

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Every firm after earning profit either retains the money for future investment or distributes it among the shareholders. The profits that are distributed to the shareholders are known as dividend and the profit kept in the organization are known as retained earnings. Dividend policy determines the division of earning between payments to stockholders and reinvestment in the firm. Therefore, the decision regarding how much profit to distribute to the stockholders and how much to keep in the organization is the dividend policy.

It is more technical area of finance in the sense that it is complex on having numerous implications for the firm. Dividend policy may affect the area such as financial structure of the firm, funds flow, stock price, investor's satisfaction, growth of the firm etc. like other major decisions of the firm i.e. investment and financing decision, the dividend decision has major role in any organization. Development in the financial terms is the efficient flow and generation of the funds in the most productive sectors (Bhattra, 2002).

The development of any country, each and every sector should be strong and capable. Among the economic sector is one of the major governing sectors. Normally each and every measure of the level of development of a country depends on the economic development. For economic development, banks and other financial institutions are playing vital role. So, if there is insufficient economy and financial facilities. The growth of economy development becomes slow. The main objectives of the commercial banks are to earn profit by proper mobilization of resource. Especially commercial banks provide different facilities to the people engaged on trade, commerce and industry. Hence, they are being the means for the uplift of society.

When economy is boom, commercial banks increase interest rate which reduces the probability of inflation and increase of depression. Commercial banks have many functions such as accepting deposits, providing interest eliminates in the formation of capital, granting loans that helps remove deficiency of capital, performing agency functions which makes life easier and they also play an important role on credit creation. They reduce interest rate so the people are interested in investment. Since, the importance of banks is highly appreciated; it needs proper attention to run successfully. They should be established and conducted after analyzing the various factors. Normally, banks play at a public money that is why people pay their attention whether their money is properly utilized or not and running at profit or loss. The existence of profit to any business firm is the basic factor. If there is no profit a business firms becomes unstable to provide its facilities in the long farm. These profits that can be distribute among the owner as dividend as well.

A very small part of the population has spare money whereas a big part is under the line of poverty. Nepal is a developing country with very low per capital income. Among the small part of population with spare money, only few people are interested to invest the money in business due to the fear of not getting back. So the people who invest money in the business expect return from the money they invest. So the most important filing to attract the people to business is dividend. People are encouraged to invest in the business is actually running in profit or not. So paying dividend is very important to attract the shareholders who are very important constituent of the business.

But satisfying the shareholders should not only be the objective of firm. Sometimes the firm may get the good investment opportunity in which retained earning is needed. In such a case firm should be involved in maximization of company's wealth. So the dividend policy followed by the firm should be able to satisfy the shareholders as well as maximize the company's wealth. The dividend policy also depends up on the objective of the firm. But the policy should be formulated considering the legal aspects of the country.

Once the company decides to pay dividend, they may establish some what permanent dividend policy which pay in turn impact on the position of the company in the financial market. The dividend payment is the major decision of the firm which affects the running of the banking. What they decide affects the investors and potential investors.

Banks are the financial institutions which mobilizes idle saving of people into productive sectors. Banks play the very important role in the economic development of the country. Banks help to connect the savers and users brought the monetary resources. The money is earned from saver to users by banks. The idle saving of the people is transferred to the industries, trades and commerce. The savers are benefited in the form of interest. At the same time, trade commerce and industrial are also benefited by money for business.

1.2 Focus of the Study

There are thirty one commercial banks in Nepal but it is possible to cover all the banks in the study. Dividend is the major decision which affects the value of firm. So the study is based on dividend policy of the commercial banks in Nepal. So the only three commercial banks are chosen which will represent all the commercial banks of Nepal. So the study will analysis the financial statement of the chosen banks and whether the dividend policy followed by them is relevant or not.

1.3 Statement of the Problem

Dividend, the most inspiring factor for the investment on shares of the corporation, is an important aspect of financial management. Because the dividend policy determines the division of earnings between payment to stockholders and reinvestment in the firm to exploit growth opportunities. It affects the value of firm as well as overall financing decision such as financial structure, the flow of funds, corporate liquidity and investor's satisfaction.

There is no consensus among the financial scholars on this subject matter and its relation with stock price. The dividend decision, however, is still crucial as well as controversial area of managerial financial. Some financial scholars say that stock prices are least influenced by dividend per share while some others believe that its relevance to the stock prices is quite significant. The idea of relevance is vague as well. It is rather than to define whether dividend per share has positive effect or its effect is negative one.

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 which give more return. But some scholars and experts do not agree with this relationship of dividend 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.

It is because, the government rules and regulations, among the various reasons, ownership patterns, attitudes of management, forms of management may be the partial causes of such a situation. In practice, every firm follows some kinds of dividend policy and there is no unique dividend policy which is appropriate (suitable) for all the firms. So they follow different policies. In general, it is assumed that there is relationship between dividend and stock price but the relation in under developed country like Nepal is not yet known. So the relation between dividend and stock prices established by much finance scholars needs to be tested in the context of Nepal.

The company listed in NEPSE are not seen so serious regarding dividend decisions in the Nepalese context. Since most of them do not have any consistent and obvious (Clear Cut) policy on dividend distribution. In connection to Nepalese public enterprises, M.K. Shrestha remarks that dividend is still considered as the unintended strategy or the non payable obligation of a time when Nepalese government is not in a position to impose the public

limited companies to pay a minimum rate of dividend on the equity capital contributed. Some Nepalese acts like Nepal Company Act 2053, Nepal commercial Banks Act 2031 and other regulating acts are still silent regarding dividend distribution. So different companies are adopting different dividend decisions inconsistently. There is a common trend of deciding the dividend by the management of companies instead of by shareholders meeting.

This study raises some issues to be examined which are stated below:

- a. Whether there is uniformity of dividend distribution or not.
- b. Whether the problem is attitude to pay dividend or the ability to pay dividend.
- c. What is the relationship between dividend with other key variables like earning per share, market price per share, book value per share, net profit and net worth of the banks?
- d. Whether or not the prevailing dividend policy influences the corporate liquidity position.
- e. What are the prevailing practices of the banks regarding their dividends?
- f. Whether dividend decision affects the market price of shares differently in different banks or not.
- g. Whether changing dividend policy or payout ratio increase the value of stock or not.

1.4 Objectives of the Study

This study is primarily undertaken to focus on the prevalent dividend policy and to suggest the direction of future endeavors for the overall healthier development of the share market and also the possible impact of such endeavors on the share market in Nepal. The objective of a dividend decision should be to maximize the shareholders return so that the value of this investment is maximized.

The main objectives of this study are as follows:

- a. To study the relationship of dividend policy with various of financial indicators like EPS, DPS, MPS, DPR, and other relating ratios.
- b. To find the impact of dividend policy on market price of stock.
- c. To study whether the commercial banks are following the suitable dividend policy or not.
- d. To provide suggestions to the listed banks for the improvement of their dividend policies on the basis of findings.

1.5 Significance of the Study

As dividend is one of the factors in every organization and dividend policy decision is one of the most important decisions. This might serve to be important information for these respective firms taken as sample.

When any new company issues (floats) shares through capital markets, very big congregation gathers to apply for owner's certificate. To excess liquidity and lack of investment opportunities in the capital market, nowadays people are very much interested and attracted to invest in shares for getting higher returns. It reveals that people have expectation on higher return for investing in shares. So the dividend decision is one of the most important decisions of financial management. It is an effective tool (way) to attract new investors, maintain present investors and controlling position of the firm. In capital market, basically, the return can be earned in the following two ways:

- i. By means of dividend
- ii. By capital gains i.e., increase in share price.

The people are haphazardly investing in shares having lack of adequate knowledge. It shows that there is an extreme necessity to establish clear conception about the return that there is an extreme necessity to establish clear conception about the return that yield from investing in securities.

We find that there exists almost none of the companies adopting consistent dividend policy in the Nepalese perspective. There may be many reasons behind it. But there is not sufficient study conducted in this regard. So, I have

made this humble attempt to contribute to this aspect. The reform, considering all these facts, the study is undertaken which will help to meet deficiency of the literature relating to dividend decision and factors affecting the dividend policy. So the study of dividend policy is of considerable importance.

I believe that so many persons and parties such as shareholders, management of banks, financial institutions, general public (depositors, prospective customers, investors etc.) and other policy making bodies which are concerned with banking (especially NIBL, SCBL, NABIL, BOK and EBL Bank Ltd.) business will be benefited from this study. It is also believed that it will provide valuable inputs for future research scholar.

1.6 Limitation of the Study

There are limitations that weaken the generalizations e.g. shortage of time, inadequate coverage of industries, reliability of statistical tools used and other variables. This study is simply a partial requirement of MBS program. So, this study will be limited by the following:

- a. The secondary data collected depends upon the accuracy of the annual reports of banks.
- b. The study period only covers five fiscal years.
- c. There are many factors that affect dividend decisions and valuation of the firm. However, only those factors related with dividend will be considered in the study.
- d. Due to insufficiency of time, only five joint venture banks are taken as samples.

1.7 Organization of the Study

The study will be organization following five chapters listed below:

Chapter – I 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-II 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, journal, previous research works and thesis reports on the subject matter.

Chapter – III Research Methodology

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

Chapter – IV 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 – V 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 - II

REVIEW OF LITERATURE

This research aims to analyze the dividend policy and practices of commercial banks especially joint venture banks. For this purposes, it is helpful to review related literatures in the concerned areas which will help to get clear ideas, opinions and other concepts.

This chapter emphasizes on the literatures which are concerned with this connection. Therefore, in this chapter, conceptual frameworks given by different authors and intellectuals on this areas, books, journals, research works, and previous thesis related to dividend and dividend policies and practices are reviewed. Moreover, rules regarding to dividend policy are reviewed and an attempt has been made to present them properly.

2.1 Conceptual Framework

Dividend decision is an integral part of financial management decision. It is in the sense that the firm has to choose between distributing the profits to the shareholders and reinvesting it to finance the business. The important aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders in return to their investment and the amount to be retained in the firm. It affects the financial structure, the flow of funds, corporate liquidity and investor's attitudes. It is a matter of interest for all the stakeholders. Thus, it is one of the central decision are related to policies seeking to maximize the value of firm's commons stock.

“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, 1997). "There is further debate about which policy investors prefers. Firms that are growing generally pay low or no dividends matures firms that are no longer in growth phase often pay high and increasing dividends"(Gautam and Thapa, 2008).

The policy of a company in the allocation of its profits between distribution to shareholders as dividend and retention for its investment is known as dividend policy. All aspects and questions related to payment of dividend are contained in a dividend policy. Generally, dividends are paid in the form of cash, which reduces the cash balance of the company. There is a reciprocal relationship between retained earnings and cash dividends. If retained earning is kept more by the company, less will be the dividend and vice-versa. The decision depends upon the objective of the management for capital maximization.

What and how much is desirable to pay dividend, is always a matter of dispute because shareholders expect higher dividend from company, as it tends to increase their current wealth whereas detention of earning is desirable for the growth of firm. These two objectives of the dividend policy are always in conflict. There is not yet consensus on whether the firms should follow certain pattern to distribute dividend and retain earnings. However, there is different decision models developed to analyze the situation and reach a decision. These decision models are conflicting and consider the different aspects of the firm. One school of thought argues that dividend payment has no impact on valuation of a firm whereas other theories of dividend decision argues dividend to be active variable in valuation of firm. These different models on the relationship between dividend and the value of the firm will be discussed later on in this chapter in detail.

2.1.1 Concept of Dividend

The various concepts of dividend, defined in various books of finance, are discussed below:

a. Discretionary concept

When the board of directors declares the amount of dividend, it is known as discretionary dividend. According to this concept, dividend payment is on of directors' decisions and so they use discretion in declaration of dividend. Corporations' charter vested powers to board of directors and it is up to their discretion that determines what and how much to pay by way of dividends to stockholders.

"The power to declare dividends is lodged in the board of directors of the corporation. At a meeting of the board, in accordance with the charter and corporate by-laws, the board passes a resolution declaring the amount of dividend, the period which it covers, the payable data, and the record data of ownership" (Cooke and Bomeli, 1967).

Even in the context of Nepalese corporations, the decision regarding the payment of dividend is purely vested in the board of directors of corporation, and it is also insisted by the corporate acts. There are not any legal rights to demand any part of profit in the form of dividends by the ordinary shareholders because profits are the property of the corporations and not of individual shareholders.

b. Pro-Rata distribution concept

"A dividend is a pro-rata distribution of cash, other assets, promises to pay, or additional stock to the shareholders of a corporation chargeable against its surplus accounts or (for certain liquidating dividends only) against its capital stock accounts" (Cooks and Bomeli, 1967).

The pro-rata distribution refers to proportionate share of all outstanding stock, or all shares of a given class, which participate equally in whatever is distributed. Thus, under this concept, all shareholders enjoy equal right on the profit distributed by the corporations, according to their proportion of shares.

c. Residual concept

"Dividend is the residue left after meeting all obligations and adjusting for retention of earnings and other provisions. IT is a residue since shareholders get dividends only when there exists balance of earnings after paying fixed obligations such as operating expenses, interest, provisions for depreciations, and settings" (Van Horne, 1993).

Under this concept, dividend policy is a residual firm investment policy and dividends are paid only after financing all investment opportunities. So, dividend policy is totally passive in nature. "When we treat dividend policy as strictly a financial decision, the payment of cash dividends is a passive residual" (Van Horne, 1993).

d. Liability concept

Dividend once declared by the board of directors, becomes a liability of the corporation. "When the board of directors of a solvent corporation declares cash dividend, the amount declared becomes an obligation to pay." If the directors avoid payment of dividend after declaration, the shareholders would have a right to take action against the directors to force payment. The dividends declared are treated as liabilities in the balance sheet if the shareholders do not come to claim in time.

2.1.2 Conflicting Theories on Dividends

There are two fundamental of theories of dividend;

A. Residual Theory of Dividend

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

B. Wealth Maximization Theory

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

2.1.3 Types of Dividend

Though cash dividend is assumed to be the most popular form of dividend, corporation needs to follow various types of dividend according to the objectives and policies, which they implement. "The type of dividend that corporations follow is partly a matter of attitude of directors and partly a matter of the various circumstances and financial constraints that bound corporate plans and policies" (Shrestha, 1980).

According to the changing needs of corporations, dividend is being distributed in several forms viz. cash dividends, stock dividend (bonus share issue), scrip dividend, property dividend, optional dividend and bond dividend. But in

Nepal and India only two types of dividend namely cash dividend and stock dividend are being practiced.

i. Cash Dividend

Cash dividend is the form of dividend, which is distributed to shareholders in cash out of earnings of company. The cash account and the reserves account of 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.

So the companies should wisely make decisions regarding payment of cash dividend.

ii. Stock Dividend/Bonus Share

A stock dividend represents the distribution of shares in addition to the cash dividend to the existing shareholders. This has the effect of increment in the number of outstanding shares of the company. The declaration of the bonus shares will increase the paid-up share capital and reduce the reserve and surplus of the company. The total net worth is not affected by the bonus issue. In fact, it represents nothing more than re-capitalization of the owners' equity portion, i.e., the reserve and surplus. It is simply an accounting transfer from retained earning to capital stock.

iii. Scrip Dividend

A scrip dividend is issued when company has been suffering form the cash problem and does not permit the cash dividend, but has earned profit. A dividend paid in promissory notes is called a scrip dividend. Scrap is a form of promissory notes promising to pay holder at specified later data. Under this form of dividend, company issues and distributes transferable promissory notes to shareholders, which may be interest bearing or non-interest bearing. The use

of scrip dividends is desirable only when corporations have really earned profit and have only to wait for the conversion of other current assets into cash. Therefore, in order to overcome the temporary shortage of cash, sometimes company uses scrip dividends.

iv. Property Dividend

It is also known by the name of liquidating dividends. It involves a payment of assets/ property in any form other than cash. Such form of dividend may be followed whenever there are assets that are no language necessary in the operation of the business or n extra ordinary circumstances. Companies own products and the securities of subsidiaries are the examples that have been paid as property dividend.

v. Optional Dividend

The optional dividend is, in fact, not a kind of dividend but simply a choice of dividend given to the shareholders to accept either cash or stock dividend. But the shareholders consider the comparative value of stock dividend with the amount of optional cash. "If the two are very nearly the same, as it often the case, the cash option may be a convenience to the small shareholder, who thus avoids the case and expense of selling either whole or fraction of shares he does not wish to keep" (Waring, 1931).

vi. Bond Dividend

This type of dividend is distributed to the shareholders in the form of bond. It helps to postpone the payment of cash. In other words, company declares dividend in the form of its own bond with a view to avoid cash outflows. They are issued really. They are long term enough to fall beyond the current liability group. The stockholders become secured creditors if the bond carries lien on assets.

But none of these types except cash and stock dividend have been practiced in Nepalese corporations although they have sample scope for application. So far in this study, the term dividend generally refers to cash 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 Dividends

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.

"The residual dividend policy suggests that dividend paid by the firm should be viewed as a residual amount left after all acceptable investment opportunities have been undertaken" (Lawrance, 1994).

According to this theory, dividend policy is a firm's policy in which dividend is paid only after all acceptable investments have been financed. So, payment of dividend depends on its investment policy. In other words, the firms use earnings 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. If not, there would be no dividends. It assumes that the internally generated funds (i.e. retained earnings) are comparatively cheaper than the funds obtained from external sources (i.e. issuing new shares). It is because the retained earning or internally generated found does not imply any flotation cost as in the external sources by selling equity shares.

So, under this theory, dividend policy is determined by the following two major actors:

- i. Company's investment opportunities.
- ii. Availability of internally generated funds i.e. retained earnings.

According to this concept, dividend policy is totally passive in nature. 'When we treat dividend policy as strictly a financing decision, the payment of cash dividend is a passive residual' (Van Horne, 1993).

2.1.4.2 Stability of Dividends

“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 maintaining a position in relation to a dividend trend line, preferably one that is upward slopping.” (Van Horn, 2000)

Stability of dividends means regularity in paying some dividend annually, even though the amount of dividend may fluctuate form year to year and may not be related with earnings.

Stability or regularity of dividends is considered as a desirable policy by the management of most companies. Shareholders also generally prefer stable dividends because all other things being the same, stable dividends may have a positive impact on the market price of the share.

By stability, we mean maintaining its position in relation to a dividend trend line, preferably one that is upward sloping. In other words, the term dividend stability refers to the consistency or lack of variability in the stream of dividends. Precisely, it means that a certain minimum amount of dividend is paid out. Three distinct forms of such stability may be distinguished.

1. Constant Dividend per Share

According to this form of stable dividend policy, a company follows a policy of paying a certain fixed amount per share as dividend. The fixed dividend amount would be paid year after year, irrespective of fluctuation in the earnings. In other words, fluctuations in earnings would not affect the dividend payment. In fact, when a company follows such a dividend policy it will pay dividends to the shareholders even when it suffers loss. It should be clearly noted that this policy does not imply that the dividend per share or dividend rate will never be increase.

The dividend per share is increased over the years when the company reaches new levels of earnings and expects to maintain it. Of course, if the increase is expiated to the temporary, the annual dividend per share is not changed and remains at the existing level. It is easy to follow this policy when earnings are stable. f the earning pattern of a company shows wide fluctuations, it is difficult to maintain such policy. Investors who have dividends as the only source of their income prefer the constant dividend policy.

2. Constant Payout Ratio

Constant/target payout ratio is a form of stable dividend policy followed by some companies. The term payout ratio refers to the ratio of dividend to earnings or the percentage share of earnings used to pay dividend. With constant/target about ratio, a firm pays a constant percentage of net earnings as dividend to the shareholders. In other words, a stable divined payout ratio implies that the percentage of earnings paid out each year is fixed. Accordingly, amount of dividend will fluctuate in direct proportion to earnings and are likely to be highly volatile in the wake of wide fluctuations in the earnings of the company.

This policy is related to company's ability to pay dividends. If the company incurs loss, no dividends shall be paid regardless of the desires of shareholders.

Internal financing with retained earnings is automatic when this policy is followed. At any given payout ratio the amount of dividends and the additions to retained earnings increase with increasing earnings and decrease with decreasing earnings.

This policy simplifies the dividend decision, and has the advantage of protecting a company against over and under payment of dividend. It ensures that dividends are paid when profits are earned, and avoided when it incurs loss.

3. Stable rupee Dividend Plus Extra Dividend (low regular dividend plus extras)

A policy of paying a low regular dividend plus a year end extra amount in good years is a compromise between the previous two policies. Under this policy, a firm usually pays fixed dividend to the shareholders and in years of marked prosperity, additional or extra dividend is paid over and above the regular dividend. As normal conditions return, the firm cuts the extra dividend and pays the normal dividend per share.

It gives the firm flexibility, but it leaves investors with somewhat uncertainty about what their dividend income will be. If a firm's earnings and cash flows are quite volatile, this policy might be the best choice.

2.1.5 Factors Influencing Dividend Policy

Dividend policy, one of the major decisions of managerial finance, determines that what percentage of the earnings of the firm is distributed to its shareholders and what percentage of the earnings is retained in the firm which is desirable for the growth of the firm. Dividends are desirable to its shareholders because it tends to increase their current wealth whereas retained earnings are desirable for the firm to exploit investment opportunities as the internal source of financing. So, in order to develop a long term dividend policy, the directors should aim at bringing a balance between the desire of shareholders and the needs of the company. The firm's decision regarding the

amount of earnings to be distributed as dividends depends on a number of factors.

1. Legal restrictions

a. The Surplus Rule

According to surplus rule, dividend should be paid only out of profit. If there is no surplus or profits, dividend can't be legally declared.

b. The Insolvency Rule

The insolvency rule states that dividends can't be paid if company is insolvent or if a payment would result in insolvency. (i.e. when liabilities exceed assets.)

c. Capital Impairment Rule

According to this rule, dividend should not be paid if a firm's capital has been impaired or if dividend payment will cause capital to become impaired. It means dividends should not be paid out of paid-up capital.

2. Bond Indenture

Best contracts generally restrict dividend payments to earnings generated after the loan is granted. Also, debt contracts often stipulate that on dividends can be paid unless the current ratio, the times interest-earned ratio and other safety ratios exceed stated minimums.

3. Possibility of Accelerating or Delaying Projects

The ability to accelerate or postpone project will permit more flexibility in a firm's dividend policy.

4. Alternative Sources of Capital

i. Cost of Selling New Stock

If a firm needs to finance a given level of investment, it can obtain equity by retaining earnings or by selling new common stock. If flotation costs are high,

it is better to finance through retention than through sale of new common stock. On the other hand, if these costs are low, dividend policy will be less important. Flotation costs differ among firms. For example, they are generally higher for small firms. Hence, the importance of these costs, and consequently, the degree of flexibility in setting a dividend policy, varies among firms.

ii. Ability to Substitute Debt for Equity

A firm can finance a given level of investment with either debt or equity. As we have seen, if flotation costs are low, a more flexible dividend policy may be followed because equity can be raised by retaining earnings or by selling new stock. A similar situation holds for debt policy. If the firm is willing to adjust its debt ratio, it can maintain a constant amount of dividend by using a variable debt ratio.

5. Need to Repay Debt

When a firm has sold debt to finance expansion or to substitute for other forms of financing, it is faced with two alternatives. It can refund the debt at maturity by replacing it with another form of security, or it can make provisions for paying off the debt. If the decision is to retire the debt, this will generally require for retention of earnings.

6. Access to the Capital market

All the firms do not have equal access to capital markets. A firm which has not sufficient liquidity can pay dividends, if it is able to raise debt or equity in the capital market. A firm which is larger, well established and has a record of profitability will not find much difficulty in raising funds in the capital market.

Easy accessibility to the capital market provides flexibility to the management in paying dividends as well as in meeting the corporate obligations.

7. Rate of Assets Expansion

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

8. Internal Investment Opportunity

It is apparent that opportunities to invest are major consideration in setting dividend policy. Putting other considerations aside, when the firm has opportunities to earn returns greater than those available to shareholders outside the firm, retention and reinvestment are appropriate.

9. Financial Needs of the Company

It is another consideration which also influences on the establishment of an appropriate dividend policy. Mature companies that have few investment opportunities may generally have high payout ratios. On the other hand, growth companies may have low payout ratios.

They are continuously in need of funds of finance their fast growing fixed assets. The distribution of earnings will reduce the funds of the company.

10. Profit Rate

The rate of return on assets determines the relative attractiveness of paying out earnings in the form of dividends to stockholders who will use them in the current enterprise or some elsewhere.

11. Tax Position of the Corporations

It is a factor which affects the firm's dividend decision. Possible penalties for excess accumulation of retained earnings may induce higher payout ratios.

12. Stockholders Expectations

In case of widely-held company, the number of shareholders is very large and they may have conflicting interests and diverse desires regarding dividends and capital gains. Therefore, it is not easy to reconcile these conflicting interests of the various shareholders group to adopting a dividend policy which equally satisfies all shareholders.

Generally, the company should adopt a dividend policy which serves the purpose of the dominating group. But, it does not totally neglect the desires of other groups.

In a closely-held company, the body of shareholders is small and homogeneous group, so management usually knows the expectations of its shareholders and may adopt a dividend policy, which satisfies all shareholders. If most of the stockholders are in high tax brackets and have a preference for capital gains to current dividend incomes the company can establish a low dividend payout or no dividends and retains the earnings within the company.

13. Tax of Stockholders

The tax position of the corporation's owners greatly influences the desire for dividends. For example, a corporation closely held by a few taxpayers in high income tax brackets is likely to pay a relatively low dividend. The owners are interested in talking their income in the form of capital gains rather than as dividends which are subject to higher personal income tax rates. However, the stockholders of a large widely held corporation may be interested in a high dividend payout.

14. Stability of Earnings

A firm that has relatively stable earnings is often able to predict approximately what its future earnings will be. Such a firm is therefore more likely to payout a higher percentage of its earnings than is a firm with fluctuating earnings. The

unstable firm is not certain that in subsequent years the hope for earnings will be realized, so it is likely to retain a high proportion of current earnings. A lower dividend will be easier to maintain if earnings fall off in the future.

15. Control

The objective of maintaining control over the company by the existing management group or the body of shareholders can be an important variable in influencing the company's dividend policy. When a company pays large dividends, its cash position is affected. As a result, the company will have to issue new shares to raise funds to finance its investment programmes. The control of the existing shareholders will be diluted if they don't want or can't buy additional shares.

Under this circumstance, the payment of dividends may be withheld and earnings may be retained to finance the firm's investment opportunities.

16. Liquidity

The liquidity of a company is a prime consideration in many dividends decision. Although a firm may have sufficient retained earnings to declare dividend, but if they are invested in physical assets cash may not be available to make dividend payments. Thus the company must have adequate cash available as well as retained earning to pay dividends.

As dividends represent cash outflow, the greater the cash position and overall liquidity of a company, the greater is its ability to pay dividend and vice-versa. a company that is growing and profitable may not be liquidated, for its funds may go into fixed assets and permanent current assets.

17. Inflation

In an indirect way inflation costs act as a constraint on paying dividends. Our accounting system is based on historical costs. Department is charged on the basis of original costs at which assets were acquired. As a result, with raising

prices funds saved on account of depreciation may be inadequate to replace obsolete equipment. Those firms have to rely upon retained earnings as a source of funds to make up the shortfall. This aspect becomes more important if the assets are to be replaced in the future. Consequently, their dividend payment tends to be low during periods of inflation.

2.1.6 Legal Provisions Regarding Dividend Practices

There are no clear cut legal provisions regarding dividend policy in Nepal. The responsibility to undertake required actions to protect shareholder's interest is given to Nepal Stock Exchange which is stated on the security Exchange Act 1983. But this organization has not been so able to protect shareholders interest since interest and attitude of the board of directors play dominant role in management of public limited companies and they are generally in majority who are nominated by government.

According to Corporation Act, corporations must set aside a certain part of profit as reserves before the declaration of dividend. Moreover, corporations have to separate the tax provisions prior to dividend declaration. Likewise, Commercial Bank Act 2031 has also made some provisions for distributing dividend. Section 18 of this act states about the restrictions for dividend distribution. According to this section, before providing the whole expenses by the bank for preliminary expenses, loss incurred in last year, capital reserve, risk beard fund reserve fund, the bank shall not declare and distribute the dividend to shareholders.

Similarly, Company Act 1997 makes some legal provisions regarding dividend distributions, which are discussed below:

According to this act, board of director can fix dividend payout rate but such rate should be reposed, first for the discussion and approval in the annual general meeting of shareholders, the general meeting can reduce the rate determined by board of directors but can't increase.

Likewise, some other legal provisions are:

Section (2) (m) states that bonus shares mean shares issued in the form of additional shares to shareholders by capitalizing the surplus from the profits on the reserve fund of a company. The term also denotes an increase in the paid up values of the shares after capitalizing surplus or reserve funds.

Section (47) has prohibited company from purchasing its own shares. This section states that no company shall purchase its own shares or supply loans against the security of its own shares.

Section (137) bonus shares and sub-section (1) states that the company must inform the office before issuing bonus shares under sub-section (1); this may be done only according to a special resolution passed by the general meeting.

Section (140): Dividends and sub-sections of this section are as follows:

- i. Except in the following circumstances, dividend shall be distributed among the shareholders within 45 days from the date decision to distribute them.
 - a. In case any law forbids, the distribution of dividends.
 - b. In case the right to dividend is disputed.
 - c. In case dividends can't be distributed within the time limit mentioned above owing to circumstances beyond anyone's control and without any fault on the part of the company.
- ii. In case dividends are not distributed within the time limit mentioned in subsection (1) this shall be done by adding interest at the prescribed rate.
- iii. Only the person whose name stands registered in the register of existing shareholders at the time of declaring the dividend shall be entitled to it.

The above indicates the Nepalese law prohibits repurchase of stock, which is against the theory of finance. But the reason for this kind of provision is still unknown.

Similarly, followings are decisions regarding dividend payment by the government corporations dated June 14, 1998.

- i. Dividend should be paid in profitable years. Even though there are cumulative losses, dividend is to be paid if cash flow is sufficient to distribute dividend.
- ii. In case of un-audited accounts, interim dividend should be paid on the basis of provisional financial statement.
- iii. Dividend rate will not be less than the interest rate on fixed deposit of commercial bank of government owned. In case of insufficiency of profit mount to distribute dividend in above mentioned rate, concerned corporation should send proposal of new distribution rate to the Finance Ministry through liaison ministry and should do what so ever decision is given there of.
- iv. Those corporations operating in monopoly situation should repay all amounts of profits to the government except the amount of bonus, tax and the amount needed to expand and develop the business. The amount separated for the expansion and development of business will not be more than 20 percent of profit of the year and this amount will not be more than total paid up capital.

The amount so separated should all be paid as dividend if it is not used within 3 years.

- v. Decision regarding distribution of annual net profit shall not be made without prior acceptance of Finance Ministry. All incentives, except those to be paid by law, shall not be distributed unless the amount of dividend is not paid to government.
- vi. Concerned BOD and top management will be held responsible for implementation of these dividend policies.
- vii. Ministry of Finance will make necessary arrangements regarding fixation of dividend percentage coordinating all concerned corporations and ministries.

2.2 Review of Related Studies

In this section, an attempt has been made to review of the major studies concerning dividends and stock prices and management views on dividend policy.

Lintner (1956) He investigated a partial adjustment model as he tested the dividend patterns of 28 companies. In this study dividends are 'sticky' in the sense that they are slow to change and lag behind shifts in earnings by one or more periods. Dividend is a function of earnings of that year, existing dividend rate, target payout ratio and speed of adjustment. In this study identify occasions when a change in dividends might well have been under active consideration even though no change was made.

Major findings of the study were firms generally think in terms of proportion of earnings to be paid out, in order to modify the pattern of dividend, investment opportunities, liquidity position, funds flows are not considered.

Firms generally have target pay out ratios in view while determining change in dividend rate or dividend per share.

To determine the factors existing most actively into dividends. He concluded that a major portion of a firm's dividend could be expressed in the following manner.

$$DIV_t^* = P EPSt \dots\dots\dots (1)$$

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

Adding DIV_{t-1} on both sides of equation (2)

$$DIV_t = a + b DIV_t^* + (1-b) DIV_{t-1} + e_t \dots\dots\dots (3)$$

Where,

DIV_t^* = Firm's Desired Payment

$EPSt$ = Earnings

P = Targeted Payout Ratio

a = Constant Relating to Dividend Growth

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

Modigliani and Miller, (1961) conducted a study on the irrelevance of dividend. Dividend policy of a firm is irrelevant as it does not affect the wealth of the shareholders. The value of the firm depends on the earning power of the firm's assets or its investment policy. The investment policy is given, the dividend decision - splitting the earnings into packages of retentions and dividends does not influence the value of equity shares.

In this study, the division of earnings between dividend and retained earning is irrelevant from shareholders viewpoint. The argument supporting the irrelevance of dividend valuation is that dividend policy of the firm is a part of its financing decisions. The financing decision of the firm, the dividend policy of the firm is a residual decision and dividends are passive residual.

The MM approach of irrelevance dividend is based on the following critical assumptions. The firms operate in perfect capital market where all investors are rational. Information is freely available to all. Securities are infinitely divisible and no investor is large enough to influence the market price of securities. There are no flotation costs. The securities can be purchased and sold without payment of any commission or brokerage etc. Taxes do not exist. The firm has a definite (fixed) investment policy, which is not subject to change. Risk of uncertainty does not exist. Investors are also able to forecast future prices and dividends with certainty, and one discount rate is appropriate for all securities and all time period. Thus $r = k = kt$ for all time.

M-M provide the proof in support of their argument in the following manner.

Step – One

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

Symbolically,

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

Where,

P_0 = Current market price of a share (market price at the beginning or at the zero period)

K_e = the cost of equity capital (Assumed constant)

D_1 = the dividend per share to be received at the end of the period one.

P_1 = the market price of the share at the end of the period one.

Step - Two

Multiply both sides of equation (1) by the number of shares outstanding (n) to obtain the total value of the firm if no new financing exists.

Symbolically,

$$np_c = \frac{n(D_1 + P_1)}{1 + K_e}$$

Where,

n = Number of outstanding shares at zero period.

Step Three

If the firm issues (sells) number of new shares (m) to finance the new investment needs of the fund at a price of P_1 , the value of the firm at time zero will be:

Symbolically,

$$np_c = \frac{n(D_1 + P_1) + (nP_1 + mP_1)}{1 + K_e} \dots\dots\dots (2)$$

$$np_c = \frac{nD_1 + P_1 + nP_1 + mP_1}{1 + K_e} \dots\dots\dots(3)$$

Where,

n = Number of shares at the beginning (no. of outstanding shares at zero periods)

m = Number of equity shares issued at the end of the period.

Step - Four

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

$$mp_1 = I - (E - nD_1)$$

Or, $mp_1 = I - E + nD_1 \dots\dots\dots (4)$

Where,

I = Investment needs

E = Earning available.

Step - Five

By substituting the value of mp_1 from equation (4) to equation (3) we get,

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

$$np_0 = \frac{p_1 (n + m) - I + E}{1 + K_e} \dots\dots\dots (5)$$

Step Six

Conclusions: Since dividend does not appear directly in expression and E, I (n + m) p_1 and K_e are assumed to be independent of dividend. In other words, MM concludes that dividend policy is irrelevant and dividend policy has no effect in the value of the firm. A firm that pays dividends will have to raise funds

externally to finance its investment plans. MM hold that when the firm pays dividends, external financing offsets its advantage.

It does not seem so relevant to apply MM approach in Nepalese Context because when we apply this approach, the assumptions supposed by MM are significantly deviated. In Nepal, we are unable to find the rational investors as well as perfect capital market, which are considered by MM. It does not seem so sound to neglect the flotation cost, transaction cost and tax effect on capital gain as neglected by MM. Arbitrage arguments as explained by MM applies only when there are very sensitive investors and which are lacking in Nepal. A conscious investor always finds different between dividend and retained earning, and generally, Nepalese investors also prefer dividends more than retained earnings, when dividend is distributed.

James E. Walter (1966) conducted a study on dividend and stock prices. He proposed a model for share valuation. According to him, the dividend policy of the firm affects the value of the shares. So, the dividends are relevant. He argues that the choice of dividend policies always affect the value of enterprise.

His study shows clearly the importance of the relationship between internal rate of return (R) and its cost of capital (K) in determining the dividend policy.

The assumptions of the Walter's model are firm finances all investment through retained earning. The external funds (i.e. debt, new equity) are not used for new investment. All earning on the firm's investment (R) and the cost of capital (K) are constant. All earnings are either distributed as dividend or reinvested internally. The values of EPS and DPS are assumed to remain constant forever in determining a given value. The firm has a perpetual or infinite life.

Based on these above assumptions, Walter has given following formula of valuation of equity share.

$$P = \text{DPS} / K_e + \{r/k_e (\text{EPS}-\text{DPS})\} / K_e$$

Where,

P = Market value of an equity share (Market price per share)

DPS = Dividend Per Share

EPS = Earning Per Share

r = The rate of return on the firm's investment.

k_e = Cost of capital/capitalization rate

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 referred different dividend policy for different types of the firm which can be summarized as follows:

Growth firms are those firms, which expand rapidly. Because of ample investment opportunities yielding return (r) is higher than the opportunity cost of capital (k). So, firms having $r > k$ are referred as growth firms which are able to reinvest earnings at a rate which is higher than the rate expected by shareholders. They will maximize the value per share if they follow a policy of retaining all earnings for internal investment. Thus, the correlation between dividend and stock price is negative, and the optimum payout ratio for a growth firm is zero. The market value per share (P), increase, as payout ratio declines when $r > k$.

If the internal rate of return is equal to cost of capital, the dividend payout does not affect the value of share, i.e. dividends are indifferent from stock prices. In other words, there is no role of dividends on stock prices. Such a firm can be called as a normal firm. Whether the earnings are retained or distributed as dividend, on stock prices. Such a firm can be called as a normal firm. Whether the earnings are retained or distributed as dividend, it is a matter of indifference for a normal firm. The market price of share will remain constant for different dividend payout ratio from zero to 100. Thus, there is no unique optimum

payout ratio for a normal firm. One dividend policy is good as other and the market value per share is not affected by the payout ratio when $r = k$.

If the internal rate of return (R) is less than cost of capital (k), it indicates that the shareholders can earn a higher return by investing elsewhere. In such a case for maximizing the value of shares, dividend also should be maximized. By distributing the entire earning as dividend, the value of share will be at optimum value. In other words, the market value per share of a declining firm with $r < k$ will be maximum when it does not retain earnings at all. The relation between dividends and stock price is positive. The optimum payout ratio for a declining firm is 100 percent and the market value per share increases as payout ratio increase when $r < k$.

Criticism of Walter's Model

i. No External Financing

This model is based on assumption that the investment opportunities of the firm are financed by retained earnings finance the investment opportunities of the firm only no external financing i.e., debt or equity is used for the purpose. When such a situation exist either the firm's investment or its dividend policy or both will be sub -optimum.

ii. Constant Ratio of Return (R) and Opportunity Cost of Capital (K)

This model assumes that rte of return (R) and opportunity cost of capital or discount rate (k) is constant. In fact, rate of return (R) changes with increase and decrease of investment. i.e. R decreases as more investment occurs and cost of capital (k) changes directly with the risk borne by the firms.

Van Horne and Mc-Donald (1971) conducted a study on dividend policy and new equity financing. The purpose of this study was to investigate the combined effect of dividend policy and new equity financing decision on the market value of the firm's common stocks. Empirical tests are performed with year end 1968 cross sections for two industries, using a well-known valuation

model. For their investigation, they employed two samples of firms viz. the 86 electric utilities in the continental U.S. which are included on the COMPUSTAT utility data tape, and 39 companies in the electronics and electric component industries as listed on the COMPUSTAT industrial data tape in 1968.

They performed empirical study by testing two regressions for the electric utilities and one regression model for electronics and electronic components industry. They concluded that for electric utility firms in 1968, share value was not adversely affected by new equity financing in the presence of cash dividends, except for those firms in the highest new issues group and it made new equity a more costly form of financing than the retention of earnings. They also indicated that the "Cost" disadvantages of new equity issues relative to retained earnings widens as relatively large amounts of new equity are raised, so that the payment of dividends through excessive equity financing reduces share prices. For firms in the electronics- electronic component industry, a significant relationship between new equity financing and value was not demonstrated.

Chawla and G. Grinivasan (1987) conducted a study on the impact of dividend and retention on share price. They selected 18 chemicals and 13 sugar companies and estimated cross-sectional relationship for the years 1969 and 1973. They collected the required data from the official directory of Bombay stock exchange.

It was found, from the result of their two stages least square estimation, that the estimated coefficients had the correct sign and the coefficients of determination of all the equations were very high in case of chemical industry. It implies that the stock price and dividend supply variation can be explained by their independent variables. But in case of sugar industry, they found that the sign for retained earnings is negative in both years and left for further analysis of sugar industry. It was observed that the coefficient of dividend was very high as compared to retained earnings for chemical industry. They also found that

coefficient of dividend was significant at one percent level in both years whereas coefficient of retained earnings was significant at ten percent level in 1969 and one percent level in 1973.

Finally, they concluded that dividend hypothesis holds well in the chemical industry. Both dividend and retained earnings significantly explain the variation in share price in chemical industry. They also stressed that the impact of dividend is more pronounced than that of the retained earnings but the market has started shifting towards more weight for retained earnings.

R. Michaely, Richard H. Thaler and Kent L. Womack (1995) conducted a study on price reactions to dividend initiations and omissions. They investigated the immediate and long-term effects of dividend initiation and omission announcements. They found that the short - run price impact of dividend omissions was negative and that of initiations was positive. Initiation reactions were about one-half the magnitude of the market reaction to omission announcements. They change in yield, however, was about seven times larger for the omission announcements. They saw that the market reaction to a dividend omission announcement was no greater than to an initiation for a given change yield.

Uddin (2003) empirical results based on 137 samples of dividend paying companies listed on Dhaka Stock Exchange (DSE) showed that investors do not gain value from dividend announcement. Indeed shareholders lost about 20 percent of value over a period of 30 days prior to the dividend announcement through to 30 days after the announcement. The lost value may be partially compensated because of the current dividend yield. Overall, the evidence tends to support the dividend irrelevancy hypothesis. Evidence also indicates that dividend payment does not signal any information to the investors.

The study shows that the highest average dividend was paid in the Fuel and Power sector, followed by that in the banking sector. The highest dividend was announced in the food sector, and lowest in the Jute and Services sectors. In

Jute sector, only one company announced dividend during the sample period. The average dividend was 19.5 percent with standard deviation of 12.9 percent. Overall, the study shows that the sample includes stocks from all sectors, except the paper sector. The number of samples are also fairly equally distributed with 10 to 20 stocks from each sector except Paper, Jute and Services sectors. This is also noted that out of 137 companies, 34 companies announced dividend in 2001 and 103 in 2003. Sample also displays that 108 companies belong to A category, 17 belong to B category and 12 belong to Z category.

Foong, Zakaria, and Tan (2007) investigated the relationship between individual stock returns with dividend yield, dividend stability and changes in dividend yield from 1992 to 2000 in the Malaysian Trading/Services and Plantation firms. The statistical result from annually cross-sectional regression show weak evidence to support the significant role of dividend yield and dividend stability in explaining firm stock returns. Changes in dividend yield, on the other hand, have negative and significant coefficients in explaining stock returns in Trading/Services firms throughout 1993-1996 and the average crisis period. For Plantation firms, it is negatively significant only in 1994 and 1997.

The main purpose in conducting this study was to identify the role of dividend in explaining Malaysian firm stock returns. They tested the relationship of firm stock returns with the so-called the dividend related variables, comprising dividend yield, dividend stability and changes in dividend yield.

Although they do not obtained very strong results that the dividend related variables are the main factors explaining firm stock returns, they do find that changes in dividend play some role in explaining firm stock returns, especially of the Trading/Services firms, which are essentially representing growth firms. If this holds true across the whole Malaysia listed firms, this suggests that CEO and top management of growth firms should pay careful attention to the changes of dividend yield in their firms, which has an inverse relationship with the stock returns.

The frequent changes in firm dividend policy may be particularly useful in attempting to differentiate high value firm from their low-value counterparts that have high dividend payout levels. The negative sign documented implies that the lower the changes in the dividend yield, the higher the stock returns. This suggests that the management should try to minimize changes in the dividend yield. Smoothing dividends payment over time can push the stock price to higher level. Another option is to maintain the level of dividend yield by adjusting the dividend payment relative to the stock price. Furthermore, announcing changes in the level of dividend payment provides important information to investors and must be carefully considered. This will eventually maximize the firm value; follow by the maximization of shareholder wealth.

2.3 Review of Nepalese Studies

2.3.1 Review of Journals and Articles in Nepalese Perspective

Shrestha (1992) in his study, he dealt with the policies and financial performance of some financial companies and has made the following outcomes. The cost-push inflation at exorbitant rate has made the shareholders to expect higher return from their investment. Multiple decrease in the purchasing power of the Nepalese currency to the extent that higher return by way of dividend is just a natural economic consequence of it. Erosion in the purchasing power of the income has made it clear that dividend payment must be directed to enhance shareholders' purchasing power by raising dividend payout ratio on the basis of both earnings and cost theory.

In this study, Indo-Nepal trade and transit deadlock has become a sort of economic warfare putting rise in the cost of living index to a considerable extent. This is one of the reasons, which made shareholders to expect higher demand for satisfactory dividend. The waiting of five with peanut dividend in previous year is equally a strong enforceable reason of the bank's shareholders to expect handsome dividend largely assured and committed in various reports of the earlier annual general meeting. One way to encourage risk-taking ability

and preference is to have proper risk - return trade off by bank's management board in a way that higher return must be the investment rule for higher risk-takers that comprise bank's shareholders.

Adhikari (1999) the study had covered the period of 1990 to 1996 with the total observation of 47 firms in financial sector and 30 in non-financial sector. His main objectives of the study was to examine the relationship between dividend and stock price, analyses the properties of portfolio forms on dividends and to survey the opinion of financial executive on corporate dividend practices.

Manandhar (2002) He had tried to test whether Nepalese Corporate firms consider the lagged earning and dividend paid to pay the dividend in current year. To carry out the test he had considered 17 corporate companies as samples and set different hypothesis. After this study he found that there is significant relationship between change in dividend policy in terms of DPS and change in lagged earning and there is a positive relationship between change in lagged consecutive earning and DPS.

In addition to this there is relationship between distributed lagged profit and dividend when change in lagged consecutive earning is greater than zero, in 65% case, change in DPS and increase in EPS has resulted to the increase in dividend payment in 66.66% of the cases while decrease in EPS resulted decrease in dividend payment.

Likewise Nepalese corporate firms have followed the practice of maintaining constant dividend payment per share.

Kharel (2006) she had tried to test the prevailing dividend practices of sample banks. There seems instability and inconsistency in dividend payment by the banks, every year EPS and MPS highly fluctuation. The CV of EPS has highly ranged. Similarly, MPS are also fluctuating. Government has not clear policy towards dividend and to improve the efficiency of the companies.

Gautam (2006) The main objectives of her study was to examine the dividend policy of listed bank and analyze the relationship between EPS, DPS, P/E ratio, Earning yield ration and MPS and analyze the factor affecting dividend policy. He concluded that market price of share is affected by the dividend policy therefore market price of high dividend paying company is higher than the other company likewise he also found that commercial banks has not clear.

2.3.2 Review of Thesis

Timilsens (2001) he used multiple regression models of three independent variables. Besides this he also tried to highlight the relationship between stock price and other independent variables separate simple linear regression equations. The sectors chosen for the study were manufacturing and trading sector and banking and insurance sector. He chose 16 enterprises as sample and his stock covers the data from 1990 to 1994 for analysis.

After his study he found out that there is positive correlation between dividend per share and stock price of the sample companies and dividend affects the stock price. Likewise, dividend policy or dividend per share might help to increase the share price of the share because there is negative relationship between stock prices and lagged earning price ratio.

Rajbhandari (2003) the study between Banks and Insurance cost. He find out the appropriate dividend policies and practices in Nepal. The study examines the relationship between dividend and market price of the stock. Identify the appropriate dividend policy followed by the banks and insurance companies. To analyze the relation between dividend policy decision of banks and insurance companies. The methodology used in the study includes financial tools such as ratio analysis and statistical tools such as correlation coefficient and probable error. Secondary data are used for the analysis.

Conclusion other study is that no consistency in dividend payment is found in all the sample institutions i.e. NGBL, NIRL, NABIL, NIC and ELC which

seems to be paying average DPS Rs. 20 every year. This shows that none of the six sample institutions have a clearly defined and appropriate dividend policy. The institutions don't seem to follow the optimal dividend policy of paying regular dividend as per the share holder's expectation and interest. This would create uncertainty among the shareholders. The major findings has also led to conclude the controversy existed in declaring dividend by the companies in the sense that the major factors like the firm have been neglected, ignored and disregarded with much have been considered the most.

Kunwar (2005) the study between Nepal Insurance Co. Ltd. and National and General Insurance Co. Ltd. The study finds the influence of financial indicators on share price, to show the relationship between dividend per share and other financial indicators. He checks the consistencies amongst DPS, EPS, D/P ratio etc. of the sample insurance company. The study identifies the dividend policy undertaken by each company and the appropriateness of the policy undertaken. The study proved useful suggestions to formulate optimal dividend policy and maximize stock price and the basis of findings.

The methodology used in the study includes financial tools such as ratio analysis and statistical tools such as correlation co-efficient and problem error. Secondary data are used for the analysis. Conclusion of his study there are many factors that influence the dividend and the market value of share such as earnings, liquidity position, efficiency, and leverage. These factors indicate the financial position of the company. If the company has good performance in terms of these factors it will be able to provide returns in the form of dividends to its shareholders.

Karki (2007) the Study research to analyze the dividend policy followed by Finance companies. He compares the dividend paid by Annapurna Finance Company Ltd. and Butwal Finance Ltd, examine the relationship between DPS with EPS, MPS and BPS. The study predicts DPS in future years. The major findings the shareholders of AFCL enjoyed higher DPS than those of BFL.

AFCL made more EPS than BFL. However, DPR and BFL is higher than DPR of AFCL, which indicates that BFL has concentrated on attracting new shareholders by distributing more portion of its earning while AFCL focused on retaining earning for internal financing. He found there is high positive relationship between DPS and EPS of AFCL and the relationship is statistically significant. However, the relationship between DPS and EPS of BFL is positive but the relationship is insignificant. The correlation coefficient indicates that MPS increases with the increase in DPS of each bank and the relationship is positively significant. The Regression analysis indicates that the MPS of both banks is highly dependent on the DPS and EPS of corresponding banks. The trend analysis depicts that the DPS of AFCL in the fiscal year 2005/06 and 2006/07 will be Rs. 12.76 and Rs. 14.85 respectively, whereas the DPS of BFL will be Rs. 9.82 and Rs. 10.15 in the fiscal year 2005/06 and 2006/07 respectively.

Khatriwada (2009) the research is to identify the dividend policy in SCBNL and NIBL. The study examines the relationship between earning and dividend distribution, to evaluate the impact of dividend on share price and examine the relationship of DPS with other financial indicators. He presented the following major findings in his study.

The shareholders of SCBNL received comparatively very high DPS than the shareholders of NIBL. On average, SCBNL paid Rs. 110 DPS, whereas NIBL in generating earning per share. On average, SCBNL earned Rs. 155.84 per share, while NIBL earned only Rs. 50.54. The DPR of SCBNL is also very high compared to that of NIBL. The average DPR of SCBNL is 70.59% and that of NIBL is 28.69%. DPS has high influence on the price rise /fall of share. Both MPS and BPS are highly dependent on the DPS of corresponding banks. The prime objective to invest in bank is to earn dividend. About 78 percent of the respondents stated that dividend is the most alluring factor in share investment.

There exists high correlation between DPS and EPS, DPS and MPS and DPS and BPS of both banks.

Dhungel (2011) conducted a study Everest Bank Limited and Bank of Kathmandu Limited. The study identifies what type of dividend policy is being followed and whether or not the followed policy is appropriate in both banks, to highlight dividend practices of the Bank of Katnmandu and Everest Bank Limited. The study analyze the relationship between dividend per share with various important variables such as earning per share, net profit, net worth and stock prices. The study provide a practical suggestion and possible guidelines to overcome various issues and gaps based on the findings of the analysis.

The study major findings Everest Bank seems to be much more successful in satisfying shareholders through distributing cash and bonus share dividend and the Everest Bank was able to generate higher amount of earning per share and hence maintaining the higher market value of share. The BOK seems to be generous in distributing dividend by providing high dividend payout ration and keeping good relationship between DEP, EPS and MPS. The dividend payout ration shows that BOK has the policy of alluring its shareholders and EBL has the policy of retaining its earning for internal financing.

2.3.3 Research Gap

In this study, I have taken new journals and articles from the international and Nepalese scholars which are related to dividend policy that helps to study the prevailing practices and efforts made in dividend policy among the firms and to find the impact of dividend policy on market price of stock.

There are hundreds of researches related to banking sectors a lot of study covers the dividend policy of commercial bank. This study has been carried out latest dividend policy of commercial banks. This research will be helpful to understand some aspects of dividend policy of commercial banks of Nepal and provides present scenario of dividend payments.

CHAPTER - III

RESEARCH METHODOLOGY

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

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

3.1 Introduction

Research Methodology is a way to systematically solve the research problem. A brief introduction of this study has been already presented in the first chapter. Besides the review of the ideas, theories and research findings have also been presented in second chapter. Now it is important to have a look into research methodology that helps to make this analysis meaningful. This chapter highlights the method of research adopted in this study. Research design, sample selection, data collection procedure, period covered, data processing procedure and tools used for analysis and included under this chapter. The analytical as well as descriptive research designs have therefore been included in the present study. In this study, research methodology has been paid due attention to achieve the objectives of the study.

3.2 Research Design

The main objective of this research work is to evaluate the dividend policy of Standard Chartered Bank Ltd., Nabil Bank Limited., Bank of Kathmandu Ltd., Everest Bank Ltd., and Nepal Investment Bank Ltd.

3.3 Sources of Data

The study is based on secondary data. The secondary data are collected from their respective annual reports especially from profit and loss accounts, balance sheet and other publications made by the banks. Likewise, some other related information is gathered from related banks and related agencies like Nepal Rastra Bank, Nepal Stock Exchange Limited.

3.4 Population and Sample

At present, there are 31 commercial banks operating in Nepal. Due to time and resource factors, it is not possible to study all of them regarding the study topic. Therefore, five banks are taken as samples:

- i. Standard Chartered Bank Ltd.
- ii. Investment Bank Ltd.
- iii. Nabil Bank Ltd.
- vi. Bank of Kathmandu Ltd.
- v. Everest Bank Ltd.

It has been made a best effort to select the combination of five commercial banks which were not chosen for the research purpose before.

3.5 Period of the Study

The study is based on five years financial data of sample banks (i.e. Standard Chartered Bank Ltd., Nepal Investment Bank Ltd., Bank of Kathmandu Ltd., Everest Bank Ltd. and Nabil Bank Ltd.) from fiscal year 2007 to 2011.

3.6 Research 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 ration analysis will be used to analyze the collected data.

To achieve the objectives of the research, the following financial and statistical tools will be used.

3.6.1 Financial Tools

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;

Earning Per Share (EPS)

Earning per share refers to the rupee amount earned per share of common stock outstanding. It measures the return of each equity shareholder. It is also identified to measure the profitability of the shareholders' investment. The earning per share simply shows the profitability of the banks on a per share basis. The higher earning indicates the better achievements of the profitability of the banks by mobilizing their funds and vice versa. In other words, higher earning per share denotes the strength and lower earning per share indicates the weakness of the banks.

EPS is computed to know the earnings capacity and to make comparison between concerned banks. This ratio can be computed by dividing the earning available to common shareholders by the total number of common stock outstanding of banks.

Thus,

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

Dividend Per Share (DPS)

Dividend per share indicates the rupee earnings actually distributed to common stockholders per share held by them. It measures the dividend distribution to each equity shareholder. The DPS simply shows the portion of earning distribution to the shareholders on a per share basis. Generally, the higher DPS creates a positive attitude of the shareholders towards the bank, which

consequently helps to increase the market value of the shares. And it also works as the indicator of better performance of the bank management. It is defined as the result received by dividing the total dividend distributed to equity shareholders by the total number of equity shares outstanding.

Thus,

$$\text{DPS} = \frac{\text{Total amount of dividend paid to ordinary shareholders}}{\text{Number of ordinary shares outstanding}}$$

Dividend Payout Ratio (DPR)

It is the portion of the earning used for the payment of dividend. The dividend payout ratio is the earnings paid to the equity holders for the earnings of a firm in a particular year. This ratio shows what percentage of the profit is distributed as dividend and what percentage is retained as reserve and surplus for the growth of the banks. In other words, the amount of dividend that a bank pays depends upon the earning capacity of the bank. Higher earning enhances the ability to pay more dividends and vice versa.

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 profit that is distributed as dividend. This ratio is calculated by dividing dividend per share by the earning per share. Thus,

$$\text{DPR} = \frac{\text{Dividend per share}}{\text{Earning per share}}$$

$$\begin{aligned} \text{And, retention ratio} &= (1 - \text{Dividend payout ratio}) \\ &= (1 - \text{DPR}) \end{aligned}$$

Price - Earning Ratio (P/E Ratio)

Price - earning ratio is also called the earnings multiplier. Price - earning ratio is simply the ratio between market price per share and earning per share. In other words, this represents the amount which investors are willing to pay for

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

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

Earning Yield and Dividend Yield (EY and DY Ratio)

The earning yield and dividend yield both are expressed in terms of the market value (price) per share. Earning yield and dividend yield are two important profitability ratios from the point of the ordinary shareholders.

Earning Yield (EY)

Earning per share as the percentage of market price per share in the stock market is called the earning yield. In other words, it is a financial ratio relating to earning per share to the market share price at a particular time. 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. It is calculated as:

$$\text{EY Ratio} = \frac{\text{Earning per share}}{\text{Market Price per share}}$$

Dividend Yield (DY)

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. It measures the dividend in relation to market value of share. So, dividend yield is

the dividend received by the investors as a percentage of market prices per share in the stock market. 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. This ratio is calculated by dividing dividend per share by market price of the stock. Thus,

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

Market Price Per Share (MPS)

MPS refers to the rupees value of on share that is being transaction in the NEPSE. This is affected by DPS and EPS of the firm. The capital market determines MPS.

3.6.2 Statistical Tools

The basic of statistics are Average or Mean, Standard Deviation and Coefficient of Variation. The following formula have been used to calculate the value of Mean, Standard Deviation and Coefficient of Variation.

a. Mean or Average (x)

Mean or average is the set of observations that represent the entire data. Generally the average value lies somewhere in between the two extremes. For this reason mean is frequently referred to as a measure of central tendency.

$$\bar{X} = \frac{\Sigma X}{N}$$

Where,

ΣX = Sum of the sizes of the items.

N = Number of items

b. Standard Deviation

The measurement of the scatter ness of the mass of figures in a series about an average is known as dispersion. The standard deviation measures the absolute

dispersion of a distribution. The greater the amount of dispersion, greater the standard deviation. A small standard deviation indicates high degree of uniformity of the observation as well as homogeneity of a series and a large standard deviation indicates low degree of uniformity. It is calculated for selected dependent and independent variables specified in the analysis model. It is usually denoted by the Greek Letter σ (sigma)

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{x})^2}{N}}$$

Where,

N = Number of items in the series

\bar{x} = Mean

X = Variable

c. Coefficient of Variation

The coefficient of variation is the relative measure of dispersion, comparable across which is defined as the ratios of the standard deviation to the mean expressed percentage.

d. Co-efficient of Correlation

Co-efficient correlation may be defined as the degree of linear relationship existing between two or more variables. From the theory of correlation, the analysis is can study the comparative changes occurring in two related phenomena and their cause effect relation can be examined. In this study, the data related to dividend over the different years will be tabulated and their relationship between them will be drawn out with the help of co-efficient of correlation. The equation for the coefficient of correlation is as follows:

$$\rho_{xy} = \frac{\text{Cov}(x, y)}{\sigma_x \sigma_y}$$

Where,

$$\rho_{xy} = \pm 1$$

$$\text{Cov}(x, y) = \frac{1}{n} \sum_{t=1}^n (x - \bar{x})(y - \bar{y})$$

$$\sigma_x = \sqrt{\frac{1}{n} \sum_{t=1}^n (x - \bar{x})^2}$$

Square root $(1/n \sum_{t=1}^n (y - \bar{y})^2)$

$$\sigma_y = \sqrt{\frac{1}{n} \sum_{t=1}^n (y - \bar{y})^2}$$

Where

ρ_{xy} = Value of coefficient of correlation between X and Y set of variable.

$\text{Cov}(x, y)$ = Covariance between two set of variables 'x' and 'y'

σ_x = Standard deviation of set of variable x.

σ_y = Standard deviation of set of variable y.

Multiple co-efficient of correlation are the study on degree of relationship between a single dependent variables in combination. If we have a taken three variables x_1 , x_2 and x_3 we have the following multiple correlation coefficient.

$R_{1.23}$ = Multiple correlation coefficient between dependent variables x_2 and x_3 on x_1 .

$R_{2.13}$ = Multiple correlation coefficient between dependent variable x_2 and joint effect of the independent x_1 and x_3 on x_2 .

$R_{3.12}$ = Multiple correlation coefficient between variable x_3 and joint effect of the independent variables x_1 and x_2 .

The multiple correlations co-efficient listed above are computed by using the following formula:

$$R_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2r_{12}r_{13}r_{23}}{1 - r_{23}^2}}$$

$$R_{2.13} = \sqrt{\frac{r_{12}^2 + r_{23}^2 - 2r_{12}r_{23}r_{13}}{1 - r_{13}^2}}$$

$$R_{3.12} = R_{1\ 23} = \sqrt{\frac{r_{13}^2 + r_{13}^2 - 2 r_{12} r_{13}}{1 - r_{12}^2}}$$

e. Coefficient of Determination (r^2)

The coefficient of determination is a measure of the degree of linear association or correlation between two variable one of which happens to be independent and other being dependent variable. In order we word r measures the percentage total variation in dependent variables. The coefficient of determination value can have ranging from zero to one. A value or one can occur only if the unexpected variation is zero which simply means that all the data point in the scatters diagram fall exactly on the regression line.

f. Regression Analysis

Regression analysis is a mathematical measure of the average relationship between two or more variables in terms of original units of data. There are two types of variable in regression analysis. The variable whose value is to be predicted is called dependent variable and whereas the variable which is used for prediction is called independent variable. For the study, simple regression analysis will be used.

i. Market value per share on earning per share

This analysis enables us to know whether EPS is the influencing factor of market value per share or not. At what extent the EPS affects the MVPs.

$$y = a + bx$$

Where,

y = market value per share

a = Regression constant

b = Regression coefficient

x = Earning per share

ii. Market value per share on Dividend per share

This analysis tests the dependency of market per share on dividend per share.

$$y = a + bx$$

Where

Y = Market value per share

a = Regression constant

b = Regression coefficient

x = Dividend per share

g. Multiple Regression Analysis

Multiple regression analysis consists of the measurement of the relationship between the dependent variable and two or more independent variables. The variable 'Dividend' depends up on more than two variables and thus the multiple regressions analysis explains it. The variable 'dividend' depends up on more than two variables and thus, the multiple regression analysis explains it. Here for this study the model has been formulated as model.

$$DIV = a + b_1 EPS + b_2 MVPS + b_3 NWPS$$

Where,

a = Some constant

b = Regression coefficient of the variable

EPS = Earning per share

MVPS = Market value per share

NWPS = Net worth per share

The above model has been formulated considering earning per share, market value per share and net worth per share as basic factors. Since dividend is high if company has reasonable earning, market value per hare and net worth per share. Similarly market price of the stock is also influenced by several factors like dividend per share and earning per share. Thus multiple regression models of MVPS dependent up on DPS and EPS formulated as:

$$MVPS = a + b_1 \text{ DPS} + b_2 \text{ EPS}$$

Where,

MVPS = Market value per share

DPS = Dividend per share

EPS = Earning per share

i. Regression Constant (a)

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

ii. Regression coefficient (b)

The regression coefficient of each independent variable indicates the marginal relationship between the variable and value of dependent variable, holding constant the effect of all other independent variables in the regression model. In other words the coefficient describes how change in independent variables affects the values of dependent variables estimative.

iii. T-statistics

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

$$T = \frac{x_1 - x_2}{S} \times \sqrt{\frac{n_1 n_2}{n_1 + n_2}}$$

Where,

X_1 = Mean of the first sample

X_2 = Mean of the second sample

n_1 = Number of observation in the first sample

n_2 = Number of observation in the second sample.

S = Combined standard deviation.

iv. F-Test

It is also called variance ratio test. To test for the significant of the different between more than two sample variance, F-test can use. The difference between two or more sample variables at the same time, ANOVA is used. In this study, one way ANOVA is used to examine the equality between sample variables. Formula:

$$F = \frac{\text{Variance between Sample}}{\text{Variance within Sample}}$$

$$F = \frac{\text{Sum of square due to row or between banks}}{\text{Sum of square due to error or within banks}}$$

3.7 Test of Hypothesis

Followings are some of the hypothesis that should be tested for the study,

a. First Hypothesis

Null Hypothesis (H_0): There is no significance difference in DPS of sample commercial banks.

Alternative Hypothesis (H_1): There is significance difference in DPS of sample commercial banks.

b. Second Hypothesis

Null Hypothesis (H_0): There is no significance difference in EPS of sample commercial banks.

Alternative Hypothesis (H_1): There is significance difference in EPS of sample commercial banks.

c. Third Hypothesis

Null Hypothesis (H_0): There is no significance difference in DPR of sample commercial banks.

Alternative Hypothesis (H_1): There is significance difference in DPR of sample commercial banks.

CHAPTER - IV

DATA ANALYSIS AND PRESENTATION

After the collection of research data various sources related to the topic, they are presented and analyzed to get certain result which helps to fulfill the objectives of the study. In the previous chapters objective of the study and the review of different literature of different researcher relating to the topic of the study have been discussed. Now in this chapter secondary data of five commercial banks are taken for the analysis of dividend policy. Also different statistical and financial tools are used for the purpose of analysis of data.

4.1 Financial Analysis

Under this topic various financial ratios has been tried to find out which are related to the study. The comparisons of commercial banks are done.

Table No. 1

Dividend per Share of Five Commercial Banks form 2007 to 2011

Year	NIBL	SCBL	NABIL	BOK	EBL	Average
2006/07	617.5	3495	2210	20	636.4	1395.76
2007/08	470	3085	2019.6	732.11	265.5	1314.44
2008/09	20	1689	1227	343.37	30	661.87
2009/10	25	325	530.8	100.5	30	202.26
2010/11	152.75	50	30	129.79	-363.2	-0.132
Average Mean	257.05	1728.9	1203.8	125.15	119.73	
Standard Deviation(S.D)	243.38	1396.37	837.76	292.47	224.73	
Coefficient of Variance	94.68	80.76	69.61	233.69	204.40	

Source: Appendix III

Table No. 1 shows the DPS of the selected banks from the year 2006/07 to 2010/11. In the table Mean, Standard Deviation and Coefficient of Variation respective have been presented.

The DPS of NIBL range between (Rs. 20 to Rs. 617.5) during the period of study. The average DPS is (Rs. 257.05), the S.D. of the DPS is (Rs. 243.38)

and the C.V. of sample bank is (Rs. 94.68), SCBL with in the period of study, has an average DPS of (Rs. 1728.9) ranging between (Rs. 50 to Rs. 3495). The S.D. is (Rs. 1396.37) and the fluctuation of (Rs 80.76) in shown by the C.V. of the bank. During the period of study NABIL has an average DPS of (Rs. 1203.8) with the S.D. (Rs. 837.76). The DPS range between (Rs. 30 to Rs.2210). The C.V. shows there is period of study which is (Rs. 69.61). The average DPS of BOK, during the period of study is (Rs.125.15). It stayed with in the range of (Rs. 20 to Rs. 732.11). The S.D. of EPS is (Rs. 292.47) where as C.V. is (Rs. 233.69). EBL has the DPS range between (Rs. -363.2 to Rs. 636.4). The average DPS is (Rs. 119.73). The S.D. of EPS is (Rs.224.73). Where as C.V. of EPS is (Rs. 204.40) during the period of study.

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

Table No. 2

Earning per Share of Five Commercial Bank from 2007 to 2011

Year	NIBL	SCBL	NABIL	BOK	EBL	Average
2006/07	62.57	167.37	137.08	43.50	78.42	97.78
2007/08	57.87	131.92	115.86	59.94	91.82	91.48
2008/09	37.42	109.99	113.44	54.68	99.99	83.10
2009/10	52.55	77.65	83.81	43.08	100.16	71.45
2010/11	48.84	69.51	70.67	44.51	83.18	63.34
Average Mean	45.05	111.28	104.2	49.14	90.71	
Standard Deviation (SD)	10.95	35.91	23.84	6.88	8.86	
Coefficient of Variance	24.30	32.26	22.88	14.02	9.77	

(Source: Annual Reports of NIBL, SCBL, NABIL, BOK and EBL)

Table No. 2 shows the EPS of the selected banks from the year 2006/07 to 2010/11. In the table mean, standard deviation and coefficient of variation respective have been presented.

The EPS of NIBL range between (Rs. 37.42% to Rs. 62.57%) during the period of study. During this period, the average EPS is (Rs. 45.05%). The S.D. of the EPS is (Rs. 10.95%) and the C.V. of sample bank is (Rs. 24.30%). The SCBL with in the period of study has an average EPS of (Rs. 111.28%) ranging between (Rs. 69.51% to Rs. 167.37%). The S.D. is (Rs. 35.91%) and the fluctuation of (Rs. 32.26%) in shown by the C.V. of the bank. During the period of study NABIL has an average EPS of (Rs. 104.2%) with the S.D. (Rs. 23.84%). The EPS range between (Rs. 70.67% to Rs. 137.50%). The C.V. shows there is period of study which is (Rs. 22.28%). The average EPS of BOK, during the period of study is (Rs. 49.14%). It stayed with in the range of (Rs. 43.08% to Rs. 59.94%). The S.D. of EPS is (Rs. 6.88%) where as C.V. is (Rs. 14.02%). EBL has the EPS range between (Rs. 78.42 to Rs. 100.16%). The average EPS is (Rs. 90.71%). The S.D. of EPS is (Rs. 8.86%) where as C.V. of EPS is (Rs. 9.77%).

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

Table No. 3
Price Earning Ratio of Five Commercial Banks from 2007 to 2011

Year	NIBL	SCBL	NABIL	BOK	EBL	Average
2006/07	27.63	35.25	36.84	31.61	30.99	32.64
2007/08	42.33	51.77	45.53	39.21	34.11	42.59
2008/09	37.10	54.64	43.19	33.37	24.55	38.57
2009/10	13.42	42.23	28.45	19.50	16.27	23.97
2010/11	10.54	25.90	17.72	12.81	13.15	16.02
Average Mean	26.20	41.95	34.35	27.3	23.81	
Standard Deviation (S.D)	12.56	10.58	10.20	9.67	8.10	
Coefficient of Variance	47.96	25.22	29.70	35.44	34.05	

(Source: Annual Reports of NIBL, SCBL, NABIL, BOK and EBL)

The PE ratio of selected banks has been presented the table. It is clear from the table that mean PE ratio of SCBL (i.e. 41.95%) is the highest position throughout the study period where as EBL is lowest position with (23.18%). Similarly NABL, BOK, and NIBL are in 2nd, 3rd, and 4th position with (34.35%), (27.3%) and (26.20%) times respectively. PE ratio of all banks is in increasing trend. It means that the stocks to their earnings and dividend payout.

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

The C.V. analysis shows that C.V. of NIBL (47.96%), BOK (35.44%), EBL (34.05%), NABIL (29.70%) & SCBL (25.22%) which means SCBL is most consistent in P.E. ratio among other banks.

Table No. 4

Dividend Payout Ratio of Five Commercial Banks from 2007 to 2011

Year	NIBL	SCBL	NABIL	BOK	EBL
2006/07	9.86	20.88	16.12	0.45	4.25
2007/08	8.12	23.38	17.43	12.21	0.33
2008/09	0.53	15.36	10.82	6.3	0.30
2009/10	0.47	4.18	6.33	2.33	-3.86
2010/11	3.13	0.72	0.47	2.92	3.55
Average Mean	4.42	27.16	10.22	4.84	0.914
Standard Deviation (S.D)	3.88	16.99	6.29	4.14	2.88
Coefficient of Variance	88.00	62.55	61.62	85.54	3.16

From above table it can be observed the DP ratio of different five commercial banks from year 2007 to 2011.

An average DPR of NIBL is (4.42%). It shows that NIBL generally pay (4.42%) of its total earning as dividend to its shareholders. The S.D. of DPR is (3.88). The C.V. is (88%). This indicates that there is an only about (88%) fluctuation in the DPR of the bank over the study period. SCBL has an average DPR is (27.16%) it means SCBL is generally paying (27.16%) it means SCBL is generally paying (27.16%) of its earning as dividend to its shareholders. The S.D. of DPR is (16.99%) and the C.V. is (62.55%). An average DPR of NABIL indicates that NABIL generally payout (10.22%) of its total earning as dividend to its shareholders. The S.D. of DPR is (6.29%) and C.V. is (61.62%). The C.V. indicates that the DPR of BOK highly inconsistency during the period of study. BOK has an average DPR is (4.84%). It means that BOK generally paying (4.84%) of its earning as dividend to its shareholders. The S.D. of DPR is (4.14%) and C.V. is (85.54%) which is indicates that there is (85.54%) fluctuation in the DPR during the period of study. EBL has an average DPR is (0.941%) during the study period. The Bank generally payout (0.941%) of its

total earning as dividend. The S.D. is (2.88%) and the C.V (3.16%) fluctuation during the period of study.

Table No. 5

Dividend Yield of Five Commercial Banks from 2007 to 2011

Year	NIBL	SCBL	NABIL	BOK	EBL
2006/07	35.71	59.23	43.76	1.45	13.71
2007/08	19.18	45.16	38.28	31.2	9.57
2008/09	1.44	28.11	25.04	18.81	1.22
2009/10	3.54	9.91	22.26	11.96	-23.77
2010/11	29.66	2.77	2.39	22.77	26.98
Average Mean	17.91	29.04	26.35	17.24	5.54
Standard Deviation (S.D)	13.66	21.11	14.41	10.05	16.85
Variance of Coefficient	76.32	72.69	54.67	58.29	3.04

Dividend yield highly influences the market value per share as change in dividend per share can be effective change in the market value of share. The above table shows the dividend yield analysis of five commercial banks from 2006 to 2011.

The D.Y of NIBL range between (1.44% to 35.71%) during the period of study. The average of D.Y is (17.91%) The S.D. of the D.Y. under the period of study (13.66%). The C.V. of bank is (76.32%), which indicates that the fluctuation of D/Y of NIBL is (76.32%). SCBL within the period of study has an average D.Y (29.04%) ranging between (2.77% to 59.23%). The S.D. is (21.11%), where as C.V. (72.69%). The C.V. indicates there is fluctuation of (72.69%) in the Dividend Yield.

NABIL bank has an average D.Y of (26.35%) within S.D. of (14.41%). The D.Y range between (2.29% to 43.76%). The C.V. shows that there is a fluctuation of (54.64%). BOK bank has an average D.Y of (17.24%) within S.D. of (10.05%). The D.Y range between (1.45% to 31.2%). The C.V. shows that there is a fluctuation of (58.29%). EBL bank has an average D.Y of

(5.54%) within S.D. of (16.85%). The D.Y range between (-23.77% to 26.98%). The C.V. shows that there is a fluctuation of (3.04%).

Table No. 6

Market Value per Share of Five Commercial Banks from 2007 to 2011

Year	NIBL	SCBL	NABIL	BOK	EBL	Average
2006/07	1729	5900	5050	1375	2430	3296.8
2007/08	2450	6830	5275	2350	3132	4007.4
2008/09	1388	6010	4899	1825	2455	3315.4
2009/10	705	3279	2384	840	1630	1767.6
2010/11	515	1800	1252	570	1094	1046.2
Average Mean	1357.4	4763.8	3772	1395	2148.2	
Standard Deviation (S.D)	702.57	1902.7	1639.47	645.89	660.9	
Coefficient of Variance	51.75	39.94	43.46	46.30	30.76	

(Source: Annual Reports of NIBL, SCBL, NABIL, BOK and EBL)

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

As per the table, highest mean MPS is Rs. 6830 of SCBNL and the lowest one is Rs. 515 of NIBL. Mean MPS of NIBL, SCBL, NABIL, BOK and EBL are Rs. 1357.4, Rs. 4763.8, Rs. 3772, Rs 1395 and Rs. 2148.2 respectively. By this result we can say that SCBNL is best than others i.e. Rs. 4763.8 and least of NIBL is Rs. 1357.4. As we observe in figure 6 MPS of all banks generally in increasing trend. When the capital rate increases, there is also increase in MPS. Here the analysis of MPS trend shows that capital increasing rate of all banks is not similar to each other.

4.2 Correlation Analysis

Table No. 7

Correlation between DPS and MPS of Five Commercial Banks.

BANK	Coefficient of Correlation (r)	Relationship	R ²	Probable Error
NIBL	0.700	Positive	0.49	0.154
SCBL	0.8897	Positive	0.792	0.0631
NABIL	0.972	Positive	0.944	0.01665
BOK	0.875	Positive	0.765	0.07069
EBL	0.0788	Positive	0.0062	0.2997

(Source: Appendix I)

Above table shows the relationship between DPS and MPS of five commercial banks respectively from the period of five years starting from 2006 to 2011. All banks are positively correlated.

From the above relations it can be said that increase and decreases in dividend per share does not lead to increase and decrease in the stock price.

Table No. 8

Correlation between EPS and MPS of Five Commercial Banks.

BANK	Coefficient of Correlation(r)	Relationship	R ²	Probable Error
NIBL	0.4042	Positive	0.163	0.252
SCBL	0.8153	Negative	0.665	0.1011
NABIL	9.351	Positive	87.44	-26.07
BOK	0.8987	Positive	0.807	0.0580
EBL	0.1129	Positive	0.0127	0.2933

(Source: Appendix I)

The above table shows the relationship between EPS and MPS of NIBL, SCBL, NABIL, BOK and EBL respectively. Positive correlations have existed in NIBL (0.4042), SCBL (0.8153), BOK (0.8987), and EBL (0.1129). NABIL (0.08) is high correlated. All the four banks shows the low degree of relationship (insignificant) where $r > 6P.E.$ in NABIL is high degree of

relationship (significant) where $r < 6P.E.$. Therefore it can be conclude that stock price is highly affected by their earning per share.

Table No. 9

Correlation between PE Ratio and MPS of Five Commercial Banks.

BANK	Coefficient of Correlation(r)	Relationship	R ²	Probable Error
NIBL	0.9065	Positive	0.83	0.2479
SCBL	0.7513	Positive	0.56	0.1314
NABIL	0.7182	Positive	0.52	0.2165
BOK	0.9660	Positive	0.933	0.0202
EBL	0.9553	Positive	0.913	0.0264

From the above table it can be seen the relationship between PE ratio and MPS of the five different banks. Positive correlation occurs between all the banks. The correlation coefficient of NIBL, SCBL, NABIL, BOK and EBL is greater than $6PE$, it is significant as its $r > 6PE$. It shows that PE ratio has positive effect in the stock price.

Table No. 10

Correlation between DP Ratio and MPS

BANK	Coefficient of Correlation(r)	Relationship	R ²	Probable Error
NIBL	0.6990	Positive	0.4886	0.1543
SCBL	0.9687	Positive	0.938	0.01858
NABIL	0.37865	Positive	0.143	0.2584
BOK	0.8026	Positive	0.644	0.1074
EBL	-0.0235	Negative	0.00055	0.3018

Above table shows the relationship between DP ratio and MPS of five banks in the time period from 2007 to 2011. EBL shows the negative relationship and have the correlation coefficient of -0.0235 and respectively and NIBL, SCBL, NABIL and BOK is positively correlated as correlation coefficient is 0.69, 0.96, 0.37 and 0.83. Although NIBL, SCBL, NABIL and BOK coefficient of correlation (r_0) is greater than P.E., it is not significant as its $r > 6PE$.

Negative relation exist EBL from above relationship between or and MPS of banks is more case it shows negative relation so it can be said that DP affect on stock price negatively.

Table No. 11

Correlation between DY and MPS of Five Commercial Banks.

BANK	Coefficient of Correlation(r)	Relationship	R ²	Probable Error
NABIL	0.3511	Positive	0.559	0.264
SCBL	0.8599	Positive	0.938	0.0786
NABIL	17.745	Positive	0.143	-94.68
BOK	0.3902	Positive	0.152	0.255
EBL	-0.091	Negative	0.008	0.304

The above table shows the relationship between DY and MPS. It shows EBL is negative relationship between dividend field and MPS in all four banks are NIBL (0.3511), SCBL (0.8599), NABIL (17.745) and BOK (0.3902). It means DY positive on stock price of the above four banks.

4.3 Regression Analysis

Table No. 12

Regression between EPS and MPS of Five Commercial Banks

Bank	Constant (A)	Relationship Coefficient (B)	T-value
NIBL	3071.56	33.06	0.8366
SCBL	9569.59	43.185	4.211
NABIL	75371.91	687.32	-0.187
BOK	5532.05	84.25	8.094
EBL	2978.14	9.149	0.2012

The above table shows the simple regression analysis between market price per share and earning per share of the five commercial banks.

From the table, it can be seen that the regression coefficient (B) of NIBL (33.06), SCBL (43.185), NABIL (687.32), BOK (84.25) and EBL (9.149) is

positive, which shows the positive correlation between MPS and EPS of concerned banks, which implies one rupee increases in EPS leads to an average of about Rs. 687.32 increase in MPS of NABIL, Rs. 9.14 in EBL holding other variable constant which can effect on MPS.

The test of t- statistic aid to conclude that in NIBL the relationship between MPS and EPS is insignificant, since the calculated value of t (0.84) is lower than tabulated value of t (2.78), in SCBL the relationship between MPS and EPS is also highly insignificant as the calculated value of t (4.2) is higher than tabulated value of t (2.78), in NABIL the relationship between MPS and EPS is also highly insignificant as the calculated value of t (-0.1874) is lower than tabulated value of t (2.78), in EBL the relationship between MPS and EPS is also highly insignificant as the calculated value of t (0.2012) is lower than tabulated value of t (2.78) and in BOK the results are highly significant, Since the calculated t-value (8.094) is higher than the tabulated t-value (2.78) at 5% level of significance on 4 degree of freedom.

Table No. 13

Regression between DPS and MPS of Five Commercial Banks

Bank	Constant (A)	Relationship Coefficient (B)	T-value
NIBL	1876.89	2.021	2.377
SCBL	-49466.6	-31.367	7.391
NABIL	-3541.5	-6.077	30.06
BOK	2007.15	2.32	6.46
EBL	2190.55	0.704	0.137

The above table shows the simple regression analysis between market price per share and dividend per share of the five commercial banks.

From the above table we can see the regression coefficient (B) of is positive in NIBL (2.021), BOK (2.32), EBL (0.704), which indicates the positive correlation an implies one rupees increase in DPS leads to an average increase

on Rs 2.32, in BOK, Rs 2.077 in NIBL, and Rs 0.704 shows that these banks MPS does depends on DPS.

From the above table regression coefficient (B) of is negative in SCBL (-31.367) and NABIL (-6.077) which indicates the negative correlation on implies one rupees increase in DPS leads to an average decrease on Rs 31.36, in SCBL, Rs 6.077 in NABIL, and SCBL, NABIL show that these banks MPS does not depends on DPS.

4.4 Test of Hypothesis

4.4.1 First Hypothesis

Null Hypothesis (H_0) : $\mu_1 = \mu_2 = \mu_3$ i.e. There is no significant difference in DPS of sample banks.

Alternative Hypothesis (H_1) $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is no significant difference in DPS of sample banks.

Cash Dividend Per Share

Year	Banks				
	NIBL	SCBL	NABIL	BOK	EBL
2006/07	5.00	80.00	100.00	20.00	20.00
2007/08	7.50	80.00	60.00	2.11	30.00
2008/09	20.00	50.00	35.00	7.37	30.00
2009/10	25.00	55.00	30.00	15.00	50.00
2010/11	25.50	50.00	30.00	16.75	1.58

(Source: Annual Reports of NIBL, SCBL, NABIL, BOK and EBL)

Table No. 14
One-way ANOVA table for CDPS

Source of Variation	Sum of Squares	Degree of Freedom CD.F.= n-1	Mean Sum of Square	F-Ratio
Between Banks	22182.73	2(3-1)	11091.4	-22.46
Within Banks	-5925.19	12(15-3)	-493.76	
Total	16257.54	14 (15-1)		

Critical value: The tabulated value of F at 5% level of significance of 2 and 12 D.F. is 3.89.

Decision: Since the calculated value of F is less than the tabulated value of F the null hypothesis (H_0) is accepted and hence the alternative hypothesis (H_1) is rejected. Therefore we can conclude that there is no significance difference in CDPS of sample banks.

4.4.2 Second Hypothesis

Null Hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3$ i.e. There is no significant difference in EPS of sample banks.

Alternative Hypothesis (H_1) $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is no significant difference in EPS of sample banks.

Earning Per Share (EPS)

Year	Banks				
	NIBL	SCBL	NABIL	BOK	EBL
2006/07	62.57	167.37	137.08	43.50	78.42
2007/08	57.87	131.92	115.86	59.94	91.82
2008/09	37.42	109.99	113.44	54.68	99.99
2009/10	52.55	77.65	83.81	43.08	100.16
2010/11	48.84	69.51	70.67	44.51	83.16

(Source: Annual Reports of NIBL, SCBL, NABIL, BOK and EBL)

Table No. 15
One-way ANOVA table for EPS

Source of Variation	Sum of Squares	Degree of Freedom CD.F.=n-1	Mean Sum of Square	F-Ratio
Between Banks	17063.06	2 (3-1)	8531.53	9.96
Within Banks	10282.95	12 (15-3)	856.91	
Total	27346.01	14 (15-1)		

Critical value: The tabulated value of F at 5% level of significance of 2 and 12 D.F. is 3.89.

Decision: Since the calculated value of F is greater than the tabulated value of F the null hypothesis (H_0) is rejected and hence the alternative hypothesis (H_1) is accepted. Therefore we can conclude that there is significance difference in EPS of sample banks.

4.4.2 Third Hypothesis

Null Hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3$ i.e. There is no significant difference in DPR of sample banks.

Alternative Hypothesis (H_1) $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is no significant difference in DPR of sample banks.

Dividend Payout Ratio (DPR)

Year	Banks				
	NIBL	SCBL	NABIL	BOK	EBL
2006/07	9.86	20.88	16.12	0.45	4.25
2007/08	8.12	23.38	17.43	12.21	0.33
2008/09	0.53	15.36	10.82	6.3	0.30
2009/10	0.47	4.18	6.33	2.33	-3.86
2010/11	3.13	0.72	0.42	2.92	3.55

(Source: Annual Reports of NIBL, SCBL, NABIL, BOK and EBL)

Table No. 16
One-way ANOVA table for DPR

Source of Variation	Sum of Squares	Degree of Freedom CD.F.=n-1	Mean Sum of Square	F-Ratio
Between Banks	465.09	2 (3-1)	232.545	3.59
Within Banks	775.51	12 (15-3)	64.63	
Total	1240.6	14 (15-1)		

Critical value: The tabulated value of F at 5% level of significance of 2 and 12 D.F. is 3.89.

Decision: Since the calculated value of F is less than the tabulated value of F the null hypothesis (H_0) is accepted and hence the alternative hypothesis (H_1) is rejected. Therefore we can conclude that there is no significance difference in DPR of sample banks.

4.5 Major Findings

The major findings of the study are stated as follows:

- * The SCBL has the highest DPS Rs. 3495 to the share holders. The C.V. of the DPS is 69.61% NABIL of NIBL, SCBL, BOK, EBL and EBL pay the lowest DPS Rs. -363.2 and highest fluctuation C.V. BOK is 233.69%.
- * By observing the data of five commercial banks (NIBL, SCBL, NABIL, BOK and EBL) earning per share, the coefficient of variation indicates that there is no consistency of EPS. The C.V. is 9.77% of EBL and that of NIBL is 24.30% and SCBL is 32.26%, NABIL is 22.88% and BOK is 14.02%, SCBL has highest average EPS Rs. 111.28 NIBL has least average EPS Rs. 45.05%.
- * The average Price-earning ratio (PE) of SCBL is 41.95%, and EBL'S PE ratio is 23.18%. SCBL has highest PE ratio. PE of SCBL is more unstable than other. Higher the PE ratio indicates the favorable condition

of the banks so SCBL has favorable performance during the research period.

- * The analysis of DPR shows that in an average SCBL has the highest DPR 27.16% and last fluctuation. EBL'S DRP is more fluctuating.
- * The average dividend Yield of the banks under the study indicates that the dividend Yield is quite low. SCBL has average dividend Yield 29.04%, NABIL 26.35%, NIBL 17.91%, BOK 17.24% and EBL 5.54%.
- * The average market value per share (MVPS) shows that there is quite high level of fluctuation. SCBL has higher average MVPS Rs. 4763, hut average MVPS of NIBL Rs. 1357.4 which is lowest in comparison to SCBL.
- * The correlation of NIBL between DPS and MPS, EPS and MPS, EP ratio and MPS, DPR and MPS, DY and MPS, is positive.
- * The correlation of SCBL between DPS and MPS, EPS and MPS, PE ratio and MPS, DP ratio and MPS, DY and MPS is positive.
- * The correlation of NABIL between DPS and MPS, EPS and MPS, PE ratio and MPS, DPR and MPS, DY and MPS, is positive.
- * The correlation of BOK between DPS and MPS, EPS and MPS, PE Ratio and MPS, is positive and but DPR and MPS, DY and MPS is negative.
- * The correlation of EBL between DPS and MPS, EPS and MPS, PE ratio and MPS, DPR and MPS, DY and MPS, is positive.
- * The regression between MPS and EPS indicates that the regression coefficient (B) of NIBL, SCBL, NABIL, BOK and EBL is positive.
- * The regression of MPS and DPS shows that regression coefficient (B) is positive of NIBL, BOK and EBL and but SCBL and NABIL is negative.
- * The first hypothesis between DPS of NIBL, SCBL, NABIL, BOK and EBL is lass than the tabulated value at 5% level of significance. So null hypothesis (H_0) is accepted and alternative hypothesis (H_1) is rejected, which is no significance.

- * The second hypothesis between EPS of five commercial banks is greater than the tabulated value at 5% level of significance. So null hypothesis (H_0) is rejected and alternative hypothesis (H_1) is accepted which is significance.
- * The third hypothesis between DPR of five commercial banks is less than the tabulated value at a 5% level of significance. So null hypothesis (H_0) is accepted and alternative hypothesis (H_1) is rejected, which is no significance.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

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

5.1 Summary

It concludes the findings in an understandable form and it provides some suggestion to the concerned authority as well as practitioner and academicians. The recommendation is presented in this chapter considering major findings and gaps found there too.

The study is based on secondary data for a period of 2006/07 to 2010/11. This study attempts to analyze the dividend policy of commercial banks. To analyze the dividend payment practices of banks; different financial ratios have been calculated and interpreted.

Cash Dividend serves as simple, comprehensive signal of management's interpretation of the firm's record performance and its future prospects. Cash Dividend refers to that portion of firm's net earning which is paid out to the shareholders. The improved corporate dividend practices are thus essential means to solve the problem of asymmetric information between companies and Nepalese's investors who have poured their funds there in.

Simple regression analyses have been done to make the research more reliable. To assess the impact of dividend on MPS, available information from different sectors were reviewed and analyzed. At least, testing of hypothesis has been done.

The study shows that none of the banks have well defined and appropriate dividend policy. It is found from the study that banks are paying dividend but there is instability of dividend and inconsistent payout ratio is the most applied phenomenon of Nepalese dividend distribution practices. They don't seem to

follow the optimum dividend policy of paying regular dividend as per the shareholders expectation. It might cause uncertainty among shareholder. A change in dividend per share and payout ratio affects the share price differently in different banks.

The theoretical statement of this paper is to study the dividend practices of sampled banks therefore, it is 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 may also impact on market price of share. For this argument two simple regressions were formed. The first simple regression was formed to assess the impact of EPS on market price of share. It concludes the fact that earning per share has positive and negative impact on MPS whereas the second simple regression was formed to assess the impact of DPS on MPS. From the analysis, it is found that the DPS has positive and negative impact on MPS. From the regression analysis, it can be concluded that a change in dividend per share affects the share price differently in differently in different banks.

Further companies have not been following stable dividend policy; on the other hand, the dividend payout ratio of listed companies in Nepal has not been able to distribute fair dividends. In Nepal, only a few listed companies have paying regular dividend to their shareholder. The theoretical statement of this study is to study the dividend practices of sampled bank therefore, it is 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 share. For this argument, there were two multiple regression formed.

The market price of share is affected by financial position and the dividend paid by the firms. In the regards the MPS of the sample banks are seem to be fluctuated. It denotes Nepalese investors are not treated fairly. The lack of financial knowledge and the market inefficiency has affected the market price of the share in all the sample banks.

Due to the division of earning of a company (between dividend payout and retention of earnings) its effect on the market price of shares is a crucial question. Paying dividend to shareholders in an effective way to lure new investors to invest in shares. It is therefore, necessary that a wise policy should be maintained to balance between shareholders interest with that of corporate growth from internally generated funds. Since, shareholders have investment opportunities to employ of investment opportunities could not be used due to lack of investment opportunities could not be sued due to lack of investment opportunities should be better paid as dividends. So in conclusion it can be said that the dividend policy should be optimal which balances the opposing forces and maximizes stock price.

5.2 Conclusion

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

Not only the companies do not have dividend policy but also the government does not have any clear policy towards dividend. There is lack of rules and regulations that bind companies to pay dividend every year. There seems instability of dividend and inconsistency in dividend payout ratio of the banks. Every year EPS and MPS are highly fluctuating. The CV of EPS has ranged from 9.77 to 32.26 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 5.54 percent to 29.04 percent. The highest percent of 29.04% is also cannot be considered so encouraging figure.

Shareholders in Nepal are not conscious. Taking the advantage of unconscious shareholders, the company management does not show the commitment promised in prospectors while raising capital. Promoter lures investors mentioning to pay attractive dividends, which company makes profit. However,

in reality, most of the companies are deviated from their statement as promise in prospectus. Government does not have any clear policy towards dividend and to improve the efficiency of the companies. The number of companies can not earn enough profit and bureaucrats accused the cause of inefficiency to managers which is not sound.

5.3 Suggestion and Recommendation

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

- * The legal rule for the treatment of dividend is most for smooth growth of the enterprises as well as national economy. There is a lack of rules binding companies to pay dividend. Some regulating acts are silent on these matters. Some companies are in position to pay dividend. But some companies are suffering from loss and there are efforts to minimize loss rather than payment of dividend. For this purpose, GON, NEPSE, SCBON and concerned parties should do work together in favor of investors and bind their companies by separate rules.
- * Shareholders should be given an option to choose between stock dividend and cash dividend declaration should be proposed to the annual general meeting of shareholders for approval.
- * Clearly defined dividend policy helps to determine specific policy i.e. Banks are paying dividend without adopting any appropriate policy. Companies should have their clearly defined dividend policy. Stable dividend or constant pays out or low regular plus extras. What should be the long run dividend payout policies or smoothed dividend policy. This helps to investor in deciding whether to buy or not the share of particular company and to build good image, stock market.

- * The government should encourage for the establishment of organization to promote and protect activities in favor of investors. There are not any other organizations fully devoted to protect investors' interest.
- * Payment of dividend is neither static nor constantly growing. It is highly fluctuating; such way of paying dividend could not impress the market positively. So, these banks are advised to follow either static or constantly growing dividend policy. It would be better to fix the amount of dividend in the general annual meeting. This is important not only from the point of view of adequate return to shareholders but also to generate stable and increasing market value per share, long run survival of banks, efficient management and socially acceptable distribution of income.
- * The legal rules and regulations must be in favor of investors to excise the dividend practice and to protect the shareholders rights.
- * Each and every company should provide the information regarding their activities and performance so that investors can analyze the situation and invest their money in the best company.
- * Although the payout ratio of the sample banks is fluctuating from year to year, there is no rational approach in deciding the payout. All the banks should analyze the internal rate of return and the cost of capital in deciding DPR which helps to maximize the shareholders' wealth.
- * Banks are advice to have target rate of earning and target payout ratio that will help companies to build good image in stock market and investors will be ease on making investment decision.
- * The organization formed by conscious shareholders like 'Shareholder's Association of Nepal' should be encouraged to work against the management ignorance.

Each and every company should provide the information regarding their activities and performance, so that investors can analyze the situation and invest their money in the best company.

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Appendix I

Calculation of Correlation Coefficient and Regression Analysis between DPS and MPS

a) NIBL Bank

Calculated table of Correlation Coefficient between DPS & MPS

Year	DPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	617.5	1729	1067657.5	381306.25	2989441
2007/08	470	2450	1151500	220900	6002500
2008/09	20	1388	27760	400	1926544
2009/10	25	705	17625	625	497025
2010/11	152.75	515	78666.25	23332.56	265225
	X=1285.25	Y=6787	XY=2343208.75	X ² =626563.81	Y ² =11680735

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.700$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.154$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B = Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = 2.021$$

$$A = \bar{y} - b\bar{x} = 1876.89$$

b) SCBL Bank

Year	DPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	3495	5900	20620500	12215025	34810000
2007/08	3085	6830	21070550	9517225	46648900
2008/09	1689.5	6010	10153895	2854410.25	36120100
2009/10	325	3279	1065675	105625	10751841
2010/11	50	1800	90000	2500	3240000
	X=8644.5	Y=23819	XY=53000620	X ² =24694785.25	Y ² =131570841

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.8897$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.0745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.0631$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B = Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = - 31.367$$

$$A = \bar{y} - b\bar{x} = - 49466.6$$

c) NABIL Bank

Year	DPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	2210	5050	11160500	4884100	25502500
2007/08	2019.6	5275	10653390	4078784.16	27825625
2008/09	1227	4899	6011073	1505529	24000201
2009/10	530.8	2384	1265427.2	281748.64	5683456
2010/11	30	1252	37560	900	1567504
	X=6017.4	Y=18860	XY=29127950.2	X ² =10497487.8	Y ² =84579286

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.972$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.01665$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B= Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = -6.077$$

$$A = \bar{y} - bx = -3541.5$$

d) BOK Bank

Year	DPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	20.00	1375	27500	400	1890625
2007/08	732.11	2350	1720458.5	535985.1	5522500
2008/09	343.37	1825	626650.25	10100.25	3330625
2009/10	100.5	840	84420	84420	705600
2010/11	129.79	570	73980.3	16845.44	324900
	X=1325.77	Y=6960	XY=2533009.1	X ² =647350.74	Y ² =11774250

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.875$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.070697$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B= Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\Sigma xy - \Sigma x \Sigma y}{n\Sigma x^2 - (\Sigma x)^2} = 2.32$$

$$A = \bar{y} - b\bar{x} = 2007.15$$

e) EBL Bank

Year	DPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	636.4	2430	809676	111022.24	5904900
2007/08	265.5	3132	93960	900	9809424
2008/09	30	2455	73650	900	6027025
2009/10	30	1630	-631788	-150233.76	2656900
2010/11	-363.22	1094	322948.8	87143.04	1196836
	X=300.8	Y=10741	XY=668446.8	X ² =49731.52	Y ² =25595085

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2} \sqrt{n\Sigma Y^2 - (\Sigma Y)^2}} = 0.07885$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.29977$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B = Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = 0.7039$$

$$A = \bar{y} - b\bar{x} = 2190.55$$

Calculation of Correlation Coefficient and Regression Analysis between EPS and MPS

a) NIBL Bank

Year	EPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	62.57	1729	108183.53	3915	2989441
2007/08	57.87	2450	141781.5	3348.94	6002500
2008/09	37.42	1388	51938.96	1400.26	1926544
2009/10	52.55	705	37047.75	2761.50	497025
2010/11	48.84	515	25152.6	2385.34	265225
	X=259.25	Y=6787	XY=364104.34	X ² =13811.04	Y ² =11680735

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.4042$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.252$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B = Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = 33.06$$

$$A = \bar{y} - b\bar{x} = 3071.56$$

b) SCBL Bank

Year	EPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	167.37	5900	987483	28012.72	34810000
2007/08	131.92	68300	901013.6	17402.88	46648900
2008/09	109.99	6010	661039.9	12097.80	36120100
2009/10	77.65	3279	254548.77	6026.42	10751841
2010/11	69.51	1800	125172	4831.64	3240000
	X=556.42	Y=23819	XY=2929257.27	X ² =68371.5	Y ² =131570841

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.8153$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \sqrt{1 - r^2}}{\sqrt{n}}$$

$$\text{P.E.} = 0.10114$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B = Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = 43.185$$

$$A = \bar{y} - b\bar{x} = 9569.599$$

c) NABIL Bank

Year	EPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	137.08	5050	692254	18790.93	25502500
2007/08	115.86	5275	611161.5	13423.54	27825625
2008/09	113.44	4899	555742.56	12868.63	24000201
2009/10	83.81	2384	199803.04	7024.12	5683456
2010/11	70.67	1252	88478.84	4994.25	1567504
	X=520.86	Y=18860	XY=2147439.94	X ² =57101.47	Y ² =84579286

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 9.351$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = - 26.07$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B = Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = 687.324$$

$$A = \bar{y} - b\bar{x} = 75371.91$$

d) BOK Bank

Year	EPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	43.50	1375	59812.5	1892.25	1890625
2007/08	59.94	2350	140859	3592.80	5522500
2008/09	54.68	1825	99791	2989.90	3330625
2009/10	43.08	840	36187.2	1855.88	705600
2010/11	44.51	570	25370.7	1981.14	324900
	X=245.71	Y=6960	XY=362020.4	X ² =12311.97	Y ² =11774250

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.8987$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.058$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B = Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = 84.25$$

$$A = \bar{y} - b\bar{x} = 5532.05$$

e) EBL Bank

Year	EPS (X)	MPS (Y)	XY	X ²	Y ²
2006/07	78.42	2430	190560.6	6149.69	5904900
2007/08	91.82	3132	287580.24	8430.91	9809424
2008/09	99.99	2455	245475.45	9998.00	6027025
2009/10	100.16	1630	163260.8	10032.02	2656900
2010/11	83.18	1094	90998.92	6918.91	1196836
	X=453.57	Y=10741	XY=977876.01	X ² =41529.53	Y ² =25595085

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.11297$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.2933$$

Regression Equation of Y on X is

$$Y = a + bx$$

Where,

A = Regression Constant

B = Regression coefficient (slope of the regression line)

According to the principle of least squares two normal equation for estimating two numerical constant a & b are given by

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

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

Solving these two normal equations we get,

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} = 9.15$$

$$A = \bar{y} - b\bar{x} = 2978.23$$

Calculation of Correlation Coefficient between PE Ratio and MPS

a) NIBL Bank

Year	PE ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	27.63	1729	47772.27	763.42	2989441
2007/08	42.33	2450	103708.5	1791.83	6002500
2008/09	37.10	1388	51494.8	1376.44	1926544
2009/10	13.42	705	9461.1	180.09	497025
2010/11	10.54	515	5428.1	111.09	265225
	X=131.02	Y=6787	XY=217864.77	X ² =4222.84	Y ² =11680735

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.90656$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.2479$$

b) SCBL Bank

Year	PE ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	35.25	5900	207975	1242.56	34810000
2007/08	51.77	6830	353589.1	2680.13	46648900
2008/09	54.64	6010	328386.4	2985.53	36120100
2009/10	42.23	3279	138472.17	1783.37	10751841
2010/11	25.90	1800	46620	670.81	3240000
	X=209.79	Y=23819	XY=1075042.67	X ² =9362.4	Y ² =131570841

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.7513$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.13138$$

c) NABIL Bank

Year	PE ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	36.84	5050	186042	1357.185	25502500
2007/08	45.53	5275	240170.75	2072.98	27825625
2008/09	48.19	4899	211587.81	1865.376	24000201
2009/10	28.45	2384	67824.8	809.40	5683456
2010/11	17.72	1252	22185.44	313.99	1567504
	X=171.73	Y=18860	XY=707843.8	X ² =6418.93	Y ² =84579286

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.7182$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.2165$$

d) BOK Bank

Year	PE ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	31.61	1375	43463.75	999.19	1890625
2007/08	39.21	2350	92143.5	1537.42	5522500
2008/09	33.37	1825	60900.25	1113.55	3330625
2009/10	19.50	840	16380	380.25	705600
2010/11	12.81	570	7301.7	164.09	324900
	X=136.5	Y=6960	XY=220189.2	X ² =4194.5	Y ² =11774250

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.9660$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.02016$$

e) EBL Bank

Year	PE ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	30.99	2430	75305.7	960.38	5904900
2007/08	34.11	3132	106832.52	1163.49	9809724
2008/09	24.55	2455	60270.25	602.70	6027025
2009/10	16.27	1630	26520.1	264.71	2656900
2010/11	13.15	1094	14386.1	172.92	1196836
	X=119.07	Y=10741	XY=283314.67	X ² =3164.2	Y ² =25595085

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.9553$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.0264$$

Calculation of Correlation Coefficient between DP Ratio and MPS

a) NIBL Bank

Year	DP ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	9.86	1729	17047.94	97.81	2989441
2007/08	8.12	2450	19894	65.93	6002500
2008/09	0.53	1388	735.64	0.2809	1926544
2009/10	0.47	705	331.35	0.2209	497025
2010/11	3.13	515	1611.95	9.796	265225
	X=22.13	Y=6787	XY=39620.88	X ² =174.038	Y ² =11680735

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.6990$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.1543$$

b) SCBL Bank

Year	DP ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	20.88	5900	123192	435.97	34810000
2007/08	23.38	6830	159685.4	546.62	46648900
2008/09	15.36	6010	92313.6	235.93	36120100
2009/10	4.18	3279	13706.22	17.47	10751841
2010/11	0.72	1800	1296	0.518	3240000
	X=64.52	Y=23819	XY=390193.22	X ² =1236.50	Y ² =131570841

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.9687$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.01858$$

c) NABIL Bank

Year	DP ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	16.12	5050	81406	259.85	25502500
2007/08	17.43	5275	91943.25	300.675	27825625
2008/09	10.82	4899	53007.18	117.07	24000201
2009/10	6.33	2384	15090.72	40.068	5683456
2010/11	0.42	1252	525.84	0.1764	1567504
	X=51.12	Y=18860	XY=241972.99	X ² =1777.84	Y ² =84579286

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.37865$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.2584$$

d) BOK Bank

Year	DP ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	0.45	1375	618.75	0.2025	1890625
2007/08	12.21	2350	2869.35	149.08	5522500
2008/09	6.3	1825	11497.5	39.69	3330625
2009/10	2.33	840	1957.2	5.43	705600
2010/11	2.92	570	1664.4	8.53	324900
	X=24.21	Y=6960	XY=44431.35	X ² =202.9325	Y ² =11774250

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.8026$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.1074$$

e) EBL Bank

Year	DP ratio (X)	MPS (Y)	XY	X ²	Y ²
2006/07	0.45	1375	618.75	0.2025	1890625
2007/08	12.21	2350	28693.5	149.08	5522500
2008/09	6.3	1825	11497.5	39.69	3330625
2009/10	2.33	840	1957.2	5.43	705600
2010/11	2.92	570	1664.4	8.53	324900
	X=24.21	Y=6960	XY=44431.35	X ² =202.9325	Y ² =11774250

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = -0.0235$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.3018$$

Calculation of Correlation Coefficient between DY and MPS

a) NIBL Bank

Year	DY (X)	MPS (Y)	XY	X ²	Y ²
2006/07	35.71	1729	61742.59	1275.20	2989441
2007/08	19.18	2450	46991	367.87	6002500
2008/09	1.44	1388	1998.72	2.074	1926544
2009/10	3.54	705	2495.7	12.53	497025
2010/11	29.66	515	15274.9	879.72	265225
	X=89.53	Y=6787	XY=128502.91	X ² =2537.39	Y ² =11680735

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.3511$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.264$$

b) SCBL Bank

Year	DY (X)	MPS (Y)	XY	X ²	Y ²
2006/07	59.23	5900	349457	3508.19	34810000
2007/08	45.16	6830	308442.8	2039.43	46648900
2008/09	28.11	6010	168941.1	790.172	36120100
2009/10	9.91	3279	32494.89	98.21	10751841
2010/11	2.77	1800	4986	7.673	3240000
	X=145.18	Y=23819	XY=864321.79	X ² =6443.675	Y ² =131570841

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.8599$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.0786$$

c) NABIL Bank

Year	DY (X)	MPS (Y)	XY	X ²	Y ²
2006/07	43.76	5050	2212068	1714.94	25502500
2007/08	38.28	5275	201927	1465.35	27825625
2008/09	25.04	4899	122670.96	627.00	24000201
2009/10	22.26	2384	53067.84	495.51	5683456
2010/11	2.39	1252	2992.28	5.71	1567504
	X=131.73	Y=18860	XY=2592726.08	X ² =4508.51	Y ² =84579286

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 17.745$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = -94.68$$

d) BOK Bank

Year	DY (X)	MPS (Y)	XY	X ²	Y ²
2006/07	1.45	1375	1993.75	2.103	1890625
2007/08	31.2	2350	73320	973.44	5522500
2008/09	18.81	1825	34328.25	353.82	3330625
2009/10	11.96	840	10046.4	143.04	705600
2010/11	22.77	570	12978.9	518.47	324900
	X=86.19	Y=6960	XY=132667.3	X ² =1990.87	Y ² =11774250

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = 0.3902$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 * (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.256$$

e) EBL Bank

Year	DY (X)	MPS (Y)	XY	X ²	Y ²
2006/07	13.71	2430	33315.3	187.96	5904900
2007/08	9.57	3132	29973.24	91.58	9809424
2008/09	1.22	2455	2995.1	1.488	6027025
2009/10	-23.77	1630	-38745.1	-565.01	2656900
2010/11	26.98	1094	29516.12	727.92	1196836
	X=27.71	Y=10741	XY=57054.66	X ² =443.94	Y ² =25595085

Here, N = 5

$$\text{Coefficient of Correlation } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}} = -0.09136$$

And,

$$\text{Probable Error (P.E.)} = \frac{0.6745 \cdot (1 - r^2)}{\sqrt{n}}$$

$$\text{P.E.} = 0.3042$$

Appendix II

Test of hypothesis

(A) One way analysis of variance (ANOVA) for Dividend Per Share

Fiscal Year	NIBL (X ₁)	SCBL (X ₂)	NABIL (X ₃)	BOK (X ₄)	EBL (X ₅)	X ₁ ²	X ₂ ²	X ₃ ²	X ₄ ²	X ₅ ²
06/07	5.00	80.00	100.00	20.00	10.00	25	6400	10000	400	100
07/08	7.50	80.00	60.00	2.11	20.00	56.25	6400	3600	4.45	400
08/09	20.00	50.00	35.00	7.37	30.00	400	2500	1225	54.32	900
09/10	25.00	55.00	30.00	15.00	30.00	625	3025	900	225	900
10/11	25.00	50.00	30.00	16.75	50.00	625	2500	900	280.56	2500
	82.50	315	255	61.23	140	1731.3	20825	16625	964.33	4800

Here,

$$X_1 = 82.50, \quad X_2 = 315, \quad X_3 = 255, \quad X_4 = 61.23, \quad X_5 = 140, \quad X_1^2 = 1731.3, \\ X_2^2 = 20825, \quad X_3^2 = 16625, \quad X_4^2 = 964.33, \quad X_5^2 = 4800,$$

Note:

Value of X₁, X₂, X₃, X₄ and X₅ represent the value of Cash Dividend Per Share (CDPS) of five banks NIBL, SCBL, NABIL, BOK and EBL respectively.

$$\text{Grand Total (T)} = X_1 + X_2 + X_3 + X_4 + X_5 = 853$$

$$\text{Correction Factor (CF)} = T^2/N = 715^2/5 = 29154.19$$

$$\text{Total Sum of Squares (TSS)} = X_1^2 + X_2^2 + X_3^2 + X_4^2 + X_5^2 - CF \\ = 44873.32 - 29154.19 = 15719.13$$

Sum of squares due of row or between banks (SSR)

$$= (X_1)^2/n_1 + (X_2)^2/n_2 + (X_3)^2/n_3 + (X_4)^2/n_4 + (X_5)^2/n_5 - CF \\ = 82.52/5 + 3152/5 + 2552/5 + 61.232/5 + 1402/5 - 15719.13 \\ = 23161.99$$

$$\text{Sum of squares due of error or between banks (SSE)} = TSS - SSR = - 7442.86$$

(B) One way analysis of variance (ANOVA) for Earning Per Share

Fiscal Year	NIBL (X ₁)	SCBL (X ₂)	NABIL (X ₃)	BOK (X ₄)	EBL (X ₅)	X ₁ ²	X ₂ ²	X ₃ ²	X ₄ ²	X ₅ ²
06/07	62.57	167.37	137.08	43.50	78.42	3915	28012.72	18790.93	1892.25	6149.69
07/08	57.87	131.92	115.86	59.94	91.82	3348.94	17402.88	13423.54	3592.80	8430.91
08/09	37.42	109.99	113.44	54.68	99.99	1400.3	12097.8	12868.63	2989.90	9998.00
09/10	52.55	77.65	83.81	43.08	100.16	2761.5	6029.52	7024.1	1855.88	10032.02
10/11	48.84	69.51	70.76	44.51	83.16	2385.3	4831.64	4994.3	1981.14	6915.58
	259.25	556.44	520.86	245.71	453.55	13811	68374.56	57101.5	12311.97	41526.2

Here,

$$X_1 = 259.25, \quad X_2 = 556.44, \quad X_3 = 520.86, \quad X_4 = 245.71, \quad X_5 = 453.55,$$
$$X_1^2 = 13811, \quad X_2^2 = 68374.56, \quad X_3^2 = 57101.5, \quad X_4^2 = 12311.97, \quad X_5^2 = 41526.2,$$

Note:

Value of X₁, X₂, X₃, X₄ and X₅ represent the value of Earning Per Share (EPS) of five banks NIBL, SCBL, NABIL, BOK and EBL respectively.

$$\text{Grand Total (T)} = X_1 + X_2 + X_3 + X_4 + X_5 = 2035.8$$

$$\text{Correction Factor (CF)} = T^2/N = 4144481.64 / 25 = 165779.26$$

$$\text{Total Sum of Squares (TSS)} = X_1^2 + X_2^2 + X_3^2 + X_4^2 + X_5^2 - \text{CF}$$
$$= 193125.27 - 165779.26 = 27346.01$$

Sum of squares due of row or between banks (SSR)

$$= (X_1)^2/n_1 + (X_2)^2/n_2 + (X_3)^2/n_3 + (X_4)^2/n_4 + (X_5)^2/n_5 - \text{CF}$$
$$259.25^2/5 + 556.44^2/5 + 520.86^2/5 + 245.71^2/5 + 453.55^2/5 - 165779.26$$
$$= 182842.32 - 165779.26 = 17063.06$$

$$\text{Sum of squares due of error or between banks (SSE)} = \text{TSS} - \text{SSR} = 10282.95$$

(C) One way analysis of variance (ANOVA) for Dividend Payout Ratio

Fiscal Year	NIBL (X ₁)	SCBL (X ₂)	NABIL (X ₃)	BOK (X ₄)	EBL (X ₅)	X ₁ ²	X ₂ ²	X ₃ ²	X ₄ ²	X ₅ ²
06/07	9.86	20.88	16.12	0.45	4.25	97.22	435.97	259.85	0.2025	18.06
07/08	8.12	23.38	17.43	12.21	0.33	65.93	546.62	303.8	149.08	0.108
08/09	0.53	15.36	10.82	6.3	0.30	0.3	235.92	117.1	39.69	0.09
09/10	0.47	4.18	6.33	2.33	-3.86	0.22	17.47	40.1	5.43	-14.89
10/11	3.13	0.72	0.42	2.92	3.55	9.79	0.52	0.1764	8.53	12.60
	22.11	64.52	51.12	24.21	4.57	173.46	1236.5	721.03	202.93	15.96

Here,

$$X_1 = 22.11, \quad X_2 = 64.52, \quad X_3 = 51.12, \quad X_4 = 24.21, \quad X_5 = 4.57, \quad X_1^2 = 173.46, \quad X_2^2 = 1236.5, \quad X_3^2 = 721.03, \quad X_4^2 = 202.93, \quad X_5^2 = 15.96,$$

Note:

Value of X₁, X₂, X₃, X₄ and X₅ represent the value of Dividend Payout Ratio (DPR) of five banks NIBL, SCBL, NABIL, BOK and EBL respectively.

$$\text{Grand Total (T)} = X_1 + X_2 + X_3 + X_4 + X_5 = 166.53$$

$$\text{Correction Factor (CF)} = T^2/N = 27732.24/25$$

$$\begin{aligned} \text{Total Sum of Squares (TSS)} &= X_1^2 + X_2^2 + X_3^2 + X_4^2 + X_5^2 - \text{CF} \\ &= 2349.88 - 1109.28 = 1240.6 \end{aligned}$$

Sum of squares due of row or between banks (SSR)

$$\begin{aligned} &= (X_1)^2/n_1 + (X_2)^2/n_2 + (X_3)^2/n_3 + (X_4)^2/n_4 + (X_5)^2/n_5 - \text{CF} \\ &= 22.11^2/5 + 64.52^2/5 + 51.12^2/5 + 24.21^2/5 + 4.57^2/5 - 1109.28 \\ &= 465.09 \end{aligned}$$

$$\text{Sum of squares due of error or between banks (SSE)} = \text{TSS} - \text{SSR} = 775.51$$

Appendix III

a) Calculation of Cash dividend and Stock dividend of NIBL Bank

Fiscal Year	Cash Div in %	Par Value	Cash Dividend	Stock Div in %	Market Price of next year	Stock Dividend
2006/07	5.00	100	5.00	25.00	2450	612.5
2007/08	7.50	100	7.50	33.33	1388	462.6
2008/09	20.00	100	20.00	00.00	705	0
2009/10	25.00	100	25.00	00.00	515	0
2010/11	25.00	100	25.00	25.00	511	127.5

b) Calculation of Cash dividend and Stock dividend of SCBL Bank

Fiscal Year	Cash Div in%	Par value	Cash Dividend	Stock div in %	Market Price of next year	Stock Dividend
2006/07	80	100	80	50	6830	3415
2007/08	80	100	80	50	6010	3005
2008/09	50	100	50	50	3279	1639.5
2009/10	55	100	55	15	1800	270
2010/11	50	100	50	0	1799	0

c) Calculation of Cash dividend and Stock dividend of NABIL Bank

Fiscal Year	Cash div in %	Par value	Cash Dividend	Stock div in %	Market Price of next year	Stock Dividend
2006/07	100	100	100	40	5275	2110
2007/08	60	100	60	40	4899	1959.6
2008/09	35	100	35	50	2384	1992
2009/10	30	100	30	40	1252	500.8
2010/11	30	100	30	0	1355	0

d) Calculation of Cash dividend and Stock dividend of BOK Bank

Fiscal Year	Cash div in %	Par value	Cash Dividend	Stock div in %	Market Price of next year	Stock Dividend
2006/07	20	100	20	0	2350	0
2007/08	2.11	100	2.11	40	1825	730
2008/09	7.37	100	7.37	40	840	336
2009/10	15	100	15	15	570	85.5
2010/11	16.75	100	16.75	18	628	113.04

e) Calculation of Cash dividend and Stock dividend of EBL Bank

Fiscal Year	Cash div in %	Par value	Cash Dividend	Stock div in %	Market Price of next year	Stock Dividend
2006/07	10	100	10	20	1332	626.4
2007/08	20	100	20	10	2455	245.5
2008/09	30	100	30	0	1630	0
2009/10	30	100	30	0	1094	0
2010/11	50	100	50	- 40	1033	- 413.2