

**A COMPARATIVE STUDY ON DIVIDEND POLICY OF
BANK OF KATHMANDU AND NABIL BANK**

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RECOMMENDATION

This is to certify that the thesis

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And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for the degree of **Master of Business Studies (MBS)**

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DECLARATION

I hereby declare that the work reported in this thesis entitled “**A COMPARATIVE STUDY ON DIVIDEND POLICY OF BANK OF KATHMANDU AND NABIL BANK**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of Mr. Shashikanta Mainali and Mr. Rabindra Bhattarai of Shanker Dev Campus.

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ABBREVIATIONS

BOK	:	Bank of Kathmandu Limited
CB	:	Commercial Bank
CV	:	Coefficient of Variation
DPR	:	Dividend Payout Ratio
DPS	:	Dividend per Share
DY	:	Dividend Yield
EBL	:	Everest Bank Limited
EPS	:	Earning Per Share
EY	:	Earning Yield
Ltd.	:	Limited
MPS	:	Market Price per Share
NEPSE	:	Nepal Stock Exchange
NIBL	:	Nepal Investment Bank Ltd.
NRB	:	Nepal Rasta Bank
NSBL	:	Nepal SBI Bank Limited
P.E.	:	Probable Error
P/E Ratio	:	Price Earnings Ratio
r	:	Correlation Coefficient
SD	:	Standard Deviation
SDPS	:	Stock Dividend per Share
SEBON	:	Securities Board of Nepal

CHAPTER - I

INTRODUCTION

1.1 General Background of the Study

“Dividend refers to the portion of net income paid out to stockholders. It is paid in cash or stock for making investment and bearing risk. Dividend decision of the firm is yet another crucial area of financial management as it affects shareholders wealth and value of the firm. The percentage of earnings paid out in form of cash dividend is known as dividend payout ratio. A company may retain some portion of its earnings to finance new investment. The percentage of earnings in the firm is called retention ratio. Dividend policy is an integral part of the firm’s financing decision as it provides internal financing. Dividend policy is concerned with determining the proportion of firm’s earnings to be distributed in the form of cash dividend and the proportion of earnings to be retained. The payment of the corporate dividend is at the discretion of the board of directors. Most corporations pay dividend quarterly. Dividends may be paid in cash and stock. Cash dividend is the most common.” (*Gilman; 1991:616*)

“Dividend policy is an integral part of financial decision. The dividend policy is a major decision for the board of directors as the board of directors has to decide between paying out to shareholders and keep them happy in the short run or retain for investment which may be more beneficial to the shareholder in the long run. Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Retained earnings are one of the most significant sources of funds for financial corporate growth, but dividends constitute the cash flows that accrue to stockholders. Dividend can be distributed to shareholders by a company in form of cash, shares or both. Some companies paid dividend whole amount of profit as dividend for good image, some retained all amount for reinvestment and some partially paid the amount as dividend.” (*Thapa and Gautam; 2011: 312*)

“Commercial banks are such financial institutions which mainly deal with the activities of trade, commerce, industry and agriculture that seek regular financial and other help from banks for growing and flourishing. The main objective of commercial bank is to mobilize idle resources in particular productive users after collecting them

from scattered sources. Commercial banks as financial institutions transfer monetary sources from savers to users. They furnish necessary capital required for savings of the individual and institution. Normally banks play at public money therefore, they should pay more attention whether their money is properly utilized or not and is running at profit or loss. For the existence of the business firm, profit is the basic factor. A business firm becomes unable to provide its facilities in the long run if there is no profit. This profit can be distributed among the owners as dividend.” (*Van Horne; 2002:145*)

In Nepal, there are few numbers of companies which pay stable dividend. Others are not able in the payment of dividends due to lack of profit. Mainly Joint Venture and highly rated Commercial banks are paying higher dividend to attract the investors and they are the leading companies in the capital market as their number of transactions and market price per share is usually high. They bring the new trend to distribute the dividend which encourages the investors to invest in the companies and mobilize the fund.

One of the major reasons for which public are interested to invest money on the shares of banks or other institutions is for dividend. Normally, business running at profit is capable to pay it. The amount which is distributed as dividend should be adequate to meet the normal expectation of shareholders. Dividend refers to that portion of earnings of a firm that is distributed to the shareholders in return to their investment in the shares. It is important decision of financial management. By a dividend we mean some kind of consistent approach to the distribution versus retention decision, rather than making the decision on the purely ad hoc basis from period to period. It is thus rewarding to have clear understanding on the specifics dividend policy the participants of the capital market. Although the actual owners of the company are shareholders, they are paid low dividends in some companies whereas in some companies the dividend is not announced. But recently the trend of payment of dividend is increasing.

“Dividend policy is a major decision of the firm. Mostly, dividend is paid in cash to its shareholders. Dividend payment reduces the total amount of internal financing. Consequently, it must be consider in relation to the overall financial decision. A

commercial bank is a dealer of money and substitute of money, such as check or a bill of exchange. It also provides a variety of financial services.” (*The Encyclopedia of Britannic; 1985: 600*)

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

The dividend payout ratio obviously depends on the way earnings are measured but net earnings may not confirm and may not be an approximate measure of the ability of the firm to pay dividend. So, what and how much it is desirable to pay dividend is always a controversial topic because shareholders expect higher dividend.

"The objective of a dividend policy should be to maximize shareholders return so that the value of their investment is maximized. Shareholders' return consists of two components: dividend and capital gain. Dividend policy has direct influence on these two components of return." (*Pandey; 1999: 744*)

In a capital structure decision, each and every firm can obtain additional fund by issuing new equity and retention of the earnings. So after measuring the firm's profit, there is further problem of what amount of these profits should be distributed in terms of dividend. It is a big financial decision because the firm has to choose one between the distribution of profit to the shareholders or retaining it to finance the business. Different firms adopt different approaches to distribute dividend. In order to maximize the shareholders' wealth, the firm should use a large amount of profit for the payment of dividend. But since the firm's objective is the expansion of its business, the firm retains profit to finance in investment programs.

“Dividends are distributed out of profits. The alternative to the payment of dividend is the retention of earnings profits. The retained earnings constitute an easily accessible important source of financing the investment requirement of firms. Thus, there is a type of reciprocal relationship between retained earnings and cash dividends. The larger the retention, the lesser is the dividend and the smaller the retention, the larger

is the dividend. Thus, the alternative uses of net earning dividend and retained earnings are competitive and confliction.” (*Khan and Jain; 1990: 35*)

Capital market plays an important role in the economics development of a nation. But, in Nepal, the capital market is very small and developing slowly with disorganized. The Nepalese companies (especially government enterprises) have not been able to generate sufficient as compared to the organizations that are established and operated on public sector. Hence the government is not receiving dividends from public enterprises for several years.

Dividend practice in public corporations is still having problem for taking dividend policy. Thus, here neither corporation are able to generate sufficient earnings for dividend payment nor is the government expecting dividends, since it has been observed that dividend payment is practically a crucial problem of the public corporations. Corporation like Nepal Oil Corporation and Nepal Electricity Authority are not distributing earnings as dividend but total effort is focused on minimization of losing through better utilization of capital. Noticeable matter is that this shifting aim of public corporation is failed to minimize the losses. The joint venture banks in Nepal have brought new hope for productive mobilization of funds according to their new trends of dividend.

1.2 Brief Introduction of Sample Banks

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. There are 32 commercial banks in Nepal but it is not possible to cover all the banks in the study. So only two commercial banks are chosen which will represent all the commercial banks of Nepal. So the study will analyze financial statement of the chosen banks. The selected banks for the study are as follows:

1.2.1 Bank of Kathmandu Limited (BOK)

Bank of Kathmandu (BOK) started its operation in March 1995 with the objective to stimulate the Nepalese economy and take it to newer heights. BOK has today become a landmark in the Nepalese banking sector by being among the few commercial banks which is entirely managed by Nepalese professionals and owned by the general

public. BOK also aims to facilitate the nation's economy and to become competitive globally. To achieve these, BOK has been focusing on its set objectives right from the beginning.

The mission of BOK is to offer financial services and becoming the “Bank of Choice” by dedicating to the progress and growth of the institution for the community, customers, employees, supervisors and stockholders by promoting economic growth and becoming a caring corporate citizen, providing excellent customer services by offering personalized quality products and services, inducing modern technologies of banking that adds value to customer service, following strict risk control mechanisms, enhancing shareholders value, providing challenging career and learning opportunities for employees.

1.2.2 NABIL Bank Limited (NABIL)

NABIL Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984 under the company act 1964. The initial foreign partner handed its share to Emirates Bank Limited and now its shares are transferred to National Bank Limited in January 1, 2002. The bank was renamed as NABIL Bank Limited; previously it was named Nepal Arab Bank Limited. Out of total share, National Bank Limited (Bangladesh) holds 50% share and remaining 30% by general public and 20% by financial institution.

NABIL was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, NABIL provides a full range of commercial banking services through its 19 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. NABIL, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business. Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software

from Infosys Technologies System, Bangalore, India, Internet banking system and Tele banking system.

1.3 Statement of the Problems

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

“Different financial experts have introduces the Dividend payment models which present their view towards Dividend payment. Among them, MM model tells that Dividends are irrelevant to the value of the firm. It believes that earnings should be retained only for getting benefit from investment opportunities. If there is no investment opportunity, all the earnings should be distributed as dividend.”
(Modigliani & Miller 1961: 89)

Walter (1996) had propounded relevant theory of dividend. He proposed a model for share valuation. According to him, the Dividend policy of the firm affects the value of the shares. His model supports that Dividends are relevant. He argues that the choice of Dividend polices almost always affect the value of an Enterprise. The Investment policy of a firm cannot be separated from its Dividend policies according to him both are interlinked which is just opposite to Modigliani and Miller approach. Walter's model shows clearly the importance of the relationship between the return on a firm's investment or its internal rate of return (r) and its cost of capital or the required rate of return (k) in determining the Dividend policy. As long as the internal rate greater than the cost of capital, the share price will be enhanced by retention and will vary

inversely with dividend payment. In this way Walter's model's is also known as "Optimal Theory of Dividend." (Walter, 1966: 76)

In general, the dividend policy will affect the stock price in market. If the dividend policy is shareholder oriented, then the market price of the stock will increase. It's because people want to invest in those stocks, which give more return. But some scholars and experts do not agree with this relationship of dividend and market price of stock. Moreover; the study will be focused on the following problems regarding the subject chosen for the study. This study deals with the following issues;

- What kind of dividend policies are following by the commercial banks of Nepal?
- Is there any consistency between dividend policies followed by commercial banks?
- Do the Nepalese investors take care about the dividend policies followed by the related companies before investing?
- Does there exist the positive or negative relationship between dividend and stock price?
- What is the relationship between dividends with other key variables like earning per share, market price per share, book value per share net profit and net worth of the banks?

1.4 Objectives of the Study

The main objective of the study is to make comparative analysis of dividend policy of selected banks. But the specific objectives are as follows:

- To examine the dividend policies of listed banks.
- To explore the impact of dividend policy on market price of stock.
- To determine the major factors affecting dividend policy of the firm.
- To examine the relationship between DPS and other financial indicators i.e. DPS, MPS and DPR.

1.5 Significance of the Study

The finding of this study will be of worth to the shareholders to see the dividend policy of the three banks in comparison. So this may be helpful for them in

identifying the productivity of their investment and justify the rationale of their investment decision. Nowadays, people are very much attracted towards investment in share for the purpose of getting higher return. So dividend policy has become an effective way for attracting the large number of new investors, retain present investors and to maintain goodwill and the desired controlling position of the firm. Despite investor's high expectation, there are almost none of the firms adopting clear dividend policy in Nepal. Therefore this study of the dividend policy of the selected commercial banks in Nepal may be rewarding.

This study also is useful to management to point out the loopholes and suggest the remedies about the appropriate dividend policy and also for stockbrokers, financial agencies, policy makers and other interested person. It may be useful to government as well for policy making, controlling, and supervision and monitoring. Furthermore, students will be able to study about dividend policy and will be helpful as they can take it as reference if they are doing the research in the similar topics.

1.6 Limitations of the Study

This study tries to evaluate the dividend policy of commercial banks. The study focuses the sensitive part of the bank which results in the management a little bit hesitation to come up with open view regarding the dividend policy and payment procedure. Therefore the study has been conducted on the basis of annual reports of selected banks, published and unpublished material and NRB publications. The study has following limitations:

- The study is mainly conducted on the secondary data. So the result depends on the reliability of the secondary data. However primary data is also used to analyze the impact of dividend policies on market price of stock.
- The study covers a period of five years, i.e from 2006/07 to 2010/11.
- Among the different determinants of the market price of the stock only cash dividend and earnings per share are taken for the analysis.
- Among the various aspect of dividend policy only market price of stock is taken as subject matter.
- Among the various sector only banking sector is considered.
- This study has used only simple financial and statistical tools.

1.7 Organization of the Study

The whole study has been divided into five chapters as follows:

Chapter I: Introduction

This chapter deals with subject matters of the study consisting background of the study, focus of the study, statement of problems, objectives of the study, significance of the study, limitations of the study and organization of the study.

Chapter II: Review of Literature

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

Chapter III: Research Methodology

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

Chapter IV: Data Presentation and Analysis

This chapter is the main part of the study which deals with analysis and interpretation of collected data using appropriate financial and statistical tools. The major findings of the study have been conducted based on primary and secondary data.

Chapter V: Summary, Conclusion and Recommendation

This chapter deals with summary of the entire study. Conclusions of the study and recommendations will also be included.

Recommendation sheet, Viva-Voce Sheet, Declaration, Acknowledgement, Table of contents, List of Table, List of figure, Abbreviation has been included at the beginning of this study where as Bibliography and Appendixes have been included at the end.

CHAPTER – II

REVIEW OF LITERATURE

For all types of studies, review of literature is essential, which helps to find out what research studies have been conducted and what remains to do. For this research study the literature survey will be done by consulting libraries, various journals and articles, textbooks and other contemporary materials in this study.

2.1 Conceptual Framework

2.1.1 Concept of Dividend

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 exist balance of earnings after paying fixed obligations such as operating expenses, interest, provisions for depreciation, and setting. "Dividends refer to that portion of retained earnings that is paid to stockholders while dividend policy refers to the policy or guidelines that management uses in establishing the portion of retained earnings that is to be paid in dividends." (*Mathur, 1979:297*)

"The three major decisions in a company are Investment Decision, Financing Decision and Dividend/Share repurchases Decision. Dividend decision is not only important for the desire of the shareholders but also firm's internal growth. Dividend decision of the firm is yet another crucial area of financial management. The important aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm. Retained earnings are the most significant internal sources of financing the growth of the firm. On the other hand, dividends may be considered desirable from shareholders point of view as they tend to increase their wealth. Dividends constitute the use of the firm's funds." (*Pandey; 1999:672*)

The dividend policy affects the overall financing decisions of the firm. Dividend implies to the portion of earning that is paid to the shareholders while dividend policy refers to the guidelines that management uses in establishing portion of retained

earning that is paid to the shareholders in the form of dividend. Dividend policy covers two portion bonus share issue and cash dividends.

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

"Bonus share refers to free share stock that are extended to the current shareholders of a company, without need for the shareholders actually purchase the additional shares. An issue of bonus share represents distribution of shares in addition to the cash dividend to the existing shareholders. This has the effects of increasing the number of outstanding share of the company." (*Pandey; 1995: 706*) Hence, the declaration of bonus share will increase the paid up share capital and reduce the reserve and surplus of the company. The total net worth is not affected by bonus issue.

When company need to expansion to its business then bonus issue is useful for corporate firms. Bonus issue control company's cash flow. Bonus issue is the source of reinvestment corporate firms. The issue bonus share does not affect the wealth of shareholders. The earnings per share and market price per share will fall proportionately to the bonus issue. Dividend policy affects long term effects on corporate firms. If the firm increases the retained earnings, shareholders dividend decreases and the market price of the share is increases. Thus the dividend decision is always matter of dispute.

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

Hence we can say that dividend policy can be defined as percentage of dividend which maximizes the wealth of the share holders in long term. Dividend policy becomes a problem especially on the public limited companies. A firm's dividend policy has effects of dividing in net profit in to two parts one is retained earnings and dividend. Dividend also divided into two parts i.e. bonus issue and cash dividend. Bonus share announcement is one of the important decisions of the financial management. Before determine issue of bonus Share Company must study its impact on earnings per share and stock price. Bonus share is one type of dividend forms. Bonus share may be issued in addition to cash dividend. Issue of bonus share conserves cash where as cash dividend flow out the cash.

2.1.2 Forms of Dividend

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

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

a. Cash Dividend

“Most companies pay dividends in cash. Sometimes cash dividend may be supplemented by a bonus issue (stock dividend). A company should have enough

bank balance at the time of paying cash dividend; arrangement should be made to borrow funds. When the company follows a stable dividend policy, it should prepare a cash budget for the coming period to indicate the necessary funds which would be needed to meet the regular dividend payments of the company. It is relatively difficult to make cash planning in anticipation of dividend needs when an unstable policy is followed. The cash account and the reserves account of a company will be reduced when the cash dividend is paid." (*Bhattarai; 2010: 81*) 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.

b. Script Dividend

"When company has been suffering from the cash problem but has earned profit, script dividend is paid (issued). Script is a form of promissory note promising to pay the holder at specified later date."(*Mathur; 1979:321*) So, under this type of dividend, company issues and distributes to shareholders transferable promissory notes which may be interest bearing or not.

c. Stock Dividend

"Stock dividend is a form of dividend out of two forms; cash and stock. In the stock dividend company distributes shares as dividend to the shareholders' and this dividend is distributed either from past retained earnings or from net profit earned in the respective year. The share price of stock dividend is fixed at market price at the time of dividend declaration. The declaration of stock dividend will increase the paid up share capital and reduce the retained earnings. Therefore, it involves making a transfer from the retained earnings amount to the other shareholders' equity accounts like common stock and additional paid-up capital (share premium or excess of par value) There are number of reasons why company declares stock dividend. The following are the reasons: to increase share capital and to provide tax benefit to the shareholders." (*Thapa and Gautam; 2011: 341*) Hence we can say that the shareholders are indifferent with the stock dividend assuming market place no value on the stock dividend.

Receipts of stock dividend are not taxable income but cash dividend is a taxable income to conserve cash in the organization. A company having less liquidity pay stock dividend to conserve cash to provide psychological value to the shareholders to decrease the share price at taxable range. The share issued to shareholders as dividend is called stock dividend. This is method of paying dividend without reducing cash balance. The issue of stock dividend is also known as bonus shares. Payment of stock dividend increases the number of outstanding shares of the company. Simply, it is a recapitalization of the owner's equity portion, i.e. the reserves and surpluses and transfers a portion of retained earnings to the capital accounts.

d. Stock Split and Reverse Stock Split

"Stock split is also a kind of stock dividend where company breaks (increase or decrease) shares through splitting (breaking) the par value of the share. Split takes place in two ways: Straight split, and Reverse split. Except in accounting treatment the stock dividend and stock split are very similar. A stock split however is usually reversed for occasion when a company wishes to achieve a substantial reduction in the market price of the shares." (*Van Horne; 2002:256*)

In stock split there is no change in the capital account: instead a large numbers of the shares of the common stock are issued. In two-for-one stock split, stockholders receive two shares for each one previously held. The book value per share is cut in a half and par or stated, value per share is similarly changed. Straight stock split: In the straight split company increases number of shares through a proportional reduction in the par value of stock. Straight split takes place to bring the market price in reasonable range (affordable by small investors) and to increase the total dividend without increasing dividend per share. With a stock split, the number of shares increases. Stock splits are similar to stock dividends. As a result of the stock split, the common stock, paid-in capital and retained earnings accounts remain unchanged. Shareholders' equity also stays the same; the only change is in the par value of the stock. Except in accounting treatment, the stock dividend and stock split are very similar. Reverse stock split: In the reverse stock split, company reduces number of shares outstanding through merging the par values of the stocks. This takes place to bring low priced shares up at desirable trading levels. Reverse stock split is the opposite of straight

stock split where the par value increase but the common stock, retained earnings, additional paid-in capital remain unchanged.

e. Stock Re-Purchase

"Company repurchases its own stock as dividend decision. It is also said that stock repurchase is an alternative of cash dividend. Under this plan, company distributes cash to the shareholders buying back some of its own outstanding stock, thereby decreasing the number of shares, which would increase EPS and the stock price. Company repurchases its own stock due to number of reasons, such as; to bring change in the existing capital structure to increase value of stocks in the future to distribute temporary excess cash to manage excess liquidity." (*Western & Brigham; 1987:230*) Hence stock repurchase is a method, in which a firm buys back shares of its own stock, thereby decreasing shares outstanding, increasing EPS, and often increasing the price of the stock.

f. Property Dividend

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

g. Bond Dividend

Bond dividend by its name is a dividend that is distributed to shareholders in form of a bond. In other words company declares dividend in form of its own bond with a view to avoid cash out flows. Though there is a different form of dividends. In general, the forms of dividends popular in Nepal are cash dividend and stock dividend.

2.1.3 Factors Affecting Dividend Policy

Many variables influence dividends, however. For example, a firm's cash flows and investment needs may be too volatile for it to set a very high regular dividend. Yet, it may desire a high dividend payout to distribute funds not necessary for reinvestment. In such a case, the directors can set a relatively low regular dividend low enough that

it can be maintained even in low profit years or in years when a considerable amount of reinvestment is needed – and supplement it with an extra dividend in years when excess funds are available.

a. Liquidity of Funds:

"Availability of cash and sound financial position is also an important factor in dividend decisions. A dividend represents a cash outflow, the greater the funds and the liquidity of the firm the better the ability to pay dividend. The liquidity of a firm depends very much on the investment and financial decisions of the firm which in turn determines the rate of expansion and the manner of financing."(*Gilman; 1991:104*) If cash position is weak, stock dividend will be distributed and if cash position is good, company can distribute the cash dividend.

b. Needs for Additional Capital:

Companies retain a part of their profits for strengthening their financial position. The income may be conserved for meeting the increased requirements of working capital or of future expansion. Small companies usually find difficulties in raising finance for their needs of increased working capital for expansion programs. They having no other alternative, use their ploughed back profits. Thus, such Companies distribute dividend at low rates and retain a big part of profits.

c. Stability of Earnings:

"The nature of business has an important bearing on the dividend policy. Industrial units having stability of earnings may formulate a more consistent dividend policy than those having an uneven flow of incomes because they can predict easily their savings and earnings."(*Thapa and Gautam; 2011:348*) Usually, enterprises dealing in necessities suffer less from oscillating earnings than those dealing in luxuries or fancy goods.

d. Government and Taxation Policy:

"The earnings capacity of the enterprise is widely affected by the change in fiscal, industrial, labor, control and other government policies. Sometimes government restricts the distribution of dividend beyond a certain percentage in a particular industry or in all spheres of business activity as was done in emergency. The dividend

policy has to be modified or formulated accordingly in those enterprises. High taxation reduces the earnings of the companies and consequently the rate of dividend is lowered down. Sometimes government levies dividend-tax of distribution of dividend beyond a certain limit. It also affects the capital formation. In India, dividends beyond 10 % of paid-up capital are subject to dividend tax at 7.5 %." (Paudel; 2010:292)

e. Legal Requirements:

"In deciding on the dividend, the directors take the legal requirements too into consideration. In order to protect the interests of creditors and outsiders, the Companies Act 1956 prescribes certain guidelines in respect of the distribution and payment of dividend. Moreover, a company is required to provide for depreciation on its fixed and tangible assets before declaring dividend on shares. It proposes that Dividend should not be distributed out of capital, in any case. Likewise, contractual obligation should also be fulfilled, for example, payment of dividend on preference shares in priority over ordinary dividend." (Paudel; 2010:293)

f. Past Dividend Rates:

While formulating the Dividend Policy, the directors must keep in mind the dividend paid in past years. The current rate should be around the average past rate. If it has been abnormally increased the shares will be subjected to speculation. In a new concern, the company should consider the dividend policy of the rival organization.

g. Repayments of Loan:

"A company having loan indebtedness is vowed to a high rate of retention earnings, unless one other arrangement is made for the redemption of debt on maturity. It will naturally lower down the rate of dividend. Sometimes, the lenders (mostly institutional lenders) put restrictions on the dividend distribution until such time their loan is outstanding. Formal loan contracts generally provide a certain standard of liquidity and solvency to be maintained. Management is bound to honor such restrictions and to limit the rate of dividend payout." (Paudel; 2010: 295)

h. Policy of Control:

“Policy of control is another determining factor is so far as dividends are concerned. If the directors want to have control on company, they would not like to add new shareholders and therefore, declare a dividend at low rate. Because by adding new shareholders they fear dilution of control and diversion of policies and programs of the existing management. So they prefer to meet the needs through retained earnings. If the directors do not bother about the control of affairs they will follow a liberal dividend policy. Thus control is an influencing factor in framing the dividend policy.”
(*Thapa and Gautam; 2011: 345*)

2.1.4 Dividend Policy

“A stable dividend policy is a long term policy. It does not affect by variation in earning from year to year. When a firm constantly pays a fix amount of dividend and maintains it for all times to come regardless of fluctuations in the level of its earnings, it is called a stable dividend policy. The dividend will be regular. Stability of dividend means regularity in paying dividend even though the amount of dividend may fluctuate from year to year. By stability we maintaining a position in relation to a dividend trend line, preferably one that is upward slopping.” (*Weston & Brigham; 1987: 686*)

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

a. Constant Dividend Per share

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

b. Constant Payout Ratio

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

c. Low Regular Dividend plus Extra Dividend:

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

2.1.5 Dividend Payment Procedure

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

a. Declaration Date

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

b. Holder- of- Record Date

The dividend is payable to shareholders whose names appear in the register of members as on the holder of record date. This is the date the company opens the ownership books to determine who will receive dividend; the stockholders of record on this date receive the dividend. If shareholders sell share before the record date, the buyer of shares will receive dividend. If shareholders sell shares after the record date, the seller of the shares will receive dividend.

c. Ex- Dividend Date

This day is four days prior to the record date. Share purchased after the ex-dividend date are not entitled to the dividend. The dividend is attached to the stock until the Ex-

dividend date (four business days before the holders of record date), after which date it stays with the seller.

d. Payment Date

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

2.2 Review of Major International Studies

As we mentioned earlier, there have been so many studies made by the different persons and institutions for dividend policy and stock price. There are two opinions regarding to dividend payout and market price of the shares. One point of view is that dividends are irrelevant and the amount of dividend payout does not affect the market value of the share. The other is dividends are relevant and the amount of dividend paid affect the market price of the shares. Always a critical and confused question has arise, whether dividend policy affect the market value of the shares or not. To put light in these matter different studies made by different international scholars and researchers should be overviewed. Therefore some of the main researchers are going to be discussed below:

Linter's Study (1956)

Linter conducted a study in 1956 which is focused in the behavioral aspect of dividend policy. He investigated dividend pattern of 28 different companies of America and found that firms generally predetermines the desired payout and tries to achieve it and rarely considers other factors.

The objectives of study were:

- To identify occasions when a change in dividends might well have been under active consideration even though no change was made.
- To determine the factors which existed must actively into dividend decision. Different views were collected with regard to Occasion Company's responsible official including presidents, financial vice presidents, treasures, controllers and directors.

- The model developed from his research is as follows:

$$D^*t = P \cdot EPSt \dots \dots \dots (i)$$

And,

$$D^*t - Dt - 1 = a + b(D^*t - Dt - 1) + e \dots \dots \dots (ii)$$

Where,

D^*t = Desired Dividend

$EPSt$ = Earnings per Share

P = Targeted payout Ratio

a = Constant related to dividend growth

b = Adjustment factor relating to previous periods dividend and desired level of dividend. ($b > 1$)

The Major findings of this study are as:

- Firms generally prefer desired proportion of earning to be paid as dividend.
- Investment opportunities of the firm are not considered for modifying the pattern of dividend behavior.
- Firms generally have target payout ratios in view while determining change in dividend per share.

Modigliani and Miller's Study (1961)

The most comprehensive argument for the irrelevance of dividend has been made by Franco Modigliani and Metro-Miller in 1961 A.D. They argue that value of the firm depends on the income produced by the assets, not on how this income is split between dividends and retained earnings.

Professor Modigliani and Miller hold that investors are indifferent to dividend and capital gains so dividends have no effect on the wealth of stakeholders. According to them it is the investment policy of the firm which increases earnings of firm and there by value of the firm. The manner in which earnings are divided into dividends and retained earnings does not affect this value.

The basic objectives of this study are as follows:

- To explain the irrelevance of a firms' dividend policy.

- To study the relationship between the internal rate of return and the cost of capital of the firm, to give a dividend policy that maximizes the shareholder's wealth.

Walters's formula for determining the market price per share is as follows:

$$P_0 = \frac{DPS + \frac{r}{K_s} (EPS - DPS)}{K_s}$$

Where,

P_0 = Market price per share.

DPS = Dividend per share

EPS = Earnings per share

r = Internal rate of return (average)

K_s = Cost of capital or Capitalization rate

In Walters's model, the optimum dividend policy depends on the relationship between the firm's internal rate of return and its cost of capital. Walters view on the optimum dividend payout ratio can be summarized as follows:

Growth Firms:

Firm having $r > k$ may be referred as growth firm. The optimum payout ratio for a growth firm is zero. The market value per share (P) increases as payout ratio declines when $r > k$.

Normal Firms:

Firm having $r=k$ may be referred as normal firm. There is no unique optimum payout ratio for a normal firm. One dividend policy is as good as other. The market value per share is not affected by the payout ratio when $r = k$.

Declining Firms:

Firm having $r < k$ may be referred as declining firm. The optimum payout ratio for a declining firm is 100%. Market value per share (P) increases as payout ratio increases when $r < k$.

Hence, the major findings of this study are: (*Khan; 1990:140*)

- When the firm is in growth stage, then dividends are negatively correlated with stock price.
- When the firm is in declining stage, then dividends are positively correlated with stock price.
- There is no relationship between dividend and stock prices in the normal firm.
- Thus, dividend policy is a financing decision when dividend policy is treated as a financing decision; the payment of cash dividend is a passive residual.

Gordon's Model (1962)

Gordon conducted a research in 1962 regarding the interesting approach relating the market value of the firm to dividend policy. He holds that investors have a strong preference for present dividends to future capital gains under the condition of uncertainty. This is relevant theory similar to the Walters model. In this study, he explained that “the investors prefer present dividend rather than future capital gains.” According to him market value of a share is equal to the present value of an infinite stream of dividends to be received by the shareholders.

The basic objectives of this study are as follows:

- To explain the relevance of dividend policy as similar to Walter's study.
- The price of share will be the discounted value of infinite stream of dividends to be received by the shareholders.

Accordingly, from the above objectives:

$$P_0 = \frac{D_0(1+g)^1}{(1+Ks)^1} + \frac{D_0(1+g)^2}{(1+Ks)^2} + \dots + \frac{D_0(1+g)^n}{(1+Ks)^n}$$

Gordon has further developed the following equation for the computation of market value of stock.

$$P_0 = \frac{EPS(1-b)}{Ks-br}$$

Where,

P_0 = Market price per share

EPS = Earnings per share

b = Retention ratio

K_s = Cost of capital

$1-b$ = Dividend payout ratio

br = Growth rate

According to this model following facts are revealed:

Growth Firm: In case of growth firm i.e. $r > K_s$, share price tends to decline in corresponding with increase in payout ratio or decrease in retention ratio i.e. b . Therefore dividend and stock price are negatively correlated in growth firm.

Normal Firm: Firms having $r = K_s$ are referred as normal firm. In case of normal firm share price remain constant regardless of change in dividend policies.

Declining Firm: In case of declining firm i.e. $r < K_s$, share price tends to rise in correspondence with raise in dividend payout ratio. It shows that dividend and stock prices are positively correlated with each other in a decline firm.

Hence, the major findings of this study are as follows: (*Pandey; 1995: 745-746*)

- When the firm is in growth stage, then dividends are negatively correlated with stock price.
- When the firm is in declining stage, then dividends are positively correlated with stock price.
- There is no relationship between dividend and stock prices in the normal firm.
- Thus, dividend policy is a financing decision. When dividend policy is treated as a financing decision, the payment of cash dividend is a passive residual.

Gupta (1973)

Gupta conducted an empirical study on bonus issue in bonus share in India. He studied 496 bonus issues during 1948-1971. It was found that bonus share was issued by companies not necessarily with a view to increasing total dividend distribution. This study attempts to test some popularly held beliefs about the effect of bonus share issue on dividends and share prices. It examines the practices among Indian companies regarding the making of bonus issues and exploits interest controversy whether, and to extent, such bonus issue represents real gains to their recipients. It

was observed that as many as one- third of the companies issuing bonus shares did not increase total quantum of dividend on the enlarged capital, a significant number of them even reducing the total dividend distribution. Gupta also tested the impact of bonus issues on the same prices. It was found that the speculative price rise which occurred immediately after bonus announcement was frequently based not to so much on a realistic appraisal of the fundamental factors governing profits and dividend as psychology. The price rise at the end of one year from bonus announcement was less universal than the price rise in the period of immediately after such announcements.

The basic objectives of studies were:

- It specially examines how far bonus share represent a real addition to the shareholders wealth and income.
- To study the effect on dividends and share price changes associated with bonus issue.
- To investigate the characteristic features of bonus issues by the Indian companies.
- The analysis is intended to remove some of the widely held misconception about bonus issues.

Gupta used simple statistical tools such as percentage, frequency distribution, average and standard deviation to study and analyze the data. The original report was subsequently revised and simplified to make it of wider interest without altering the basic framework and the major conclusion. His study was wide coverage and immense on bonus share. The major findings of this study are: (*Thapa and Gautam; 2011:354*)

- The great majority of the bonus issues in India are in relatively high ratio of 20% (1:5) and above.
- The bonus issues are made by Indian companies at irregular interval without any constant policy.
- The increase in dividend distribution was not quite as universal as is commonly believed and almost one third of the cases showed no increase in the quantum of dividend distribution following the bonus issue.
- There is no systematic relation exists between the bonus ratios on the one hand and the percentage of dividend increase on the other hand.

- The analysis conclude that the higher bonus ratios were found more often among companies paying high dividend rates, and lower ratios more often among companies paying low dividend rates.
- The analysis find that the positive correlation between the magnitudes of price rise and the bonus ratio.

2.3 Review of Journals and Articles

Michaely, Richard, Thaler & Kent, (2005), in their published articles on “*Price Reactions to Dividend Initiations & Omissions*” explain the immediate and long term effects of dividend initiation & omissions announcements. They found that the short-run price impact of dividend omissions was negative and that of initiations was positive. Initiations reactions were 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 announcements was no greater than to an initiation for given change yield.

Kale & Noe (2009) has published an article “*Determinants of Dividend Policy: The Evidence from New Zealand*”. The study investigates the extent to which four theories of dividend policy, namely, signaling theory, agency theory, residual theory and stability theory of dividends, together with the imputation system extant in New Zealand influence corporate dividend policy of New Zealand firms listed on NZSE. Several variables are employed as proxies for these theories and have been tested simultaneously in order to capture the joint impact of the different dimensions affecting corporate dividend policy. The findings are mostly consistent with the agency cost theory. Ownership structure seems to be the most important determinant of dividend policy for NZSE firms. NZSE firms tend to have a high dividend payout ratio when they have high ownership dispersion. The findings are partly consistent with the transaction cost and residual theory. The study find that firm that experience rapid growth in the recent past tends to pay lower dividend. In addition, the study finds some evidence that the dividend imputation system provides firms with an incentive to pay higher dividends.

Nyong (2010) has published an article "*An empirical study of dividend policy*" This study attempt to evaluate the observed dividend policy of a cross section of 27 Nigeria quoted companies using theories tested to explain dividend behavior of those firms. These theories which are several and varied; even contradict each other and considerable doubt exist as to which theory best represent the observed dividend behaviour of Nigerian firms; hence the need for this study. The study reveals that the traditional factors are significant in explaining and predicting their dividend decision within the period under review. The result provides strong support for the explanatory or predictive power of Lintner's model. Also, factors which attempt to explain variations in share market prices were identified, and the magnitude of their effect estimated. The result confirms that share market price is a representation of market valuation of dividends. In conclusion therefore, the study empirical evidence indicates that the hypotheses of Lintner Gordon as well as that of signaling theory of Bhattacharya performs remarkably well with respect to the dividend policy of quoted companies under review. However, recent data reveal that the magnitude of the impact of earnings or earning per share is now greater than that of current dividend payment which used to be the most significant as reported in previous studies. Furthermore, The study also confirm that growth prospect and firm size has no significant impact on the dividend behavior of corporate firms; and this is inconsistent with the findings of Adelegan (2001). Based on the findings from the study, the study recommend as follows: (i) that government should assist in improving the quality and availability of secondary data bank available for research in Nigeria. (ii) That the result of this study has at least one policy implication. The fact that dividend is still an important determinant of share market prices means that companies may increase their share market price by increase in the rate of dividend paid. In order words, there is sufficient empirical evidence to believe that a liberal dividend policy will lead to a higher average market value of common stocks than will penurious dividend policies. In effect the study suggests that corporate management should follow a generous dividend policy which will maximize the long term benefits to its stockholders. (iii) Firms should try all their possible best in improving their total earnings from each transaction year.

2.4 Review of Thesis

Rajbhandari (2001) has conducted a study on “*Dividend Policy: A Comparative Study between Banks and Insurance Companies.*” The main objective of the study is to find out the appropriate dividend policies and practices in Nepal. The specific objectives of the study are:

- To examine the relationship between dividend and market price of the stock.
- To 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 major findings of the study are:

- The sample institutions have average earnings which can be considered satisfactory. However, no consistency in dividend payment is found in all the sample institutions i.e. NGBL, NIBL, KBL, NIC and EIC except NLGI which seems to be paying average DPS Rs. 20 every year.
- None of the six sample institutions have a clearly defined and appropriate dividend policy. The dissimilarity and insignificant relationship between the financial indicators of all three banks and insurance companies’ helps to conclude that they don’t seem to follow and practice the dividend policy as established and developed in our context.
- Investors are not found to be investing their capital by studying the financial performance of the institutions but rather randomly without properly understanding the stock market.
- The institutions don’t seem to follow the optimal dividend policy of paying regular dividend as per the shareholder’s expectation and interest.

Bhattarai study (2002) has conducted a study on “*Dividend Policy and Its Impact on Market Price of Stock*”. He has done analysis of five years data from 1997 to 2002) taken from two commercial banks and two insurance companies. In his analysis simple and multiple regression equations are used.

The main objectives of the study are as under:

- To study the prevailing practices and effect made in dividend policy by the Nepalese firms with the help of simple firms.
- To find out the impact of dividend policy on market price of stock.
- To analyze if there is any uniformity among DPS, EPS, MPS and DPR in the sample firms.

Major findings of the study are as follows:

- There is no any consistency in dividend policy of the sample firms. It has indicated the need of dividend strategy as well as need of proper analysis of respective sectors of the firms.
- Most of Nepalese firms from the very past did not have profit planning and investing strategy which has imbalanced the whole position of the firms. It means there is no consistency even in the earnings of the firms.
- The MPS is affected by the financial position and dividend paid by the firms. In this regards, the MPS of the sample firms is seen to be fluctuating. It denotes that Nepalese investors are not treated fairly.
- The lack of financial knowledge and market inefficiency has affected the market price of the share in all the firms.

Dhungel (2004) has conducted a study on “*Dividend Policy of the Commercial Banks in Nepal*”. The main objectives of the study are:

- To study whether the commercial banks are following the suitable dividend policy or not.
- To study whether the dividend policy affects the value of the firm or not.
- To compare the dividend policy followed by different commercial banks chosen.
- To study the relationship of dividend policy with various financial indicators like EPS, DPS, MPS, DPR, Net worth, Net profit and book value of share.

Major findings are:

- None of the sample banks are following suitable dividend policy except Standard chartered bank.

- The regression analysis of DPS on MPS shows that increase in MPS leads to decreases in DPS in all the sample banks except Standard chartered bank.
- There is positive relationship between EPS and MPS in all the banks except in case of SBI bank.
- Change in dividend per share affects the value of share differently in different banks.

Kharel (2006) has conducted her studies on “*Dividend Policy of Commercial Banks with Respect to Nepal Arab Bank Ltd., Himalayan Bank Ltd and Bank of Kathmandu Ltd.*” based on the data collected for the years from 2000/01 to 2004/05. The main objectives of the study are:

- To analyze the prevailing dividend practices of sample banks.
- To analyze and evaluate the application of dividend decision in the selected banks.
- To analyze the relationship of dividend with earning per share, net worth, net profit, market price and book value per share.

Major findings are:

- DPS of the commercial banks in average shows that there is no regularity in dividend payment.
- Banks should pay proper attention to enhance their percent of cash dividend on paid up value.
- From the regression analysis it can be conclude that a change in DPS affects the share price differently in different banks.
- Payment ratio affects stock price differently in different banks.

Jha (2007) has conducted a study on “*Study on Dividend Policy*”. A comparative study between banks, insurance companies and financial institution with eight years data relating to dividend policy from 2056/57 to 2064/65.

The main objectives of the study are as follows:

- To highlight dividend practice of the bank, insurance and financial companies.
- To analyze the relationship of dividend with various important variables.

Major findings to the study are:

- Nepalese government NRB, SEBON, NEPSE should be conscious to discourage market imperfection.
- Companies should have long term policy regarding the adoption of suitable dividend policy.
- Even if not earning has been increasing, the dividend per share has widely fluctuated. Distribution of bonus share should be pre-evaluated.
- Their needs a proper information discloser to the investor.

Raya (2008) has conducted a study on "*The Study of Dividend Policy of the Commercial Banks in Nepal.*" The main objectives of the study are:

- To study whether the commercial banks are following the suitable dividend policy or not.
- To compare the dividend policy followed by different commercial banks chooses.
- To study the relationship of dividend policy with various financial indicators like EPS, DPS, MPS, DPR, net worth, net profit and book value of share.
- The methodology used in the study included, financial tools such as ratio analysis and statistical tools such as correlation analysis and test of hypothesis etc. She used secondary data for the analysis.

The major findings of the study are:-

- There is lack of rules and regulations that bind companies to pay dividend every year. Not only the companies do not have dividend policy but also the government does not have any clear policy towards dividend.
- There seems instability of dividend and inconsistency in dividend payout ratio of the banks.
- Government does not have any clear policy towards dividend and to improve the efficiency of the companies. The number of companies cannot earn enough profit and bureaucrats accused the cause of inefficiency to managers which is not sound.

Maharjan (2009) has conducted a study on “*Dividend Policy of Listed Commercial Banks*” The major objectives of the study are:-

- To examine the dividend policies of listed banks.
- To analyze the relationship between dividends per share (DPS), earning per share (EPS) and market price per share (MPS).
- To analyze the effect of dividend on share price

The methodology used in the study includes financial tools such as ratio analysis and statistical tools such as correlation analysis, regression analysis, trend analysis and test of hypothesis etc. She used secondary data for the analysis. The researcher selected 9 commercial banks for the research. The major findings of the study are:

- Earnings per share of banks are increasing which indicates that banks in Nepal are doing well.
- Commercial banks of Nepal prefer cash dividend rather than stock dividend because it is easy and low operation cost to distribute likewise they prefer to provide fair return to shareholders because in the one hand they have to increase their capital and in the other hand they have to retain the market image as well.
- The share price in Nepal affected by various other factors rather than the earnings and dividend of those banks.

Singh (2010) has conducted a study on the topic "*The Impact of Dividend Policy on Market Price of Share with Reference to Listed Commercial Bank in Nepal*". The specific objectives of the study are as follows;

- To major uniformity in DPS, EPS, MPS and DPR of the sample firms.
- To find the major factors affecting dividend policy of the firm.
- To see whether dividend distributions are in proportionate to the earnings of the firms or not.

Singh took six commercial banks and six year data that study. The methodology used in the study included, financial tools and statistical tools such as correlation analysis, regression analysis and test of hypothesis etc. Singh used secondary data for the analysis. The major findings of the study are as follows;

- Average market price per share of NABIL, HBL, BOK, SBI, NB and EBL is Rs. 3558.83, 1391, 1278.33, 1045.833,420 and 1982.67 respectively mean MPS of NABIL is greater than other companies. Higher market price creates the positive attitude of the investors towards the bank, which consequently attracts the investor to invest in such high valued shares.
- Correlation coefficient between EPS & MPS of three (HBL, BOK, SBI) are significant and three bank are not significant. All are positive relation of EPS and MPS.
- Regression Coefficient (b) is highest between EPS and MPS of BOK and lowest is NB. The highest t-value (5.28) is BOK and lowest T-value (0.56) is NB.
- Correlation coefficient between EPS & DPS of their bank (NABIL, BOK, EBL) are significant but BOK is negative relation and two bank (SBI, HBL) are insignificant. NB bank has not any relation of EPS and DPS because it didn't paid any dividend.
- Regression Coefficient (b) is highest between EPS & DPS of NABIL (1.19), BOK have negative regression coefficient. In the case of t-value the NABIL bank has highest t-value (3.94) and the BOK has a negative (-2.3) t-value.

Gyawali (2011) has conducted a study on “*Dividend Policy and Its Impact on Market Price of Shares*”. The major objectives of the study are as follows;

- To identify the impact of dividend policy on market price of stock.
- To measure uniformity in DPS, EPS, MPS and DPR of the sample firms.
- To identify the relationship between DPS and other financial indicators.

On that study take five companies sample and taken five year data the some major findings are as follows;

- Average Dividend Payout ratio of NIC, MBL NIBL HBL and KBL is Rs 18.26, 2.87, 31.14, 34.37 and 13.24 respectively. Mean DPR of HBL is greater than other companies. Higher DPR indicate the company is greater return on dividend.
- The correlation of DPS & MPS of NIC, NIBL and KBL has negative correlation and HBL have highest positive correlation.

- Correlation coefficient between EPS & MPS of three (HBL, NIBL, SBI) are significant and three bank are not significant. All are positive relation of EPS and MPS.
- Regression Coefficient (b) is highest between EPS and MPS of HBL and lowest is KBL. The highest t-value (2.367) is HBL and lowest T-value (0.0624) is MBL.
- Correlation coefficients between EPS & DPS of all banks are significant but NIBL is negative relation and other four banks have positive relation.
- Regression Coefficient (b) is highest between EPS & DPS of NIC (1.29), NIBL have negative regression coefficient. In the case of t-value the NIC bank has highest t-value (2.927) and the HBL has a lowest (0.8323) t-value.

Research Gap

There have been many national and international studies in the field of dividend policy to date. All concepts and practices of foreign author's about the dividend practices are not used our Nepalese dividend policy. Those studies have tried to find out the relationship between dividend policy and market price of the stock. But as the Nepalese capital market is in the early stage of development, the conclusion made by the international studies may not be relevant in the Nepalese context.

So far the Nepalese studies are concerned some studies. These can be considered as landmark in the field of dividend policy. But many more changes appear in the market in short time period also. In Nepalese capital market also many changes ate seen in last few years. So it is necessary to carry out a fresh study related to dividend pattern of commercial banks of Nepal.

This is a distinct study form the previous studies in terms of sample, size and methodology used. The study has covered only two commercial banks. Latest five years data have been used to analyzed with due consideration of EPS, DPS, DPR and MPS. In order to assess the impact of dividend on market price of share available information from concerned banks were reviewed and analyzed. Regression analysis has been done taking market price of share (MPS) other variables like DPS, and EPS

ratio. Trend analysis of MPS, DPS and EPS is also done which helps to predict the future of the banks.

Among the previous study done in this topic, the samples were either mixture of banks and finance companies or that of insurance companies and manufacturing units. Here, the study has been done with special reference to two leading commercial banks of Nepal. Descriptive analysis has incorporated trend analysis with picture demonstrations that the previous researchers have not done.

CHAPTER – III

RESEARCH METHODOLOGY

“Research Methodology, describes the methods and process applied in the entire aspects of study. Every research should be outline in the systematic manner and for that reason Research Methodology is one of most important parts of every research. In fact, Research Methodology is a way to systematically solve the research problems. It refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objects in views.” *(Kothari, 1978 P: 19)*

This chapter refers to the overall research method from the theoretical aspects to the collection and analysis of data. This study covers quantitative methodology in a greater extent and also user the descriptive part based on both technical aspects and logical aspect. This research tries to perform a well-designed quantitative and qualitative and qualitative research in a very clear and direct way using both financial and statistical tools.

3.1 Research Design

Research Design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances *(Kerlinger; 1978 P: 300)*. The research design basically followed the comparative evaluation of dividend policy in the sample firms and their effect on stock prices. A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Descriptive and analytical research designs have been used to this study. With the help of maintained research design the study evaluates the dividend policy structure of selected sample commercial banks as well as its impact on the market price of the stocks of the respective banks.

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

3.2 Population and Sample

Population refers to the entire group of people, events or things of interest that a researcher wishes to investigate. As this study is about Dividend policy of commercial banks, all 32 Commercial banks of Nepal are taken into account as population. Out of the total population i.e. 32 commercial banks, 2 commercial banks are taken for this study. These two banks are the samples selected by using judgmental sample methods for this research. The selected sample banks are:

1. Bank of Kathmandu Limited (BOK)
2. Nabil Bank Limited (NABIL)

3.3 Sources of Data

This study is based on two methods of data collection i.e. primary and secondary data. Primary data are the data collected directly from the site. To collect the secondary data, published materials are viewed in various spots like books by different authors, unpublished thesis reports, journals, Internet web sites, online library, AGM reports of listed companies, NEPSE, SEBON etc. To collect these secondary data, the researchers visited campus library of SDC, NCC, TU Central library, SEBON library.

3.4 Data Analysis Tools

The analysis of data has been done according to the pattern of data available. Wide varieties of methodology have been applied according to the reliability and consistency of data. Firstly, the collected data are presented in proper forms, grouped in various tables and charts according to their nature. Then various financial and statistical tools have been applied. And then interpretations and explanations are made wherever necessary with the help of various statistical analyses.

3.4.1 Financial Tools

To evaluate the financial position and performance of any firm ratio is used as a key tool of financial analysis. "Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account". Financial analysis is the use of financial statements to analyze a company's financial position and performance and to assess future financial performance. The financial tools used in this study are briefly presented below:

- **Market Price of Shares**

It reflects per unit price of the share traded in the market. MPS is determined according to the demand and supply of share in the market. If there is high demand it leads to the increase in MPS and if there is low demand it leads to decrease in MPS. MPS also indicates the performance of the firm. Firm with high MPS are regarded better and are thought to be in a good financial position.

- **Earnings per Share (EPS)**

Earnings per share refer the rupee amount earned per share of common stock outstanding. EPS is one of the most important financial indicators, which measures the earning capacity of a firm. It measures the profit available to the ordinary shareholders 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 earnings per share denote the strength and lower earnings per share indicates the weakness of the banks. EPS is calculated by dividing net income available to the common stockholders by the total number of common shares outstanding.

$$\text{Earnings per share} = \frac{\text{Net profit after tax}}{\text{No. of shares outstanding}}$$

- **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 distributed to each equity shareholders. The DPS simply shows the portion of earning distributed to the shareholders on per share basis. Generally, the higher DPS creates positive attitude of the shareholders toward 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.

$$\text{DPS} = \frac{\text{Total dividend paid}}{\text{No. of shares outstanding}}$$

- **Dividend Payout Ratio (D/P Ratio)**

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 from 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 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 firm is checked. It is calculated to indicate the percentage of the profit that is distributed as dividend. This ratio is calculated by dividing dividend per share by the earning per share. It is the percentage of profit i.e. distributed as dividend. It is calculated as follows:

$$D/P \text{ ratio} = \frac{\text{Dividend per share (DPS)}}{\text{Earning per share (EPS)}}$$

- **Price Earnings Ratio (P/E Ratio) / Earning Multiplier**

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

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

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

- **Earning Yield (EY)**

Earning yield is the percentage of earning per share to market price per share in the stock market. 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 the share. It gives some idea that of how much an investor is earning 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:

$$\text{Earning Yield} = \frac{\text{Earning per share (EPS)}}{\text{Market Price per share (MPS)}}$$

- **Dividend Yield (DY)**

Dividend yield is a percentage of dividends per share on market price per share. It measures the dividend in relation to market value of share. So, dividend yield is the dividend received by the 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. Thus the price of higher dividend yields increases sharply in the market. Dividend has important guidance to commit funds for the buying shares in the secondary market. This ratio is calculated by dividing dividend per share by market price of the stock. Thus

$$\text{Dividend Yield (DY)} = \frac{\text{Dividend per share}}{\text{Market price per share}}$$

3.4.2 Statistical Tools

Statistical tools are the mathematical techniques used to analyze and interpret performance. It is used to describe the relationship between variables and interpret the result. Statistics is also used to test the hypothesis that is set to know the information of population.

- **Mean (\bar{X})**

The arithmetic mean or average is the sum of total values to the number of observations in the sample. It represents the entire data which lies almost between the two extremes i.e. the largest and the smallest item. For this reason an average is

frequently referred to as a measure of central tendency. In this study it is used in data related to dividend of sample banks over five years. It is calculated as:

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

Where,

$\sum X$ = Sum of total values

N = Number of observation

- **Standard Deviation (S.D.)**

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

$$\text{Standard Deviation}(\sigma) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2}$$

- **Coefficient of Variation (CV)**

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

$$\text{Coefficient of Variation} = \frac{\sigma}{\bar{X}} \times 100 \%$$

Where,

σ = Standard deviation

\bar{X} = Mean

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

- **Coefficient of correlation (r)**

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another. The coefficient of correlation measures the direction of relationship between two set of figures. It is the square root of coefficient determination. Correlation can either be negative or positive. If both variables are changing in same direction, then correlation is said to be positive but when the variation in the two variables take place in opposite direction the correlation is said to be negative.

$$\text{Correlation coefficient}(r) = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \times \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

Where,

N = Number of pairs of X and Y observed

X = Values of Investment, Loan and Advance

Y = Values of Total Deposit

r = co-efficient of correlation

The strength of correlation between the variables can be quantified. This is achieved by calculating the correlation coefficient. The correlation coefficient varies between +1 to -1; with +1 representing perfect positive correlations and -1 representing perfect negative correlation. In this study, simple coefficient of correlation is used to examine the relationship of different factors with dividend and other variables. The data regarding dividend over different years are tabulated and their relationship with each other are drawn out. In practical life, the possibility of obtaining either perfect positive or perfect negative correlation is very rare.

- **Coefficient of Determination (R^2)**

The coefficient of determination is the measure of the degree of linear association or correlation between two or more independent variables. It measures the percentage total variation in dependent variables explained by independent variables. If r^2 has a zero value then, it indicates that there is no correlation which means all the data points in scatter diagram fall exactly on the regression line. If it has the value equal to one then it indicates that there is perfect correlation and as such the regression line is the perfect estimator. But in most of the cases the value of r^2 will lie somewhere between these two extremes of 1 and 0. One should remember that r^2 close to one indicates a strong correlation between two variables and r^2 near to zero means there is little correlation.

$$\text{Coefficient of Determination } (R^2) = \frac{\text{Explained variation}}{\text{Total Variation}}$$

Or,

$$R^2 = 1 - \frac{\text{Unexplained variation}}{\text{Total Variation}}$$

- **Regression Analysis**

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

i. Simple Regression Analysis

The simple regression is used to study, the particular one dependent and one independent variable's relationship. The simple linear regression analysis would be:

$$Y = a + bX$$

Where,

Y is the dependent variable

X is the independent variable

a is the average value of Y when X equals zero

b is the expected change in Y per unit change in X

ii. Multiple Regression Analysis

The multiple regression analysis consists of the measurement of the relationship between one dependent variable and two or more independent variables. The procedure is similar to that for simple regression, with a difference that other independent variables are added to the regression equation. If X_1 is the dependent variable and X_2, X_3 are two independent variables, so that the multiple regression equation for the observed data is given by:

$$X_1 = a + b_1X_2 + b_2X_3$$

Where,

a = Point of intercept on Y-axis = the value of X_1 when $X_2 = X_3 = 0$

b_1 = Slope of X_1 with variable X_2 holding variable X_3 constant.

b_2 = Slope of X_1 with variable X_3 holding variable X_2 constant.

But this study is only based on simple regression analysis.

- **Probable Error**

The Probable Error (PE) of correlation coefficient is an old measure of testing of reliability of an observed correlation coefficient. The Probable Error of the correlation coefficient is the basis for the interpretation of its value.

PE is used in interpretation whether the calculated value of r is significant or not.

- If $r < PE$ than it is insignificant or there is no evidence of correlation.
- If $r > 6PE$ than, it is significant.
- If $PE < r < 6PE$ than, nothing can be concluded.

- **T-test**

T-test, commonly known as Student's T-Distribution, is used when sample size is equal to or less than 30, the parent population from which the sample is drawn is normal, the population standard deviation is unknown. In order to test the significance of an observed sample correlation coefficient, the following procedure has been applied:

The following formula is used to test an observed sample correlation coefficient:

$$t = \frac{r \times \sqrt{n - 2}}{\sqrt{1 - r^2}}$$

Where,

t = test of hypothesis

r = simple correlation coefficient

n = number of observation

- **Trend Analysis**

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

Let, the equation of Trend Analysis would be,

$$Y = a + bx$$

Where,

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

a = Intercept of trend line or y- intercept.

b = Slope of Trend Line.

x= Time variable.

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

The main purpose of analyzing the data is to change it from an unprocessed form to an understandable presentation. The analysis of data consists of organizing, tabulating, and performing statistical analysis. This chapter consists of presentation and analysis of data which is collected from different sources. The data is mainly focused on the capital adequacy position and its impact on the performance of the sample banks. To obtain best result, the data and information have been analyzed with the measures of different financial and analytical tools by using appropriate tables, graphs, formulae, hypothesis and other tools.

4.1 Presentation and Analysis of Secondary Data

4.1.1 Analysis of Financial Indicators and Variables

4.1.1.1 Earning per Share (EPS)

In business organization performance and success is measure by earning capacity of the company. Lower earning shows weak position and higher earning show strength position of the business organization. The EPS of both banks BOK and NABIL is presented in the table 4.1.

Table 4.1
Analysis of Earning Per Share (EPS)

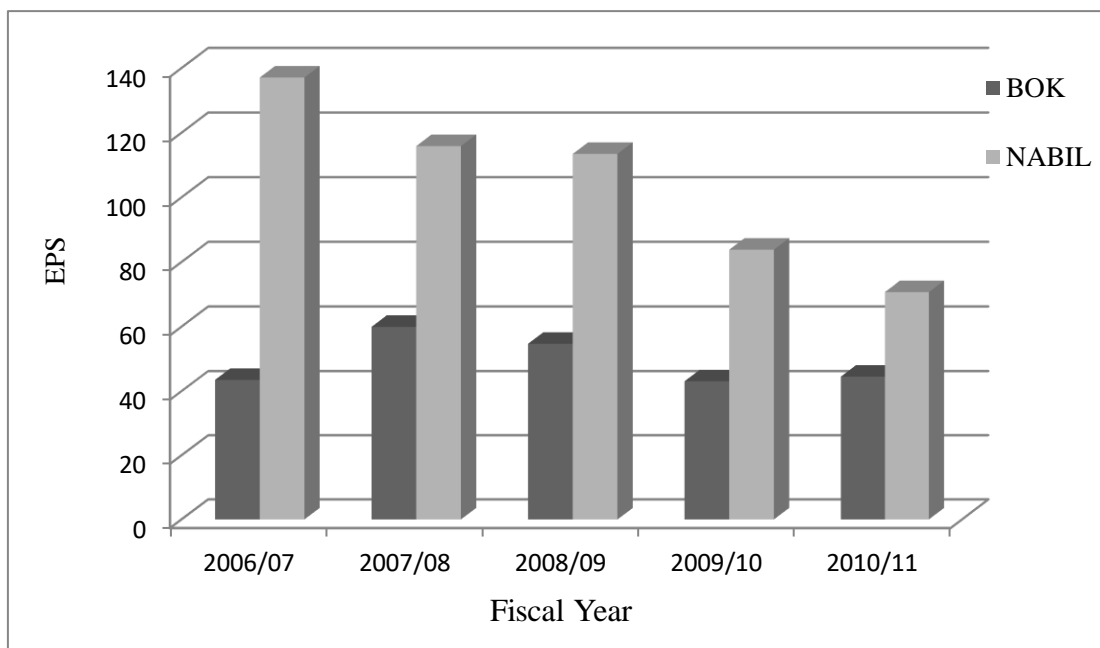
(In Rupees)

Fiscal Year	Bank	
	BOK	NABIL
2006/07	43.50	137.08
2007/08	59.94	115.86
2008/09	54.68	113.44
2009/10	43.08	83.81
2010/11	44.51	70.67
Mean	49.14	104.2
S.D.	6.89	23.80
C.V	14.02	22.84

Source: Annual reports of respective banks

The table 4.1 presents the EPS of the two commercial banks from fiscal year 2006/07 to 2010/11 at which NABIL has higher average EPS than that of BOK. BOK has average EPS of Rs. 49.14. Its standard deviation is 6.89 and CV is 14.02%. EPS of BOK is fluctuating slowly as it has 14.02%. And NABIL has average EPS of Rs. 104.2. Its standard deviation is 23.8 and CV of NABIL is 22.84% which means that EPS of NABIL is also fluctuating slowly but higher than of BOK. This is also presented in figure 4.1.

Figure 4.1
Analysis of Earning per Share (EPS)



4.1.1.2 Dividend per Share (DPS)

The common shareholders received the amount from company which is paid on a per share basis is generally Dividend per share (DPS). DPS shows what amount exactly paid to the common shareholders. It is calculated by dividing the dividend provided to equity shareholders by the total number of equity shares of particular company.

Table 4.2
Analysis of Dividend per Share (DPS)

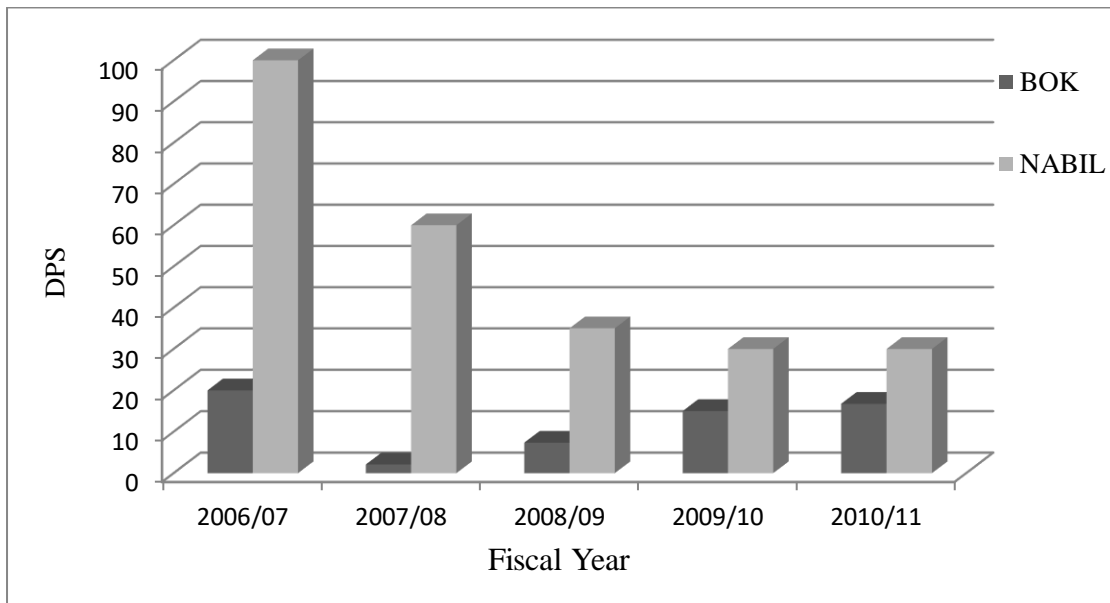
(In Rupees)

Fiscal Year	Bank	
	BOK	NABIL
2006/07	20.00	100.00
2007/08	2.11	60.00
2008/09	7.37	35.00
2009/10	15.00	30.00
2010/11	16.75	30.00
Mean	12.25	51.00
S.D.	6.55	26.90
C.V	53.47	52.75

Source: Annual reports of respective banks

The table 4.2 shows the dividend per share of two listed commercial banks from the fiscal year 2006/07 to 2010/11 at which NABIL has higher average DPS than that of BOK. NABIL has average DPS, i.e. Rs. 51 with its standard deviation 26.9 and 52.75% CV, which shows that it has high fluctuation. Whereas BOK has average DPS of Rs. 12.25 with its standard deviation 6.55 and 53.47% CV, which shows that DPS of BOK is also fluctuating highly. This is also presented in figure 4.2.

Figure 4.2
Analysis of Dividend per Share (DPS)



4.1.1.3 Dividend Payout Ratio (DPR)

Earning determines the amount of dividend. The greater the earning was more ability of banks to pay dividend. This ratio expresses the amount of dividend as a percentage of earning available for equity shares after meeting all charges.

Table 4.3
Analysis of Dividend Payout Ratio (DPR)

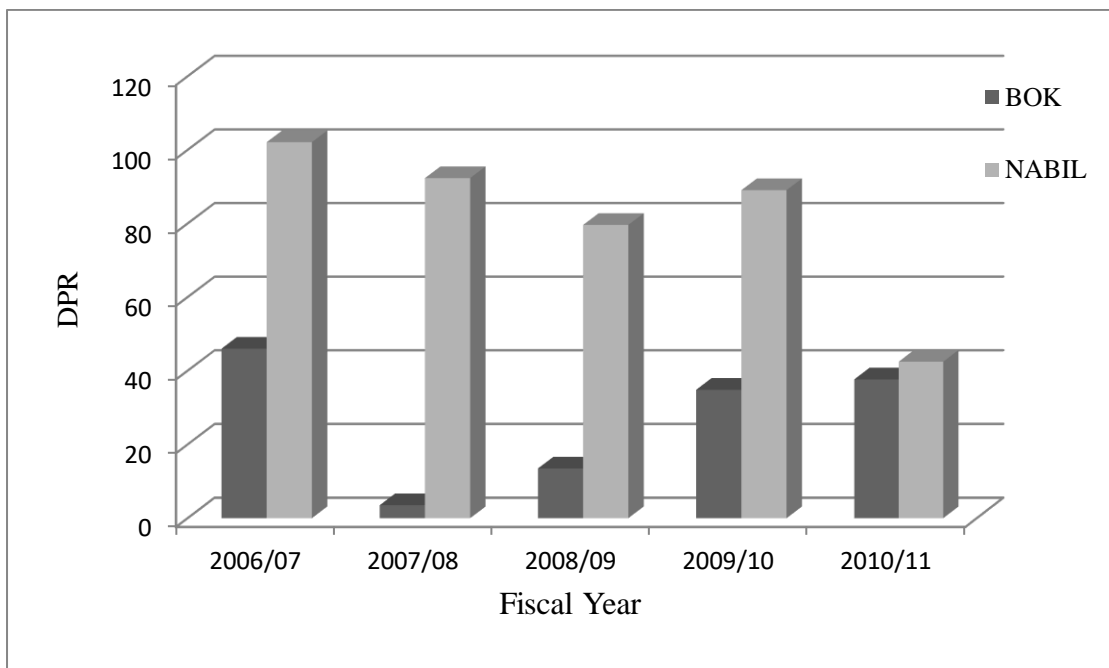
(In Percentage)

Fiscal Year	Bank	
	BOK	NABIL
2006/07	45.98	102.10
2007/08	3.52	92.33
2008/09	13.48	79.62
2009/10	34.82	89.05
2010/11	37.63	42.45
Mean	27.09	81.11
S.D.	15.93	20.62
C.V	58.80	25.42

Source: Annual reports of respective banks

The table 4.3 represents the dividend pay-out ratio (DPR) of two selected commercial banks at which NABIL has higher average DPR than that of BOK. NABIL has average DPR of 81.11 with its standard deviation 20.62 and 25.42% CV which shows the lower fluctuation of DPR on NABIL as it has 25.42% CV. Whereas, BOK has average DPR 27.09 with its standard deviation 15.93 and 58.80% CV which shows that the higher fluctuation on DPR of BOK. This is also presented in figure 4.3.

Figure 4.3
Analysis of Dividend payout ratio (DPR)



4.1.1.4 Dividend Yield (DY)

This ratio shows the relationship between dividend per share and market value per share. It is calculated by dividend per share by market value per share.

Table 4.4
Analysis of Dividend Yield (DY)

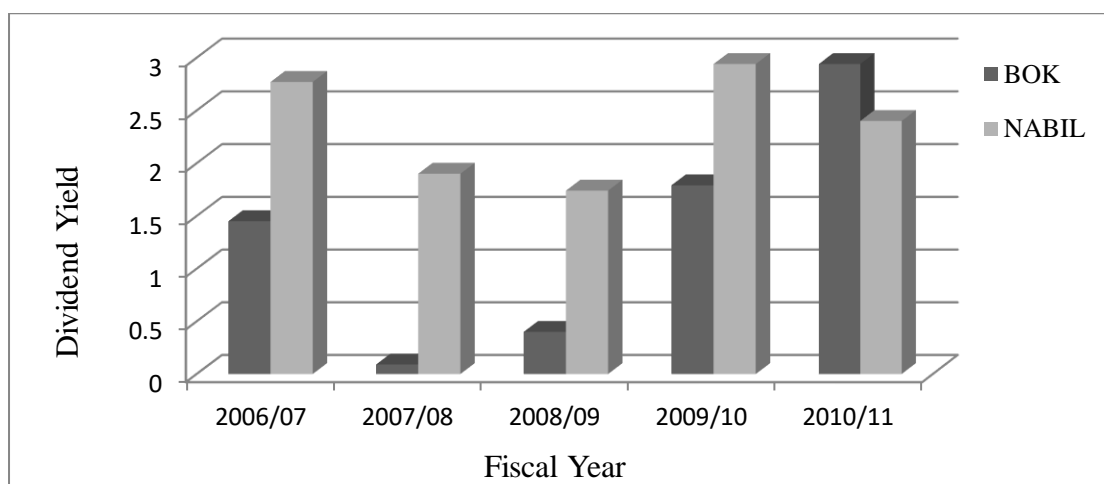
(In percentage)

Fiscal Year	Bank	
	BOK	NABIL
2006/07	1.45	2.77
2007/08	0.09	1.90
2008/09	0.40	1.74
2009/10	1.79	2.94
2010/11	2.94	2.40
Mean	1.33	2.35
S.D.	1.02	0.47
C.V	76.69	20.00

Source: Appendix II

The table 4.4 represents the dividend yield of two selected commercial banks at which NABIL has average dividend yield. NABIL has average DY of 2.35 with its standard deviation 0.47 and 20.00% CV which shows the lower fluctuation of DY on NABIL as it has 20.00% CV. Whereas, BOK has average DY of 1.33 with its standard deviation 1.02 and 76.69% CV which shows that the higher fluctuation on DY of BOK presented in figure 4.4.

Figure 4.4
Analysis of Dividend Yield (DY)



4.1.1.5 Earning Yield (EY)

This ratio shows the relationship between earning per share and market value per share. It is calculated by earning per share by market value per share.

Table 4.5
Analysis of Earning Yield (EY)

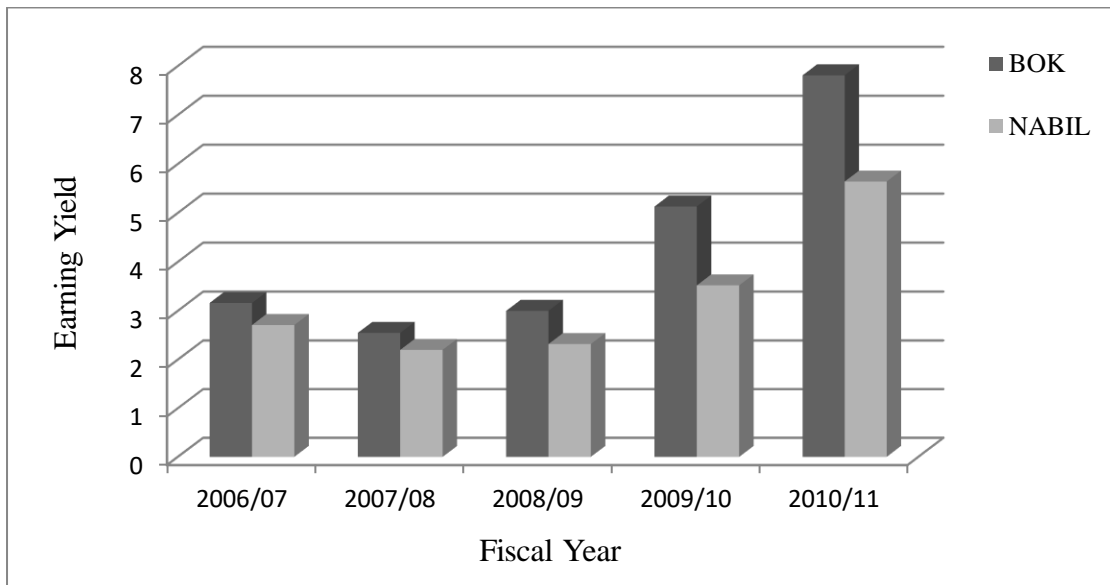
(In percentage)

Fiscal Year	Bank	
	BOK	NABIL
2006/07	3.16	2.71
2007/08	2.55	2.20
2008/09	3.00	2.32
2009/10	5.13	3.52
2010/11	7.81	5.64
Mean	4.33	3.28
S.D.	2.36	1.27
C.V	60.67	38.72

Source: Appendix II

The table 4.5 represents the earning yield of two selected commercial banks at which BOK has higher earning yield than that of NABIL. BOK has average EY of 3.89 with its standard deviation 2.36 and 60.67% CV which shows the higher fluctuation of EY on BOK as it has 60.67% CV. Whereas, NABIL has average EY 3.28 with its standard deviation 1.27 and 38.72% CV which shows that the moderate fluctuation on EY of NABIL. This is also presented in figure 4.5.

Figure 4.5
Analysis of Earning Yield (EY)



4.1.1.6 Price Earnings Ratio (P/E Ratio)

Table 4.6
Analysis of Price Earnings Ratio (P/E Ratio)

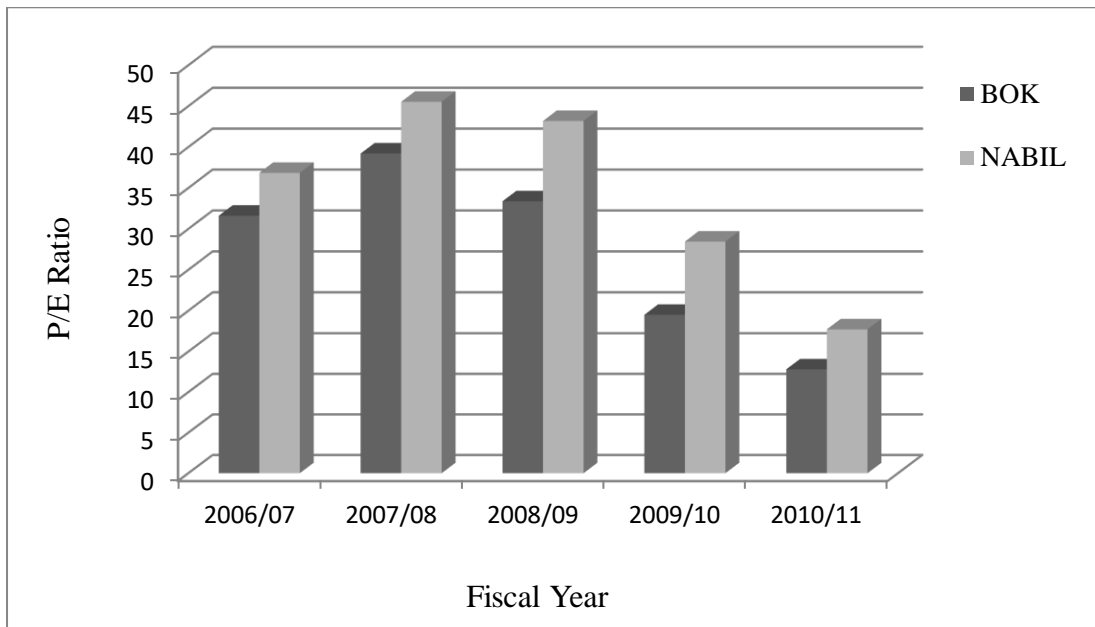
Fiscal Year	Bank	
	BOK	NABIL
2006/07	31.61	36.84
2007/08	39.21	45.53
2008/09	33.37	43.19
2009/10	19.50	28.45
2010/11	12.81	17.72
Mean	27.30	34.35
S.D.	9.68	10.20
C.V	35.46	29.69

Source: Annual reports of respective banks

The table 4.6 represents the P/E ratio of two selected commercial banks at which NABIL has higher average P/E ratio than that of BOK. NABIL has average P/E ratio of 34.35 with its standard deviation 10.20 and 29.69% CV which shows the moderate fluctuation of P/E ratio on NABIL as it has 29.69% CV. Whereas, BOK has average

P/E ratio of 27.30 with its standard deviation 9.68 and 35.46% CV which also shows that the moderate fluctuation on P/E ratio of BOK. But fluctuation on BOK is higher than that of NABIL. This is also presented in figure 4.6.

Figure 4.6
Price Earnings Ratio (P/E Ratio)



4.1.1.7 Market Price per Share (MPS)

The rate which is treated in secondary markets is known as market price of share (MPS). In the case of Nepal MPS is calculated by taking the average of the highest and the lowest market price of Nepal Stock Exchange (NEPSE). The market price per share depicts the perception of the market relating to the performance of a company. MPS is the current price at which the stock is traded.

Table 4.7
Comparative Analysis of Market Price per Share (MPS)

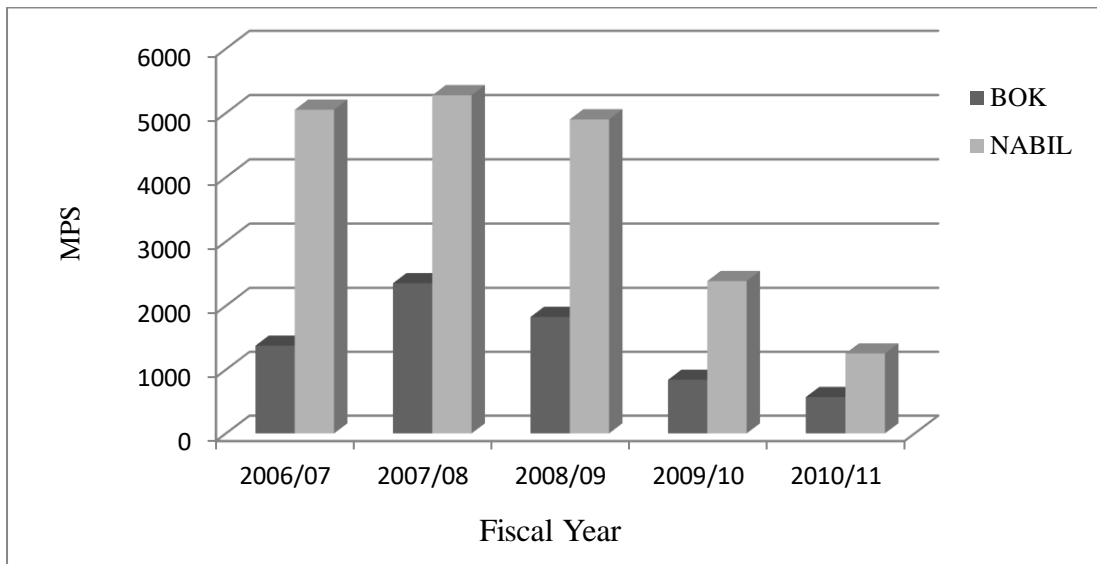
(In Rupees)

Fiscal Year	Bank	
	BOK	NABIL
2006/07	1375	5050
2007/08	2350	5275
2008/09	1825	4899
2009/10	840	2384
2010/11	570	1252
Mean	1392	3772
S.D.	645.90	1639.47
C.V	46.40	43.46

Source: Annual reports of respective banks

The table 4.7 shows the market price of the two listed commercial banks from fiscal year 2006/07 to 2010/11 at which NABIL has higher average MPS than that of BOK. BOK has average MPS of Rs. 1392 which shows it is performing well. Its standard deviation is 645.90 and CV is 46.40%. MPS of BOK is fluctuating highly as it has 46.40%. MPS is increasing up to the fiscal year 2007/08 and it starts to decline heavily. And NABIL has average MPS of Rs. 3772. Its standard deviation is 1639.47 and CV of NABIL is 43.46% which means that MPS of NABIL is also fluctuating highly but quiet lower than of BOK. MPS of NABIL is also increasing up to the fiscal year 2007/08 and starts to decline heavily. This is also presented in figure 4.7.

Figure 4.7
Market Price per Share



4.1.2 Analysis of Statistical Indicators and Variables

4.1.2.1 Correlation Analysis

The correlation analysis is a technique used to measure the closeness of the relationship between the variables. It helps us in determining the degree of relationship between two or more variables. It describes not only the magnitude of correlation but also its direction. The coefficient of correlation is a number which indicates to what extent two variables are related with each other. The correlation coefficient shows the relationship between two variables. Its value ranges from -1 for perfect negative correlation up to +1 for perfect positive correlation. Here we have calculated the relationship between EPS and MPS, MPS and DPS and EPS and DPS.

4.1.2.1.1 Correlation Coefficient between DPS and MPS

Table 4.8
Correlation Coefficient between DPS and MPS

Bank	r	r ²	PE	6PE	Remarks
BOK	-0.81	0.66	0.10	0.90	Insignificant
NABIL	0.64	0.41	0.18	1.08	Undefined

Source: Appendix IV

Table 4.8 presents the correlation coefficient between MPS and DPS of two listed commercial banks. Correlation coefficient of BOK is negative which indicates that there is negative relationship between MPS and DPS. It means that when there is increase in DPS; it leads to decrease in MPS and vice-versa. And correlation coefficient of NABIL is positive which indicates that there is positive relationship between MPS and DPS. It means that when there is increase in DPS; it leads to increase in MPS and vice- versa. BOK has the highest degree of negative correlation and NABIL has moderate degree of positive correlation.

PE measures the reliability of the observed correlation coefficient. The coefficient of determination (r^2) of BOK and NABIL indicates there is 66% and 41% variation in the dependent variable has been explained by the independent variable respectively. In the case of BOK, 'r' is less than PE which indicates that there is insignificant relationship between MPS and DPS whereas in the case of NABIL, 'r' is greater than PE but less than 6PE which indicates that there is undefined relationship between MPS and DPS.

4.1.2.1.2 Correlation Coefficient between EPS and MPS

The correlation coefficient between EPS and MPS as calculated in Appendix III is summarized below.

Table 4.9
Correlation Coefficient between EPS and MPS

Bank	r	r^2	PE	6PE	Remarks
BOK	0.90	0.81	0.06	0.36	Significant
NABIL	0.94	0.88	0.04	0.24	Significant

Source: Appendix IV

The Table 4.9 helps to depict the relationship between Earning per Share (EPS) and Market Price per Share (MPS) of above two commercial banks from the year 2006/07 to 2010/11. The correlation coefficient (r) between EPS and MPS both banks are positive which indicates the positive relationship between EPS and MPS. It means

that the MPS increases with the increase in EPS. BOK and NABIL are highly positive having coefficient of correlation 0.90 and 0.94 respectively.

In the case of BOK, coefficient of determination is 0.81, which means 81% of the variation in the dependent variable has been explained by the independent variable. And in the case of NABIL, coefficient of determination is 0.88, which means 88% of the variation in the dependent variable has been explained by the independent variable. PE measures the reliability of the observed correlation coefficient. On both the banks 'r' is greater than 6PE, which indicates that there is significant relationship between EPS and MPS.

4.1.2.1.3 Correlation Coefficient between EPS and DPS

Table 4.10
Correlation Coefficient between EPS and DPS

Bank	r	r ²	PE	6PE	Remarks
BOK	-0.97	0.94	0.018	0.11	Insignificant
NABIL	0.84	0.71	0.087	0.52	Significant

Source: Appendix IV

Table 4.10 presents the correlation coefficient between EPS and DPS of two listed commercial banks. Correlation coefficient of BOK is negative which indicates that there is negative relationship between EPS and DPS. It means when there is increase in EPS; it leads to decrease in DPS and vice-versa. And correlation coefficient of NABIL is positive which indicates that there is positive relationship between EPS and DPS. It means when there is increase in EPS; it leads to increase in DPS and vice-versa. BOK has the highest degree of negative correlation and NABIL has highest degree of positive correlation.

PE measures the reliability of the observed correlation coefficient. The coefficient of determination (r²) of BOK and NABIL indicates there is 94% and 71% variation in the dependent variable has been explained by the independent variable respectively. In the case of BOK, 'r' is less than PE which indicates that there is insignificant

relationship between EPS and DPS, whereas in the case of NABIL, 'r' is greater than 6PE which indicates that there is significant relationship between EPS and DPS.

4.1.2.1.4 Correlation Coefficient between DPR and MPS

The correlation coefficient between DPR and MPS as calculated in Appendix III is summarized below.

Table 4.11
Correlation Coefficient between DPR and MPS

Bank	r	r ²	PE	6PE	Remarks
BOK	-0.81	0.66	0.10	0.60	Insignificant
NABIL	0.76	0.58	0.12	0.72	Significant

Source: Appendix IV

The Table 4.11 helps to depict the relationship between Dividend Payout Ratio (DPR) and Market Price per Share (MPS) of above two commercial banks from the year 2006/07 to 2010/11. The correlation coefficient (r) between DPR and MPS of BOK is negative which represents negative relationship between DPR and MPS. And correlation coefficient between DPR and MPS of NABIL is positive which indicates the positive relationship between EPS and MPS.

In the case of BOK, coefficient of determination is 0.66, which means 66% of the variation in the dependent variable has been explained by the independent variable. And in the case of NABIL, coefficient of determination is 0.58, which means 58% of the variation in the dependent variable has been explained by the independent variable. PE measures the reliability of the observed correlation coefficient. On BOK 'r' is less than PE, which indicates the insignificant relationship between DPR and MPS. On NABIL 'r' is greater than 6PE, which indicates that there is significant relationship between DPR and MPS.

4.1.2.2 Simple Line Regression Analysis

Regression is the statistical tool which is used to determine the statistical relationship between two or more variables and so make estimate of one variable on the basis of the other variable. Regression is the line which gives the best estimate of one variable

for any given value of the other variable. The regression line of Y on X estimate the most probable values of Y for given values of X.

The regression equation of Y on X expressed as $Y = a + bX$

Where,

X is independent variable

Y is dependent variable

a and b are parameters of the line

To find out the exact relationship between different variable simple regressions analysis has been done and results of the analysis have been shown on the table.

4.1.2.2.1 Regression Analysis of MPS on DPS

MPS is taken as dependent variable and DPS as independent variable. In this basis regression analysis of MPS on DPS is calculated and it is presented in the table below.

Table 4.12
Regression Analysis of MPS on DPS

Bank	Intercept (a)	Slope (b)	T value	Remarks
BOK	2372.55	-80.07	2.41	Insignificant
NABIL	1797.02	38.73	1.44	Insignificant

(Source: Appendix V)

The table 4.12 shows that the slope of BOK is negative which indicates that there is negative relationship between DPS and MPS. In other words, it indicates that when there is one unit increase in the DPS it leads to 80.07 unit decreases in the MPS and vice-versa. And slope of NABIL is positive which indicates that there is positive relationship between DPS and MPS. In other words, it indicates that when there is one unit increase in the DPS it leads to 38.73 unit increases in the MPS and vice-versa. Intercept (a) is the average value of MPS when DPS is equal to zero. Intercept of both banks are found to be positive and both the intercept remains constant.

The calculated t-value of relationship between DPS and MPS is lower than that the tabulated t-value (3.182) at 5% level of significance on 3 degree of freedom for both banks so that there is found to be insignificant.

4.1.2.2.2 Regression Analysis of MPS on EPS

To describe the average relationship between EPS and MPS, we have performed the regression analysis of both commercial banks. In this analysis, we have assumed MPS as depended variable and EPS as the independent variable. The summary of the regression analysis is presented in the table 4.12 below.

Table 4.13
Regression Analysis between EPS and MPS

Bank	Intercept (a)	Slope (b)	T value	Remarks
BOK	-2748.09	84.25	3.576	Significant
NABIL	-2925.80	64.30	4.7	Significant

(Source: Appendix V)

The table 4.13 shows the regression analysis of MPS on EPS of two listed commercial banks. From this analysis we have found the slopes or regression coefficient (b) of both banks are positive which indicates the positive relationship exists between EPS and MPS. In other words, one unit increase in EPS leads to 84.25 and 64.30 unit increase in MPS of BOK and NABIL respectively. Intercept (a) is the average value of MPS when its EPS is equal to zero. According to the data, intercept of both banks found to be negative.

Also, the calculated value of t (3.576) of BOK and calculated value of t (4.7) of NABIL are higher than the tabulated value of t (3.182) at 5% level of significance and 3 degree of freedom, which indicates that the result is statistically significant.

4.1.2.2.3 Regression Analysis of DPS on EPS

Regression Analysis of DPS on EPS is calculated in the table below. We have taken the data of both commercial banks, where EPS is taken as independent variable and DPS as dependent variable.

Table 4.14
Regression Analysis of DPS on EPS

Bank	Intercept (a)	Slope (b)	T value	Remarks
BOK	57.34	-0.9176	6.86	Significant
NABIL	-47.97	0.9500	2.70	Insignificant

(Source: Appendix V)

According to the table 4.14, slope (b) of NABIL is positive which indicates there is positive relationship. In other words, when there is increase in one unit of EPS it leads to the 0.9500 unit increase in DPS of NABIL. Whereas, slope or regression coefficient (b) is negative on BOK which indicates that there is negative relationship. It means increase in one unit of EPS leads to 0.9176 unit decreases in DPS of BOK respectively. Intercept (a) is the average value of DPS at which EPS is equal to zero. There is positive value of intercept on BOK whereas there is negative value of intercept on NABIL.

The test of t-statistics helps to conclude that relationship between DPS and EPS of BOK is significant as its calculated t-value (6.86) is higher than that of the tabulated t-value (3.182) at 5% level of significance on 3 degree of freedom. In case of NABIL it is insignificant due to lower calculated value than tabulated value.

4.1.2.3 Multiple Regression Analysis

The regression is used to determine the statistically relationship between two or more variable and to make prediction of one variable on the basis of others. The regression can analyze either in simple regression or multiple regressions. When we take two or more independent variable and predict the value of the dependent variable through the appropriate regression line, the analysis is known as multiple regression analysis.

4.1.2.3.1 Regression Analysis of MPS on DPS and EPS

To find out dependency of market price per share on the dividend per share and earnings per share this analysis is tested.

Table 4.15
Regression Analysis of MPS on DPS and EPS

Bank	a	b ₁	b ₂	R ²
BOK	-7479.05	159.97	82.46	0.8542
NABIL	-4447.77	94.44	-31.73	0.9533

(Source: Appendix V)

The table 4.15 shows that the influences of DPS and EPS to market price of stock in the sample commercial banks. In case of BOK, the regression coefficient (b₁) for DPS is 159.97 which indicates that one rupee increase in DPS leads to an average of about 159.97 increase in MPS keeping other variable constant. There is positive relationship between MPS and DPS. Since, DPS cause increase in MPS. The regression coefficient (b₂) for EPS is 82.46, which indicates that one rupee increase in EPS resulted in only 82.46 increase in MPS keeping other variable constant. There is positive relationship between MPS and EPS. The value of multiple coefficient of determination (R²) is 0.8542 which shows 85.42% variation in MPS explained by variation in DPS and EPS.

In case of NABIL, the regression coefficient (b₁) for DPS is 94.44 which indicates that one rupee increase in DPS leads to an average of about 94.44 increase in MPS keeping other variable constant. There is positive relationship between MPS and DPS. Since, DPS cause increase in MPS. The regression coefficient (b₂) for EPS is -31.73, which indicates that one rupee increase in EPS resulted in only 31.73 decrease in MPS keeping other variable constant. There is negative relationship between MPS and EPS. The value of multiple coefficient of determination (R²) is 0.9533 which shows 95.33% variation in MPS explained by variation in DPS and EPS. Hence, it shows that by keeping EPS and DPS an independent ,MPS is depend upon those factors, i.e. MPS is dependent factor. So, the MPS is affected by EPS and DPS. Therefore, both are relevant factors of share prices.

4.1.2.4 Trend Analysis

Trend analysis is an analysis of financial ratio over time used to determine the pattern of growth. Trend Analysis informs about the future expected values of studied variables. It gives a glimpse of future expected value if the same growth level is achieved. This information is crucial for management to make decision regarding future. This method is widely used in practice.

4.1.2.4.1 Trend Analysis of MPS

Trend analysis of MPS shows the pattern of market price per share growth. Trend helps the investor to estimate its future market value of share and make decision regarding purchase or sale of the share.

Table 4.16
Trend Analysis of MPS

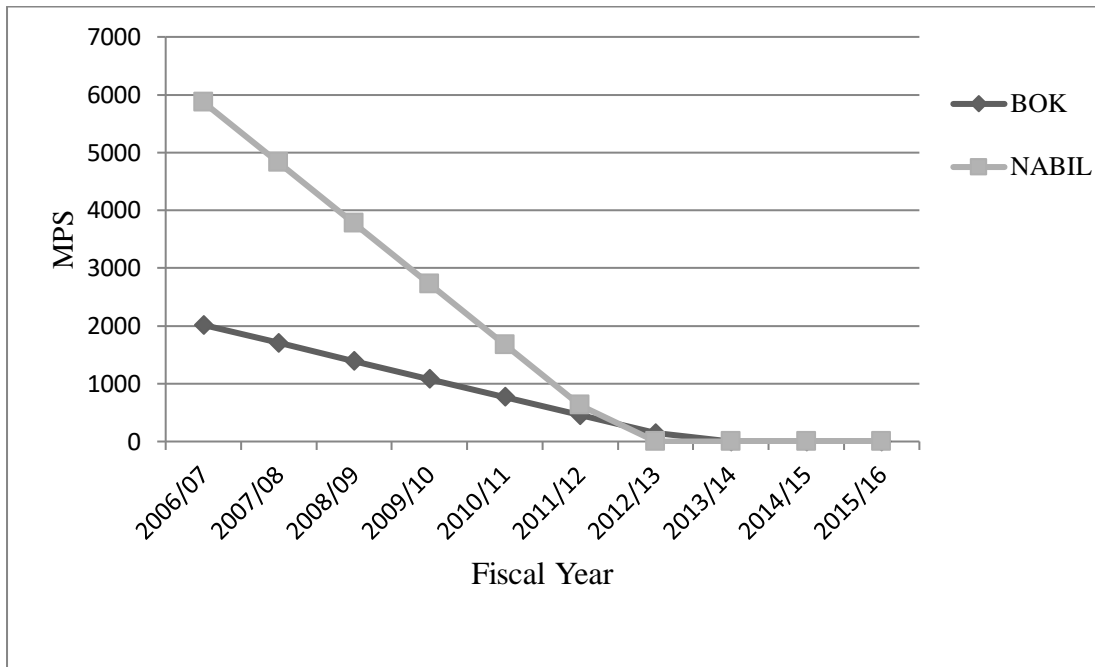
Fiscal Year	BOK		NABIL	
	Actual Value	Trend Value	Actual Value	Trend Value
2006/07	1375	2016	5050	5870
2007/08	2350	1704	5275	4821
2008/09	1825	1392	4899	3772
2009/10	840	1080	2384	2723
2010/11	570	768	1252	1674
2011/12	-	456	-	625
2012/13	-	144	-	0
2013/14	-	0	-	0
2014/15	-	0	-	0
2015/16	-	0	-	0

(Source: Appendix VI)

The table 4.16 shows the actual trend values of MPS of BOK and NABIL. The trend value indicates MPS of both banks were in decreasing trend. The table has defined that the actual value of MPS of BOK in the year 2006/07 was Rs. 1375 than it reached to Rs. 570 in the year 2010/11. Similarly the trend value of MPS of BOK was Rs. 2016 in the year 2006/07 and has amount to Rs. 144 in the year 2012/13 and amount

to Rs. 0. Same as, actual value of MPS of NABIL in the year 2006/07 was Rs. 5050 than it reached to Rs. 1252 in the year 2010/11. Similarly the trend value of MPS of BOK was Rs. 5870 in the year 2006/07 and has amount to Rs. 625 in the year 2011/12 and then amount to zero.

Figure 4.8
Trend Analysis of MPS



The figure 4.8 shows the trend analysis of MPS. Trend analysis shows that MPS of both sample commercial banks are decreasing. If this trend will be followed MPS of BOK is going to be negative on and after fiscal year 2013/14, but MPS would not be in negative instead it is in zero. Similarly MPS of NABIL is zero on and after the fiscal year 2012/13 assuming MPS would not be in negative. Trend line must be a straight line but assuming MPS would not be in a negative sign instead it is zero, so the trend lines of both commercial banks bend to zero.

4.1.2.4.2 Trend Analysis of EPS

Trend analysis helps to predict the future. Here EPS of the two mentioned banks are forecasted with the help of trend analysis.

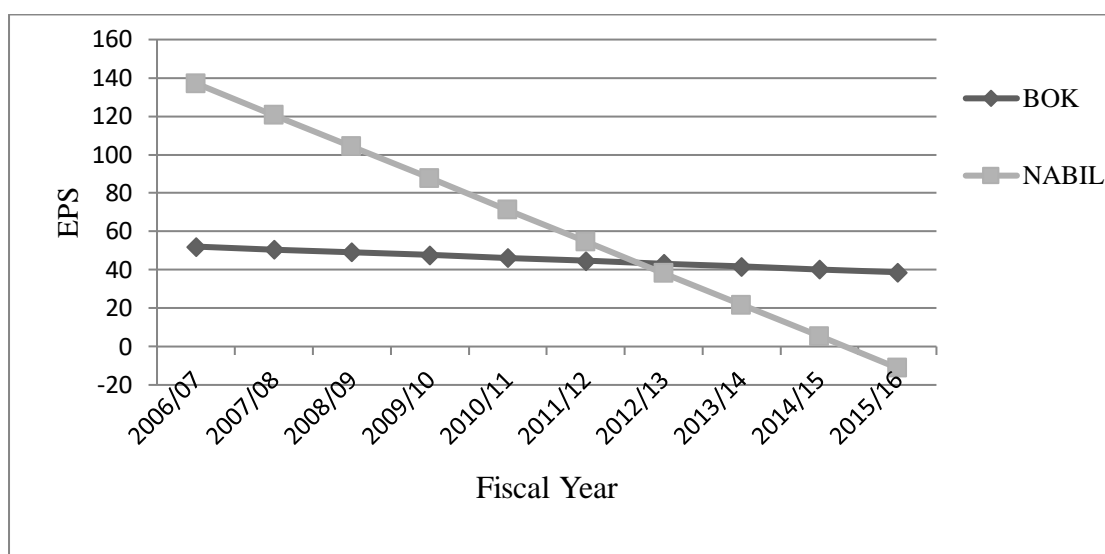
Table 4.17
Trend Analysis of EPS

Fiscal Year	BOK		NABIL	
	Actual Value	Trend Value	Actual Value	Trend Value
2006/07	43.50	52.11	137.08	137.17
2007/08	59.94	50.62	115.86	120.69
2008/09	54.68	49.14	113.44	104.20
2009/10	43.08	47.66	83.81	87.71
2010/11	44.51	46.17	70.67	71.23
2011/12	-	44.69	-	54.74
2012/13	-	43.20	-	38.26
2013/14	-	41.72	-	21.77
2014/15	-	40.24	-	5.28
2015/16	-	38.75	-	-11.21

(Source: Appendix VI)

The table 4.17 shows the actual trend values of EPS of BOK and NABIL. The trend value indicates EPS of both banks were in decreasing trend. The table has defined that the actual value of EPS of BOK in the year 2006/07 was Rs. 43.50 than it reached to Rs. 44.51 in the year 2010/11. Similarly the trend value of EPS of BOK was Rs. 52.11 in the year 2006/07 and has amount to Rs. 38.75 in the year 2015/16. Same as, actual value of EPS of NABIL in the year 2006/07 was Rs. 137.08 than it reached to Rs. 70.67 in the year 2010/11. Similarly the trend value of EPS of NABIL was Rs. 137.17 in the year 2006/07 and has amount to Rs. 5.28 in the year 2014/15 and be Rs. -11.21 in the fiscal year 2015/16. This is also presented in figure 4.9.

Figure 4.9
Trend Analysis of EPS



4.1.2.4.3 Trend Analysis of DPS

Trend values of DPS of the two listed banks are forecasted with the help of trend analysis. Summary of the actual and trend values of DPS of two commercial banks base on the current five years are presented in table 4.18 as:

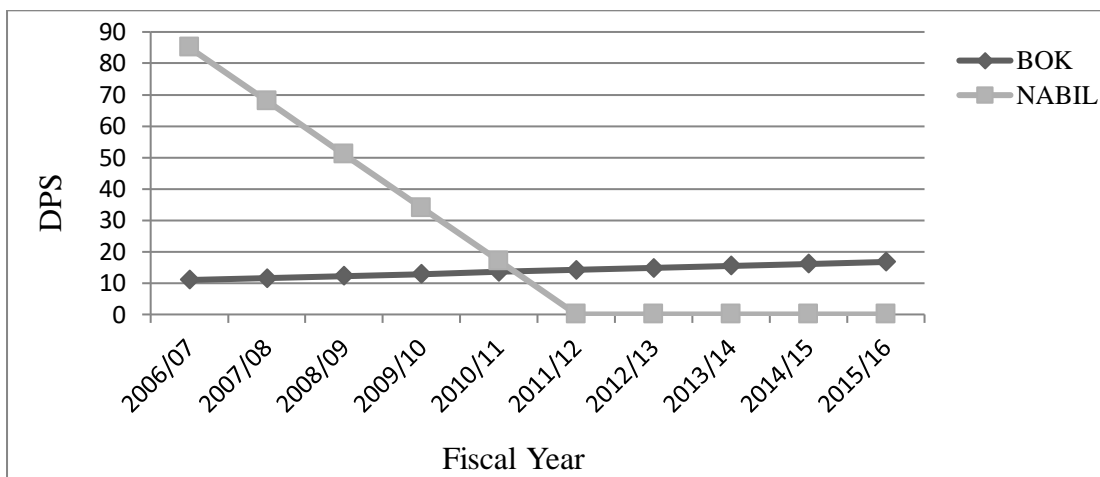
Table 4.18
Trend Analysis of DPS

Fiscal Year	BOK		NABIL	
	Actual Value	Trend Value	Actual Value	Trend Value
2006/07	20.00	10.97	100.00	85.00
2007/08	2.11	11.56	60.00	68.00
2008/09	7.37	12.25	35.00	51.00
2009/10	15.00	12.89	30.00	34.00
2010/11	16.75	13.53	30.00	17.00
2011/12	-	14.17	-	0
2012/13	-	14.81	-	0
2013/14	-	15.45	-	0
2014/15	-	16.08	-	0
2015/16	-	16.72	-	0

(Source: Appendix VI)

The table 4.18 shows the actual trend values of DPS of BOK and NABIL. The trend value indicates DPS of BOK was in increasing trend whereas DPS of NABIL was in decreasing trend. The table has defined that the actual value of DPS of BOK in the year 2006/07 was Rs. 20 than it reached to Rs. 16.75 in the year 2010/11. Similarly the trend value of DPS of BOK was Rs. 10.97 in the year 2006/07 and has amount to Rs. 16.72 in the year 2015/16. Same as, actual value of DPS of NABIL in the year 2006/07 was Rs. 100.00 than it reached to Rs. 30.00 in the year 2010/11. Similarly the trend value of DPS of BOK was Rs. 85.00 in the year 2006/07 and has amount to Rs. 17.00 in the year 2010/11 and then amount to zero.

Figure 4.10
Trend Analysis of DPS



The figure 4.10 shows the trend analysis of DPS of two sample commercial banks. Trend line of BOK seems to be upward which shows that DPS of BOK is increasing. And trend line of NABIL seems to be downward which shows that the DPS of NABIL is decreasing and seems to be zero on and after fiscal year 2011/12 assuming DPS would not be in negative sign instead it is kept zero.

4.2 Presentation and Analysis of Primary Data:

The primary data analysis has been done by distributing questionnaire containing 7 questions to the 50 respondents. A questionnaire is a formal list of questions designed gathers responses from respondents on a given topic. The questionnaire survey method is used to analyze the dividend policy analysis of commercial banks in Nepal. The primary data has been collected from sample banks employees, NEPSE employees, Shareholders, related other office employees and from some students.

4.2.1 Reasons for Bank Paying Dividend:

To examine for what reasons the commercial banks are interested to pay the dividend each year, the respondents are on this subject. The responses obtained from them are presented as:

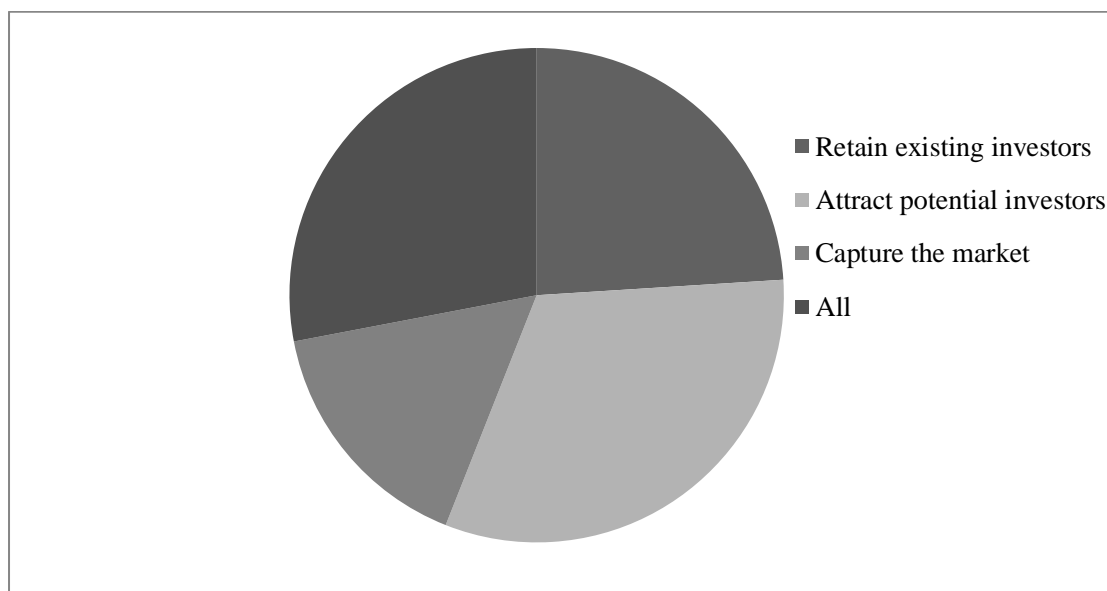
Table 4.19
Reasons for Paying Dividend

Option	No. of respondents	% of respondent
Retain existing investors	12	24
Attract potential investors	16	32
Capture the market	8	16
All	14	28
Total	50	100

(Source: Field Survey, 2012)

The table 4.19 shows most of the respondents think that the commercial banks are interested to pay the dividend each year to attract potential investors. Among the 50 respondents, 24% replied to retain existing investors, 32% replied to attract potential investors, 16% replied to capture the market and 28% choose all. This is also shown on figure 4.11.

Figure 4.11
Reasons for Paying Dividend



4.2.2 Factors should be Considered While Adopting Dividend Practice:

To examine for what factor should be considered while adopting dividend practices of the commercial banks in Nepal, the respondents are on this subject. The responses obtained from them are presented as:

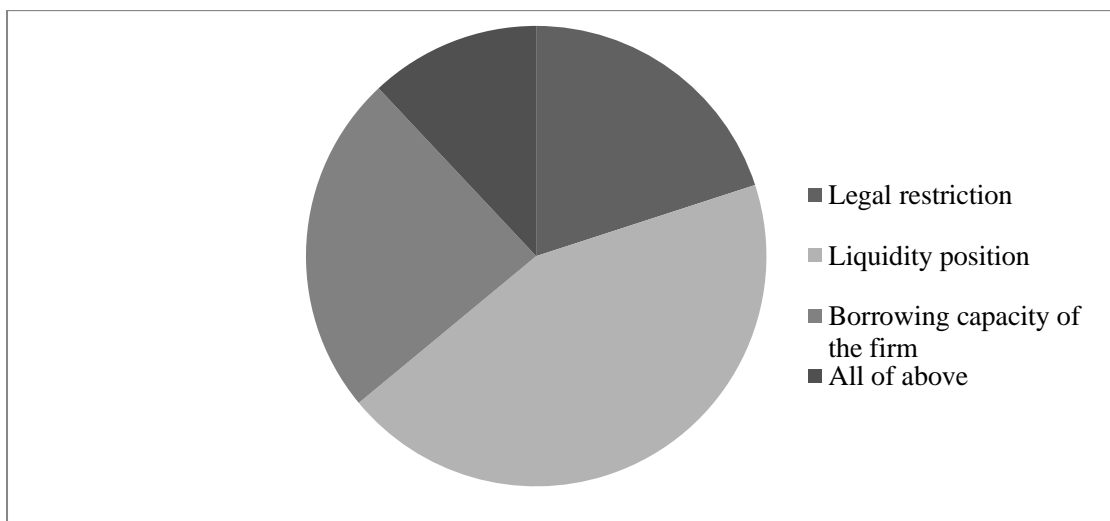
Table 4.20
Factors should be Considered While Adopting Dividend Practice

Option	No. of respondents	% of respondent
Legal restriction	10	20
Liquidity position	22	44
Borrowing capacity of the firm	12	24
All of above	6	12
Total	50	100

(Source: Field Survey, 2012)

The table 4.20 shows that mainly the liquidity position should be considered while adopting dividend practice. Among the 50 respondents, 44% choose liquidity position, 20% choose legal restriction, 24% choose borrowing capacity of the firm and only 12% choose all of above as the factors that should be considered while adopting dividend practice. This is also shown in figure 4.12.

Figure 4.12
Factors should be Considered While Adopting Dividend Practice



4.2.3 For the Preference Of The Dividend Option:

To examine the preference of the dividend options of the commercial banks in Nepal, the respondents are on this subject. The responses obtained from them are presented in table and figure as:

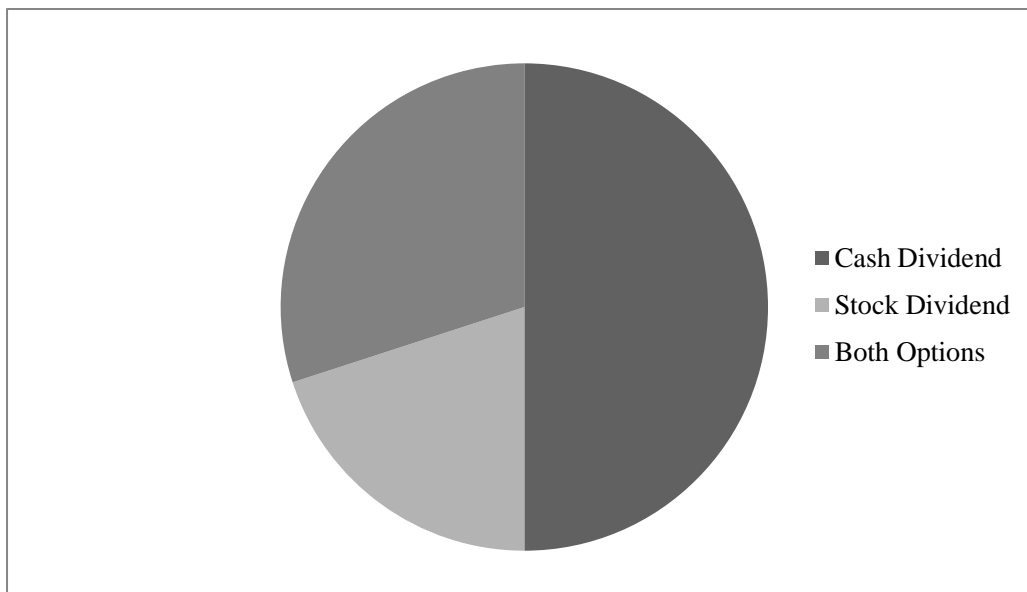
Table 4.21
Preference of Dividend Option

Option	No. of respondent	% of respondent
Cash dividend	25	50
Stock dividend	10	20
Both	15	30
Total	50	100

(Source: Field Survey, 2012)

The table 4.21 shows that most of the respondents wished for cash dividend. Among the 50 respondents, 50% wanted cash dividend and only 20% wanted for stock dividend. Both options were wished by only 30% respondents. This is also shown on figure 4.13 as:

Figure 4.13
Preference of Dividend Option



4.2.4 Dividend Practices Followed by Bank:

To examine for what dividend policy practices followed by Nepalese commercial bank, the respondents are on this subject. The responses obtained from them are presented as:

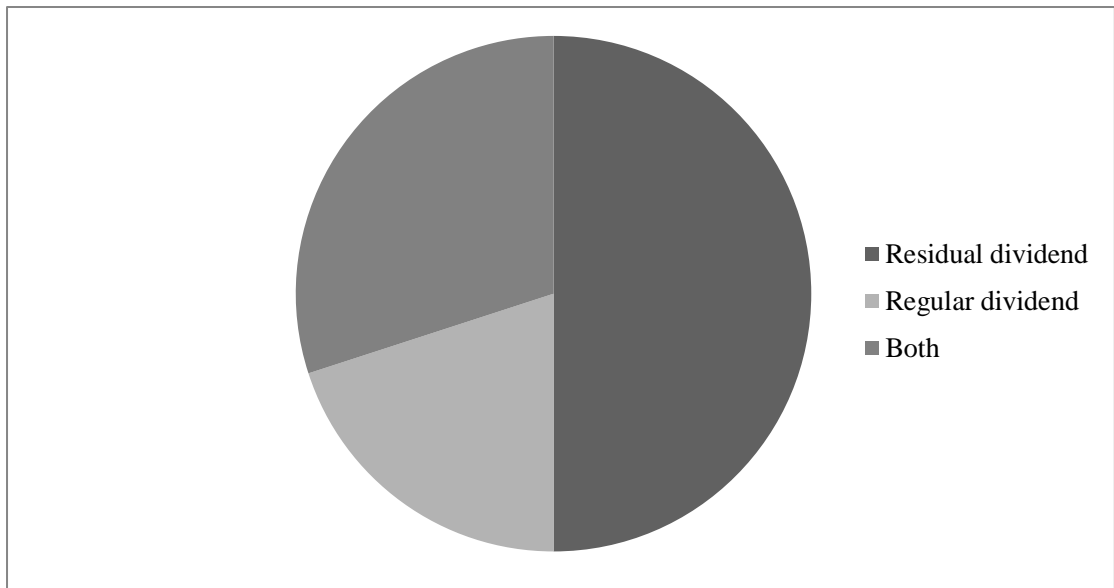
Table 4.22
Dividend Practices Followed by Bank:

Option	No. of respondents	% of respondent
Residual dividend	25	50
Regular dividend	10	20
Both	15	30
Total	50	100

(Source: Field Survey, 2012)

The table 4.22 shows most of the banks practices residual dividend. Among 50 respondents, 50% select residual dividend, 20% select regular dividend and only 30% select both. This is also shown on figure 4.14 as:

Figure 4.14
Dividend Practices Followed by Bank:



4.2.5 Investment in Share Capital:

To examine for why do people investment in share capital in Nepalese enterprises, the respondents are on this subject. The responses obtained from them are presented as in the table 4.23 and figure 4.15 below:

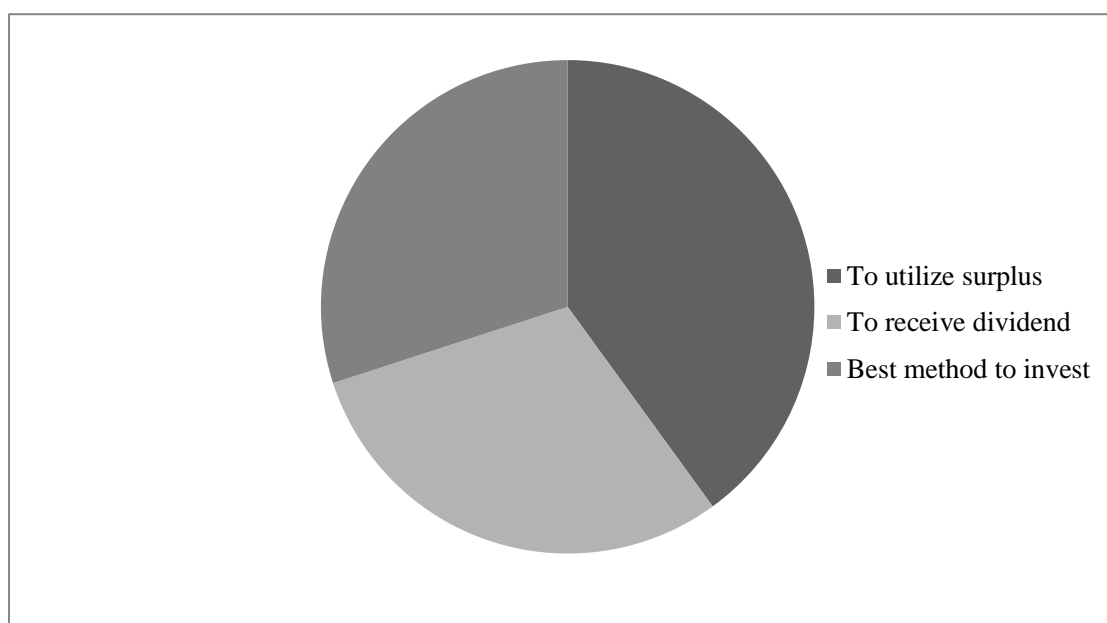
Table 4.23
Investment in Share Capital

Option	No. of respondents	% of respondent
To utilize surplus	20	40
To receive dividend	15	30
Best method to invest	15	30
Total	50	100

(Source: Field Survey, 2012)

The table 4.23 shows that mainly the preference of dividend option is to utilize surplus. Among the 50 respondents, 40% select to utilize surplus, 30% select to receive dividend and remaining 30% select method to invest. This is also shown on figure 4.15 as:

Figure 4.15
Investment in Share Capital



4.2.6 Suggestion if there is no Cash to Pay Dividend:

To examine for what the company should do if no cash to pay cash dividend, the respondents are on this subject. The responses obtained from them are presented in the table 4.24 and figure 4.16 as:

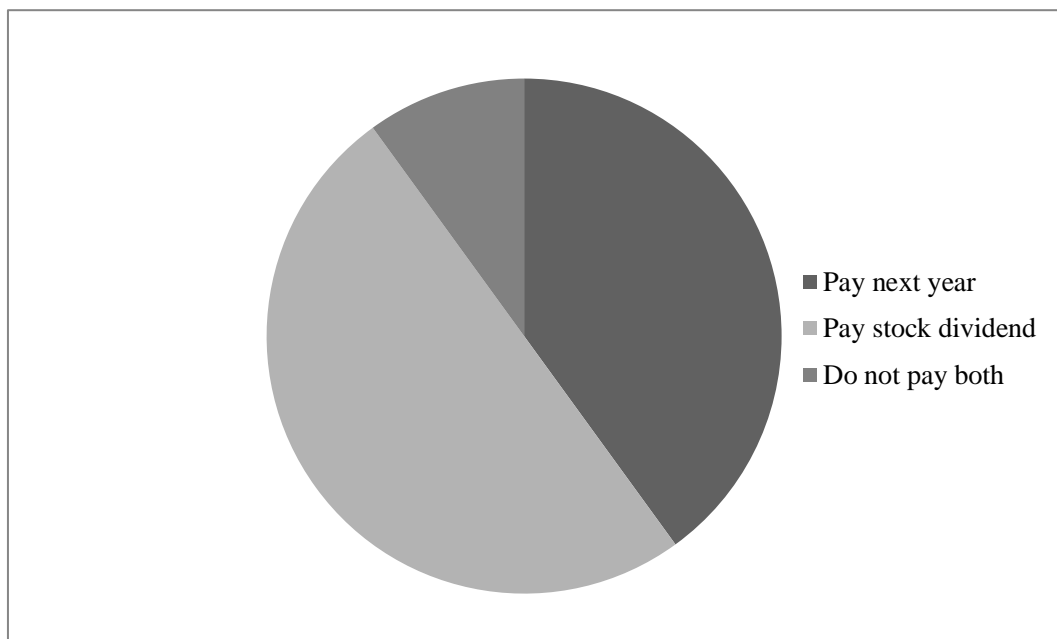
Table 4.24
Suggestion if there is no Cash to Pay Dividend

Option	No. of respondent	% of respondent
Pay next year	20	40
Pay stock dividend	25	50
Do not pay both	5	10
Total	50	100

(Source: Field survey, 2012)

The table 4.24 reflects that out of 50 respondents, 40% of the respondents want the company to pay dividend next year. 25 of the respondents i.e. 50% want the company to pay stock dividend instead of cash dividend and remaining 5 respondents i.e.10% says not to pay both on this year.

Figure 4.16
Suggestions if there is no Cash to Pay Dividend



4.2.7 Factors Considered by the Investors while Selecting the Financial Institutions:

To examine the factors that should be considered by the investors while selecting the financial institutions, the respondents are on this subject. The responses obtained from them are presented as:

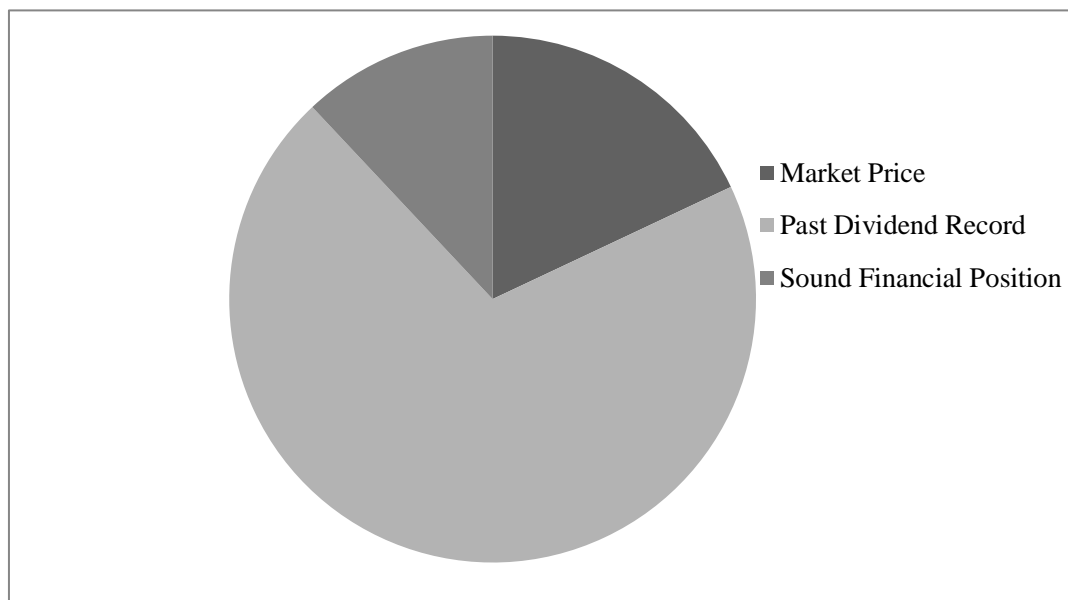
Table 4.25
Factors Considered by the Investors

Option	No. of respondent	% of respondent
Market price	9	18
Past dividend record	35	70
Sound financial position	6	12
Total	50	100

(Source: Field Survey, 2012)

The table 4.25 shows that most of the investors, 70% as per this survey, considered the past dividend record of the firm while investing in them. Among the 50 respondents, 18% considered market price 12% considered the sound financial position while investing. This is also shown on figure 4.17 as:

Figure 4.17
Factors Considered by the Investors



4.3 Major Findings

4.3.1 Major Findings from the Secondary Data

The major findings obtained from the secondary data analysis are stated as follows:

- Average market price per share of NABIL i.e. Rs.3772 is higher than that of BOK i.e. Rs.1392. Market prices per share of both banks are in decreasing trend. Higher market price creates the positive attitude of the investors towards the bank, which consequently attracts the investor to invest in such high valued shares.
- The average earning per share of NABIL i.e. Rs.104.2 is higher than that of BOK i.e. Rs.49.14. EPS of both banks are fluctuating slowly. Higher earnings per share indicate the company is lower risk to investor than other lower EPS company.
- The average Dividend per share of NABIL i.e. Rs.51 is higher than that of BOK i.e. Rs.12.25. DPS of NABIL is decreasing continuously whereas DPS of BOK is decreasing in FY 2007/08 and in increasing trend. Higher DPS indicate the company is in greater return.
- Average Dividend Payout ratio of NABIL i.e. 81.11% is higher than that of BOK i.e. 27.09%. Higher DPR indicate the company is greater return on dividend.
- The average Earning Yield of BOK i.e. 3.89 is higher than that of NABIL i.e. 3.28. Higher EY indicate the favorable condition for the owner. Whereas, the average Dividend Yield of NABIL i.e. 2.35 is higher than that of BOK i.e. 1.33. Higher DY indicates the more paid dividend on the market price of stock.
- Average P/E Ratio of NABIL i.e. 34.35 times is higher than that of BOK i.e. 27.30. Higher ratio indicate higher earning on market price of stock lower indicate lower earning on market price of stock.
- Relationship between EPS and DPS of NABIL is positive and of BOK is negative. Relationship between DPS and MPS of NABIL is positive and of BOK is negative. And also relationship between DPR and MPS of NABIL is positive and of BOK is negative. Whereas there is positive relationship between EPS and MPS of both banks.
- Trend of MPS of both banks are in decreasing trend. Similarly, trend of EPS of both banks are also in decreasing trend but BOK has less variation and

NABIL has more variation. Trend of DPS of BOK is in increasing trend but of NABIL is decreasing and seemed to be zero.

4.3.2 Major Findings from the Primary Data

The major findings of the primary data are as follows:

- Most of the respondents think that the commercial banks are interested to pay the dividend each year to attract potential investors. Among the 50 respondents, 24% replied to retain existing investors, 32% replied to attract potential investors, 16% replied to capture the market and 28% choose all.
- About 44% choose liquidity position, 20% choose legal restriction, 24% choose borrowing capacity of the firm and only 12% choose all of above as the factors that should be considered while adopting dividend practice.
- Most of the respondents wished for cash dividend. Among the 50 respondents, 50% wanted cash dividend and only 20% wanted for stock dividend. Both options were wished by only 30% respondents.
- Most of the banks practices residual dividend. Among 50 respondents, 50% select residual dividend, 20% select regular dividend and only 30% select both.
- Mainly the preference of dividend option is to utilize surplus. Among the 50 respondents, 40% select to utilize surplus, 30% select to receive dividend and remaining 30% select method to invest.
- Out of 50 respondents, 40% of the respondents want the company to pay dividend next year. 25 of the respondents i.e. 50% want the company to pay stock dividend instead of cash dividend and remaining 5 respondents i.e.10% says not to pay both on this year.
- Most of the investors, 70% as per this survey, considered the past dividend record of the firm while investing in them. Among the 5 respondents, 18% considered market price 12% considered the sound financial position while investing.

CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Summary

The dividend refers to that portion of the firm's net earnings, which is paid out to the shareholders as a return for their investments. The dividend decision affects the operation, and prosperity of the organization. To attract the new investors and to maintain the existing ones, dividend can be used as an effective tool. Dividend policy is one of the three major decisions of the financial management. Dividend implies paying earning to the equity share holders and theories of dividend policy differ, some prefer residual theory that conveys passive residual earning available for payment whereas MM hypothesis insists on dividend irrelevance in the sense that dividend policy does not affect the stock price (which makes dividend decision, irrelevance). There are others who argue that dividend policy does affect value due to uncertainty factor. Many factors affect the dividend payment depending upon the investors' need and preference on one hand and the financing need of the financial institution to the potential investment on the other hand.

Dividend is an important tool to attract the new investors. Beside this dividend paying ability reflect the financial position of the organization in the market. Due to the division of earning between dividend payout and retention ratio the market price of the share may also reflected so, it is the crucial decision of the organization. In Nepalese Environments after government adopt liberalization and privatization policy. Dividend policy is taking its path, slowly. Every Investor must have knowledge of dividend policy. So they can make better decision before they invest. Only those company pay dividend which are in profit.

Here in the study dividend paying banks have been analyzed to show the implication of the dividend policy. The study covers one joint venture banks and another just only a commercial bank for the fiscal year 2006/07 to 2010/11. The available secondary data collected from various sources has been analyzed using various financial and statistical tools. So, the reliability of conclusion of this study is determined on the accuracy of secondary data and also the primary data is also analyzed.

There is the vague practice on distribution of dividend in Nepalese companies. Shareholders have a high expectation that market price of share will be significantly higher than net worth. However, the dividend is paid only in profitable years end in most of the years. Instability of dividend and inconsistent payout ratio is the most applied phenomena of Nepalese dividend distribution practices.

This study mainly aims the prevailing practices of listed companies regarding dividend payment. The study is mainly focused to access the dividend practices of selected commercial banks. Instability of dividend and haphazard payout ratio is the most common practice of Nepalese companies. Companies do not adequately maintain cash balance for dividend payment. So, it covers some specific objectives to find out the relationship between other financial indicators and also to find out the appropriate dividend policies for different companies.

Shareholders have high expectation that market prices of shares will be significantly higher than net worth. The companies invested by foreigners are paying more attractive dividend than the companies promoted by the indigenous promoters of Nepal. The study of relationship between the dividend and stock prices have been accomplished by collecting and calculating the earning per share, dividend per share, dividend payout ratio, dividend yield, earning yield and price earnings ratio. To make the research reliable, many more analysis are conducted to find out appropriate relationship between dividend and other variables, which affects the dividend. The consistency of dividend distribution of different companies is also analyzed by using statistical tools. The relationship also statistically tested at 5% level of significance.

5.2 Conclusion

The thesis includes both primary as well as secondary data. But the presentation and calculation part is mainly based on the secondary data. According to the analysis of the data presented above it can be concluded as follows:

- From the descriptive analysis, there is not consistency in dividend policy in the sample firms. It has indicated the need of dividend strategy as well as the need of proper analysis of the respective sectors of the firms.
- From analysis, it is found that in aggregate, there is no stable dividend paid by the firms over years. The firm are paying fluctuating dividend. There are no

firms adopting constant dividend payout ratio. Stable dividend influence considerable impact on valuation of shares if there are rational investors. However, this is yet to be realized by Nepalese firm management. Anyway, it is found those Nepalese firms have not followed any dividend policy.

- The MPS is affected by the financial position and dividend paid by the firms, in this regards the MPS of the sample firms is seem to be fluctuated. It denotes Nepalese investors are not treated fairly. The lack of financial knowledge and the market efficiency has affected the market price of the share in all the firms.
- Earnings per share of both banks are in fluctuating trend. The analysis of EPS shows, that the NABIL's profitability of common shareholders investment is better than BOK.
- Relationship between EPS and DPS of NABIL is positive, which indicates that increase in EPS leads to increase in DPS and Vice-versa and of BOK is negative, which indicates that increase in EPS leads to decrease in DPS and vice- versa. Relationship between DPS and MPS of NABIL is positive and of BOK is negative. And also the relationship between DPR and MPS of NABIL is positive and of BOK is negative. There is positive relationship between EPS and MPS of both banks.
- Trend of MPS of both banks are in decreasing trend. Similarly, trend of EPS of both banks are also in decreasing trend but BOK has less variation and NABIL has more variation. Trend of DPS of BOK is in increasing trend but of NABIL seemed to be zero.
- Finally on the basis of secondary data, it can be concluded that NABIL is more successful in gaining good position in the market than BOK. BOK have also shown a normal performance. Although MPS of both banks is in decreasing trend, none of them have consistency in DPS and DPR. So shareholders may not be fully satisfied with these banks.
- Every bank has its own dividend practices. Such different policies have different kinds of effect. It means each banks and financial institutions do not have similar effect in its Market Prices of Share from their dividend practices.
- MPS of all banks are decreasing and their DPS is highly fluctuating. So it proves that other many qualitative and quantitative factors also play a great role in the determination of marker price of share. DPS is determined on the basis of EPS. EPS of the firm is divided into DPS and Retained Earnings, so if

the firm wants to retain capital the DPS will be decreased instead of good earning of the firm. Thus it can be concluded that DPS only is not the determining factor of the share price. Banks may provide bonus share, it leads to decrease in share price and dividend payout ratio will not be good, but in the market the reputation and image of that bank will be high.

5.3 Recommendations

Although, this study is concerned with dividend practices of Nepalese Financial Institution, it may be appropriate to provide a package of suggestion in the light of major findings and conclusions. These recommendations may also have some repercussions, but there is no doubt of these measures to improve the existing conditions. All banks have their own resources and on the basis of those resources management try to get the optimal result. This study has tried to find out some real facts about dividend policy and other interrelated variables with dividend policy of different commercial banks. Based on the above summary and conclusions following recommendation have been provided hoping that these recommendations will be proved as a milestone to overcome the existing issues in this field.

- Shareholders should be given an opportunity to choose between the cash dividend, stock dividend and any other forms of dividend. So dividend declaration should be presented to the annual general meeting of shareholders for their approval. For this, banks first of all should make the investors well known about the advantages and disadvantages of different forms of dividends through different media.
- There are no any clear legal provisions about the payment of dividends in our country. So the government should act in favor of the investors.
- 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.
- The information regarding the secondary market and the capital market is not flashed out. So the concerning body should timely provide all the information about this factor.
- The government should encourage the establishment of organization to promote and to protect activities in favor of investors. Government should be interference in the daily affairs of the organizations.

- Dividend policy of banks is not defined. They should define their dividend strategy clearly whether they are adopting stable dividend policy, constant payout ratio or low regular plus extra dividend policy.
- The payment of dividend is highly fluctuating, which is neither static nor constantly growing. Such inconsistency and irregularity in the dividend payment may create more confusion and miss-conception about that firm. Due to higher degree of risk and uncertainty, such fluctuations impact the firm's market price per share adversely. So these banks are advised to follow either static or constantly growing dividend payment policy.

BIBLIOGRAPHY

Books

- Bhattacharai, R. (2010). *“Investments Theory and Practice”*. Kathmandu: Buddha Academic Publishers and Distributors.
- Gilbert W. Cooke and Edwin C. Bomeli (1967). *“Business Financial Management”*. New York: Houghton Muffin Company.
- Gilman, L.J. (1991). *“Principle of Managerial Finance”*. Singapore: Harper Collins Publications.
- Joshi, P.R. (2010). *“Investment Theory and Practice”*. Kathmandu: Asmita Books and Distributors.
- Khan, M.Y. and Jain P.K. (1990). *“Financial Management: Test & Problem”*. Tata McGraw-Hill Publishing Com. Ltd.
- Mathur, I. (1979). *“Introduction to Financial Management”*. New York: Macmillan Publishing Company.
- Pandey, I.M. (1995). *“Financial Management”*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Pandey, I.M. (1999). *“Financial Management”*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Paudel R.B, Dahal G.B & et. al. (2010). *“Fundamentals of Financial Management”*. Kathmandu: Asmita Publication.
- Pearson, H., William, C.M. & Gordon, D. (1972). *“Basic Business Finance”*. New York: Inc Homewood Publications.
- Srivastava, R.M. (2000). *“Financial Management and Policy”*. Mumbai: Himalaya Publishing House.
- Thapa and Gautam (2011). *“Capital Structure Management”*. Kathmandu: Asmita Publication.
- Van Horne, James C. (2002). *“Financial Management and Policy”*. New Delhi: Prentice Hall of India Pvt. Ltd.
- Waring, Jr.W.C. (1931). *“Financial Shares under Stock Dividend Declarations”*. Boston: Harvard Law Review.
- Weston, J. Fred and Brigham, Eugene F., (1971). *“Managerial Finance”*. New York: Dryden Press.

- Weston, J. F. & Brigham, E. F. (1987). "*Essentials of Managerial Finance*". Orlando: The Dryden Press.
- Wolf, H.K. and Pant, P.R. (1975). "*Social Science Research and Thesis Writing*". Kathmandu: Buddha Academic Enterprises Pvt. Ltd.
- Wolf, H.K. and Pant, P.R. (2005). "*Social Science Research and Thesis Writing*". Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Journals and Articles

- Kale & Noe (2009). "*Determinants of Dividend Policy: The Evidence from New Zealand*". International Journal of Finance and Economics. Palmerston North: Daydream Press 21 (34): 254-284.
- Michaely, Richard, Thaler & Kent, (2005). "*Price Reactions to Dividend Initiations & Omissions*". The Journal of Finance. New York: Dryden Press 45(4): 33-487.
- Nyong, S. (2010). "*An empirical study of dividend policy*". Global Journal of Social Sciences. Calabar: Achudo Science Co. Ltd Printed In Nigeria 8 (1): 85-101.

Thesis

- Bhattacharai, M. (2002). "*Dividend Policy and Its Impact on Market Price of Stock*". Kathmandu: Shanker Dev campus, T.U.
- Dhungel, B.R. (2004). "*Dividend Policy of the Commercial Banks in Nepal*". Kathmandu: Shanker Dev Campus. T.U.
- Gyawali, K.R. (2011). "*Dividend Policy and Its Impact on Market Price of Share*". Kathmandu: Public Youth Campus, T.U.
- Jha, A. (2007). "*Dividend Policy of Listed Commercial Bank & Its Impact on Market Price of Share*". Kathmandu: Nepal Commerce Campus, T.U.
- Kharel, R. (2006). "*Dividend Policy of Commercial Banks with Respect to Nepal Arab Bank Ltd., Himalayan Bank Ltd and Bank of Kathmandu Ltd*". Kathmandu: Nepal Commerce Campus, T.U.
- Maharjan, M. (2009). "*Dividend Policy of Listed Commercial Banks*". Kathmandu: Shanker Dev Campus, T.U.
- Rajbhandari, P. L. (2001). "*Dividend Policy: A Comparative Study between Banks and Insurance Co*". Kathmandu: Shanker Dev Campus, T.U.

Raya, S. (2008). *“The Study of Dividend Policy of the Commercial Banks in Nepal”*.

Kathmandu: Shanker Dev Campus, T.U.

Singh, K. (2010). *“The Impact on Dividend Policy of Market Price of Share with*

Reference of Commercial Banks in Nepal”. Kathmandu: Central Library, T.U.

Websites:

www.bok.com.np (Download on 25-03-2012)

www.nabil.com.np (Download on 25-03-2012)

www.dividendpolicy.com.np (Download on 25-03-2012)

www.nepalstock.com.np (Download on 25-03-2012)

www.google.com (Download on 25-03-2012)

APPENDICES

Appendix I Questionnaires

- 1) Why do the banks pay dividend?
 - a. Retain existing investors
 - b. Attract potential investors
 - c. Capture the market
 - d. All

- 2) What factors should be considered while adopting dividend policy?
 - a. Legal Restriction
 - b. Liquidity position
 - c. Borrowing capacity of the firm
 - d. All of above

- 3) Which dividend option you would like to prefer?
 - a. Stock dividend
 - b. Cash dividend
 - c. Both Options

- 4) What Dividend Policy was practiced by Nepalese commercial banks?
 - a. Residual Dividend
 - b. Regular Dividend
 - c. Both options

- 5) Why do people invest in share capital?
 - a. To utilize surplus money
 - b. To receive dividend
 - c. This is the best method to invest.

6) What do you suggest if the company has no cash to pay cash dividend?

- a. Pay next year
- b. Pay stock dividend
- c. Do not pay both

7) What factor you consider the most before buying stock of any Financial Institution?

- a. Market price
- b. Past dividend record
- c. Sound Financial Position

Appendix II

Calculation of Earning Yield

Year	BOK			NABIL		
	EPS	MPS	EY	EPS	MPS	EY
2006/07	43.50	1375	3.16	137.08	5050	2.71
2007/08	59.94	2350	2.55	115.86	5275	2.20
2008/09	54.68	1825	3.00	113.44	4899	2.32
2009/10	43.08	840	5.13	83.81	2384	3.52
2010/11	44.51	570	7.81	70.67	1252	5.64

Calculation of Dividend Yield

Year	BOK			NABIL		
	DPS	MPS	DY	DPS	MPS	DY
2006/07	20.00	1375	1.45	100.00	5050	2.77
2007/08	2.11	2350	0.09	60.00	5275	1.90
2008/09	7.37	1825	0.40	35.00	4899	1.74
2009/10	15.00	840	1.79	30.00	2384	2.94
2010/11	16.75	570	2.94	30.00	1252	2.40

Appendix III
Calculation of Mean (\bar{X}), Standard Deviation (SD)
And Coefficient of variation (CV)

MPS of BOK

Year	MPS (X)	X^2
06/07	1375	1890625
07/08	2350	5522500
08/09	1825	3330625
09/10	840	705600
10/11	570	324900
Total	$\sum X = 6960$	$\sum X^2 = 11774250$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{6960}{5} = 1392$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2}$$

$$= \sqrt{\frac{11774250}{5} - \left(\frac{6960}{5}\right)^2} = 645.90$$

$$\text{Coefficient of variation (CV)} = \frac{\sigma}{\bar{X}} \times 100\%$$

$$= \frac{645.90}{1392} \times 100\% = 46.40$$

Similarly, calculation is done for MPS, EPS, DPS, DPR, DY, EY and P/E ratio for BOK and NABIL.

Appendix IV
Calculation of correlation coefficient, coefficient of Determination
And Probable error

Between EPS and MPS of BOK

EPS(X)	MPS(Y)	$x = X - \bar{X}$	$y = Y - \bar{Y}$	Xy	x^2	y^2
43.50	1375	-5.64	-17	95.88	31.81	289
59.94	2350	10.8	958	10346.40	116.64	917764
54.68	1825	5.54	433	2398.82	30.69	187489
43.08	840	-6.06	-552	3345.12	36.72	304704
44.51	570	-4.63	-822	3805.86	21.44	675684
$\Sigma X =$ 245.71	$\Sigma Y =$ 6960	$\Sigma x = 0$	$\Sigma y = 0$	$\Sigma xy =$ 19992.08	$\Sigma x^2 =$ 237.3	$\Sigma y^2 =$ 2085930

$$\bar{X} = \frac{\Sigma X}{N} = \frac{245.71}{5} = 49.14$$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{6960}{5} = 1392$$

$$\text{Correlation coefficient}(r) = \frac{N \Sigma XY - \Sigma X \Sigma Y}{\sqrt{N \Sigma X^2 - (\Sigma X)^2} \times \sqrt{N \Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{19992.08}{\sqrt{237.3} \sqrt{2085930}} = 0.90$$

$$\text{Coefficient of Determination } (r^2) = 0.90 \times 0.90 = 0.81$$

Probable error (PE)

$$= 0.6745 \times \frac{1 - r^2}{\sqrt{N}} = 0.6745 \times \frac{1 - 0.81}{\sqrt{5}} = 0.06$$

Similarly calculation is done for NABIL.

Between DPS and MPS of BOK

DPS(X)	MPS(Y)	$x = X - \bar{X}$	$y = Y - \bar{Y}$	Xy	x^2	y^2
20	1375	7.75	-17	-131.75	60.06	289
2.11	2350	-10.14	958	-9714.12	102.82	917764
7.37	1825	-4.88	433	-2113.04	23.81	187489
15	840	2.75	-552	-1518	7.56	304704
16.75	570	4.50	-822	-3699	20.25	675684
ΣX = 61.23	$\Sigma Y =$ 6960	$\Sigma x=0$	$\Sigma y = 0$	$\Sigma xy=$ -17175.91	$\Sigma x^2 =$ 214.5	$\Sigma y^2 =$ 2085930

$$\bar{X} = \frac{\Sigma X}{N} = \frac{61.23}{5} = 12.25$$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{6960}{5} = 1392$$

$$\begin{aligned} \text{Correlation coefficient}(r) &= \frac{N \Sigma XY - \Sigma X \Sigma Y}{\sqrt{N \Sigma X^2 - (\Sigma X)^2} \times \sqrt{N \Sigma Y^2 - (\Sigma Y)^2}} \\ &= \frac{-17175.91}{\sqrt{214.5} \sqrt{2085930}} = -0.81 \end{aligned}$$

$$\text{Coefficient of Determination } (r^2) = -0.81 \times -0.81 = 0.66$$

$$\text{Probable Error} = 0.6745 \times \frac{1 - r^2}{\sqrt{N}} = 0.6745 \times \frac{1 - 0.66}{\sqrt{5}} = 0.15$$

Similarly calculation is done for NABIL.

Between EPS and DPS of BOK

EPS(X)	DPS(Y)	$x = X - \bar{X}$	$y = Y - \bar{Y}$	Xy	x^2	y^2
43.50	20	-5.64	7.75	-43.71	31.81	60.06
59.94	2.11	10.8	-10.14	-109.51	116.64	102.82
54.68	7.37	5.54	-4.88	-27.04	30.69	23.81
43.08	15	-6.06	2.75	-16.67	36.72	7.56
44.51	16.75	-4.63	4.50	-20.84	21.44	20.25
$\Sigma X =$ 245.71	$\Sigma Y =$ 61.23	$\Sigma x=0$	$\Sigma y=0$	$\Sigma xy=$ -217.77	$\Sigma x^2 =$ 237.3	$\Sigma y^2 =$ 214.5

$$\bar{X} = \frac{\sum X}{N} = \frac{245.71}{5} = 49.14$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{61.23}{5} = 12.25$$

$$\begin{aligned} \text{Correlation coefficient}(r) &= \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \times \sqrt{N \sum Y^2 - (\sum Y)^2}} \\ &= \frac{-217.77}{\sqrt{237.3} \sqrt{214.5}} = -0.97 \end{aligned}$$

$$\text{Coefficient of Determination } (r^2) = -0.97 \times -0.97 = 0.94$$

Probable error (PE)

$$= 0.6745 \times \frac{1 - r^2}{\sqrt{N}} = 0.6745 \times \frac{1 - 0.94}{\sqrt{5}} = 0.018$$

Similarly calculation is done for EBL, NIBL and NSBL and also for DPR and MPS of both commercial banks.

Appendix V

Calculation of Regression Analysis

MPS on EPS for BOK,

Calculation of Regression Equation

EPS(X)	MPS(Y)	XY	X ²	Y ²	X - \bar{X}) ²
43.50	1375	59812.5	1892.25	1890625	31.81
59.94	2350	140859	3592.80	5522500	116.64
54.68	1825	99791	2989.90	3330625	30.69
43.08	840	36187.2	1855.89	705600	36.72
44.51	570	25370.70	1981.14	324900	21.44
$\sum X =$ 245.71	$\sum Y =$ 6960	$\sum XY =$ 362020.4	$\sum X^2 =$ 12311.98	$\sum Y^2 =$ 11774250	$\sum (X - \bar{X})^2 =$ 237.3

Let the regression equation of Y on X be

$$Y = a + bX \dots \dots \dots (i)$$

Where,

Y is dependent variable (MPS)

X is independent variable (EPS)

a is intercept of the line

b is Slope of the line

To find the values of a and b we have the following two normal equations.

$$\sum Y = na + b\sum X \dots\dots\dots(ii)$$

$$\sum XY = a\sum X + b\sum X^2 \dots\dots\dots(iii)$$

Substituting the values in equation (ii) and (iii) we get,

$$6960 = 5a + 245.71b \dots\dots\dots(iv)$$

$$362020.4 = 245.71a + 12311.98b \dots\dots\dots(v)$$

Multiplying (iv) by 49.142 and subtracting from (v) we get,

$$362020.40 = 245.71a + 12311.98b$$

$$342028.32 = 245.71a + 12074.68b$$

$$1992.08 = 237.3b$$

$$\therefore b = \frac{1992.08}{237.3} = 84.25$$

Putting the value of b in equation (iv) we get,

$$6960 = 5a + 245.71 \times 84.25$$

$$6960 = 5a + 20701.07$$

$$\therefore a = \frac{6960 - 20701.07}{5} = -2748.09$$

$$|t| \text{value} = \frac{r \times \sqrt{n-2}}{\sqrt{1-r^2}} = \frac{0.90 \times \sqrt{5-2}}{\sqrt{1-0.81}} = 3.576$$

Similarly calculation is done for NABIL.

DPS on EPS for BOK,

Calculation of Regression Equation

EPS(X)	DPS(Y)	XY	X ²	Y ²	(X - \bar{X}) ²
43.50	20	870	1892.25	400	31.81
59.94	2.11	126.47	3592.80	4.45	116.64
54.68	7.37	402.99	2989.90	54.32	30.69
43.08	15	646.2	1855.89	225	36.72
44.51	16.75	745.54	1981.14	280.56	21.44
$\sum X =$ 245.71	$\sum Y =$ 61.23	$\sum XY =$ 2791.20	$\sum X^2 =$ 12311.98	$\sum Y^2 =$ 964.33	$\sum (X - \bar{X})^2 =$ 237.3

Let the regression equation of Y on X be

$$Y = a + bX \dots \dots \dots (i)$$

Where,

Y is dependent variable (DPS)

X is independent variable (EPS)

a is intercept of the line

b is Slope of the line

To find the values of a and b we have the following two normal equations.

$$\sum Y = na + b\sum X \dots \dots \dots (ii)$$

$$\sum XY = a\sum X + b\sum X^2 \dots \dots \dots (iii)$$

Substituting the values in equation (ii) and (iii) we get,

$$61.23 = 5a + 245.71b \dots \dots \dots (iv)$$

$$2791.20 = 245.71a + 12311.98b \dots \dots \dots (v)$$

Multiplying (iv) by 49.142 and subtracting from (v) we get,

$$2791.20 = 245.71a + 12311.98b$$

$$3008.96 = 245.71a + 12074.68b$$

$$-217.76 = 237.3b$$

$$\therefore b = \frac{-217.76}{237.3} = -0.9176$$

Putting the value of b in equation (iv) we get,

$$61.23 = 5a + 245.71 \times (-0.9176)$$

$$61.23 = 5a - 225.46$$

$$\therefore a = \frac{61.23 + 225.46}{5} = 57.34$$

$$|t| \text{value} = \frac{r \times \sqrt{n-2}}{\sqrt{1-r^2}} = \frac{-0.97 \times \sqrt{5-2}}{\sqrt{1-0.94}} = 6.86$$

Similarly calculation is done for NABIL

MPS on DPS for BOK,

Calculation of Regression Equation

DPS(X)	MPS(Y)	XY	X^2	Y^2	$(X - \bar{X})^2$
20	1375	27500	400	1890625	60.06
2.11	2350	4958.5	4.45	5522500	102.82
7.37	1825	13450.25	54.32	3330625	23.81
15	840	12600	225	705600	7.56
16.75	570	9547.5	280.56	324900	20.25
$\Sigma X =$ 61.23	$\Sigma Y =$ 6960	$\Sigma XY =$ 68056.25	$\Sigma X^2 =$ 964.33	$\Sigma Y^2 =$ 11774250	$\Sigma (X - \bar{X})^2 =$ 214.5

Let the regression equation of Y on X be

$$Y = a + bX \dots \dots \dots (i)$$

Where,

Y is dependent variable (MPS)

X is independent variable (EPS)

a is intercept of the line

b is Slope of the line

To find the values of a and b we have the following two normal equations.

$$\Sigma Y = na + b\Sigma X \dots \dots \dots (ii)$$

$$\Sigma XY = a\Sigma X + b\Sigma X^2 \dots \dots \dots (iii)$$

Substituting the values in equation (ii) and (iii) we get,

$$6960 = 5a + 61.23b \dots \dots \dots (iv)$$

$$68056.25 = 61.23a + 964.33b \dots \dots \dots (v)$$

Multiplying (iv) by 12.246 and subtracting from (v) we get,

$$\begin{aligned} 68056.25 &= 61.23a + 964.33b \\ 85232.16 &= 61.23a + 749.82b \\ \hline -17175.91 &= 214.51b \end{aligned}$$

$$\therefore b = \frac{-17175.91}{214.51} = -80.07$$

Putting the value of b in equation (iv) we get,

$$6960 = 5a + 61.23 \times (-80.07)$$

$$6960 = 5a - 4902.69$$

$$\therefore a = \frac{6960 + 4902.69}{5} = 2372.54$$

$$|t|\text{value} = \frac{r \times \sqrt{n-2}}{\sqrt{1-r^2}} = \frac{-0.81 \times \sqrt{5-2}}{\sqrt{1-0.66}} = 2.41$$

Similarly calculation is done for NABIL.

Multiple Regression Analysis of MPS on DPS and EPS of BOK

The multiple regression equation given by,

$$X_1 = a_1 + b_1 X_2 + b_2 X_3 \dots \dots \dots (1)$$

$$X_1 = \text{MPS}$$

$$X_2 = \text{EPS}$$

$$X_3 = \text{DPS}$$

a_1, b_1 and b_2 = Regression constant

The three normal equations are:

$$\Sigma X_1 = na_1 + b_1 \Sigma X_2 + b_2 \Sigma X_3 \dots \dots \dots (2)$$

$$\Sigma X_1 X_2 = a_1 \Sigma X_2 + b_1 \Sigma X_2^2 + b_2 \Sigma X_2 X_3 \dots \dots \dots (3)$$

$$\Sigma X_1 X_3 = a_1 \Sigma X_3 + b_1 \Sigma X_2 X_3 + b_2 \Sigma X_3^2 \dots \dots \dots (4)$$

Here,

$\Sigma X_1 = 6960$	$\Sigma X_1 X_2 = 362020.4$	$\Sigma X_2^2 = 12312$
$\Sigma X_2 = 245.71$	$\Sigma X_2 X_3 = 2791$	$\Sigma X_3^2 = 964.37$
$\Sigma X_3 = 61.23$	$\Sigma X_1 X_3 = 68056$	$\Sigma X_1^2 = 11774250$

Putting these values in above equations:

$$6960 = 5a + 245.71b_1 + 61.23b_2 \dots \dots \dots (5)$$

$$362020.4 = 245.71a + 12312b_1 + 2791b_2 \dots \dots \dots (6)$$

$$68056 = 61.23a + 2791b_1 + 964.37b_2 \dots \dots \dots (7)$$

Solving equations, we get:

$$a = -7479.05$$

$$b_1 = 159.97$$

$$b_2 = 82.46$$

Calculation of Multiple Determinations of MPS on DPS and EPS is given by

$$R^2 = \frac{a \sum X_1 + b_1 \sum X_1 X_2 + b_2 \sum X_1 X_3 - n (\bar{X}_1)^2}{\sum X_1^2 - n (\bar{X}_1)^2}$$

Putting the values and solving, we get:

$$R^2 = 0.8542$$

Similarly, for NABIL

Appendix VI

Calculation of Trend Analysis

MPS of BOK

Year (X)	x=X-A	MPS (Y)	x ²	xY
06/07	-2	1375	4	-2750
07/08	-1	2350	1	-2350
08/09	0	1825	0	0
09/10	1	840	1	840
10/11	2	570	4	1140
Total		∑Y=6960	∑x ² = 10	∑xY= -3120

Assume,

A=2009

Now,

$$a = \frac{\sum Y}{N} = \frac{6960}{5} = 1392$$

$$b = \frac{\sum xY}{\sum x^2} = \frac{-3120}{10} = -312$$

Now for coming years,

For 11/12,

$$Y = a + bx$$

$$= 1392 + (-312) \times 3$$

$$= 456$$

For 12/13,

$$Y = a + bx$$

$$= 1392 + (-312) \times 4$$

$$= 144$$

For 13/14,

$$Y = a + bx$$

$$= 1392 + (-312) \times 5$$

$$= -168 \approx 0$$

Similarly, calculation is done for further fiscal year and also for NABIL.

EPS of BOK

Year (X)	$x=X-A$	EPS (Y)	x^2	xY
06/07	-2	43.50	4	-87
07/08	-1	59.94	1	-59.94
08/09	0	54.68	0	0
09/10	1	43.08	1	43.08
10/11	2	44.51	4	89.02
Total		$\sum Y=245.71$	$\sum x^2 = 10$	$\sum xY= -14.84$

Assume,

A=2009

Now,

$$a = \frac{\sum Y}{N} = \frac{245.71}{5} = 49.14$$

$$b = \frac{\sum xY}{\sum x^2} = \frac{-14.84}{10} = -1.484$$

Now for coming years,

For 11/12,

$$Y = a + bx$$

$$= 49.14 + (-1.484) \times 3$$

$$= 44.69$$

For 12/13,

$$Y = a + bx$$

$$= 49.14 + (-1.484) \times 4$$

$$= 43.20$$

For 13/14,

$$Y = a + bx$$

$$= 49.14 + (-1.484) \times 5$$

$$= 41.72$$

Similarly, calculation is done for further fiscal year and also for NABIL.

DPS of BOK

Year (X)	$x=X-A$	DPS (Y)	x^2	xY
06/07	-2	20	4	-40
07/08	-1	2.11	1	-2.11
08/09	0	7.37	0	0
09/10	1	15	1	15
10/11	2	16.75	4	33.5
Total		$\sum Y=61.23$	$\sum x^2 = 10$	$\sum xY= 6.39$

Assume,

A=2009

Now,

$$a = \frac{\sum Y}{N} = \frac{61.23}{5} = 12.25$$

$$b = \frac{\sum xY}{\sum x^2} = \frac{6.39}{10} = 0.639$$

Now for coming years,

For 11/12,

$$Y = a + bx$$

$$= 12.25 + (0.639) \times 3$$

$$= 14.17$$

For 12/13,

$$Y = a + bx$$

$$= 12.25 + (0.639) \times 4$$

$$= 14.81$$

For 13/14,

$$Y = a + bx$$

$$= 12.25 + (0.639) \times 5$$

$$= 15.45$$

Similarly, calculation is done for further fiscal year and also for NABIL.