A Comparative study of Dividend policy and practice of Himalayan Bank Limited and Nepal Investment Bank Limited.

By

HEMANTA KUMARI PAUDEL

Shanker Dev Campus

Campus Roll No: 2038/2065/066

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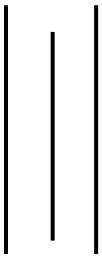

In partial fulfillment of the requirement for the degree of

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RECOMMENDATION

This is to certify that the Thesis

Submitted by:

HEMANTA KUMARI PAUDEL

Entitled:

A Comparative study of Dividend policy and practice of Himalayan Bank Limited and Nepal Investment Bank Limited.

Has been prepared as approved by this Department in the prescribed format of the faculty of Management. This thesis is forwarded for examination.

…….	…….	…….
Asso. Prof. Rita Maskey	Prof . Dr. Kamal Deep Dhakal	Asso. Prof . Prakash Singh Pradhan
(Thesis Supervisor)	(Head of Research Department)	(Campus Chief)

VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis presented

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Viva-Voce Committee

Head of Research Committee …….…….

Member (Thesis Supervisor) …….…..…..

Member (External Expert) ……..……

September, 2013

DECLARATION

I hereby declare that this thesis entitled **"A Comparative study of Dividend policy and practice of Himalayan Bank Limited and Nepal Investment Bank Limited"** submitted to the office of dean, faculty of management, Tribhuvan University is my original research work which is prepared as the partial fulfillment of the requirement for Degree of Master of Business Studies (M.B.S) under the guidance and superviaion of prof. Rita Maskay, this Supervisor, shanker Dev Campus, T.U.

……..…….

HEMANTA KUMARI PAUDEL

Researcher

Shanker Dev Campus

Campus Roll No.2038/2065/2066

T.U. Registration No.7-1-38-182-2002

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Hemanta Kumari Paudel

MBS

Shanker Dve Campus

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C.V	- Coefficient of Variation
DPR	- Dividend Payout Ratio
D/P Ratio	- Dividend Payout Ratio
DPS	- Dividend per Share
HBL	-Himalayan Bank Limited
EPS	- Earning Per Share
NIBL	-Nepal Investment Bank Limited
MPS	- Market Price per Share
NEPSE	- Nepal Stock Exchange
NRB	- Nepal Rasta Bank
P.E	-Probable Error
S.D.	-Standard Deviation
SDPS	-Stock Dividend per Share
SEBON	-Securities Board of Nepal

CHAPTER - I

INTRODUCTION

1.1General Background

A dividend is a payment made by a corporation to its shareholders, usually as a distribution of profits. When a corporation earns a profit or surplus, it can either re-invest it in the business (called retained earnings), or it can distribute it to shareholders. A corporation may retain a portion of its earnings and pay the remainder as a dividend. Distribution to shareholders can be in cash (usually a deposit into a bank account) or, if the corporation has a dividend reinvestment plan, the amount can be paid by the issue of further shares or share repurchase.

A dividend is allocated as a fixed amount per share, with shareholders receiving a dividend in proportion to their shareholding. For the joint stock company, paying dividends is not an expense; rather, it is the division of after tax profits among shareholders. Retained earnings (profits that have not been distributed as dividends) are shown in the shareholder equity section in the company's balance sheet - the same as its issued share capital. Public companies usually pay dividends on a fixed schedule, but may declare a dividend at any time, sometimes called a special dividend to distinguish it from the fixed schedule dividends. Cooperatives, on the other hand, allocate dividends according to members' activity, so their dividends are often considered to be a pre-tax expense.

Dividend refers to the portion of net income paid out to stock holders. 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 as known as dividend payout ratio. A company may retain some portion of its earning to finance new investment. The percentage of earning in the firm is called retention ratio. Dividend policy is an integral part of the firms financing decision as it provides internal financing. Dividend policy is concerned with determining the proportion of firm’s earning to be distributed in the form of cash dividend and the proportion of earning 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 .Stockholders are not promised a dividend. But he\she grows to except certain payment a historical dividend pattern of the firm. Before dividend is paying to common stockholders the claims of creditors the government and preferred stockholders must be satisfied

{Gitman, 1991:616). A commercial Bank is a dealer of money and substitute of money, such as check or a bill of exchange it's also provides a variety of financial services (The Encyclopedia of Britannic,1985: 600) an integral part of financial decision. Dividend policy is 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. Some companies paid dividend whole amount of profit as dividend for good image, some retained all amount for reinvestment and same partially paid the amount as dividend (Dahal, 2010: 3).

The policy of the company on the division if it's on net profit between to shareholders as dividend and reinvestment in the firm is known as dividend policy. It is believed by some that, "In order to maximize wealth under uncertainly, the firm must pay enough dividends to satisfy investors". The dividend policy reflects the firm's decision to pay out earning versus retaining them for reinvestment in the firm. Any change in dividend policy has both favorable and unfavorable effects on the price of the firm's stock. Higher dividend means higher cash flow to investor, which are good but lower future growth, which is bad. The optimal dividend policy balances this opposing force and maximizes the price of the stock. This policy may vary from company to company. Dividend policy is an important decision financial management. It determines the amount of earning to be distributed to shareholders and the amount to be retained in the firm.

The main objectives of commercial banks are to earn profit by proper mobilization of resources. Commercial banks functions in much different way such as accepting deposit, providing interest in the formulation of capital performing agency functions which make business easier and they also play an important role in credit creation when economy is in boom. Normally, banks play at public money therefore, banks should pay more attention whether their money is properly utilized or not and running at profit or loss. If there is no profit a business firm becomes unable to provide its facilities in the long run, therefore the existence of profit to any business firm is the basic factor. This profit can be distributed among the owners as dividend.

In Nepal, there are few numbers of companies which pay stable dividend. Others are not able in the payment of dividends and some companies which are not paying any dividend because they have lack of profit. In case of Joint Venture Commercial banks they are paying dividing 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. So, this study aims to mobilize the fund prevailing practice and policies, relevant factors of some Nepal's listed Commercial banks and financial companies regarding the difference in policy adopted by them considering size of dividend and its impact in compare with the listed manufacturing companies.

1.2 A Brief profile of Concern Bank

Himalayan Bank Limited

Himalayan Bank Ltd is a joint venture bank with Habib Bank Limited of Pakistan was established 1993 under the Company Act 1964. This is the first Joint Ventures Bank with maximum shareholding by the Nepalese private Sector, which managed by Nepali chief executive. An authorized capital of the bank has been Rs: 600,000,000, issued capital Rs: 300,000,000. Its ownership is composed of founder shareholders 51% Habib Bank Ltd, Pakistan 20%, Karmachari Sanchaya Kosh 14%and Public15% Nepal

Nepal Investment Bank Limited

Nepal Investment Bank Limited, (NIBL), previously Nepal Indosuez Bank Ltd, was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricola Indosuez, a subsidiary of one the largest banking group in the world. With the decision of Credit Agricola Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 50% share holding of Credit Agricola Indosuez in Nepal Indosuez Bank Limited. A groupof companies holding 50% of capital Rastriya Banijya Bank holding 15% of the capital. Rastriya Beema Sanstha holding 15% of the capital. The remaining 20%being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange). Now Nepal investment bank is totally invested by Nepalese investor they are general public as well as corporate investor.

1.3 Statement of the problem

In recent years, the over-subscription of ordinary shares in initial public offering showed that the people are diverting towards investing in shares, bonds rather than other traditional assets. It is also due to the high increase in the bullion price. Generally, people are investing their money in the common stocks. Some investors are being more rational towards the investment process. They are studying background, past history and market demand of the performance of the organization, of 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 in 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; Property the positive or negative relationship between dividend and stock Does there exit of price? What kind of dividend policies are following by the commercial banks of Nepal? Is there any consistency between dividend policies followed by commercial banks? Do the Nepalese investors take care about the dividend policies followed by the related companies before investing? 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?

In Nepalese context, the companies listed in NEPSE are not seen so serious regarding dividend decisions. Some Nepalese acts like Nepal Company Act 2053, Nepal Commercial Bank Act 2031 and other regulating acts are still silent regarding dividend distribution. So, different companies are adopting different dividend decisions inconsistently. There is a common trend of deciding the dividend by the management of companies instead of by shareholders meeting. Banks are different from other types of companies in many aspects. Hence, the results of such analytical study in the case of banks may differ from that of others.

The major problems for the purpose of this study are:

Is there any relationship of dividend with EPS, MPS, net worth and net profit in the case of

Sampled bank?

- Do all companies have uniformity in dividend policy?
- Can bank increase the value of stock by changing dividend policy on payout ratio?

- Are the banks following any specific dividend policy?
- Is dividend a residual decision in the case of sampled bank?
- What is the dividend pattern followed by the sampled companies?

1.4 Significance of the Study

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 divided 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 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. As mentioned above, researchers can use it as a reference for their research.

1.5 Objectives of the study

Following are the objectives of the present study.

- To see the comparative dividend practice of selected banks.
- To see the type of dividend policy, followed by the selected banks.
- To see out the relationship of dividend per share with various important variables such as earning per share and stock price and the relationship of stock price with price earnings ratio and dividend yield ratio.
- To provided suggestions and possible guidelines to overcome various problems on the basis of findings.

1.6 Limitation of the Study

A research is a compact study investigating the subject matter for solving perceived research problems. Each and every study has its own limitations. No study can be free from constraints, such as economic resources, time etc. And this study is not an exception. Therefore, the following are the main limitations of the study.

- The study is mainly based on the secondary data.
- The methodology used in the study may not help draw premise conclusion of study.
- The study covers only two joint venture commercial bank of Nepal.
- The study conforms only to the financial aspects of the company.

- The study acknowledges only Five years data (2007/08 to 2011/012)So the conclusion may not be hundred percent exactly.

In addition, there are couples of limitations, which weaken the generalization e.g. time constraint, reliability of statistical tools. Thus, while using the findings of the study one should be careful and use the same judiciously be considering the various limitations.

1.7 Organization of the Study

The study has been organized into five chapters; each chapter deals some important factors of dividend behavior. The titles of each of these chapters are listed below:

Chapter – I: Introduction

This is the introduction chapter of the study. This chapter includes general background, statement of the problems, objectives of the study, importance of the study and limitations of the study and organization of the study.

Chapter – II: Review of Literature

This chapter is the review of literature deals with conceptual framework of the dividend policy. In this part research history of dividend policy will present in brief. Review of major studies will be also presented.

Chapter - III Research Methodology

This chapter contains the research methodology. This chapter deals with research design, sources of data, data collection techniques data processing and data analysis tools.

Chapter - IV Presentation and Data Analysis

This chapter deals with the presentation and analysis and major findings of the study on dividend.

Chapter –V Summary, Conclusion and Recommendation

This is the last chapter states the summaries, conclusions of the whole study and recommendations. It also offers several avenues for future research. The exhibits and bibliography are incorporated at the end of the study

CHAPTER-II

REVIEW OF LITRATURE

For all types of studies, review of literature is essential, which helps to find out what research studies have been conducted in one has chosen field of study and what remains to do. In fact, review of literature begins with a search for a suitable topic and continues throughout the duration of the research work. It is a path to find out what other research in this area has uncovered. It is the process of locating, obtaining, reading and evaluating the research literature in the area of the student's interest. It is also a means to avoid investing problems that are already been positively answered (Wolf and Pant, 2005: 39).

2.1 Conceptual Framework

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 (Van Horne, 1993: 327).

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).

2.1.1 Concept of dividend

1) Discretionary concept

The power to declare dividends is lodged in the board of directors of the corporation .At a meeting of the board, in accordance with the charter and corporate by-laws, the board passes a resolution declaring the amount of dividend, the period which it covers, the payable date, and the record date of ownership (Cooke and Bomeli,1967:180).

2) Pro-Rata distribution concept

A dividend is a pro-rata distribution of cash, other assets, promises to pay, or additional stock to the shareholders of a corporation chargeable against its surplus accounts or (for certain liquidating dividends only) against its capital stock accounts(Cooke and Bomeli,1967:180).

3) Residual concept

Under this concept, dividend policy is a residual firm investment policy and dividend share paid only after financing all investment opportunities. So, dividend policy is totally passive in nature.

When we treat dividend policy as strictly a financing decision, the payment of cash dividend is a passive residual (Van Horne, 1993: 327).

4) Liability Concept

When the board of directors of a solvent corporation declares cash dividend, the amount declared becomes an obligation to pay. If the directors avoid payment of dividend after declaration, the shareholders would have a right to take action against the directors to force payment. The dividends declared are treated as liabilities in the balance sheet if the shareholders do not come to claim in time (Cooke and Bomeli, 1967: 181).

2.1.2 Dividend Payment Process

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

Declaration date

The declaration date is the day the Board of Directors announces its intention to pay a dividend. On this day, a liability is created and the company records that liability on its books; it now owes the money to the stockholders. On the declaration date, the Board will also announce a date of record and a payment date (Francis, 1983: 112).

Ex-dividend date

The ex-dividend date is the day after which all shares bought and sold no longer come attached with the right to be paid the most recently declared dividend. This is an important date for any company that has many stockholders, including those that trade on exchanges, as it makes reconciliation of who is to be paid the dividend easier. Prior to this date, the stock is said to be cum dividend (with dividend): existing holders of the stock and anyone who buys it will receive the dividend, whereas any holders selling the stock lose their right to the dividend. On and after this date the stock becomes ex dividend: existing holders of the stock will receive the dividend even if they now sell the stock, whereas anyone who now buys the stock now will not receive the dividend. It is relatively common for a stock's price to decrease on the ex-dividend date by an amount roughly equal to the dividend paid. This reflects the decrease in the company's assets resulting from the declaration of the dividend. The company does not take any explicit action to adjust its stock price; in an efficient market, buyers and sellers will automatically price this in (Joshi, 2006:157).

Holder of Record date

Shareholders who properly registered their ownership on or before the date of record will receive the dividend. Shareholders who are not registered as of this date will not receive the dividend.

Registration in most countries is essentially automatic for shares purchased before the ex-dividend date (Western & Bringham, 1987:109).

Payment date

The payment date is the day when the dividend cheque will actually be mailed to the shareholders of a company or credited to brokerage accounts (Joshi, 2006:158).

2.1.3 Forms of Dividend

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

Cash Dividend

Most companies pay dividends in cash. Sometimes cash dividend may be Supplemented by a bonus issue (stock dividend). A company should have enough bank balance at the time of paying cash dividend; arrangement should be made to borrow funds. When the company follows a stable dividend policy, it should prepare a cash budget for the coming period to indicate the necessary funds which would be needed to meet the regular dividend payments of the company. It is relatively difficult to make cash planning in anticipation of dividend needs when an unstable policy is followed. The cash account and the reserves account of a company will be reduced when the cash dividend is paid. Thus, both the total assets and the net worth of the company are reduced when the cash dividend is distributed. The market price of the share drops in most cases by the amount of the cash dividend distributed (Bhattarai,2007: 81).

Script Dividend

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

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 form 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, 2006: 89).

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 (Thapa , 2006:90).

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, 1993:256).

In stock split there is no change in the capital account: instead a large of 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 (Van Horne,1993:257).

Stock Re-purchase

Company repurchases its own stock as dividend decision. It is also said that stocker purchase 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 & Bringham1987:230).

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 Company's own products and securities extra ordinary circumstances of subsidiaries are the examples that have been paid as property dividend (Dahal, 2010: 269).

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 different forms of dividends, in general, the form of dividends popular in Nepal are cash dividend and stock dividend (Joshi, 2006:78).

2.1.4 Theories of Dividend

1) Residual Theory of Dividend

According to one school of thought, the residual theory of dividends suggests that the dividend paid by a firm should be viewed as a residual amount left after all acceptable investment opportunities have been undertaken. Dividend policy can be viewed as one of a firm's investment decision. A firm that behaves in this manner is said to believe in the residual dividends. According to this theory, dividend policy is a residue after investment whether or not a company pays dividends depends on the availability of investment opportunity (Khan & Jain, 1990: 537).

The starting point in this theory is that investors prefer to have the firm retain and reinvest earning, instead of paying dividends, if the return on reinvestment is higher than the opportunity cost of fund for the investors. The dividend under residual dividend policy equals the amount left over from earning after investment, no dividends are paid and new shares are sold to cover deficit for investment that is not covered. If there is not any investment opportunity then cent percent earning is distributed as dividend to the shareholders. Dividend is therefore merely a residue i.e. percent remaining after all equity investment needs arc fulfilled (Van Home, 1993:327).

As long as there are investment projects with higher returns, the firm retains the earnings to invest in such profitable projects rather than paying dividends. The firm grows at projects. External faster rate when it accepts highly profitable investment equity could be raised to finance investments. But the retained earnings are preferable because unlike external equity, they do not involve any floatation costs. The distribution of cash dividend causes a reduction in internal funds available to finance profitable .investment opportunities and thus, either constrains growth

or requires the firm to find other costly sources of financing. Thus, earning may remain undistributed as a part of a long-term financing decision. The dividend paid to shareholders represents a distribution of earnings that cannot be profitably reinvested by the firm .With this approach, dividend decision is viewed merely as a residual decision.

2) Stability Theory of Dividend

Dividend stability refers to the consistency in stream of dividend. In other words stability of dividend means regularity in paying dividend even though the amount of dividend may fluctuate from year to year. "Stability of dividends is considered as a desirable policy by the management of most companies. Shareholders also generally favor of this policy and value stable dividends higher than the fluctuating ones. All Investment Opportunity EPS, DPS & Investment Earning Year other things being the same, stable dividend may have a positive impact on the market price of the share (Pandey, 1995:695).

By stability, we mean maintaining the position of the firm's dividend payments in relation to a trend line, preferably one that is upward sloping. There are some reasons to believe that a stable dividend policy does lead to higher stock prices. First, investors are generally expected to value more highly dividends they are sure of receiving, since fluctuating dividends are riskier than stable ones. Accordingly, the same average amount of dividend received under a fluctuating dividend policy is likely to have a higher discount factor applied to it than is applied to dividends under a stable dividend policy. This means that the company with stable dividend policy will have a lower required rate of return or cost of equity capital than one whose dividend fluctuates. Second, many stockholders live on income received in the form of dividends. These stockholders are greatly inconvenienced by fluctuating dividends and they will pay a premium for a stock with a relatively assured minimum dollar dividend. Third, from the stand point of both the corporation and its stockholders is desirable for the requirement 25 legal that, stability of dividend is listing (Pandey, 1995: 702).

2.1.5 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 (Sharma, 2001: 336-337).

Liquidity of Funds:

Availability of cash and sound financial position is also an important factor in dividend decisions. A dividend represents a cash outflow, the greater the funds and the liquidity of the firm the better the ability to pay dividend. The liquidity of a firm depends very much on the

investment and financial decisions of the firm which in turn determines the rate of expansion and the manner of financing. If cash position is weak, stock dividend will be distributed and if cash position is good, company can distribute the cash dividend (Francies, 1983:104).

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 (Western & Brigham, 1987:562).

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 of uneven flow of incomes because they can predict easily their savings and earnings. Usually, enterprises dealing in necessities suffer less from oscillating earnings than those dealing in luxuries or fancy goods (Shrestha, 2009:89).

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. N India, dividends beyond 10 % of paid-up capital are subject to dividend tax at 7.5 % (Paudel et. Al, 2007:492).

Legal Requirements:

In deciding on the dividend, the directors take the legal requirements too into consideration. In order to protect the interests of creditors an outsider, 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 capita, in any case. Likewise, contractual obligation should also be fulfilled, for example, payment of dividend on preference shares in priority over ordinary dividend (Paudel et. Al, 2007:492).

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 rat. 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 (Shrestha, 2010: 91).

Repayments of Loan:

A company having loan indebtedness are vowed to a high rate of retention earning s ,unless one other arrangements are made for the redemption of debt on maturity. It will naturally lower down the rate of dividend. Sometimes, the lenders (mostly institutional lenders) put restrictions on the dividend distribution still such time their loan is outstanding. Formal loan contracts generally provide a certain standard of liquidity and solvency to be maintained. Management is bound to hour such restrictions and to limit the rate of dividend payout (Paudel et.al, 2007: 492).

Policy of Control:

Policy of control is another determining factor is so far as dividends are concerned. If the directors want to have control on company, they would not like to add new shareholders and therefore, declare a dividend at low rate. Because by adding new shareholders they fear dilution of control and diversion of policies and programs of the existing management. So they prefer to meet the needs through retained earning .If the directors do not bother about the control of affairs they will follow a liberal dividend policy. Thus control is an influencing factor in framing the dividend policy Thapa, 2008: 245).

2.1.6 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:1964, 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 increase. 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.

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 (Pandey, 1995: 702).

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 (Thapa, 2008:198).

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.

2.2. Review of Related Studies

2.2.1 Review of journals and Articles

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

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

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

Price Function:

$Pt. = a + b * Dt + c * Rt + d (P/E)t – 1$

Where,

Pt = Per share price at time't'

Dt = Dividends at time't'

Rt = Retained earnings at time't'

(P/E)t – 1 = Lagged price earnings ratio

Dividend Supply Function:

$Dt = e + f*Et + g*Dt – 1 + h (P/E)t – 1$

Where,

Et = Earnings per share at time't'

Dt – 1 = Last year Dividend

Their study based on the following assumptions;

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

They also calculated dividend supply equation i.e. $Dt = e + f*Et + g*Dt – 1 + h* (P/E)(t-1)$ and they derived price.

Similarly, they tested the regression equation of $pt. = a + b\ Dt + c*R$ by using normalized earnings again. They obtained normalized retained earnings by subtracting dividends from normalized earnings. That normalization procedure was based on the period 1950-61. Again, they added the prior year's normalized earnings price variable and they compared the result. Comparing the result they found that there was significant role of normalized earnings. When they examine the later equation they found that the difference between dividends and retained earnings coefficients disappeared. Finally they excluded that management might be able to increase prices somewhat by raising dividends in foods and steels industries. Finally, Friend and P=EPS (1-b) Puckett concluded that it is possible that management might be

Ke - br able, at least in some measure to increase stock prices in non-growth industries by raising dividends and growth industries by greater retention, i.e. Low dividends.

Walter (1966) has studied entitled *"Dividend policy on common stock prices*" in journal of finance in 1957 advocated that the choice of appropriate dividend policy almost always affect the value of the enterprises i.e. share value. Walter's study is also based on some assumptions:

- The returns on the firm's investment(R) and the cost of capital (ke) are constant.
- All earning are either distributed as dividend or re invested internally.
- The value of EPS and DPS remain unchanged.
- The firm has an infinite life.

The value of the stock according to Walter can be calculated by the following equation:

Where,

P= market price of an equity share

D= DPS

E=EPS

R= the rate of return on the firm's investment

Ke= cost of capital

Walter's focus is in internal rate of return(R) and cost of capital (ke) in determining the dividend policy with these two variables: he had tried to conclude some decisions. Therefore he had expected there conditions probably exist: Condition 1 (R>K) When internal rate of return is greater than the cost of capital, it will be better to retain all net profits. R exceeding K shows the firm's better performances to earn more than the shareholders are paid in their reinvestment. The market value per share increase by decreasing the dividend in such situation. Moreover, the market value per share will be highest at zero dividends.

Condition 2(R<K)

When internal rate of return(R) is less then cost of capital (k), it advocates that the shareholders can earn a higher return by investing elsewhere. Increasing the dividend in this condition increases the market price per share. It is happened in the declining firm, generally. By distributing entire as dividend, the value of the shares will be at optimum level. The dividend payout ratio of 100 would be the optimum dividend policy.

Condition 3(K=R)

If the internal rate of return equals to the cost of capital, the dividend payout dose not affect the market value fo the share. In this condition the market value of the share remains constant for the entire dividend payout ratio. This kind of firm is called normal firm. Therefore, there is no any optimum dividend policy for such firm.

Conclusion,

(R>K) = Dividends are negatively correlated with stock price.

(R<K) = Dividends are positively correlated with stock price.

(R=K) = Dividend is indifferent to variation in the market price of the share.

Van Horne and McDonald (1968) concluded a comprehensive study of 86 electric utility firms and 39 electronics and electric component industries by using cross sectional regression model in 1968 to know the combined effect of dividend policy and new equity financing decision on the market value of the firm's common stock. They employed two-regression model for electric utilities and one regression mode for electronics component industry.

First model was

P0/E0 = a0 + a1* (g) + a2 (D0/E0) + a3* (lev) + u

Where,

Po/Eo = Closing market price in 1968 dividend by average EPS for 1967

and1968.

g= Expected growth rate, measured by the compound annual rate of growth in assets per share for 1960 through 1968.

Do/Eo= Dividend payout, measured by cash dividend in 1968 dividend by earnings in 1968.

Lev = Financial Risk, measured by interest charges divided by the difference of operating revenues and operating expenses.

U=Error term.

P0/E0 =a0+ a1* (g) + a2 (D0/E0) + a3* (lev) + a4*(Fa)+a5*(Fb)+a6*(Fc)+a7*(Fd)+u

The main objectives of the study are:

- To assess the stock market behavior in Nepal.
- To examine the relationship of market equity, market value to book value, price earning arid dividend with: liquidity, profitability, leverage assets turnover and interest coverage.

Findings of his study, among others were as follows:

- Higher earning on stock leads larger of DPS.
- Stock with larger ratio of dividend per share to market price has lower leverage ratio.
- Positive relationship between the ratios of DPS to market price and interest coverage.
- Positive relationship between dividend payout and turnover ratios.
- Positive relationship between dividend payout and liquidity.
- Positive relationship between dividend payout and profitability.

- DPS and MPS are positively correlated,
- Liquidity and leverage ratios are more variable for the stock paying lower Dividends.

Earnings, assets turnover, and interest coverage are more variable for the stock Paying higher dividends.

Holder Langreh and Hexter (2004) M.E. Holder, F.W Langreh and Hexter's studied on *"Dividend policy determinates an Investigation of the influences of stakeholders on firm"* dividend policy by examining the interaction between the dividend and investment policies (Holder, et. al.2004).

The Model used in the study was:

Dpit = β0 + β1F sit + β2 LSALE sit + β3Inist + β4 LCSHR it +β5 + FCfit + β6 +

GROW it + β7 STD it + Et

Where,

Dpit = smoothed dividends payout ratio for firm in fiscal year t.

Fsit = Measure of the focus of firm i in year t.

LSALESit = Natural log of sales of firm I in year t.

INSit = Residual of insider ownership for firm I in year regressed LSALES

LCSHRit = Residual of Natural log of number of common shareholders for

firm I in year regressed on LSALES.

FCFit = Free cash flow for firm I year t.

GROWit = Sales growth of firm I in using prior five years.

STD = Standard deviation of Monthly returns of firm in year t. They used above Mentioned regression equation as the basis for testing their hypothesis of relationship between the NOC (Net Organizational Capital) of a firm and its dividends payout. They developed Model with data from 477 firms over an eight year period (i.e. 1990-2003) for a total of 3816 observation, and used a pooled time series cross sectional analysis.

The Major findings of the study were:

The coefficient of corporate focus on NOC is negative and statistically significant indicating a negative inference on dividend payout ratio.

• Large firms tend to have higher payout ratios, compared to smaller firms larger firms have easier access to the capital Markets and are therefore less dependent on internal funds. Therefore, they can afford to pay higher dividends.

• Insider ownership negatively and pay out. Firms with a higher percentage of stock held by insider will have lower agency costs and lower dividend payout ratio.

• Insider levels of free cash flow have higher agency costs and need higher dividend payout ratios to reduce those agency costs.

• Dividend payout ratios are lower for higher risk firms.

• Sales growth is negatively and significantly related to dividend payout ratio. The findings of the above Mentioned studies conducted in developed and big capital Market May or May not applicable in Nepal where capital Market is small and is emerging one as well as may not be directly comparable to that of Nepal. So here, attempts are made to review same Major studies that are being carried out in Nepal.

Werner Ria Murhadi (2010*)* Study on dividend Policy: Antecedent and its impact on share price. This research aims to test dividend signaling theory in an Indonesian capital market. Signaling theory states that dividend policy has information content that can influence to share price. Examination of theory of signaling is related to research phenomena in other countries indicating that by percentage there is degradation of company which is pay dividend and there even exist mentioning this as phenomenon of disappearing dividend. Examination of theory of signaling is also related to the research result showing the existence or inexistence of the influence of dividend policy to share price. Besides, in this research is also conducted by examination of agency theory. This research of agency theory tests the influence of: (1) Free Cash Flow to share price, (2) Structure of Ownership to share price,(3) Structure of ownership to dividend policy. This theory, seen influence of cycle 47 research also tests life cycle of life to dividend policy. Companies which enter in growth phase tend not to a lot of dividend, compared to company at matured step.

This research use quantitative approach by using method of path analysis. This research use samples in the form of company allocating dividend for period 1995-2005 which listed on PT Jakarta Stock Exchange. Final samples which are utilized in this research are equal to 1052 year observation. This research also tests sensitivity, widened time of even from 1 day at especial model, becoming 5 and 10 day. Besides test of sensitivity is also conducted changed approach of market model become mean adjusted model in determining expected return. Research finding indicates that signaling theory still relevant in influencing movement ofshare price. Besides, research finding also supports agency theory told by Jensen in seeing influence of free cash flow to share price. For the influence of structure of ownership to share price, the result supports

entrenchment argument. While influence of structure of ownership to dividend policy found by result which do not support agency theory. Life Cycle theory in this research is obtained by result which is research confirmation before all, where there are influenced of cycle step of company life to dividend policy.

Chitrakar (2011), *"Stock Gained on hope"* The Nepali share market was filled with some optimism after closing the review period at the highest point as the political situation looked like improving. That was supported by the hope that the financial reports for second quarter of the fiscal year from the listed companies will show improvement in their performance. The benchmark Nepse index advanced 12.98points or 3.21% to settle at 404.33. The session's high was on 27 December, 2010with 407.72 while session's low was at the opening with 391.35 on 20 December, 2010.

Bhandari & Pokheral (2012) has studied entitled: *"A Study of Commercial Banks Of Nepal".* Dividend policy\is one the most controversial subjects in Finance (Bakery & Powell,1999).Dividend ,a key factor for the investment on the company's share is desirable from the stockholder's point of view. In an established financial company dividend reflects several indicators of financial health of the company. The stock market of Nepal is still in infancy having an expansionary growth in the recent years. Amidst the recent expansion, understanding dividend practices in relation to commercial banks financial health would provide opportunity to understand financial sector dividend practices. This articles focuses to elucidate on the relationship of dividend with earning per share, market value per share and book net worth for per share. In addition, trends, levels and patterns of dividend practices are also analyzed. A comprehensive study of dividend practices of commercial banks of Nepal taking a time series data for a considerable period is strength of this study. Time series analysis can only explain the plausible relationship between dividend practices and financial indicators

2.2.2 Review of Thesis

Jha (2007) has performed a thesis on *"Study on Dividend policy*". A comparative study between banks, insurance companies and financial institution with eight years data relating to dividend policy from 2053/54 to 2061/62

His main objectives of the work 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.
- There needs a proper information discloser to the investor.

Raya (2008) has studied entitled "*The Study of Dividend Policy of the Commercial Banks in Nepal*" The main objectives of her 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 her 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 ofthe banks.

Government does not have any clear policy towards dividend and to improve the efficiency of the companies. The number of companies can not earn enough profit and bureaucrats accused the cause of inefficiency to managers which is not sound

Maharjan (2008) has studied entitled "*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 marker per share (MPS).
- To analyze the effect of dividend on share price

The methodology used in the study included, 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 research are:

- Earning per share of banks is 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 base by year 2060 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.

Kafle (2009) has presented an MBS thesis entitled "*Dividend Policy of Commercial Banks in Nepal*" with special reference to HBL, EBL and NIBL.

The main objectives of this study are as follows:

- To study dividend procedures followed by sample banks.
- To identify, whether DPS affected by the EPS in Library banks.
- To analyze the relationship between DPS with various important variables such as EPS, net profit, net worth and book value per share.

  Major findings of this study are:
- In HBL, DPS trend is increasing even in fiscal year 2004/05, when EPS is decreased. In EBL, EPS is in increasing trend, DPS is also in increasing trend except fiscal year 2004/05.
- In NIBL, EPS and DPS both trend is fluctuating. The implications of fluctuating earning per and dividend per share could not make clear to the public.
- MPS is much higher than net worth per share in case of EBL. This indicates that the investors either have a optimistic view on the future performance of company or that they are not investigating the performance indicators of the companies in which they are investing properly.
- DPS is positively correlated with EPS, net profit, market price per share and net worth in all sample banks. It means the higher EPS, net worth and net profit; higher will be dividend per share and vice versa.

Singh (2010) "*The impact of dividend policy on market price of share with reference listed commercial bank in Nepal*". Singh's objectives 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 distributions earnings of the whether dividend are in proportionate 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 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 NBAIL 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 there 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) *"Dividend policy and its impact on market price of shares*" on the following major objectives 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.

Kafle (2012) has presented an MBS thesis entitled on "*Dividend Policy and its Impact on Market Price of Stock of Commercial Banks*" sample of five commercial banks, and the data are taken 2005/06 to 2010/11.

The main objectives of this study are:

- To examine the impact of divided policy on market price of stock.
- To explain the prevailing policies and practices regarding dividend in the Nepalese

firms with reference to the sample firm.

- To explore various aspects of dividend policies and practices in Nepalese commercial banks.
- To analyze if there is any uniformity in DPS EPS MPS and DPR of the sample banks.

Major findings of this study are:

- The SCBL has the highest mean EPS among the banks which is Rs 145.30 and NIC has the lowest, which is Rs 21.68 the same result is seen to be Rs 113.24, Rs22.95, Rs43.23 and Rs73.13 in NIBIL, SBI, BOK and EBL respectively. Most of the firm always seeks to have more earning so that they can sustain efficiently in the competitive capital market. Therefore, earning is the indicator of firms. There is lower consistency in SCBL, SBI, BOK, EBL, an NIC. Indicating C.V. by 15.01%, 41.40%, 27.20% 27.24% and 23.57% respectively than that of NABIL.
- The SCBL has the highest mean DPS among selected banks where as it is lowest in NIC (i.e. R s95 and Rs 2.24). If DPS of any firm is high, it will create positive attitude of its shareholders towards the firm, which is consequently helps to increase the market value of the share. In another words the firm is paying higher dividend implies that it is performing better. Consistency in DPS is also highest in SCBL than that other banks representing (C.V. = 28.99%) which is lower than others.
- Higher DPR indicates that the firm is paying higher dividend to its shareholders and lower Dividend payout ratio implies that the firm is retaining its profit to profitable investment opportunities. The mean DPR of SCBL, SBI, BOK, EBL and NIC are 62.71%, 10.86% 31.74%, 22.70% and 9.71 respectively. This evidence shows that NIC is retaining more its earning and it might be the consequences of the higher growth opportunities.
- The SCBL has the highest mean MPS among the selected banks which is Rs4432.17 and NIC has the lowest, which is Rs740. Increase in MPS is the indication of better performance MPS trend over the sample period. Consistency in MPS in SCBL in higher than that of others as its C.V. (i.e. 43.58%) is smallest as compared to other banks.
- Correlation between EPS and MPS is positive in SBI, EBL, BOK and NIC and negative correlation between EPS and MPS in SCBL. Similarly correlation between MPS and DPR is positive in SBI and BOK and negative in SCBL, EBL and NIC. Whereas

correlation between MPS and DY is positive in SBI and negative in NABIL, SCBL, EBL, BOK and NIC. The correlation between MPS and P/E ratio is positive in SCBL, EBL, BOK and NIC.

- The regression analysis of MPS on EPS shows that the regression coefficient (n) is positive for SCBL, EBL, BOK and NIC. The coefficient of multiple determination of BOK is highest among sample banks in the regression analysis of MPS on EPS.
- From the test of hypothesis, it is found null hypothesis of no significant difference of EPS, DPS, MPS, DPR and DY among selected banks are rejected and where as null hypothesis and no significant different of P/E ratio is accepted.

2.3 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 conclusion made by the international studies may not be relevant in the Nepal ,the conclusion made by the international studies may not be relevant in the Nepalese context.

So far the Nepalese studies are concerned some studies. Like Pradhan's, Manandhar's 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 three commercial banks. Latest five years data Property of used to analyzed with due consideration of EPS, DPS, DPR and have been 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 research works done in this topic, the samples were either mixture of banks and finance companies or that of insurance companies and manufacturing units. Here, the research work has been done with special reference to three 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

Basically, historical and diagnostic types of research are employed to fulfill the objective of research work. A historical research is concerned with past phenomena. It is a process of collecting, evaluating verifying and synthesizing past evidence systematically and objectively to reach a conclusion (Wolf and Pant: 1975).

3.1 Research Design

The research design is a mixture of descriptive, exploratory, and analytical. While analyzing the research, both parametric and non-parametric tools will be used wherever and whenever necessary. A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Descriptive and analytical research designs have been used to this study. With the help of maintained research design the study evaluates the dividend policy structure of selected sample commercial banks as well as its impact on the market price of the stocks of the respective banks.

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

3.2 Population and Sample

There are 31 banks whose shares are traded actively in stock market. Which are consider to be the population of the study, but it is not difficult to study all of them regarding the study topic. Only following two banks are selected as sample. These Two banks are most of trading in Nepal Stock Exchange (NEPSE) and they paid dividend on different cash and stock dividend. They are as follows;

1. Himalayan Bank Limited

2. Nepal Investment Bank

3.3 Sources of Data

This study based on secondary data. 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

i) Earning Per Share (EPS)

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

$$\text{EPS} = \frac{\text{Earning Available to Common Shareholders}}{\text{No. of Common Stock Outstanding}}$$

ii) Dividend Per Share (DPS)

The dividend per share [DPS] is the amount paid as dividend to the holder of one share of the stock.

Mathematically:

$$\text{DPS} = \frac{\text{Total Dividend to ordinary shareholders}}{\text{No. of Common Stock Outstanding}}$$

iii) Market price of share (MPS)

It is the value of the stock which is traded in the secondary market of the stock. It is generally believed that if the EPS and DPS are high, the market value of the share (MPS) will also be high.

iv) Dividend payout ratio

DPR reflect what percentage of profit is distributed as dividend and what percentage is retained ns reserve and surplus for the growth of the company. It is calculated by dividing the DPS by the EPS.

Symbolically,

$$\text{DPR} = \frac{\text{Dividend per share (DPS)}}{\text{Earning per share (EPS)}}$$

v) Earning Yield Ratio (EYR)

This ratio shows the relation share.it is calculated by earning per share by market value per share.

Symbolically,

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

vi) Dividend Yield Ratio (DYR)

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.

$$\text{DYR} = \frac{\text{Dividend per share (DPS}}{\text{Market price per share (MPS)}}$$

vii) Price Earnings Ratio (P/E Ratio)

This ratio reflects the market value per share for each rupee of currently reported EPS. It is calculated by dividing the market value per share by earning per share.

Symbolically,

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

3.4.2 Statistical tools

i) Arithmetic mean

Arithmetic mean is the average return over periods. Arithmetic mean of a given set of observation is their sum divided by the number of observations. To illustrate it, let's suppose that X1, X2, X3 ..... Xn denote return of given 'n' number of respondents and X is the arithmetic mean of the given observation.

It is calculated by,

$X = \frac{X1+X2+X3+.....Xn}{N}$ Or X

Or, $X = \frac{}{n}$

Where,

X = Arithmetic mean

X1+X2+X3.....Xn = Set of observations

ΣX = Sum of all the values of the variable X

n = Number of observation

ii) Standard Deviation (σ)

The measurement of scatter ness of the data of figure in a series about an average is known as dispersion. The standard deviation measures the absolute dispersion. The greater amount of dispersion reflects the high standard deviation. A small standard deviation means a high degree of uniformity of observation as well as homogeneity of a series and vice-versa.

iii) Coefficient of Variation (CV)

The coefficient of variation is defined as the ratio of standard deviation to the mean expressed in percentage.

Symbolically,

Σ Coefficient of Variation (CV) $= \frac{\sigma}{\bar{x}}$ The coefficient of variation is the relative measure and is independent of units. The coefficient of variation is applicable for the comparisons of variability of two or more distributions. The greater the value of the coefficient of variation, the

less will be the uniformity (or consistency, stability, etc.) and the smaller the value of coefficient of variation, the more will be the uniformity (or less will be the variability).

iv) Correlation and Regression

Correlation Analysis is the statistical tools that we can use to describe the degree to which one variable is linearly related to another. Coefficient of Correlation is the measurement of the degree of positive and negative relationship between two casually related sets of figures. Its value lies somewhere ranging between -1 to +1. If both variables are constantly changing in the similar direction, the value of coefficient will be +1 indicating perfect positive correlation. When the value coefficient will be -1 two variables take place in opposite direction. The correlation is said to be perfect negative. 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.

Regression analysis was first developed by Sir F. Galten which is one of the most powerful tools of statistics. It is concerned with the study of relationship between one variable called the explained or dependent variable and one or more other variable called independent variable. The technique of regression analysis is used to determine the statistical relationship between two or more variables and to make prediction of one variable on the basis of others (Sharma, 2001:156).

There are two types of regression analysis. Simple regression analysis determines the relationship between one variable called the dependent variable and the other variable called independent variable. Multiple regression analysis is concern with the study of relationship between more than two variables.

v) 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:

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

Where,

t= test of hypothesis

r = simple correlation coefficient

N = number of observation

iv) Trend Analysis

This type of statistical analysis interprets the trend of earning per share, dividend per share, market price per share of sample banks from 2062/63 to 2068/69. The projections are based on the following assumptions.

- The main assumption is that other thing will remain unchanged.
- The bank will run in this present position.
- The economy will remain in this present stage.
- The forecast will be true only when the limitation of least square method is carried out.
- Central government will not change its guidelines to the commercial banks.

The trend of related variable can be calculated as $Y = a + bx$.

Where,

Y = Dependent variable

X = Independent variable

a = Intercept

b = Slope of the trend line.

The following trend value analysis has been used , in this study.

Trend analysis of EPS.

Trend analysis of DPS.

Trend analysis of MPS.

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.

Presentation of Data

The collected data and information are presented in this section. Various tables, charts and graphs are used to best present the data. The data and information has been presented in most understandable format. Dividend is a periodic payment made by a company to its shareholders. It is compensation to the shareholders for the use of and risk to their investment funds. Or in other words, it is that portion of the net earning divided by the company among the shareholders as a return for their money invested.

For the study of dividend policy of commercial banks in Nepal, 3 commercial banks are selected as sample banks. From the selected sample banks, data related to dividend policy are collected and presented as well as analyzed in this chapter.

4.1 Analysis of Financial Indicators and Variables

4.1.1 Earning per Share (EPS)

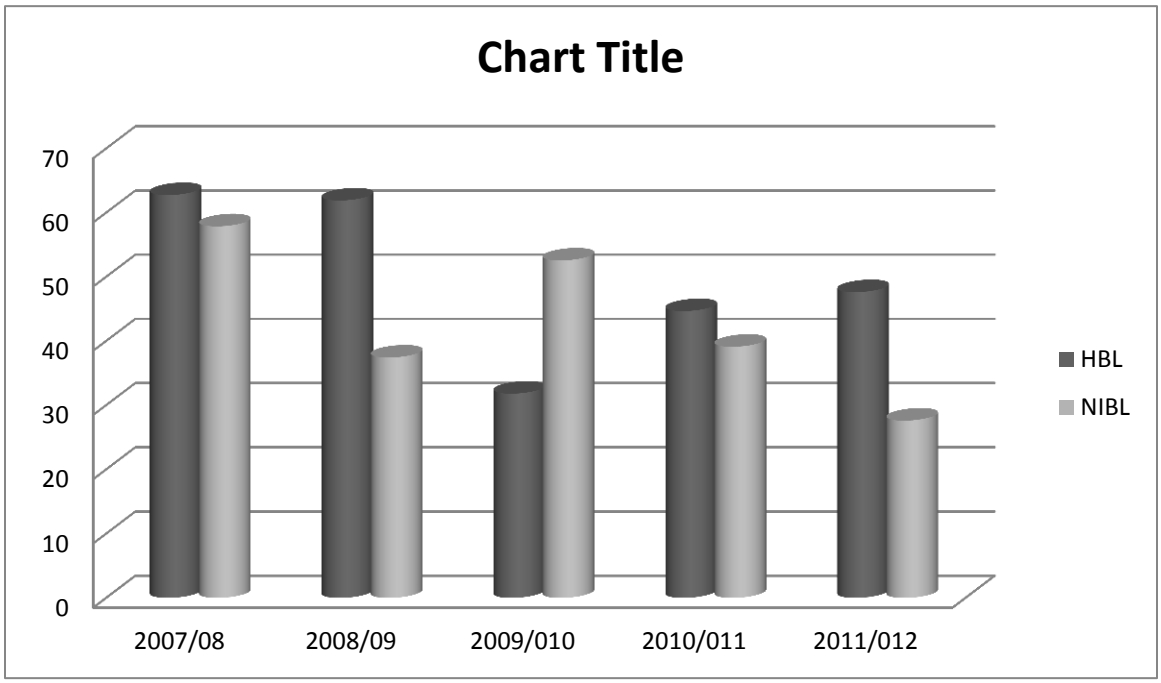
In business organization performance and success is measure by earning capacity of the company. Lower earning shows weak position and higher earning show strength position of the business organization.

Table 4.1 Analysis of Earning Per Share (EPS)

Name / Years	HBL	NIBL
2007/08	62.74	57.87
2008/09	61.90	37.42
2009/010	31.80	52.55
2010/011	44.66	39.10
2011/012	47.61	27.60
Average	49.72	42.908
SD	12.93302	12.20434
CV %	26%	28.443%

(Source Banking Annual report)

Figure No.4.1 Earning per share in Fiscal year 2007/2012



The table 4.1 presents the EPS of three sample companies for the period fiscal year starting from 2007/08.The average EPS of HBL is Rs..The 49.72.The EPS of the company is above the average EPS in First Fiscal year .Standard deviation of EPS of HBL is 12.93 and its CV is 26%.

The average EPS of NIBL is 42.908 .The EPS of the company is below the average EPS in three fiscal year except 2007/08 to 2009/010. The Standard Deviation of EPS of the NIBL is 12.20434 and its CV is 28.443% .That means the EPS of NIBL is less fluctuating than HBL.

In this figure shows the EPS of sample Company .The OX axis shows the sampling years and OY axis shows the EPS amount .In above shows the HBL is higher EPS and the NIBL Is lower EPS except fiscal year 2009/2010.That means the EPS of NIBL is less fluctuating than HBL.

4.1.2 Dividend Per share DPS)

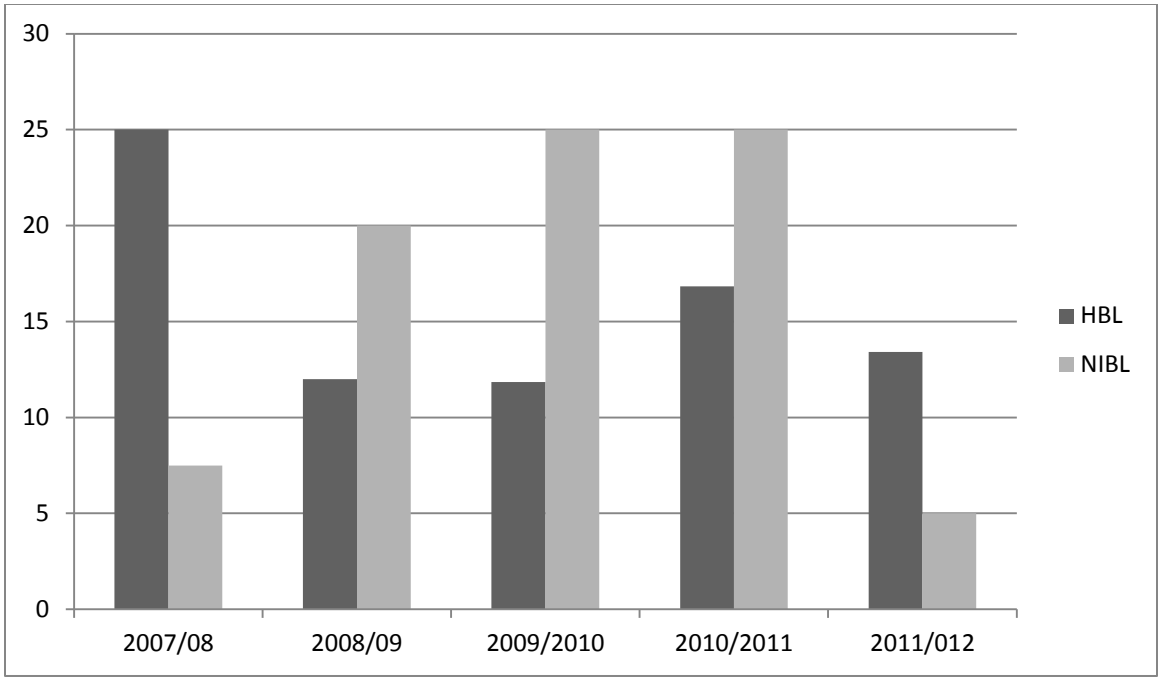
The common shareholders received the amount from company which is paid on a per share basis is generally .Dividend per share (DPS) shows what amount exactly paid to the common shareholders .It is calculated by dividing the dividend provided to equity shareholders by the total number of equity shares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

Table 4.2 Analysis of Dividend per share (DPS)

Name / Years	HBL	NIBL
2007/08	25	7.5
2008/09	12	20
2009/0/010	11.84	25
2010/011	16.84	25
2011/012	13.42	5
Average	15.82	16.5
SD	5.511	9.6177
CV%	34.84	58.289

(source: Banking Annual Report)

Figure No.4.2 Dividend per share



The Average DPS of HBL is Rs 15.82.The DPS of the company is highest in 2007/08 and lowest DPS is 2009/010.The DPS is decreasing order after2009/010 and then after increasing order. Standard deviation of DPS of HBL is 5.511 and its CV is 34.84%.

The average DPS of NIBL is Rs.16.5.The DPS of the bank is above average except then 2011/012..The NIBL was paid dividend in all fiscal year. Standard Deviation of DPS of NIBL is 9.6177 and its CV is 58.289.That means DPS if NIBL is more fluctuate than HBL.

In this figure, show the DPS of all sample company .The OX axis indicates the sampling years and OY axis indicates the DPS amount .All Bank DPS is decreasing then beginning amount and increasing order in HBL .and also DPS of NIBL is decreasing and increasing order .In above figure shows the NIBL is in higher . DPS all fiscal years except 2007/08 to 2011/012.In aggregate NIBL pays higher DPS amount then HBL.

4.1.3 Market price per share (MPS)

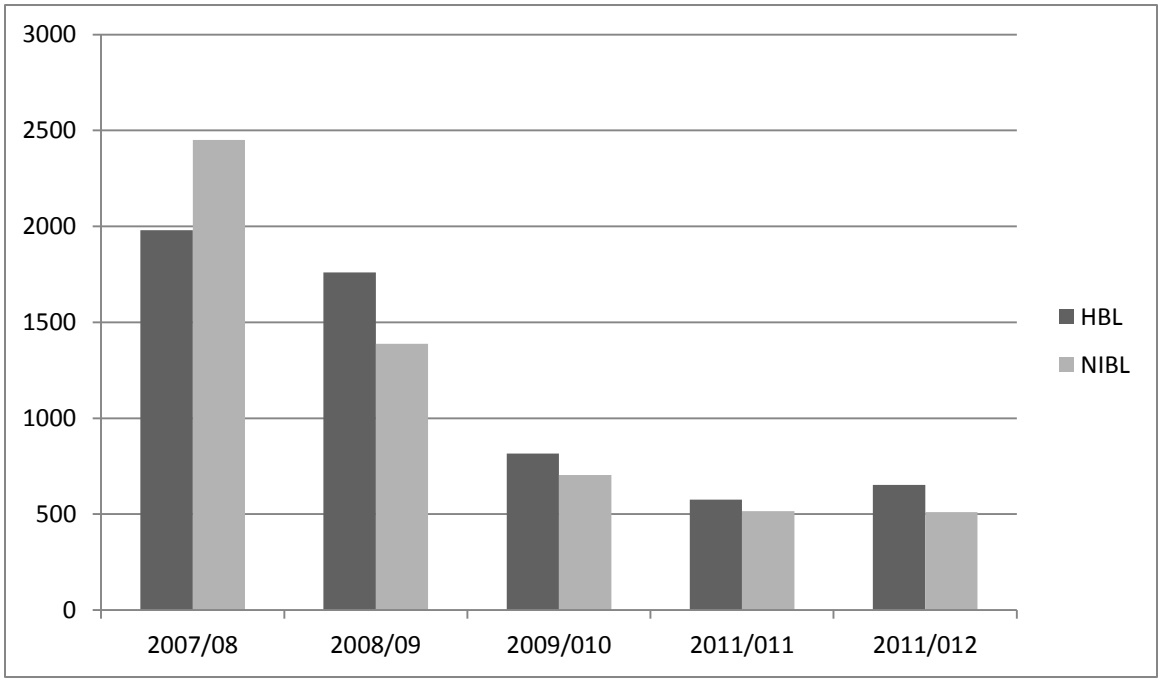
The rate which is treated in secondary market is known as market price of share.(MPS).It is calculated through average price of annual high rate and lower rate of the particular stock .In the case of Nepal MPS is calculated by taking the average of the highest and the lowest market price of Nepal Stock Exchange (NEPS

Table 4.3 Analysis of Market price per share (MPS)

Name Years	HBL	NIBL
2007/08	1980	2450
2008/09	1760	1388
2009/010	816	705
2010/011	575	515
2011/012	653	511
Average	1156.8	1113.8
SD	661.43	829.1054
CV%	57.1776	74.4393

(Source: Banking Annual Report)

Figure No 4.3: Market price per share in fiscal year 2007/08 to2011/012



The average MPS of HBL is Rs. 1156.8 The MPS of the company is below the average MPS in three fiscal year except 2007/08 to 2008/09.The standard Deviation of MPS of HBL is 661.43 and its CV is 57.1776%.

In the same way, the average MPS of NIBL is Rs.1113.8.The MPS of the company is below average MPS in three fiscal years except 2007/08 to 2008/09.The MPS of the company is decreasing order. The Standard Deviation of MPS of NIBL is 829.1054 and its CV is 74.4393.

The two sample company market price per share value through chart shows in above 4.3.The MPS of HBL is higher in all year except 2007/08.

4.1.4 Dividend Payout ratio (DPR)

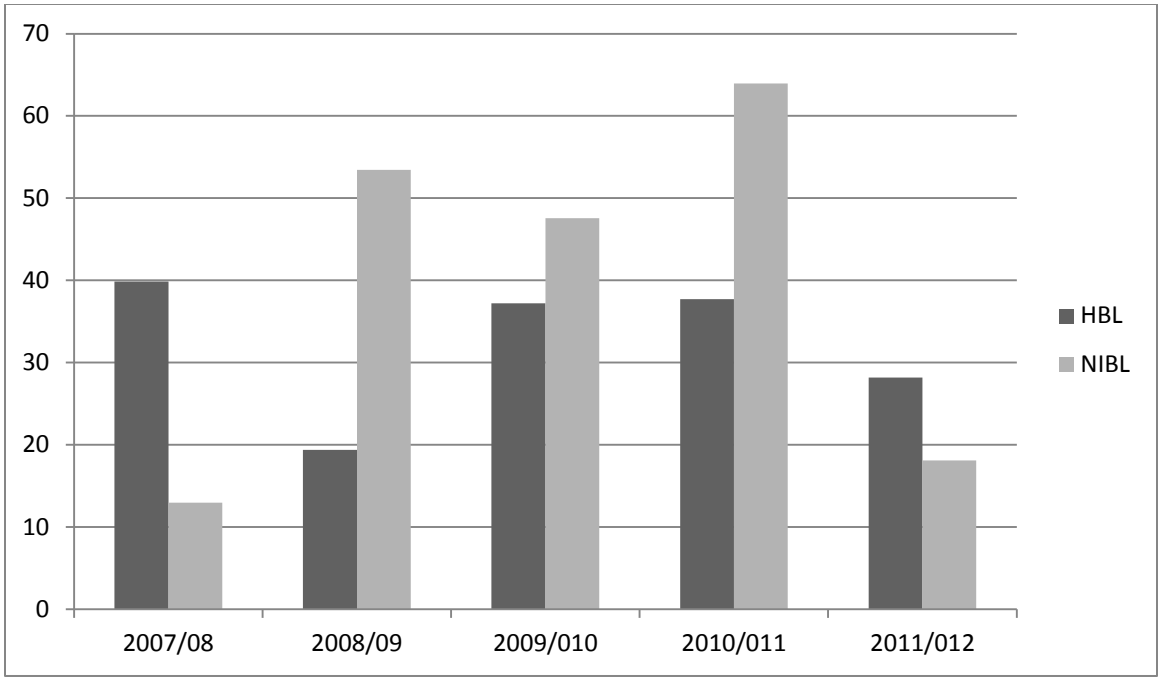
Earning determines the amount of dividend .The greater the earning was more ability of banks to pay dividend. This ratio expresses the amount of dividend as a percentage of earning available for equity shares after meeting all charges. The following table shows the dividend payout ratio of two banks from 2008/08 to 2011/012.

Table 4.4 Analysis of Dividend payout Ratio (DPR)

Name years	HBL	NIBL
2007/08	39.85	12.96
2008/09	19.39	53.45
2009/010	37.23	47.57
2010/011	37.70	63.93
2011/012	28.187	18.12
Average	32.4714	39.206
SD	8.571834	22.45883
CV%	26.3981	57.2842

(Source: Banking Annual Report)

Figure No.4.4 Dividend payout ratio (DPR)



The table 4.4 represents the dividend pay-out ratio (DPR) of two selected sample banks. From the above table it is clear that NIBL has the highest average DPR of 39.206 and HBL average DPR is 32.4714.

Standard Deviation means total risk in above table 4.4 shows the higher risk on NIBL because its SD is 22.45883 which is higher than HBL. CV shows per unit risk, it shows higher NIBL and HBL is lower.

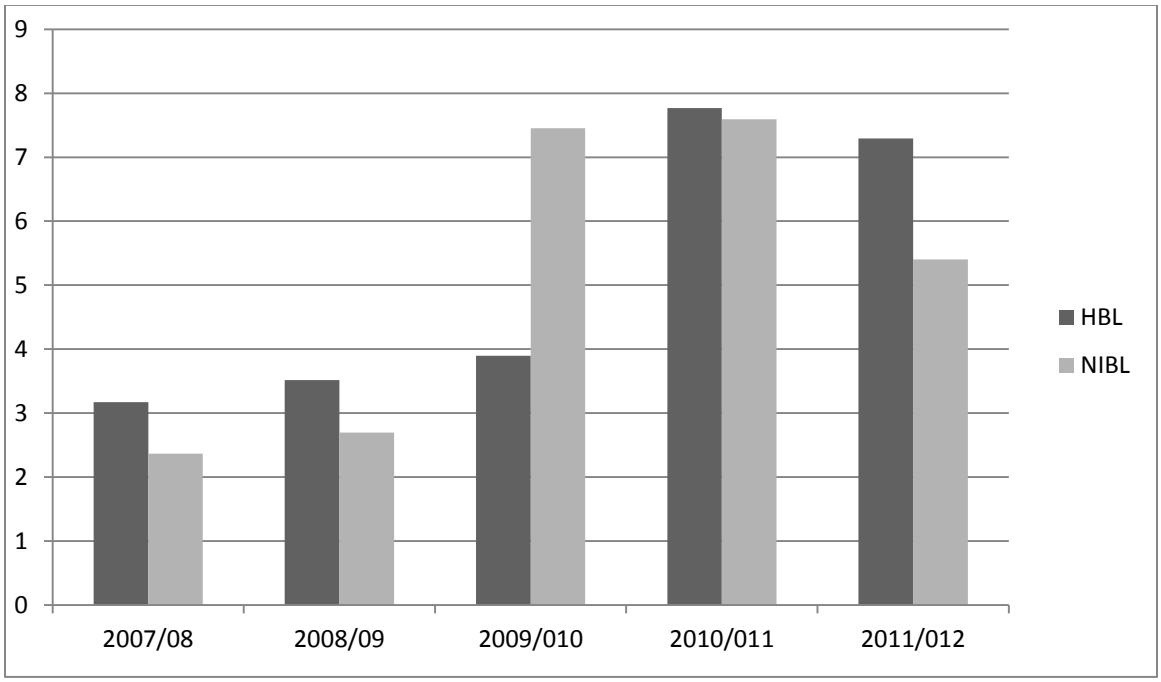
4.1.5 Earning Yield Ratio (EYR)

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 Ratio (EYR)

Name / Years	HBL	NIBL
2007/08	3.168687	2.362041
2008/09	3.517045	2.695965
2009/010	3.897059	7.453901
2010/011	7.766956	7.5922
2011/012	7.29096	5.4011742
Average	5.128141	5.40117
SD	2.21313	2.505914
CV%	43.1566	49.1254

(Source: Banking Annual Report)



The table 4.5 shows two companies earning yield ratio (EYR).The average EYR is higher NIBL then HBL In above higher EYR is 7.766956 of HBL on 2010/011.and lower EYR is 2.362041 of

NIBL on 2007/08.SD of HBL is lower i.e. 2.21313 and NIBL is Higher SD i.e.2.505914.CV shows per unit risk is also same conclusion like SD. Higher CV of NIBL and lower CV of HBL.

The figure 4.5 shows the Earning Yield Ratio (EYR) in fiscal year 2007/08 to 2011/012.HBL is less volatile then NIBL.

4.1.6 Dividend Yield Ratio (DYR)

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. Below table 4.6 shows the DYR.

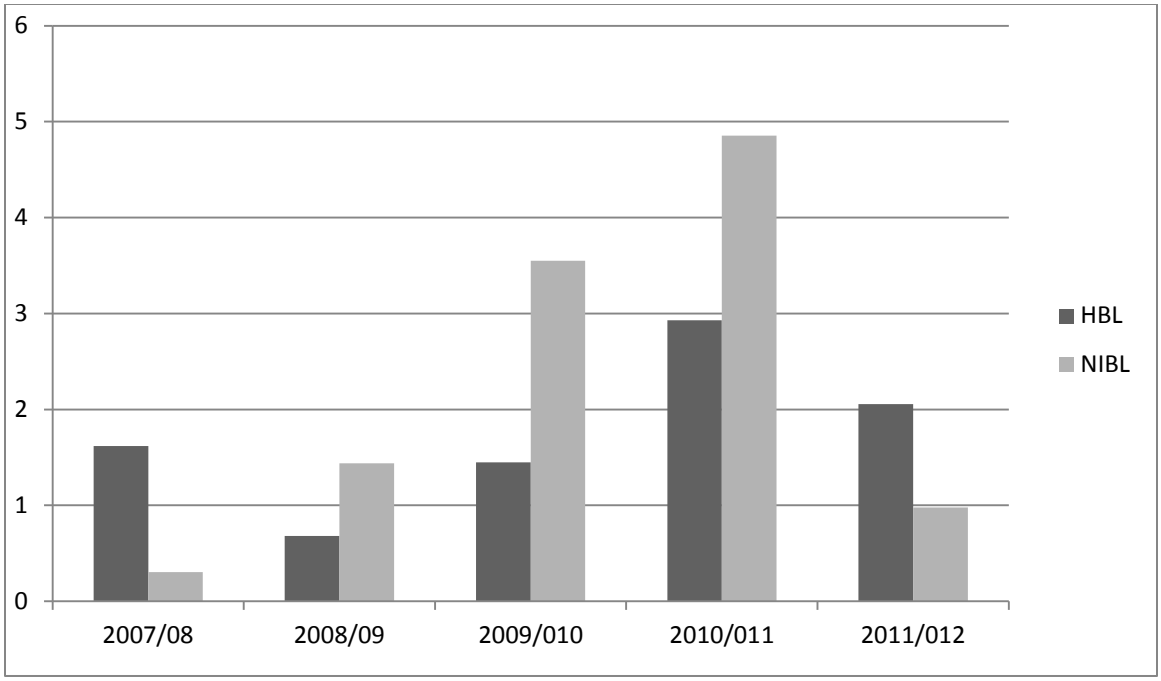
Table 4.6

Analysis of Dividend Yield Ratio (DYR)

Name / Years	HBL	NIBL
2007/08	1.62	0.306
2008/09	0.68	1.44
2009/010	1.45	3.55
2010/011	2.93	4.8543689
2011/012	2.055	0.97847
Average	1.747	2.225768
SD	0.827221	1.905376
CV%	47.351	85.6053

(Source: Banking Annual Report)

Figure No.4.6: Dividend Yield Ratio (DYR) in fiscal year 2007/08 to 2011/012.



Higher DYR is 4.8543689 in 2010/011 of NIBL. The average DYR of HBL is 1.747, and NIBL is 2.225768. Which is greater than HBL.SD of HBL is 0.827221 and NIBL is 1.905376.CV of HBL is 47.351 and 85.6053.

4.1.7 Price Earnings Ratio (P/E Ratio)

This ratio shows the relationship between market price per share and earning per share .It is calculated by market price per share by earning per share .Below table 4.7 shows the P/E Ratio

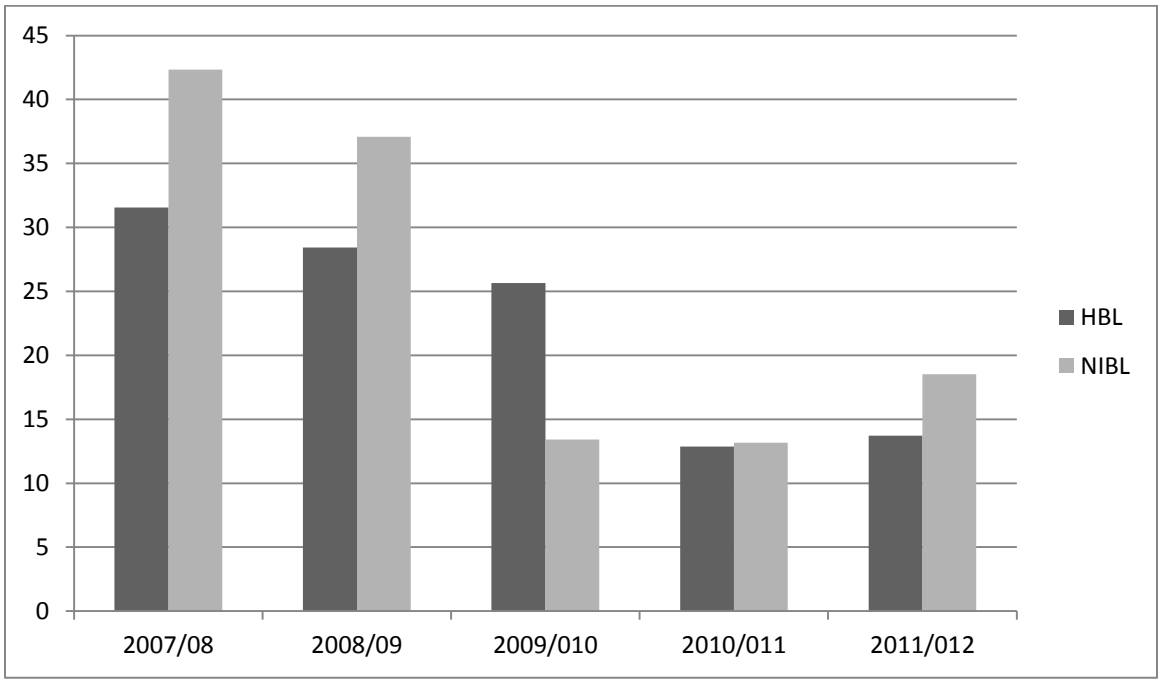
Table 4.7

Analysis of Price Earnings Ratio (P/E Ratio)

Name / Years	HBL	NIBL
2007/08	31.55881	42.33627
2008/09	28.43296	37.09246
2009/010	25.66038	13.41579
2010/011	12.875056	13.171355
2011/12	13.715606	18.514493
Average	22.44856	24.90607
SD	8.617453	13.81034
CV%	38.3875	55.4497

(Source: Banking Annual Report)

Figure No.4.7 Price Earnings Ratio(P/E Ratio)



The table 4.7 presents the P/E ratio of the two sample companies for the period fiscal year starting from 2007/08 to 2011/012.The average P/E ratio of HBL is Rs.22.44856.The P/E ratio of the company is above the average P/E ratio in three fiscal year except year 2010/011 to 2011/012.The Standard Deviation of P/E ratio of HBL is 8.617453 and its CV is 38.38.75%

The average P/E ratio of NIBL is Rs.24.90607.The P/E ratio of the company is below the average P/E ratio in three fiscal years except 2007/08 to 2008/09. Standard Deviation of P/E ratio of EBL is 13.81034 and its CV is 55.4497.

In figure 4.7,show the P/E ratio of all sample Company .The OX axis indicates the sampling years and OY axis indicates the P/E ratio .Two bank P/E ratio is increasing then beginning and decreasing order .HBL P/E ratios is less volatile than the other all sampling banks.

4.2 Analysis of Statistical Indicators and Variables

4.2.1 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 range 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.

4.2.1.1 Correlation between DPS and MPS

Table 4.8

Correlation between DPS and MPS

Banks	r	r^2	P.E.	Relationship	Significant/Insignificant
HBL	0.495467	0.245488	0.227595	Positive	Insignificant
NIBL	-0.39812	0.1585	0.253835	Negative	Insignificant

(Source: Annex I)

The above table 4.8 explains the relationship between dividends of last year DPS (t-1) and the current MPS of the sample banks .The coefficient of correlation between DPS(t-1) and MPS of HBL is 0.495467 ,which shows there is low degree of positive correlation between DPS(t-1) and MPS of HBL And it's coefficient of determination is 0.227595 means ,MPS is affected by DPS

only 22.7595% and the rest 77.2405 is affected by other unknown variables .Since rے6PE ,the value of r is not significant.

In the same way, coefficient of correlation between DPS (t-1) and MPS of NIBL is -0.39812, which shows there is negative correlation between DPS(t-1) and MPS of NIBL and it's coefficient of determination is 0.1585 which means MPS is affected by DPS only 15.85% and the rest 84.15% is affected by other unknown variables .Since rے6PE ,the value of r is not significant.

4.2.1.2 Regression Analysis between DPS and MPS

Let the dependent variables MPS is denoted by Y and independent variables DPS is denoted by X and then the regression equation of MPS on DPS is given by:

Y=a+bX

MPS (HBL) =2097.47+59.4608xDPS(HBL)

MPS (NIBL)=547.5155+(-34.32)xDPS (NIBL)

Table 4.9

Regression analysis between DPS and MPS

Banks	No.of Obsv.(n)	Constant (a)	Regression Coefficient(b)	T-value
HBL	5	2097.47	59.4608	0.987967
NIBL	5	547.5155	-34.32	-0.7517

(Source: Annex II)

The Table 4.9 depicts the major output of simple regression analysis of average market price per share (MPS) on dividend per share (DPS) of the sample banks.

As far as the regression of MPS and DPS is concerned ,the regression coefficient of HBL and NIBL are 59.4608,-34.32 respectively .It indicates that a one rupee increase in DPS leads to an average of Rs59.4608 increase in MPS of HBL , Rs: -34.32 decrease in MPS of NIBL. If the

other variable remain constant, the test of t-statistics aid to conclude that in HBL the relationship between MPS and DPS is insignificant, since the calculated value of t (0.987967) is lower than tabulated value (3.182).In NIBL the relationship between MPS and DPS is insignificant as the calculated value of t ((-0.7517) is lower than tabulated value (3.182) at 5 % level of Significance.

4.2.1.3 Correlation between EPS and MPS

The below table 4.10 explains the relationship between earning per share of last year EPS(t-1) and Market price per share of the sample commercial banks.

Table 4.10

Correlation coefficient between EPS and MPS

Banks	r	r^2	P.E.	Relationship	Significant/Insignificant
HBL	0.823537	0.67813	0.097066	Positive	significant
NIBL	0.643702	0.414352	0.176658	Positive	Insignificant

(Source: Annex III)

The coefficient of correlation between EPS (t-1) and MPS of HBL is 0.823537, which shows that there is very high degree of positive correlation between EPS (t-1) and MPS of HBL Likewise, its coefficient of determination is 0.67813 means, MPS is affected by EPS (t-1) only by 67.813% and rest 32.187% by other unknown variables .Since rے6PE, the value of r is not significant.

In the same way ,coefficient of correlation between EPS (t-1) and MPS of NIBL is 0.643702 ,which shows high degree of positive correlation between EPS(t-1) and MPS of NIBL and it's coefficient of determination is 0.414352 which means MPS is affected by EPS only 41.4352% and the rest 58.5648 % is affected by other unknown variables .Since rے6PE ,the value of r is not significant.

4.2.1.4 Regression Analysis between EPS and MPS

Let the dependent variables MPS is denoted by Y and independent variables DPS is denoted by X and then the regression equation of MPS on EPS is given by:

Y=a+bX

MPS (HBL) =3251.83+42.1179xEPS(HBL)

MPS (NIBL)= 2990.17+43.7301)xEPS (NIBL)

Table 4.11

Regression analysis between EPS and MPS

Banks	No.of Obsv.(n)	Constant (a)	Regression Coefficient(b)	T-value
HBL	5	3251.83	42.1179	2.514547
NIBL	5	2990.17	43.7301	1.456891

(Source: Annex IV)

The Table 4.11 depicts the major output of simple regression analysis of average market price per share (MPS) on earning per share (EPS) of the sample banks.

As far as the regression of MPS and EPS is concerned ,the regression coefficient of HBL and NIBL are 42.1179,43.7301 respectively .It indicates that a one rupee increase in EPS leads to an average of Rs.42.1179 increase in MPS of HBL , Rs 43.7301 increase in MPS of NIBL. If the other variable remain constant., the Test of t-statistics aid to conclude that in HBL the relationship between MPS and EPS is insignificant, since the calculated value of t (2.514547) is lower than tabulated value (3.182).In NIBL the relationship between MPS and EPS is insignificant as the calculated value of t(1.456891) is lower than tabulated value (3.182) at 5 % level of Significance.

4.2.1.5 Correlation between EPS and DPS

The below table 4.12 explains the relationship between earning per share of last year EPS(t-1) and Dividend per share of the sample commercial banks.

Table 4.12

Correlation coefficient between EPS and DPS

Banks	r	r^2	P.E.	Relationship	Significant/Insignificant
HBL	0.505823	0.255857	0.224468	Positive	significant
NIBL	0.152851	0.023363	0.294598	Positive	Insignificant

(Source: Annex V)

The coefficient of correlation between EPS and DPS of HBL is 0.505823,which shows that there is of positive correlation between EPS and DPS of HBL Likewise ,its coefficient of determination is 0.255857 which means 25.5857%,DPS is affected by EPS and rest is due to by other unknown variables .Since r<6PE ,the value of r is not significant.

In the same way ,coefficient of correlation between EPS and DPS of NIBL is 0.152851 ,which shows low degree of positive correlation between EPS and DPS of NIBL and it's coefficient of determination is 0.023363 which means 23.363% of DPS is affected by EPS and rest is due to other unknown variables .Since r<6PE ,the value of r is not significant.

4.2.1.4 Regression Analysis between EPS and DPS

Let the dependent variables DPS is denoted by Y and independent variables EPS is denoted by X and then the regression equation of DPS on EPS is given by:

Y=a+bX

DPS (HBL) =26.54234+0.21556xEPS(HBL)

DPS (NIBL)= 21.66848 +0.12045)xEPS (NIBL)

Table 4.13

Regression analysis between EPS and DPS

Banks	No.of Obsv.(n)	Constant (a)	Regression Coefficient(b)	T-value
HBL	5	26.54234	0.21556	1.015619
NIBL	5	21.66848	0.12045	0.267893

(Source: Annex VI)

The Table 4.13 depicts the major output of simple regression analysis of average Earning per share (EPS) on Dividend per share (DPS) of the sample banks.

As far as the regression of DPS and EPS is concerned ,the regression coefficient of HBL and NIBL are 0.21556 , 0.12045 respectively .It indicates that a one rupee increase in EPS leads to an average of Rs0.21556 increase in DPS of HBL , Rs 0.12045 increase in DPS of NIBL.If the other variable remain constant. The Test of t-statistics aid to conclude that in HBL the relationship between DPS and EPS is insignificant, since the calculated value of t (1.015619) is lower than tabulated value (3.182).In NIBL the relationship between MPS and EPS is insignificant as the calculated value of t(0.267893) is lower than tabulated value (3.182) at 5 % level of Significance.

4.3 Trend Analysis

4.3.1 Analysis of Earning per share

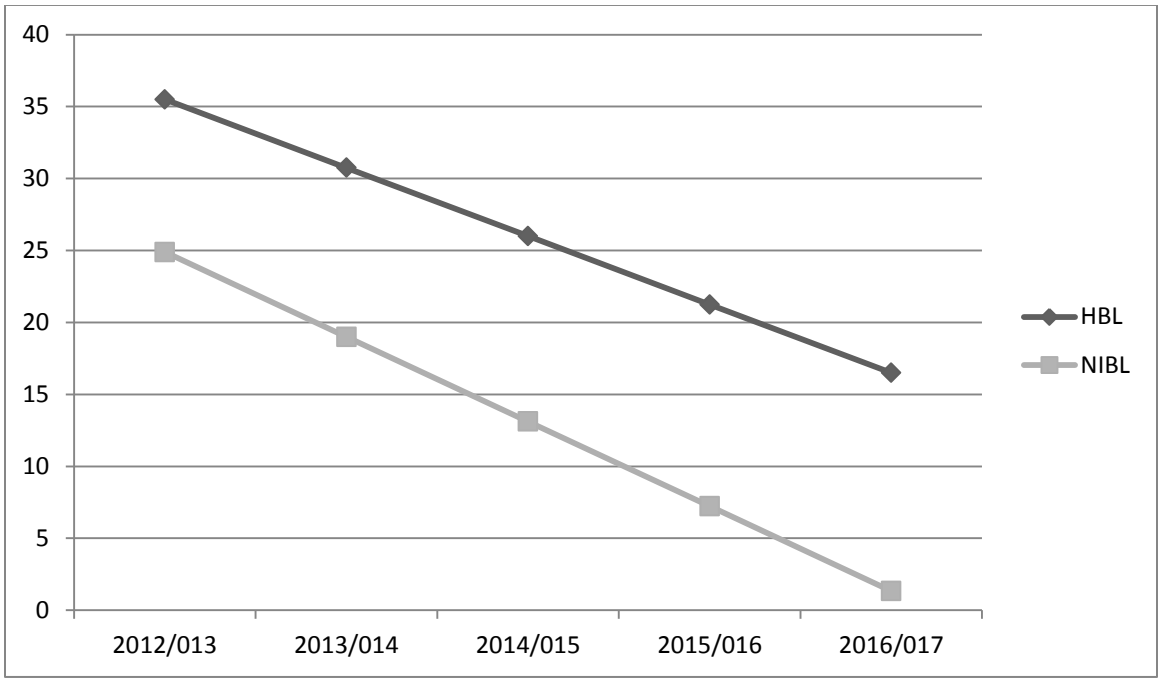
Trend line helps to forecast the values of dependent variable for future periods of time .For this purpose ,trend line is computed and estimated the trend values of EPS of banks for five years from F?Y 2007/08 to 2011/012.The trend line of EPS for HBL and NIBL are as follows.

HBL Y=49.742+(-4.75*x)

NIBL Y=42.54+(-5.886*x)

Figure 4.8

Trend Analysis of Earning per share



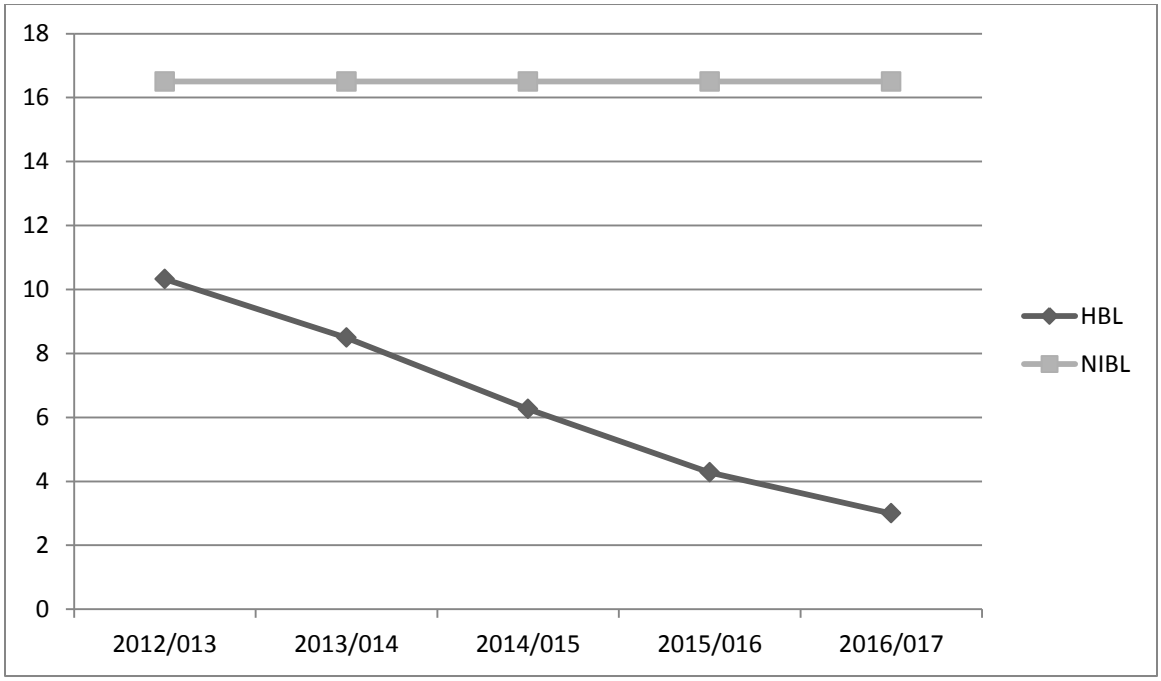
(Source: Annex VII)

Figure 4.8 shows the earning movement till 2017.HBL and NIBL has negative value of b. So, it is in decreasing in future shown in figure 4.8

4.3.2 Analysis of dividend per share

Figure 4.9

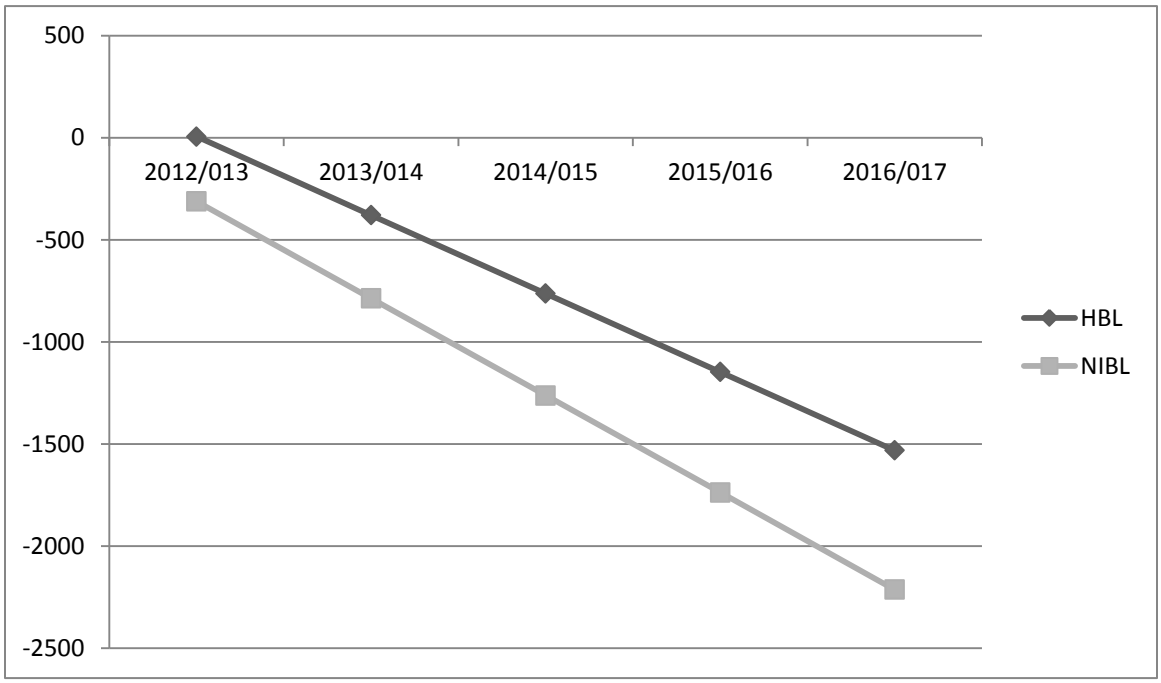
Trend analysis of dividend per share.



(Source: Annex VIII)

Figure 4.9 shows the dividend per share for next five years. HBL is decreasing Trend and NIBL is constant for next five years.

4.3.3 Analysis of Market per Share



(Source: Annex IX)

The above figure 4.10 shows the market price of share. Both NIBL and HBL banks are decreasing trend.

4.4 Major Finding

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

- The average earning per share of HBL and NIBL 49.72, 42.708respectively mean EPS of HBL is greater than HBL .Higher earning per share indicates the company is lower risk to investor then other lower EPS company.
- The average Dividend per share of HBL and NIBL is Rs. 15.82, 16.5 respectively mean DPS of NIBL is greater than HBL .HBL is lower average DPS, and Higher DPS indicate the company is greater return.
- Average market price per share of HBL and NIBL Rs 1156.8, 1113.8 respectively mean

MPS of HBL is greater than HBL .Higher market price creates the positive attitude of the investors towards the banks.

- Average Dividend payout ratio of HBL and NIBL is 32.4714 and 39.206 respectively mean DPR of NIBL is greater than HBL .Higher DPR indicates the company is greater return on dividend.
- The average Earning Yield Ratio of HBL and NIBL is Rs.5.128141, 5.40117 respectively mean EYR of NIBL is greater than HBL .Higher EYR indicate the favorable condition for the owner.
- The average Dividend Yield Ratio of HBL and NIBL is Rs. 1.747 and 2.225768 respectively mean DYR of NIBL is greater than HBL ,Higher DYR indicate the more paid dividend on the market price of stock.
- P/E Ratio average is higher of NIBL bank i.e.24.90607 and lower of HBL bank i.e.22.44856.P/E ratio indicate higher earning on market price of stock lower indicate lower earning on market price of stock.
- The correlation of DPS and MPS of HBL is positive and NIBL is Negative.
- Correlation coefficients between EPS & MPS of both banks are positive correlation.
- Correlation coefficient of EPS and DPS of both banks are positive correlation.
- Regression Coefficient (b) is highest between DPS and MPS of HBL and Lowest in NIBL .The highest t-value (0.987967) is HBL and lowest t-value (-0.7517) is NIBL
- Regression coefficient (b) is highest between EPS and MPS of NIBL and lowest is HBL .The highest t-value (2.514547) is HBL and lowest t-value(1.45689) is NIBL.
- Regression coefficient (b) between EPS and DPS of HBL is greater then NIBL .The highest t-value (1.015619) is HBL and lowest t-value (0.267893) is NIBL
- A trend analysis show of Earning per share is of both banks are decreasing trend.
- A trend analysis show of Dividend per share of HBL is decreasing order and NIBL is constant.
- Trend analysis shows of Market per share of both banks are decreasing order and negative trend.

CHAPTER V

Summary, Conclusion and recommendation

1.1 Summary

Dividend refers to the portion of net earning which is paid out to shareholders. Hence, dividend is the earning or profit distributed to the shareholders by a company. It may be in cash, shares and securities or a combination of these. Dividend decision is the major financial decision of management because firm has to choose one alternative between distributing earnings to its shareholders or retained the earning for reinvesting in the firm.

Dividend is normally paid in cash to the shareholders. When the company is incapable to pay dividend in cash, different forms of dividend payment models are used to satisfy its shareholders. The different types of dividend such as cash dividend, stock dividend, bond dividend, property dividend, stock split, reverse stock split and stock repurchase are discussed in this study. In same way, different types of dividend policies like stable dividend policy, regular plus extra dividend policy, irregular dividend policy, fixed dividend per share policy, mixed policy etc. are briefly discussed in this study.

Dividend policy of firm may be affected by different factors such as earning, liquidity position, net worth, investing opportunities, expectation of shareholders and policies followed by other companies, legal provision of nation etc. Considering all these factors, management has to take the appropriate dividend policy to satisfy existing shareholders with maintaining financial soundness of company.

The main objectives of the study is to study the major dividend policies and practices followed by Nepalese joint venture banks and examine the relationship between earnings, dividends, retained earnings and market price of stocks, dividend payout ratio and dividend yield. Because of various limitations only three joint venture banks are selected as sample for this study.

This study is mainly based on secondary data of selected three joint venture commercial banks. However, some data are collected from primary source. The source of data is the annual reports published by related banks in different fiscal year and data available at site of Nepal Stock Exchange.

Many financial and statistical tools are used to find out appropriate relationship between dividend and other financial variables of banks which helps to make the study reliable and realistic. The relationship between variables is statistically tested at 5% level of significance. This study has been organized into five major parts. The brief introduction, objectives,

limitations of study has been mentioned in first chapter. The available related literatures have been reviewed in second chapter. In same way, research methodology is described in third chapter. All available data are presented and analysis with using different financial and statistical tools and summarize the findings of analysis in chapter four. In this final chapter, an attempt has been made to present summary, conclusions and recommendations.

5.2 Conclusion

This dividend payout decision is probably base on the financial performance of the company in the previous year. Because of lack of dividend policies in any of the companies, the result of the analysis show some very strange behaviors in the financial performance indicate of the companies' studies. The analysis performed on the financial data of the three commercial banks chosen has failed to establish a concrete relation between dividends policies and practices in Nepal. There appear to be slight general trends but no set of rules apply to all the companies. Moreover, there was a few surprising result that seemed to defy economic logic. By analyzing the financial and statistical indicators of all the two banks, the following conclusions have been drawn regarding the prevalent dividend payout practices of the public listed companies of Nepal.

Dividend practices of the sample banks are neither stable, nor constantly growing; Haphazard way of distribution in growing trend is observed. These banks follow no specific dividend payment strategy .payment of cash and stock dividend is made without wise managerial decision. There are no legal rules those binding companies to pay dividend when they are running at profit. Not only the companies do not have any clear policy towards dividend decision but also there is no provision in company act.

The study based on secondary data. According to the analysis of the data presented above it can be conclude that banks are performing well among them HBL is showing better performance. Both banks also have good MPS and doing well as they are successful in increasing the share value and also better reputation in the market due to it. EPS of both banks are high and increasing which encourage the new investors to invest in it and also the existing investors are motivated. Both banks are consistently earning good return .HBL has good EPS every than that of NIBL .But the distribution of dividend by these commercial banks is not regular and also not consistent. In this study NIBL bank is lower financial performance in EPS and then HBL.

Finally on the basis of the secondary data .it can be conclude that HBL is more successful in gaining good position in the market then NIBL. But NIBL is seen more consistent than NIBL banks. Banks have also shown satisfactory performance. Although, MPS of both banks are growing, none of them have consistency in DPS and DPR. So shareholders may not be satisfied with them.

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 finding and conclusion. 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 inter related variables with dividend policy of different commercial banks. Based on the above summary and conclusions following recommendation have been provided hoping that thest 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 .Legal rules should be made in order to protect he right of the shareholders.
- 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 the 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.
- This study has fixed limitations and covered certain sector only above financial and statistical tools so future it is supportive material for researcher.

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ANNEX: I

Calculation of correlation coefficient and Regression Analysis between DPS and MPS

A) HBL

Calculated table of Correlation Coefficient between DPS & MPS

Year	DPS (X)	MPS(Y)	XY	x^2	Y^2
2007/08	25	1980	49500	625	3920400
2008/09	12	1760	21120	144	3097600
2009/010	11.84	816	9661.44	140.1856	665856
2010/011	16.84	575	9683	283.5856	330625
2011/012	13.42	653	8763.26	180.0964	426409
	79.1	5784	98727.7	1372.968	8440890

Here, N = 5

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

$$r = \frac{5*98727.7 - 79.1*5784}{\sqrt{5*1372.968 - 79.1^2}\sqrt{5*8440890 - 5784^2}}$$

r = 0.495467

And, Probably Error

$$P.E. = \pm 0.6745\left(\frac{1 - r^2}{\sqrt{n}}\right)$$

P.E= 0.227595

Regression equation of X on Y

Y=a+bX

Where a= Regression constant, b= Regression coefficient (slope of the Regression line)

According to the principal of least square, two normal equations for estimating two numerical equations constant a & b are given by

$$\sum Y = na + b\sum X \text{ , } \sum Y = a\sum Y + b\sum X^2$$

Solving two normal equations we get ,

$$b = \frac{n\sum XY - \sum X\sum Y}{n\sum X^2 - (\sum X)^2}$$

$$= \frac{5 * 98727.7 - 79.1 * 5784}{5 * 1372.968 - 79.1 * 79.1}$$

= 59.4608

Similarly,

$$a = \frac{\sum Y}{\text{n}} + b * \frac{\sum X}{\text{n}}$$

$$= \frac{5784}{5} + 59.4608 * \frac{79.1}{5}$$

= 2097.47

Similarly,

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

t = 0.987967

ANNEX: II

B) NIBL

Calculated table of Correlation Coefficient between DPS & MPS

Year	DPS(X)	MPS(Y)	XY	x^2	Y^2
2007/08	7.5	2450	18375	56.25	6002500
2008/09	20	1388	27760	400	1926544
2009/010	25	705	17625	625	497025
2010/011	25	515	12875	625	265225
2011/012	5	511	2555	25	261121
	82.5	5569	79190	1731.25	8952415

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

$$r = \frac{5 * 79190 - 82.5 * 5569}{\sqrt{5 * 1731.25 - 82.5^2}\sqrt{5 * 8952415 - 5569^2}}$$

r = -0.39812

And, Probably Error

$$P.E. = \pm 0.6745\left(\frac{1-r^2}{\sqrt{n}}\right)$$

P.E. = 0.253835

Regression equation of X on Y

Y=a+bX

Where a= Regression constant, b= Regression coefficient (slope of the Regression line)

According to the principal of least square, two normal equations for estimating two numerical equations constant a & b are given by

$$\sum Y = na + b\sum X \text{ , } \sum Y = a\sum Y + b\sum X^2$$

Solving two normal equations we get ,

$$b = \frac{n\sum XY - \sum X\sum Y}{n\sum X^2 - (\sum X)^2}$$

$$= \frac{5 * 79190 - 82.5 * 5569}{5 * 1731.25 - 82.5 * 82.5}$$

= -34.32

Similarly,

$$a = \frac{\sum Y}{\text{n}} + b * \frac{\sum X}{\text{n}}$$

$$= \frac{5569}{5} + -34.32 * \frac{82.5}{5}$$

a = 547.5155

Similarly,

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

t = - 0.7517

Calculation of Correlation Coefficient and Regression Analysis between EPS and MPS

ANNEX: III

A) HBL

Calculated table of Correlation Coefficient between EPS & MPS

Year	EPS(X)	MPS(Y)	XY	x^2	Y^2
2007/08	62.74	1980	124225.2	3936.308	3920400
2008/09	61.90	1760	108944	3831.61	3097600
2009/010	31.80	816	25948.8	1011.24	665856
2010/011	44.66	575	25679.5	1994.516	330625
2011/012	47.61	653	31089.33	2266.712	426409
	248.71	5784	315886.8	13040.39	8440890

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

$$r = \frac{5 * 315886.8 - 248.71 * 5784}{\sqrt{5 * 13040.39 - 248.71^2}\sqrt{5 * 8440890 - 5784^2}}$$

r = 0.823537

And, Probably Error

$$P.E. = \pm 0.6745\left(\frac{1 - r^2}{\sqrt{n}}\right)$$

P.E. = 0.097066

Regression equation of X on Y

Y=a+bX

Where a= Regression constant, b= Regression coefficient (slope of the Regression line)

According to the principal of least square, two normal equations for estimating two numerical equations constant a & b are given by

$$\sum Y = na + b\sum X \text{ , } \sum Y = a\sum Y + b\sum X^2$$

Solving two normal equations we get ,

$$b = \frac{n\sum XY - \sum X\sum Y}{n\sum X^2 - (\sum X)^2}$$

$$= \frac{5 * 315886.8 - 248.71 * 5784}{5 * 13040.39 - 248.71 * 248.71}$$

= 42.1179

Similarly,

$$a = \frac{\sum Y}{\mathrm{n}} + b * \frac{\sum X}{\mathrm{n}}$$

$$= \frac{5784}{5} + 42.1179 * \frac{248.71}{5}$$

a = 3251.83

Similarly,

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

t = 2.514547

ANNEX: IV

B) NIBL

Calculated table of Correlation Coefficient Between EPS & MPS

Year	EPS(X)	MPS(Y)	XY	x^2	Y^2
2007/08	57.87	2450	141781.5	3348.937	6002500
2008/09	37.42	1388	51938.96	1400.256	1926544
2009/010	52.55	705	37047.75	2761.503	497025
2010/011	39.10	515	20136.5	1528.81	265225
2011/012	27.60	511	14103.6	761.76	261121
	214.54	5569	265008.3	9801.266	8952415

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

$$r = \frac{5 * 265008.3 - 214.54 * 5569}{\sqrt{5 * 9801.266 - 214.54^2}\sqrt{5 * 8952415 - 5569^2}}$$

r = 0.643702

And, Probably Error

$$P.E. = \pm 0.6745\left(\frac{1 - r^2}{\sqrt{n}}\right)$$

P.E. = 0.176658

Regression equation of X on Y

Y=a+bX

Where a= Regression constant,b= Regression coefficient (slope of the Regression line)

According to the principal of least square,two normal equations for estimating two numerical equations constant a & b are given by

$$\sum Y = na + b\sum X \text{ , } \sum Y = a\sum Y + b\sum X^2$$

Solving two normal equations we get ,

$$b = \frac{n\sum XY - \sum X\sum Y}{n\sum X^2 - (\sum X)^2}$$

$$= \frac{5 * 265008.3 - 214.54 * 5569}{5 * 9801.266 - 214.54 * 214.54}$$

=43.7301

Similarly,

$$a = \frac{\sum Y}{\text{n}} + b * \frac{\sum X}{\text{n}}$$

$$= \frac{5569}{5} + 43.7301 * \frac{214.54}{5}$$

a = 2990.17

Similarly,

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

t = 1.456891

Calculation of Correlation Coefficient and Regression Analysis between EPS and DPS

ANNEX: V

A) HBL

Calculated table of Correlation Coefficient between EPS & DPS

Year	EPS(X)	DPS (Y)	XY	x^2	Y^2
2007/08	62.74	25	1568.5	3936.308	625
2008/09	61.90	12	742.8	3831.61	144
2009/010	31.80	11.84	376.512	1011.24	140.1856
2010/011	44.66	16.84	752.0744	1994.516	283.5856
2011/012	47.61	13.42	638.9262	2266.712	180.0964
	248.71	79.1	4078.813	13040.39	1372.868

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

$$r = \frac{5 * 4078.813 - 248.71 * 79.1}{\sqrt{5 * 13040.39 - 248.71^2}\sqrt{5 * 1372.868 - 79.1^2}}$$

r = 0.505823

And, Probably Error

$$P.E. = \pm 0.6745\left(\frac{1-r^2}{\sqrt{n}}\right)$$

P.E. =0.224468

Regression equation of X on Y

Y=a+bX

Where a= Regression constant, b= Regression coefficient (slope of the Regression line)

According to the principal of least square, two normal equations for estimating two numerical equations constant a & b are given by

$$\sum Y = na + b\sum X \text{ , } \sum Y = a\sum Y + b\sum X^2$$

Solving two normal equations we get ,

$$b = \frac{n\sum XY - \sum X\sum Y}{n\sum X^2 - (\sum X)^2}$$

$$= \frac{5 * 4078.813 - 248.71 * 79.1}{5 * 13040.39 - 248.71 * 248.71}$$

b = 0.21556

Similarly,

$$a = \frac{\sum Y}{\text{n}} + b * \frac{\sum X}{\text{n}}$$

$$= \frac{5569}{5} + 43.7301 * \frac{214.54}{5}$$

a = 26.54234

Similarly,

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

t = 1.015619

ANNEX: VI

(B NIBL

Calculated table of Correlation Coefficient between EPS & DPS

Year	EPS(X)	DPS(Y)	XY	x^2	Y^2
2007/08	57.87	7.5	434.025	3348.937	56.25
2008/09	37.42	20	748.4	1400.256	400
2009/010	52.55	25	1313.75	2761.503	625
2010/011	39.10	25	977.5	1528.81	625
2011/012	27.60	5	138	761.76	25
	214.54	82.5	3611.675	9801.266	1731.25

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

$$r = \frac{5 * 3611.675 - 214.54 * 82.5}{\sqrt{5 * 9801.266 - 214.54^2}\sqrt{5 * 1713.25 - 82.5^2}}$$

R=0.152851

And ,Probably Error

$$P.E. = \pm 0.6745\left(\frac{1-r^2}{\sqrt{n}}\right)$$

P.E. =0.294598

Regression equation of X on Y

Y=a+bX

Where a= Regression constant,b= Regression coefficient (slope of the Regression line)

According to the principal of least square,two normal equations for estimating two numerical equations constant a & b are given by

$\sum Y = na + b\sum X$, $\sum Y = a\sum Y + b\sum X^2$

Solving two normal equations we get ,

$$b = \frac{n\sum XY - \sum X\sum Y}{n\sum X^2 - (\sum X)^2}$$

$$= \frac{5 * 3611.675 - 214.54 * 82.5}{5 * 9801.266 - 214.54 * 214.54}$$

b=0.12045

Similarly,

$$a = \frac{\sum Y}{\text{n}} + b * \frac{\sum X}{\text{n}}$$

$$= \frac{82.5}{5} + 43.7301 * \frac{214.54}{5}$$

a = 21.66848

Similarly,

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

t = 0.267893

ANNEX: VII

Trend Analysis of Earning per share for HBL

Year	EPS(Y)	X= t- 2009	x^2	XY	YC =a + bx
2007/08	62.74	-2	4	-125	68.742
2008/09	61.90	-1	1	-61.9	59.242
2009/010	31.80	0	0	0	49.742
2010/011	44.66	1	1	44.66	40.242
2011/012	47.61	2	4	95.22	30.742
	$\sum Y$ =49.742	$\sum X = 0$	$\sum x^2$ =10	$\sum XY$ =-47.5	$\sum$YC=248.71

$$a = \frac{\sum Y}{N} = \frac{248.71}{5} = 49.742$$

$$b = \frac{\sum XY}{\sum x^2} = \frac{-47.5}{10} = -4.75$$

And Yc =a + bx

Projected Trend of EPS

Year	X=t-2009	x^2	EPS Yc=a+bx
2012/013	3	9	35.492
2013/014	4	16	30.742
2014/015	5	25	25.992
2015/016	6	36	21.242
2016/017	7	49	16.502

Trend Analysis of Earning per share for NIBL

Year	EPS(Y)	X= t- 2009	x^2	XY	YC =a + bx
2007/08	57.87	-2	4	-115.74	54.68
2008/09	37.42	-1	1	-37.42	48.794
2009/010	52.55	0	0	0	42.908
2010/011	39.10	1	1	39.1	37.022
2011/012	27.60	2	4	55.2	31.136
	$\sum Y$ =214.54	$\sum X = 0$	$\sum x^2 = 10$	$\sum XY = -58.86$	$\sum$YC=214.54

$$a = \frac{\sum Y}{N} = \frac{214.54}{5} = 42.54$$

$b = \frac{\sum XY}{\sum x^2} = \frac{-58.86}{10} = -5.886$

And Yc =a + bx

Projected trend of EPS

Year	X=t-2009	x^2	EPS Yc=a+bx
2012/013	3	9	24.882
2013/014	4	16	18.996
2014/015	5	25	13.11
2015/016	6	36	7.224
2016/017	7	49	1.338

ANNEX: VIII

Trend Analysis of Dividend per share for HBL

Year	DPS(Y)	X= t- 2009	x^2	XY	YC =a + bx
2007/08	25	-2	4	-50	19.484
2008/09	12	-1	1	-12	17.652
2009/010	11.84	0	0	0	15.82
2010/011	16.84	1	1	16.84	13.988
2011/012	13.42	2	4	26.84	12.156
	$\sum Y$ =79.1	$\sum X$ =0	$\sum x^2 = 10$	$\sum XY$ =-18.32	$\sum$YC =79.1

$a = \frac{\sum Y}{N} = \frac{79.1}{5} = 15.82$

$b = \frac{\sum XY}{\sum x^2} = \frac{-18.32}{10} = -1.832$

And Yc =a + bx

Projected trend Of DPS

Year	X=t-2009	x^2	DPS Y c=a+bx
2012/013	3	9	10.324
2013/014	4	16	8.492
2014/015	5	25	6.26
2015/016	6	36	4.28
2016/017	7	49	2.996

Trend Analysis of Dividend per share for NIBL

Year	DPS(Y)	X= t- 2009	x^2	XY	YC =a + bx
2007/08	7.5	-2	4	-15	16.5
2008/09	20	-1	1	-20	16.5
2009/010	25	0	0	0	16.5
2010/011	25	1	1	25	16.5
2011/012	5	2	4	10	16.5
	$\sum Y$ =82.5	$\sum X$ =0	$\sum x^2$ =10	$\sum XY$ =0	$\sum$YC =82.5

$$a = \frac{\sum Y}{N} = \frac{82.5}{5} = 16.5$$

$b = \frac{\sum XY}{\sum x^2} = \frac{0}{10} = 0$

And Yc =a + bx

Projected trend Of DPS

Year	X=t-2009	x^2	DPS Y c=a+bx
2012/013	3	9	16.5
2013/014	4	16	16.5
2014/015	5	25	16.5
2015/016	6	36	16.5
2016/017	7	49	16.5

ANNEX: IX

Trend analysis of market per share for HBL

Year	MPS(Y)	X= t- 2009	x^2	XY	YC =a + bx
2007/08	1980	-2	4	-3960	1924.6
2008/09	1760	-1	1	-1760	1540.7
2009/010	816	0	0	0	1156.8
2010/011	575	1	1	575	772.9
2011/012	653	2	4	1306	389
	$\sum Y = 5784$	$\sum X = 0$	$\sum x^2 = 10$	$\sum XY$ =-3839	$\sum$YC = 5784

$a = \frac{\sum Y}{N} = \frac{5784}{5} = 1156.8$

$b = \frac{\sum XY}{\sum x^2} = \frac{-3839}{10} = -383.9$

And Yc =a + bx

Projected trend Of MPS

Year	X=t-2009	x^2	DPS Y c=a+bx
2012/013	3	9	5.1
2013/014	4	16	-379.6
2014/015	5	25	-762.7
2015/016	6	36	-1146.6
2016/017	7	49	-1530.5

Trend Analysis of Market Per share for NIBL

Year	MPS(Y)	X= t- 2009	x^2	XY	YC =a + bx
2007/08	2450	-2	4	-4900	2064
2008/09	1388	-1	1	-1388	1588.9
2009/010	705	0	0	0	1113.8
2010/011	515	1	1	515	638.7
2011/012	511	2	4	1022	163.6
	$\sum Y$ =5569	$\sum X$ =0	$\sum x^2$ =10	$\sum XY$ =--4751	$\sum$YC = 5569

$a = \frac{\sum Y}{N} = \frac{5569}{5}$ =1113.8

$b = \frac{\sum XY}{\sum x^2} = \frac{-4751}{10}$ = - 475.1

And Yc =a + bx

Projected trend Of MPS

Year	X=t-2009	x^2	DPS Y c=a+bx
2012/013	3	9	-311.5
2013/014	4	16	-786.6
2014/015	5	25	-1261.7
2015/016	6	36	-1736.8
2016/017	7	49	-2211.9