

DIVIDEND POLICY AND ITS' IMPACT ON MARKET PRICE OF SHARE

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RECOMMENDATION

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

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List of Abbreviation

B.S.: Bikram Sambat

C.V.: Coefficient of Variation

EPS: Earning Per Share

DPS: Dividend Per Share

D/P ratio: Dividend Payout Ratio

D/Y ratio: Dividend Yield Ratio

PE Ratio: Price Earning Ratio

PR Ratio: Profitability Ratio

MVPS: Market Value Per Share

NWPS: Net Worth Per Share

JVB: Joint Venture Bank

i.e.: That is

NEPSE: Nepal Stock Exchange

SEBON: Security Board Nepal

et. : And Others (et. Alii)

NRB: Nepal Rastra Bank

Chapter I

INTRODUCTION

1.1 Background of the Study

Dividend is the part of profit or earnings which is distributed to the shareholders by a company. It may be in cash, shares and securities or a combination of these. Dividend implies the portion of retained earnings, which is paid to the stockholders. While dividend policy refers to the guidelines that corporate management uses in establishing portion of retained earnings that are paid to the stockholders as dividends (Mathur, 1979). It is paid in cash or stock for making investment over a period and for bearing risk of investment. Dividend is a direct return to shareholders and generally paid in cash. Dividend is also interpreted as left over earnings paid to the stockholders after all acceptable investment opportunities (Van Horne, 2000).

Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Retained earnings are one of the most significant sources of funds to finance corporate growth, but dividend constitutes the cash flow that accrues to stockholders. Generally, management of the corporate firm announces dividend only if profits are made after successful business operation and it is widely accepted that distributed amount of dividend should be adequate to meet the normal expectation of average shareholders. In this sense dividend policy is concerned with balancing the income distribution to the shareholders and future growth of the firm through the reinvestment of current earnings. The decision relating to dividend policy is mixed up with financing and investment decisions because it involves trade

off between retained earnings needed for reinvestment on one side and paying out cash as dividend to the shareholders on the other (Brealey and Myers, 1981).

Management may decide retained earnings as opposed to paid out as dividends. The process of paying at “what’s left” to shareholders is called dividend policy. Dividend policy involves the decision to pay out earning versus retaining them for reinvestment in the firm. The policy of a company on the division of its profits between distributions to shareholders as dividend the retention for its investment is known as dividend policy. Therefore the decision regarding how much profit to distribute to the shareholder and how much to keep in the organization is the dividend policy. All aspects and questions related to payment of dividend are restricted in a dividend policy.

The study of corporate dividend Policy has been a key research area in finance. Yet, we still do not have an acceptable explanation for the observed dividend behaviour of companies and the “dividend puzzle” still remains unsolved (Black: 1976). Miller and Modigliani (1961) suggested that dividend policy have no effect on value of corporation in a world without taxes, transaction cost or any other market imperfections. But corporate houses have been paying dividend continuously. Feldstein and Green (1983) take it as a primary puzzle of corporate economics. Other researchers have argued that when capital markets are imperfect dividends do matter and firms should follow an appropriate dividend policy. Several experiential surveys indicate that both managers and investors favor payment of dividend.

There is a mutual relationship between retained earnings and cash dividends. It retained earnings

is kept more by the company less will be dividend and vice versa. Dividend decision is the major decision of financial management. It is in the sense that the firm has to choose between distributing profits to shareholders and plugging them back into the business. The firm will use the net profit for paying dividend to the shareholders if the payment will lead to maximization of the wealth of the owners. If not it is better to retain them to finance investment programmes. The relationship between dividend and value of the firm should therefore be the criteria for decision-making.

Because of the liberalization policy of Nepal, foreign investors and internal investors were attracted to invest in Nepal in joint venture especially in banking business. Establishment of commercial banks contributes significantly in the formation and mobilization of internal capital and development efforts. They provide necessary capital needed for trade and commerce of mobilization of the isolated savings of the individuals and institutions. The increase in the opening of the joint venture bank (JVB) caught a dramatic way after the liberalization and market oriented economic policy. Though, (JVB) are enjoying liberalization, Nepal Rastra Bank (NRB) has been managing them through its directives and guidelines.

One of the major reasons for which public are interested to invest money or the shares of banks or other institutions is for dividend. Normally, business running at profit is capable to pay it. The amount that is distributed as dividend should be adequate to meet the normal expectation of shareholders.

There is no any uniformity in the dividend distribution practices in Nepal among the different

corporations. The government is unable to receive dividends from the public enterprises as documented in past several years budget speeches and economic surveys published by Government of Nepal, Ministry of finance. Recently joint venture banks and some other public limited companies have shown new trend of paying dividend to shareholders. There is also growing practice of paying bonus shares among some corporation of Nepal. Stock split is another aspect of dividend policy, which is popular in the developed capital market, but this aspect is almost neglected in the capital market of Nepal.

An alternative form of dividend is share repurchase. If a firm has excess cash and insufficient profitable investment opportunities to justify the use of these funds, it is in the shareholders interests to distributions can be accomplished either by the repurchase is often viewed as an alternative to paying dividends. However, Nepal Company Act, 2053(1996), Section 47 has prohibited company from purchasing its own shares (Nepal Company Act 2053). This provision of Nepal is against the theory of finance. Some companies may pay whole earnings as dividend at the beginning to create good image in financial sector but later they may change their policy and announce a certain percentage of dividend payout term. The dividend to keep some portion of earnings and to pay some portion of earnings as dividend is known as dividend policy.

"Although the actual owners of the company are shareholders, they are paid low dividends in some companies whereas in some companies the dividend is not announced. But recently the trend of payment of dividend is increasing" (Adhikari, 1999).

Dividend policy is one of the major decisions of financial management because it affects the

financial structure, the flow of funds, corporate liquidity and investor's attitudes. After the successful completion of fiscal year having sufficient profit management decide to declare dividend to shareholders. The important aspect of dividend policy is to determine the amount of earning to be distributed to shareholders and the amount to be retained in the firm. It also determines the forms of dividend.

This research work will look into some related factors of dividend and dividend policy of Commercial Banks of Nepal, as well as effect of dividends on market price of stock.

1.2. Statement of the Problems

During the last few years a series of studies concerning the dividend policy have been conducted [Gordon (1963), Lintner (1956); Lintzenberger and Ramaswamy (1979); Miller and Modigliani (1961); Frankfurter and Wood, Jr. (2002); Allen and Michaely (1995); Barclay, Smith and Watts (1995); and Short, Zhang, and Keasey (2002)]. The motivation for these international extensive researches was to untangle the factors that might be important in determining firm's dividend policy and evaluate the effect of dividend policy on market price of shares. There are many reasons explaining why dividend policy is so interesting. One reason may be that the dividend policy of the firm not only affects its capital structure of the firm but also determines the value of the firm. Since the retained earnings are the important sources of fund for expansion plans, it determines the capital structure of the firms. Firms use internal sources of fund to invest into their expansion plans; otherwise, if they pay dividend, they have to raise funds by issuing new debt or equity. Consider the case where the dividend payment is increased, then fewer funds is available internally for financing investments and consequently additional equity capital is

needed, thus the company has to issue new common stock. In the real world, firms choose to raise funds instead of retain larger portion of their earnings. Another reason is that a company's dividend decision may change the value of its stock. However there are two schools of thought one is dividend are matters in determining stock price and the other is they are irrelevant. Whatever the thought is in the real world, some of the firms are paying dividends and the others are reluctant to follow the principle of paying dividends.

During the last fifty years, a series of empirical and theoretical works have been conducted to solve the dividend puzzle. Summarizing all these works, there are three dominating views. The first one suggests that an increase in dividend payout affects the market value of the firms positively [Gordon (1963); Lintner (1962)]. The second argues that a positive change in the dividend decreases the firm's value (Lintzenberger and Ramaswamy, 1979). Finally, the third one claims that dividend policy does not affect the market value of the firm (Miller and Modigliani, 1961). The empirical evidences on determinants of corporate dividend policy are, unfortunately, very mixed [Frankfurter and Wood, Jr. (2002); Allen and Michaely (1995); Barclay, Smith and Watts (1995); and Short, Zhang, and Keasey (2002)].

Researchers have proposed many different theories about the factors that influence firms' dividend policy. A number of factors have been identified by previous studies to influence the dividend policy decisions of the firm. To, enumerate few of them are profitability, cash flows, liquidity, sustainability etc. Highlighting this fact Brook et al. (1998) suggested that there is no reason to believe that corporate dividend policy is driven by a single goal and determined by a single factor. The factors affecting dividend policy of firms can simply be classified in to three

categories. The first category of variables is company specific variables such as earnings of the company, its last year's dividend, liquidity, income sustainability etc. The second category of variables is investors specific; they are tax rate of investors, their age, their current income etc. Final category of variable can be macro economic variables. Such as overall interest rate, gross domestic product of the nation, inflation of the economy etc.

Profits have long been regarded as the primary indicator of the firm's capacity to pay dividends. Linter (1956) conducted a classic study on how U.S. managers make dividend decisions. He developed a compact mathematical model based on survey of 28 well established U.S corporate houses which is considered to be a finance classic. According to him the dividend payment pattern of a firm is influenced by the current earnings and previous year dividends. Using partial adjustment model he found that there must have optimum dividend payout of the firms and they adjust as far as possible to achieve it.

Baker, Farrelly and Richard (1986) surveyed 318 New York stock exchange firms and concluded that the major determinants of dividend payments are anticipated level of future earnings and pattern of past dividends rather than current level of earnings. Pruitt and Gitman (1991) asked financial managers of the 1000 largest U.S. firms and reported that, current and past year's profits are important factors influencing dividend policy. Baker and Powell (2000) concluded from their survey of NYSE-listed firms that dividend determinants are industry specific and anticipated level of future earnings are the major determinants.

Criticizing earning theory of dividend policy, some other researchers found that earnings can be well managed so the liquidity or cash flows position is an important determinant of dividend payouts. A poor liquidity position means less generous dividends due to shortage of cash. Ali et. al. (1993) revealed that dividend payments depend more on cash flows, which reflect the company's ability to pay dividends, than on current earnings, which are less heavily influenced by accounting practices. They claim current earnings do not really reflect the firm's ability to pay dividends.

Partington (1983) revealed that firm's target payout ratios, firms' motives for paying dividends and extent to which dividends are determined are independent of investment policy. Higgins (1993) indicated a direct link between growth and financing needs: rapidly growing firms have external financing needs because working capital needs normally exceed the incremental cash flows from new sales. And well matured firms are likely to pay more dividends because they generate surplus funds through sales. Higgins (1972) shows that payout ratios are negatively related to firms' funding needs for growth opportunities. Rozeff (1982), Lloyd et. al. (1985) and Collins et. al. (1984) all show statistically negative relationships between historical sales growth and dividend payout. D, Souza (1999) however shows a positive but insignificant relationship with growth; negative but insignificant relationship of dividend with market to book value.

A dividend policies study in Nepalese Banks is relatively a recent phenomenon. There are various empirical studies on the dividend policy in the commercial banks of Nepal. A study made by H.K. Baker, G.E. Farrelly, and Richard B. Edema (1985) in America by surveying the opinions of financial official officers of 562 New York Exchange firms. This study revealed that

the major determinates of dividend policy in order of their importance are anticipated level of a firms future earnings, pattern of past dividend, availability of cash and concern about maintaining or decreasing stock price (Baker, et.al.1985).

A study on stock market behaviour in a small capital market in Nepal (Radhe S. Pradhan, 1993) attempted to verify the above-mentioned results. It mainly indicated that stock paying higher dividend have higher liquidity, lower leverage, higher earnings, higher turnover and higher coverage. Another such attempt was made by the study on 'Dividend and Stock Price' (Timilsina, 1997). This revealed that the relationship between dividend per share and stock price is positive and dividend per share affects the share price variedly in different sector.

In Nepal, only a small number of Banks are paying regular dividend and other Banks are not stable in the payment of dividends. There are still some companies not having the practice of paying dividend payments in Nepal. The expectation of shareholders has yet to be met by paying regular dividends. It is in the sense that the study devoted to dividend policy in Nepal may help to develop capital market in one way or another.

1.3. Research Questions

The research questions, thus, indicate the purpose and motive of the researcher. These question directly link to the entire vital component of research study and link to the research investigation. It is thus wisely said "a question well- stated is a question half answered". Research question, in conducting the study, is to know what site or informants to choose, what data to collect, and how to analyze these data and in clearly connecting what the researcher does to his or her purposes

and existing knowledge.

This study will deal with the following research issues. Precisely framed research questions, on the other hand, can point the research to specific areas of theory that he or she can use as modules in developing an understanding of the reality. They allow the researcher to inductively develop and test grounded theory, as well as helping the researcher to make decisions about how to do the study (Maxwell, 1996).

1. What is the trend of dividend payment behaviour in Nepalese commercial banks?
2. Does dividend payout affect the market price of share?
3. What relationship does there exist between dividend per share and other financial indicators such as earnings per share, market price per share, dividend payout ratio, price earning ratio, dividend yield and Profitability ratio.

1.4. Objectives of the Study

The major objective of this study is to analyze observable accounting factors that affect the dividend payment policy of Nepalese commercial banks. The other specific objectives of this study are:

1. To study the prevailing practices and effect made by dividend policy among Nepalese commercial banks.
2. To analyze the EPS, DPS, MPS, Dividend payout ratio, Dividend yield ratio, Price earning ratio and profitability ratio of commercial banks in Nepal.
3. To examine the relationship between earnings, dividend, and market price of stocks, dividend payout ratio, dividend yield and profitability ratio.

4. To analyze the effect of Earning per Share, retaining earning per share and dividend per share on Market per Share.

1.5. Significance of the Study

The finding of this research will be of worth to the shareholders to see the dividend policy of the five commercial banks in comparison. So, this may be helpful for them in identifying the productivity of their investment and justify the rational of their investment decision. Then it will also benefited by the management to point out the loopholes and suggest the remedies about the appropriate dividend policy. Similarly, this research will also be beneficial to the policy makers from the comparative study of dividend policy. They can get important findings which are useful in policy making about dividend policy formulation. Finally, the dividend policies of the joint venture banks are of great interest to the several outsiders. They are customers, financial agencies, stock brokers, interested person and scholars.

Especially the significance of this study can be summarized in the following points.

1. The study helps to the management and policy maker in setting and making a suitable dividend policy.
2. The dividend policy of the banking sector plays vital role for socio- economic development in the nation, that is way the study of dividend policy of these sectors is needed so for as possible.
3. To raise public awareness about dividend policy and market price of share relation in order to help them for rational decision of their investment.

1.6. Limitations of the Study

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

1. This study analyzed and interpreted data related to dividend of listed commercial Banks only. It ignores all other categories of banks and listed companies.
2. This study analyses only a small sample of data. The number of listed Commercial Banks in the Nepalese stock market is small and the number of the banking companies whose securities are traded regularly in the market is even smaller. The sample for the study has been selected from such companies is, therefore, very small.
3. The study covers only five – years period i.e.2004/05 to 2008/09 because data for recent years were unavailable.
5. Data related to cash dividend are analyzed and interpreted but other forms of dividend are totally ignored in this study.
7. Due to time and resources constraint, not all the related areas and variables are covered in depth in this study. All other factors related to this study are ignored in this study. This would be the major limitation of this study.

1.7. Organization of the Study

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

Chapter 1 Introduction

- Chapter 2 Review of literature
- Chapter 3 Research Methodology
- Chapter 4 Presentation and Analysis of Data
- Chapter 5 Summary, conclusion and recommendation

Chapter 1: This is the introduction chapter of the study. This chapter includes General background, statement of problems, objective of the study, significance of the study, limitation of the study and organization of the study.

Chapter 2: 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 3: 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 4: This chapter deals with the presentation and analysis and major findings of the study on dividend.

Chapter 5: This chapter deals with summary of the study held, the conclusion and recommendations.

Chapter II

REVIEW OF LITERATURE

2.1. Conceptual Framework

A dividend payment is distribution to the shareholders something belonging to the corporation and that specify the stockholders themselves as the owner of the corporation (Hunt, Charles and Gordon, 1996). This implies that dividends are the flow of fund from organization to its owners. In general, dividends are paid out from the earnings of the corporation. Dividends are that portion of earnings which are paid to the owners of the organization (Weston and Copeland, 1992).

Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the firm (Van Horne, 1993). Earnings are the important source of funds that needs organization for growth purpose. Dividend policy decision determines that portion of earning that is distributed among owners of the organization and that is used for reinvestment on future profitable investment opportunity.

Companies used to distribute their earning to their owners in different forms. Generally, they distribute earning in cash which is called cash dividend but sometimes they provide free stock that is called stock dividend. In some special cases, companies may provide goods or properties instead of cash as dividend that is called property dividend. Scrip dividend, return on capital dividend and bond dividend are other important types of dividend. Scrip dividend refers to the payment of dividend in the form of promissory note where as bond dividend refers to payment of

bond to the shareholders as dividend. Similarly, return on capital dividend is special type of cash used chiefly by public utilities that is charged to the capital stock position on the balance sheet and represents a return to stockholders of their original paid in capital (Gitman et.al., 1985). Finally, firms sometimes pay dividends that are in excess of the retained earnings they show on their books, these are called liquidating dividends and are viewed by the internal revenue service as return on capital rather than ordinary income. Share buy back is another important way of distributing income between the shareholders. Share split and reverse split also hold important place when discussing dividend policies and practices (Marsh, P., 1982).

“Finance is basically concerned with the management of investing funds in assets and determining the optimum mix of financing and dividends in relation to company’s overall valuation” (James C. Van Horne, 1994).

Hence the dividend policy decision is one of the three major decisions of financial management. “Throughout the study of finance, the study has emphasized the goal of the maximization of wealth. The maximization of the present value of the firm’s common stock, the firm’s earnings, dividends, growth rate, and psychological factors contribute to the value of its stock in the market price” (John J. Hampton, 1998).

The firm is valued mainly by the investors and creditors; the major influencing group in the business in the capital structure decision, a firm can obtain additional funds either by issuing new equity or by retention of earnings. There is further a question of how much of this profit should be distributed as dividend. It is a major financial management decision because the firm has to

choose between distribution of profit to the shareholder's or reinvesting it into the business. Different firms adopt different approaches in this regard. If the firm's objective is to maximize shareholders' wealth, the firm should use huge portion of profit for the payment of dividend. But, if the firm's objective is to expand its business, the firm should retain significant portion of profit as ploughed back capital. "It is true, that the objective of every corporation is to maximize the value of its shareholders value as we know, is represented by the market price of the stock" (Manohar Krishna Shrestha, 2037).

"Ideally, the objective of a dividend policy should be to maximize the shareholder's return so that the value of investment can be maximized". (I. M. Panday, 1999), 16 Returns consists of two components dividend and capital gain. Dividend policy has a direct influence on these two components of return. Capital gains, however, are more uncertain than current dividends but current dividends are taxed more than capital gains. Therefore, it is quite plausible that some investors would prefer high payout companies while others may prefer low payout companies. So, the financial manager must take into consideration various conflicting factors, which influence dividend policy before deciding the allocation of the company's earning into dividends and retained earnings. "Dividend policy involves the decision to pay out earnings versus retaining them for reinvestment in the firm. The basic constant growth stock price model $[P=D_s/K_s-g]$, shows that policy paying out more cash dividends will raise expected dividend (D_s), which will tend to increase the price of the stock" (Eugene F., Brigham & Louis C. Gapanski, 1992).

However, if cash dividends are raised and consequently less money is available for reinvestment, the expected growth rate will be lowered, which will lower the market price of share. Thus dividend policy has two opposing effects, and “An optimal dividend policy strikes exactly the balance that investors in the aggregate want between current dividends and future growth and thereby maximize the prices of the firm’s stock” (I.M. Panday, 1999).

There are two different schools of thought regarding the dividend policy and share prices. Those who believe that dividend has got more impact in determining share price base their arguments on the following hypothesis.

- (i) Shareholders prefer current to future uncertain return.
- (ii) Dividend payment is an indicator of earnings capacity in future.

The other school of thought supporting the importance of retained earnings is based on the following hypothesis.

- (i) Retained earning is a symbol of growth indicating future investment opportunities
- (ii) The shareholders get a tax advantage as the increase in share value due to retention is not treated as income for tax purpose until realized. Again the effective tax rate for such appreciation in share value is invariably less than that for dividends.
- (iii) “Retention helps the firm to encounter the problem of limited capital market or increased risk. The risk of bankruptcy is minimized by more retention” (Chawla Deepak and Srinivasan G., 1987). Any changes in dividend policy have both favorable and unfavorable effects on the price of the firm’s stock. Higher dividend of the firms means higher cash outflow, which is not essential or bad for the investors. So the optimal dividend policy balances these oppostry forces and maximizes the prices of the stock. Dividend policy and stock financing are so closely

connected. A firm that pays out some of its earnings as dividends is limiting its retained earnings and hence the assets expansion can finance with relatively lower cost on internal equity. Thus, for any given rate of asset expansion, decisions on dividend policy also imply decisions on new stock sales, if the optimal capital structure is to be maintained.

2.1.1 Types of Dividend Policy

Copeland–Weston (1988) described that paying stable dollar dividends is not the only dividend policy. They described three major types of dividend payout schemes:

-) Stable dollar amount per share is a policy that also implied by the words “stable dividend policy”. This dividend policy is followed by most firms.
-) Constant payout ratio is followed by very few firms. Since earnings fluctuate, following this policy means dividends will also fluctuate and results unreliable signals to the market about the future prospects of the firm.
-) Low regular dividend plus extras is a compromise between the first two and gives flexibility to the firm but leaves investors a bit uncertain about what their income will be.

Literature provides different types of dividend policies. They are:

1. Constant Dividend Policy: Payment of dividend regularly in fixed amount or in a fixed portion of earnings and maintaining it for all coming future, regardless of fluctuations in the level of earnings is called a stable dividend policy. In this dividend policy, the dividend will be paid in fixed amount and regularly. This policy is applicable in the firm having regular and stable income. But this policy does not refer to fix income every year or periods. It can be changed proportionately with the change in companies earning. A constant dividend policy is likely to

enhance the share price by satisfying the firm's customers and by providing consistently positive signal about future earnings prospects (Viscione & Roberts, 1987). This policy has three forms:

a. Constant Dividend Per Share: Dividend stability can be achieved in per share basis.

When a firm pays a fix amount of dividend per share over the year and does not change it with fluctuations in the level of earnings, it is said to have persuade a relatively stable dividend policy. The most popular kind of dividend policy is one that pays a regular steady dividend (Viscione and Robert, 1987). This policy is completely rational policy and poses the strategic financial management; therefore, it is related to the company's ability to pay dividends.

b. Constant Payout Ratio: Another type of dividend stability can be achieved in the sense of portion of earnings. If the firm distributes a certain percentage of its profit as dividend every year, the policy is known as stable payout ratio. The ratio of dividend to earning is called payout ratio. If the firm simply applies the target payout rate of each year's earnings, dividend could fluctuate widely (Brealey & Myers, 1988).

c. Low Regular Plus Extra Dividend Policy: Generally companies maintaining dividend stability do not change the dividend payment ratio unless it is believed that the changes in earnings are permanent. When incomes are swelling, they may have decided to distribute a part of increased earnings as extra dividend and skipped subsequently, when business earnings drop to normal level. This dividend policy is known as regular and extra policy. It could be the better policy to that company whose stockholders prefer at least a certain amount of regular income or return.

2. No Immediate Dividend Policy: When a company don't show any hurry to declare dividend, the policy is known as no immediate dividend policy. These types of companies do not

declare any dividend unless the company earns large enough income. In other words, if there is not any hurry up about dividend payment and it is paid only when the company earns excess profit this policy is known as no immediate dividend policy. This is usually pursued in the following circumstances:

-) When the firm is new and rapidly growing concern.
-) When the firm's excess to capital market is very difficult.
-) When availability of funds is costlier.
-) When stockholders have agreed to accept higher return in future.

In fact, this policy is followed by issuing bonus shares or by providing stock dividend instead of cash dividend.

3. Regular Stock Dividend Policy: If the company regularly pays dividend to its shareholders in stock instead in cash form, it is called regular stock dividend policy. Regular stock dividend policy is also designated as bonus shares. Such policy should be followed under the following circumstances:

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

4. Irregular Dividend Policy: It is the policy in which, the firm does not pay any fixed amount of dividend. Dividend varied in correspondence with change in level of earnings and they are paid in stock rather than cash form. In this policy, higher earnings means higher stock dividend and lower earnings means no dividend in any forms.

The firm with un-stable earnings also adopts this policy. When there are immense investment opportunities, companies retain more and when there are no any profitable investment opportunities, the company distributes the earning as dividend. This means there is no regularity of dividend payment.

5. Residual Dividend Policy: According to this theory, dividend policy is a residual decision. Whether or not a company pays dividends depends on its investment opportunities. If equity investment equals earnings, no dividends are paid. If equity investment is greater than earnings, then no dividends are paid and even new shares are sold to cover any deficiency. If there is no any investment opportunity, then all earnings are distributed to shareholders. Dividends are therefore merely a residual remaining after all equity investment needs are fulfilled.

Residual dividend policy is a policy in which the dividend paid is set equal to the actual earnings minus the amount of retained earnings necessary to finance the firm's optimal capital budget.

Dividends = Net income – (Target equity ratio × Total capital budget)

2.1.2 Factors Affecting Dividend Policies

The typical dividend policy of most firms is to retain approximately one third to half of total net earnings and distributes the remaining amount to the shareholders (Van Horne, 2004). But it doesn't hold true in each and every organization. The company's decision regarding dividend payment may be extremely affected by different factors. Therefore it is desirable to consider some of the factors that influence dividend policy which are as follows.

1. Legal Restriction: The legal rules provide that dividends must be paid from earnings either from the current earnings or from past year's earnings as reflected in the balance sheet account

retained earnings. Usually law prescribes rules with respect to retain huge earnings for financing profitable projects (J Fred Weston, Thomas E. Copland 1986).

All the companies are bounded by some legal restrictions. General legal provisions regarding to dividend payment are:

-) Company can pay dividend from the earnings of current year or past year.
-) Company cannot pay dividend if the liabilities of the company exceeds assets.
-) Dividend can't be paid if the amount of dividend to be distributed exceeds the net profit.
-) Dividend can't be paid from the capital invested in the firms.

2. Liquidity Position: Liquidity position (availability of cash) is an important consideration for dividend payment. Although a firm may have adequate earning to declare dividend but it may not have sufficient cash to pay the declared amount. The dividend payment means outflow of cash from organization towards investors. Thus the greater cash position and overall liquidity of a company the greater will be the ability to pay dividend. Generally, the growing firms face the problems of liquidity even though they make remarkable amount of profit because they need substantial amount of cash for their expansion plans.

3. Future Investment Opportunities: The dividend policy is also influenced by the financial needs of the company. If any profitable project found, company invest its earnings to that project rather than dividend. A growing firm gives precedence to the retention of earnings over the payment of dividend in order to finance its expansion activities. But the firms having stable earnings tend to prefer to pay larger portion of their earnings as dividend. When the investment opportunities arise frequently, company follows a policy of paying stock dividend rather than cash dividend.

4. Access to Capital Market and Borrowing Capacity: A company having insufficient cash can pay dividend, if capital market is easily accessible because they can generate fund from the capital market whenever it is required. Easily accessibility to the capital market provides flexibility to the management in paying dividend as well in meeting corporate obligation. Thus, greater the ability of the firm to raise fund in the capital market, greater will be the ability to pay dividend even it is not liquid.

5. Control Objectives and Strength Resistance: If the company pays excess cash as dividend, there will be the shortage of fund to finance profitable investment opportunities, which must be fulfilled by issuing new securities. This invites the dilution and affects the control position of existing stockholders. So, they do not prefer to distribute the earnings as dividend because it weakens their controlling power to control the company.

6. Inflation of the Economy: This is another constraint for dividend payment. Cost of replacing assets increases substantially due to inflation and the funds accumulated by depreciation would be inadequate to replace the assets. So, the greater profit retention may be required for the companies in order to make replacement or to maintain the capital intact which will intern reduce dividend payment.

7. Size of Earnings: If the companies have large and stable profits, they can predict approximate future earnings. Those firms are likely pay a higher amount and higher percentage of earnings as dividend. If the earnings are small and unstable they used to pay small amount of earnings as dividend and retain higher percentage of earnings for reinvestment.

8. Past Dividends and Payout: The firms try to maintain its past dividend and payout rate. If current dividend payout ratio is less than past rate, the market price of stock will decline. Managers don't resist this type of declining price and increase their payout ratio. This means

firms paying larger dividend continue with larger payout and firms with small amount of past dividend are more reluctant to increase the dividend rate.

9. Rate of Assets Expansion: Any growing firm needs expansion on its assets. For this, the firms should retain profit which affects their dividend payment. Growing firm needs higher portion of assets expansion. So, if firms are unable to generate fund from any other alternative sources, they used to pay small amount of dividend.

2.1.3. Legal provisions relating to dividend in Nepal

Dividend policy of Nepalese corporate houses has been governed by various rules and legal provisions. Declaration of dividend payment by the corporate firm first requires approval of board of directors. It is taken as the right of the board of directors. The directors declare the regular dividend on a date to the holders of records before the close of the recording of the shares. Hence the board of directors should in a formal meeting resolve to pay the dividend. This resolution of the board of directors to pay the dividend has to be approved by the general meeting of shareholders. Company act 2063 have stated that

-) Legally provisioned operating cost, depreciation, written off and reserves should be deducted from the current years profit before declaring dividend.
-) If the company has government investment, it should take pre-permission to declare any dividend.
-) Dividend can only be distributed by the current year's profit or accumulated profit which was set aside for dividend purpose. It implies that capital can not be distributed in the form of dividend.

-) Declared dividend should be distributed within forty five days of declaration. Otherwise shareholders should be paid with interest.
-) If the dividend is not claimed for the next five years of declaration, the amount should be deposited into shareholder's welfare fund.
-) Stock dividend can be issued by utilizing amount set aside for the dividend. But pre-information should be given to company registrar office to issue stock dividend.
-) Stock repurchase has not been provisioned in the Nepalese act. Stock repurchase has not been practiced in Nepalese market.

Commercial bank act, directives from Nepal Rastra Bank and other guiding rules also direct the dividend behaviour of Nepalese corporate houses. These rules and regulations also focus on pure earnings of organization for dividend distribution.

2.2. Review of Major International Studies

2.2.1. Modigliani and Miller's Study (1961): "Dividend policy of positive firm is irrelevant, as it does not affect the wealth of the shareholders" (Modigliani and Miller 1961). For the first time in the history of finance there is a new argument that, dividend policy does not affect the share price of the firm. "Under condition of perfect capital market, rational investors, absence of tax discrimination, given the firm's investment policy its dividend policy may have no influence on the market price of the shares" (Miller H.M and F. Modigliani, 1966) this study is popularly known as M.M. Approach. The most comprehensive argument in support of the irrelevance of dividends is provided by the MM hypothesis. MM maintain that dividend policy has no effect on the share prices of the firm and is the investment policy through which the firm can increase its earnings and thereby the value of the firm. Given the investment decision of the

firm, the dividend decision splitting the earnings into packages of retentions and dividends – is a matter of detail and does not matter. “Under conditions of perfect capital markets, rational investors, absence of the discrimination between dividend income and capital appreciation, given the firm’s investment policy, its dividend policy may have no influence on the market price of the shares” (Modigliani & Miller, 1961).

The MM hypothesis of irrelevance of dividends is based on the following critical assumptions.

- a. Perfect capital markets in which all investors are rational information is available to all free of cost, there are no transaction costs, securities are infinitely divisible no investor is large enough to influence the market price of securities there are no flotation costs.
- b. There are no taxes alternatively there are no differences in tax rates applicable to capital gains and dividends.
- c. A firm has given investment policy which does not change. The operational implication of this assumption is that financing of new investments out of retained earnings will not change the business risk composition of the firm and therefore, no change in the required rate of return.
- d. There is perfect certainty by every investor as to future investments and profits of the firm. In other words, investors are able to forecast future prices and dividends with certainty. But this assumption is dropped by MM later.

Based on the above assumption Modigliani and Miller have provided the following equation to prove the argument.

$$NP_0 = \frac{P_1(n \Gamma \zeta n) - I \Gamma E}{1 \Gamma K_e}$$

Where,

NP_0 = Value of the firm

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

n = number of existing shares

n = no of additional shares

I = Total new investment requirement

E = Earning of the firm during the period

K_e = Cost of equity capital

To prove this model they began from simple valuation model.

Step 1

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

Symbolically;

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

Where,

P_0 = The prevailing market price of a share

K_e = The cost of equity capital

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

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

Step 2

Assuming no external financing, the total capitalized value of the firm would be simply the number of shares (n) times the price of each share (P_0).

$$nP_0 = \frac{nD_1 \Gamma nP_1}{1 \Gamma K_e}$$

Where,

n = No. of equity share at zero period.

Step 3

If the firm's internal sources of financing its investment opportunities fall short of the funds required, and A is the number of new shares issued at the end of year 1 at price of P , then

Symbolically,

$${}_n P_0 = \frac{{}_n D_1 \Gamma (n \Gamma \zeta n) P_1 Z \zeta n P_1}{1 \Gamma K_e}$$

Where,

n = The number of shares outstanding at the beginning of the period.

n = The change in the number of shares outstanding during the period.

Equation of step 3 implies that the total value of the firm is the capitalized value of the dividends to be received during the period plus the value of the number of shares outstanding at the end of the period, considering any newly issued shares, less the value of the newly issued shares. Thus, in effect, equation of step 3 is equivalent of equation of step.

Step 4

If the firm were to finance all investment proposals, the total amount of new shares issued would be given by the following equation.

$${}_n P_1 = I - (E - nD_1)$$

$$\text{Or, } {}_n P_1 = I - (E + nD_1)$$

Where,

${}_n P_1$ = The amount obtained from the sale of new shares to finance capital budget.

I = The total amount required of capital budget.

E = Earning of the firm during the period.

nD_1 = Total dividend paid.

$(E - nD_1) = \text{Retained earnings.}$

Step 5

If we substitute equation of step 4 in to equation of step 3, we derive equation of step 5.

$$nP_0 = \frac{nD_1 \Gamma (n \Gamma \zeta n) P_1 Z I \Gamma E Z n D_1}{1 \Gamma K_e}$$

There is a positive nD_1 and negative nD_1 .

Therefore, nD_1 cancels. Then we have,

$$nP_0 = \frac{(n \Gamma \zeta n) P_1 Z I \Gamma E}{1 \Gamma K_e}$$

Step 6

Since dividends are not found in above equation. So, Modigliani and Miller conclude that dividends do not count and that dividend policy had no effect on the share price.

In this way, according to Modigliani and Miller study, "It seems that under conditions of perfect capital markets, rational investors, absence of tax discrimination between dividend income and capital appreciation, given the firms investment policy, its dividend policy may have no influence on the market price of shares." So M.M. concludes that the dividends policy has no effect on the price of share. In case of Nepal, the MM approach is not relevant since its assumption significantly deviate when it is applied because the assumptions of perfect capital market and rational investors prove faulty assumptions in case of Nepal. Transaction cost, flotation cost and tax effect on capital gain is neglected by M.M. which is not sound. Arbitrage argument as described by MM applies only when there is very sensitive argument as describe by MM applies only when there is very sensitive investors but sensitive in Nepal. When dividend is distributed it can be said Nepalese investors prefer dividends more than retain earnings. When

dividend is distributed it can be said Nepalese investors prefer dividends more than retain earnings.

2.2.2 Walter Study (1996): Walter study supports the doctrine that dividends are relevant. The investment policy of a firm cannot be separated from its dividend policy and both are, according to Walter, interlinked. The choice of an appropriate dividend policy affects the value of an enterprise. Professor James E. Walter (1963) argues that the choice of dividend policy almost always affects the value of the enterprise. His study clearly shows the import relations are three probable conditions for comparing the relationship between r and k . The key argument in support of the relevance proposition of Walter's model is 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).

The firm would have an optimum dividend policy which will be determined by the relationship of r and k . in other words, if the return on investments exceeds the cost of capital, the firm should retain the earnings, where as it should distribute the earnings to the shareholders in case the required rate of return exceeds the expected return on the firm's investment.

Walter's models are based on following critical assumptions:-

-) All financing is done through retained earnings external sources of funds like debt or new equity capital are not uses.
-) With additional investments undertaken, the firm's business risk does not change. It implies that r and k are constant.
-) There is no change in the key variables, namely begin earning per share, E and dividends per share D . the values of D and E may be changed in the model to determine results, but any given value of E and D are assumed to remain constant in determining a given value.

J) The firm has perpetual (or very long) life considering the above assumption; Walter's formula determines the market price per share in following ways.

$$P = \frac{D}{K_e Z g}$$

Where,

P= The prevailing market price of a share.

D = Dividend per share

K_e = Cost of capital.

g = Growth rate

The above equation shows that the value of a share is the present value of all dividends plus the present value of all capital gains.

According to Walter, an optimum dividend policy dependent on the relationship between the firm's return (r) and its cost of capital (k), he suggests various types of firm they are:-

i. When ($r > K_e$), the firm is able to earn a return on investment exceeding the required rate of return (i.e. $r > K_e$). The value of shares is inversely related to the D/P ratio. If a firm has adequate profitable investment opportunities, it will be able to earn more than what the investor expect so that $r > K_e$. Such firms may be called growth firms. For growth firms, the firms should plough back the entire earnings within the firm. The market value of the shares will be maximized as a result.

ii. When $r < K_e$, the firm does not have large size sample profitable, investment opportunities, the value of shares are positively correlated. If a firm does not have profitable investment opportunities (when $r < K_e$) the shareholders will be better-off. If earnings are paid out to them so as to enable them to earn a higher return by using the funds elsewhere. In such a case, the market price of shares will be maximized by the distribution of the entire earnings as dividends. .

Declining firms ($r < K_e$); If the firm's internal rate of return is less than its cost of capital, in such as case the share holders can earn a higher return by investing their dividends as a fund of else where so the value of shares can be maximized by paying dividends. By distributing the earning situation.

To reflect earnings retentions, we have

$$P = \frac{D}{K_e Zrb}$$

Where,

r = expected rate of return on firm's investments.

b = Retention rate (EPS-DPS)/EPS.

Thus, rb measures growth rate in dividends, which is the product of the rate of profitability of retained earnings (r) and the earnings retention percentage (b). From the above equation, we derive an equation for determining K_e .

$$K_e = \frac{D}{P} \Gamma g$$

Since $g = \frac{\zeta P}{P}$, we have $K_e = \frac{D}{P} \Gamma \frac{\zeta P}{P}$ and

$$\text{Since } P = \frac{r}{K_e} (E Z D)$$

Substituting the value of AP, we have

$$K_e \times \frac{D \Gamma \frac{r}{K_e}}{P} (E Z D)$$

$$\text{Or, } P = \frac{D \Gamma \frac{r}{K_e}}{K_e} (E Z D)$$

Price of the shares also increases with 100% D/P ratio the value is the highest, while it is the lowest with D/P ratio being zero. When $r < K_e$, the firm would be well and wished to distributed the entire earnings to the shareholders.

iii. For a situation in which $r = K_e$ The market value of shares is constant irrespective of D/P ratio, no optimum dividend policy D/P ratio. It is a matter of indifference whether earnings are retained or distributed. This is so because for all D/P ratios. Market price of share will remain constant for such firms; there is no optimum dividend policy (D/E). In other words, the market price of shares is not affected matter of indifference. This is a hypothetical situation, the two values (r and K_e) are different and Walter concludes that dividend policy does matter as a variable maximizing share price.

2.2.3 Myron Gordon Study (1962): Gordon argues that dividend policy affects the value of shares even in a situation where the return on investment and required rate of return are equal. According to him investors are difference between current dividend and retention of earning with the prospects of future dividends, and capital gain. This study described as a bird hand argument. That a bird in hand is better than two in the bush is based on the logic that what is available at present is preferable to what may be available in future. Based on this argument Gordon has suggested that the future is uncertain and more distant the future more uncertain. Investors would naturally like to avoid uncertainty. In fact they would be inclined to pay a higher price for share on which current dividends are paid and visa-versa.

This model based on the following assumptions.

-) The firm is an all equity firm. No external financing is used and investment programs are financed exclusively by retained earnings.
-) The internal rate of return (r) and cost of capital (K_e) are constant.

-) The firm has perpetual life.
-) The retention ratio, once decided upon, is constant. Thus, the growth rate, ($g=br$) is also constant.
-) There is not a tax on corporate income.
-) The cost of capital (K_e) greater than growth rate (i.e. $K_e > g$).

It can be seen from the assumptions of Gordon's model that they are similar to Walter's model. As a result Gordon's model, like Walter's contends that dividend policy of the firm is relevant and that investors put a positive premium on current incomes/dividends. But Gordon goes one step further and argues that dividend policy affects the value of shares even in a situation in which the return on investment of a firm is equal to the required capitalization rate i.e. $K_e = g$, while Walter's approach is of the view that the investors are indifferent between dividends and retention. Crux of Gordon's arguments is a two – fold assumption.

-) Investors are risk-averse, and
-) They put a premium on a certain return and discount/penalize uncertain returns.

The investors are rational. Accordingly, they want to avoid risk. The term risk refers to the possibility of not getting a return on investment. The payment of current dividends removes any chance of risk. If, however, the firm retains the earnings (i.e. current dividends are withheld), the investors can expect to get a dividend in future. The future dividend is uncertain, both with the respect to the amount as well as timing. The rational investors can reasonably be expected to prefer current dividends, i.e. they would place less importance on it as compared to current dividend. The retained earnings are evaluated by the investors as a risky promise. In case the earnings are retained, therefore, the market price of the shares would be adversely affected.

Basing model on this argument, Gordon argues that the future is uncertain and the more distant the future, the more uncertain it likely to be.

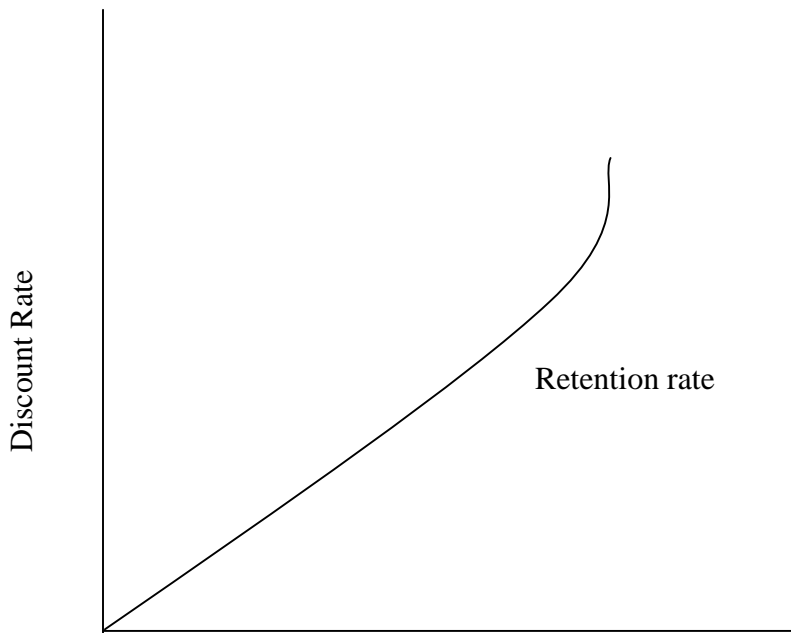


Fig. 2.2.1 Retention rate and Discount rate

If therefore, current dividends are withheld to retain profits, whether the investor would at all receive them later is uncertain. Investors would naturally like to avoid uncertainty. In fact, they would be inclined to pay a higher price for shares on which current dividends are paid. Conversely, they would discount the value of shares of a firm which postpones dividends. The discount rate would vary, as shown in above figure, with the retention rate or the level of retained earnings. The term retention ratio means the percentage of earnings retained. It is the inverse of D/P ratio. The omission of dividends, or payment of low dividends, would lower the value of the shares. According to Gordon, the market value of a share is equal to the present value of future streams of dividends.

“A simplified version of Gordon’s model can be symbolically”. Expressed as

$$P = \frac{E(1 - Zb)}{K_e - Zbr}$$

Where,

P= Price of shares

E= Earning per share

B = Retention ratio or percentage of earnings retained

1-b= D/P ratio, i.e. percentage of earnings distributed as dividends.

Ke = Capitalization rate/ cost of capital.

br =g= Growth rate in i.e. r rate of return on investment of an all equity firm.

Gordon contends that the dividend decision has a bearing on the market price of the share in situations where $r > K_e$, the market price of the share is favorably affected with more retentions.

The reverse holds true when $r < K_e$, i.e. more retentions lead to decline in market price.

Retentions do not affect the market price of the share when $r = K_e$.

According to this model following facts are revealed.

a. Growth firm ($r > K_e$):- Share price tends to decline in correspondence with increase in payout ratio or decrease in retention ratio i.e. high dividends corresponding to earning leads to decrease in share price. Therefore, dividends and stock price are negatively correlated in growth firm.

Negatively correlate in growth firm.

b. Normal firm ($r = K_e$):-Share value remains constant regardless of changes in dividend policies which mean dividends and stock price are free from each other.

c. Declining firm ($r < K_e$):-Share price tends to rise in correspondence with rise in dividend payout ratio. It means dividend and stock prices are positively correlated with each other in declining firm.

2.2.4 Friend and Puckett Study (1964): Friend and Puckett have taken Samples from chemicals electric utilities, electronics, steels and foods industries, during the period 1956 to 1958. Study based on regression analysis and interpreted relationship between dividends and stock prices.

Friend and Puckett have taken dividend, retained earnings and price earning ratio as independent variables on price function Supply function (dividend functions) was taken earnings, last year dividend and price earnings ratios were independent variables..

This study bases on the following assumption.

1. Price does not contain speculation component.
2. Dividends do react to year fluctuations in earnings.
3. Earning fluctuations may not sum zero over the sample.

The result of the study was

1. Dividends have a pre-dominant influence on stock prices in the same 'B' industry.
2. The coefficients of the dividends and retained earnings are nit so marked as in the first set of regressions
3. More than 80% of the variation in the stock prices can be explained by 'B' independent variables.
4. The coefficients of the dividends and retained earnings are closer to each other for all industries in both year except for steels in 1956 and the correlation are higher, again except fir steels and supply function on their study price function were expressed symbolically as follows:

$$P_t = a + b (Dt) + C (Rt) + d (E/P) t-1$$

$$D_t = (e + f (E_t) +g (D_t-1) + h (E/P) t-1$$

Where,

P_t = per share price at time t

D_t = Dividend at time t

R_t = Retained earnings at time t

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

(E_t) = Earning per share at time t

(D_{t-1}) = Dividend of last year.

Supply functions (Dividend function) and the desired price equation seem that there were significant changes from those obtained from the single equation approach as explained above. According to their result, price effect on dividend supply are probably not a serious source of bias as in the customary derivation of dividend and retained earning effects on stock prices, though such a bias might be market if the distributing effect of short run in come movements are sufficiently great.

Friend and Puckett used the lagged price as a variable instead of lagged earnings price ration and show that more than 90% of variation in the stock prices can be explained by the three independent variables and in most of the cases the retained earnings received greater relative weight than dividends. In case of growth industries group (i.e. chemical, electronics and utilities), the retained earnings effect was larger than the dividend effect for both year covered. Steel and food industries there were no significant differences between retained earnings & dividend. At the end they concluded that it is possible that management might be able to increase stock price in non-growth industries by raising dividends and in growth industries by greater retention (Irwin Friend and Puckett, 1964).

2.2.5 Hankinson Nils Study (1981) : The study made by Hankinson Nils was conducted on daily share prices changes around the announcement of a dividend change and that have found that the result consist with a dividend announcement effect of the organization. And it clearly shows that increase in dividend leading to positive excess returns and decrease in dividend to negative excess returns. “Such effects seem to be more applied for these companies that previously over reinvested free cash flow in projects with turns less that what the financial market requires. After a long interruption of payment of dividend the firm's, they were found to earn significant excess of returns. The companies omitting dividends because of poor present earnings and future prospects suffer a decline share price in such way the study concludes dividend effect on change of daily share prices” (Hankinson Nil H.1981).

2.2.6 James C. Van Horne and John G. Mc Donald Study (1968): They conducted a study with the purpose of investigating the effect of dividend policy and new equity financing decision in the market value of the firm's common stock several empirical tests were performed on two industries, using a well known valuation model with year end 1968. They have taken 86 electric utility firm and 39 firms in the electronic and electronic component industries.

They compare the results obtained for the firm’s with other firms in the industry sample. They concluded that for electric utility firms in 1968 share value was not adversely affected by new equity financing the presence of cash dividends, except for those in the highest new issue group and t made new equity more costly form of financing than the retained earnings. Payment of dividend through excessive equity financing reduces the share prices (James C. Van Horne and John G.Mc Donald, 1997).

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

The above laws for distributing dividends and Bonus share are not sufficient so the government has to make new sufficient law 'Nepalese law Prohibits repurchase to stock, which is against the, theory of finance. Rules regarding distributing of dividends are not adequate in the Nepalese company act 1977 so it will be resurrected according

2.3 Review of Nepalese Studies

However a number of unpublished thesis reports regarding to dividend issue have been prepared to fulfill the requirements of master's students; there are only limited research articles published in Nepal. Four remarkable studies about dividend policy and market price of share are:

2.3.1 Shrestha (1992): "Shareholder's democracy and annual general meeting feedback" by Shrestha (1992) deals with financial policies and practices of some commercial banks. It focuses equally on both shareholders' right and financial practices including dividend policy of Nepalese corporate houses specially by banking sectors. On his paper he outlined the following facts:

-) The cost plus inflation at exorbitant rate has made the shareholders to higher return from their investment.
-) Multi-decreases in purchasing power of money make it natural right of investors to get higher rate of dividend.
-) Amount of dividend must be handsome enough after omission for few years.

2.3.2 Pradhan (1993): The first important article on dividend behaviour in Nepal was by Pradhan (1993). One hundred thirty five financial executives of Nepal were interviewed in this study and the conclusions were:

-) Cash dividends are paid to signal the shareholders about good financial condition of the company.
-) Nepalese investors are not indifferent about current earning and future gain so dividend decision can not be taken as residual decision.
-) Earnings, liquidity and past dividend are the important determinants of dividend policy of Nepalese company in their respective order.
-) The reasons to pay stock dividend instead of cash dividend are to conserve cash and to signal higher future earnings.
-) Dividend stability with steady rate is favored by majority of Nepalese executives.

2.3.3 Manandhar (2000): Manandhar (2000) conducted an extensive research for his doctoral degree. In his unpublished doctoral dissertation, he analysed dividend behaviour of data of 17 sample companies and interviewed both company executives and investors. His work reached to the conclusion that:

-) There is much more deviation in dividend policy among the Nepalese corporate houses.

-) Nepalese corporate houses have no target dividend payout; hence they don't have to adjust their payout.
-) Dividend yield explanatory variables are different in among different organizations so dividend practices in Nepal are industry specific.
-) Nepalese corporate houses have no practice of considering the variables affecting dividend policy such as liquidity, profitability, lagged dividend, lagged earnings and shareholder's expectation etc.
-) Due to unspecified dividend policy, Nepalese investors are not attracted by the corporate houses.
-) Nepalese corporate houses were found to be trying to increase dividend payment or at least to maintain the past dividend.
-) When testing Linter's model, he found that Nepalese corporate houses have no any optimum dividend payout and no any question of adjustment.

2.3.4 Pradhan and Adhikari (2002): An attempt to what extent the dividend paid by company effect its share price in Nepalese prospect through the topic "Impact of dividends on share prices in Nepal". They collected the data from dividend paying, listed on Nepal Stock Exchange i.e. (Financial Statement of listed companies' vol. II, III and IV. To date, the number of listed companies on stock exchange market was 109. Considering the study period of F Y 1992/93 to FY 1997/98, they have taken 13 companies from finance sector, 9 companies out of finance sector and total 22 companies. Sample size (n) 77 (Finance f Non finance sector), 47 from finance sector and 30 from non finance sectors.

The major findings of this study are as follows:

-) Dividends have positive impact on their share price i.e. more dividends paying companies increase their share price.
-) Dividends have comparatively more favorable impact on the share prices of the non finance sector than the prices of finance sectors.
-) Past earnings have more impact than retained earnings and dividends on share prices of finance sectors.

There are few companies that have actively traded stock. One research in this field shows the most important reasons to retain earnings in traded and non-traded sectors is due to lower cost of funds. This reasons to retain earnings on traded sector is the reluctance to dilute control from selling stock to outside whereas in non-traded sector. There is difficult to convince of outsiders about the profitability investments while raising capital (Radhe S. Pradhan and Nabraj Adhikari, 2002).

2.3.5 Basnet (2005): Basnet (2005) conducted a research to fulfill the requirement of his M. Phil. degree on dividend policy and market price of share and found that:

-) Dividend policy of Nepalese company has significant impact on market price of share.
-) The contribution of dividend is higher than the contribution of retained earnings to market price of share.
-) Price earning ratio is another important factor to determine market price of the share.
-) Nepalese corporate houses have no any optimal dividend payout ratio and they have distributing dividend on ad-hoc basis.

Voluminous researches have been conducted by master's students to fulfill their degree requirement. Selective of them and their findings can be summarized as below.

2.3.6 Rajbhandari (2001): compared dividend policy of bank and insurance company and found that there is positive relation between earnings and dividends. He also concluded that dividend payment policy of Nepalese companies is not consistent and stable.

2.3.7 Pandit (2002): seeks dividend determining factors in Nepalese companies and concluded that earnings, liquidity and leverage are the important factors affecting dividend decision of Nepalese corporate sectors. He also found that market price of Nepalese stock are significant positively related with dividend per share.

2.3.8 Rai (2003): searches the relation between dividend and market price of share and found that there is no any relation between the market price of share and dividend per share at least in finance companies. On the basis of data analysed by him dividend irrelevance theory was evident in Nepalese market.

2.3.9 Rangitkar (2004): compares dividend behaviour of two commercial banks and found that both of them were following constant payout policy. On the basis of five year's sample he concluded that dividends have weak effect on market price rather net worth is more importantly valued in the market.

2.3.10 Ranabhat (2005): found that dividend policies are ad-hoc but their impact on market price of share is significant positive. Earnings per share, price earning ratio and net worth of the company also have significant role in determining market price of share.

2.3.11 Joshi (2006): analysed the dividend policy of banks, insurance companies and, finance companies and found that both dividend payout ratio and dividend per shares are different for different types of organization. He found some contradictory result that EPS and MPS are negatively related at least in banking sector of Nepal.

2.3.12 Kuikel (2007): analysed the dividend policy of commercial banks had great fluctuation on dividend per share , earning per share, dividend yield, dividend pay out ratio, price earning and share price in terms of coefficient of variation. There is negative relationship between Dividends per Share to market price per share with leverage.

2.3.13 Aryal's Study (2008): found that Current earnings, past earnings and past dividend jointly explain major variation in dividend payment of Nepalese firms. Nepalese managers have unlimited resistance to reduce dividend. His studies basically focus on two issues of dividend: relevancy of dividend, behaviour of dividend. Nepalese executives have unlimited resistance to reduce dividend.

2.4 Concluding remarks

The above studies are performed by different researchers. Their weakness and drawbacks are also mentioned there with. This study will analyze the dividend payment policy of commercial banks of Nepal. Usually the policy of commercial banks is paying dividend. This study carries out the methodology followed by previous studies in terms of sample size, nature of sample firms and variables used. This study is only the updating of old studies. The study has covered five commercial banks. Lasted five years EPS, DPS, Dividend payout ratio and market value per share of these banks have been analyzed in this study. Individual analysis for each company has been done in this study. In order to assess the impact of dividend on market price of share, available information from concerned banks were reviewed and analyzed. Market price of share as dependent variable and other independent variables such as EPS, DPS & REPS are also considered in this study.

Chapter III

RESEARCH METHODOLOGY

3.1. Introduction

The term Research Methodology is the composition of the two words “Research” and “Methodology”. Research means the search for truth and methodology refers to the various sequential steps that are adopted in the research process. “Research methodology is defined as a systematic process adopted by the researcher in studying a problem with certain objectives in view” (C.R. Kothari 1983).

Research methodology is related to the specific problem of limited scope for which researchers has need of additional information on which to base a decision. Research concerns the seeking of solutions as to what should be done to solve a given problem and how to implement the solution. Research tends to be future and present oriented as opposed to taking an interest in the effectiveness of prior actions. According to the F. N. Kerlinger, “Research methodology is a vital and absolutely indispensable part of social scientific and educational research would still be in the dark age.” Research methodology mainly described the technique, method and process applied in the entire process of a scientific research. Research methods logy refer to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view.

3.2. Research Design

The research design is the plan, structure and strategy of investigation conceived so x. to obtained answers to reason questions and to control variance (Fred N. Kerlinger 1994). Basically

this study is fact finding survey so it employs descriptive research design. It evaluates correlation between the variables under consideration and follows econometric procedures to analyze dividend payment policy of Nepalese firms. Evaluation of cause and effect relationships is the basic function of this study. It deals with dividend payment policy of commercial Banks in Nepal and attempts to analyze the reasons behind it.

This study follows comparative evaluation approach between the sample units. Only five Commercial banks have been included as sample. Comparison has been made among their dividend payment policies and effect of dividend per share and earning per share at market value per share.

3.3. Nature and Sources of Data

This study is primarily based secondary data but primary data have also been collected to add more confidence on findings. It uses secondary data published in annual reports of concerned companies. Reports were collected from the office of Security Board, Nepal. It also uses data collected from the website of Nepal Stock Exchange Ltd. Annual reports published by concerned banks. Besides this further data are collected from published and unpublished reports, journals and thesis etc. A questionnaire was distributed to the financial executives of listed Banks for the purpose of collecting primary data. The basic purpose of inclusion of respondents from financial sectors is to compare their views towards the dividend policy of Nepalese organizations.

3.4. Population and Sample

All registered commercial Banks of Nepal are the population of this study. There are many banks whose share is traded actively in stock market; hence it is not possible to study all of them. This study uses purposive sampling technique. Since the objective of this study is to analyze dividend policy of Nepalese commercial banks the primary criteria of selecting a sample is distribution of cash dividend during the preceding five years. Data bank in Nepalese capital market is very poor, the second criterion to select a company as a sample is fixed as availability of data regarding to concerned variables. Current earnings, past earnings, past dividend have been used as independent variables to explain the dividend policy of Nepalese commercial banks. So the one important criteria of selecting corporation as a sample is availability of figures relating to these variables which are included in dividend policy model tested in the market. Therefore sampling will be done selecting from population. The population is as follows:

1. Nepal Bank Ltd.
2. Rastriya Banijya Bank.
3. Agriculture Development Bank.
4. Nepal Arab Bank Ltd. (Nabil Bank Ltd.)
5. Nepal Investment Bank Ltd.
6. Nepal SBI Bank Ltd.
7. Nepal Bangladesh Bank Ltd.
8. Nepal Industrial & Commercial Bank Ltd.
9. Nepal Credit & Commerce Bank Ltd.
10. Standard Chartered Bank Ltd.
11. Himalayan Bank Ltd.

12. Everest Bank Ltd.
13. Bank of Kathmandu Ltd.
14. Lumbini Bank Ltd.
15. Machhapuchchher Bank Ltd.
16. Kumari Bank Ltd.
17. Laxmi Bank Ltd.
18. Siddhartha Bank Ltd.
19. Global Bank Ltd.
20. Citizen Bank International Ltd.
21. Prime Commercial Bank Ltd.
22. Bank of Asia Nepal Bank Ltd.
23. Sunrise Bank Ltd.
24. Development Credit Bank Ltd.
25. NMB Bank Ltd.
26. Kist Bank Ltd.

Among the 26 Commercial Banks, the researcher chooses five banks of the total commercial Banks and it is taken early and newly established Banks as follows:

1. Nepal SBI Bank Ltd.
2. Nabil Bank Ltd.
3. Kumari Bank Ltd.
4. Laxmi Bank Ltd.
5. Nepal Investment Bank Ltd.

3.5. Data Analysis Tools

Various financial and statistical tools have been used in this study. The analysis of data will be done according to pattern of data available. Financial tools and simple regression analysis will do mainly the analysis. The relationship between different variables related to study topic would be drawn out using financial and statistical tools. The main financial indicators EPS, DPS, D/P Ratio, Price Earning Ratio, Profitability Ratio, and Market Value per Share will be calculate in this research, likewise statistical tools arithmetic mean, Standard deviation, coefficient of variation, Simple regression analysis will be calculate in this research.

A. Financial Tools

Under the financial tools, the following ratios has been calculated and interpreted:

1. Earning Per Share (EPS): EPS calculations made over the years indicate whether the banks earning power on per share basis have changed over the period or not. EPS is calculated by dividing the net profit after taxes by the total number of common share outstanding.

$$\text{EPS} = \frac{\text{Net profit after tax}}{\text{No of stock outstanding}}$$

2. Dividend Per Share (DPS): DPS indicates the part of earning distributed to the shareholders on per share basis. It is calculated by dividing the total dividend to equity shareholder, the number of equity shares.

$$\text{DPS} = \frac{\text{Total dividend to ordinary shares}}{\text{No. of common ordinary share outstanding}}$$

3. Dividend Payout Ratio (D/P ratio): D/ P ratio is percentage of profit that is distributed as dividend. These ratios reflect percentage of profit is distributed as dividend and what percentage

of profit is remaining as reserve and surplus for the growth of the company. It is calculated by DPS dividing the EPS.

$$\text{D/P Ratio} = \frac{\text{Dividend per share}}{\text{Earning per share}}$$

4. Price Earning Ratio (P/E ratio): This ratio reflects the price currently paid by the market for each rupee of current reported earning pre share (EPS). It is calculated by dividing the market value share (MVPS) by earning per share.

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

5. Dividend Yield Ratio (D/Y ratio): This ratio shows the relationship between per share and market value per share. It is calculated by dividing dividend per share by market value per share.

$$\text{Dividend Yield Ratio} = \frac{\text{Dividend Per Share(DPS)}}{\text{Market value per share(MVPS)}}$$

6. Profitability Ratio (P/R): Profitability ratio is calculated by dividing gross profit by total assets.

$$\text{Profitability ratio} = \frac{\text{Gross profit}}{\text{Total assets}}$$

B. Statistical Tools

In the present study, certain statistical tools have been used to compare the figure and draw one meaningful conclusion there from. Short descriptions of the statistical tools have been presented here.

1. Mean: The most popular and widely used measure of representing the entire data by one variable is the arithmetic mean. The number of items obtains by adding together all items and

dividing this total its value. Mean values of the different variable represent the average value for the study period. In general $X_1, X_2 \dots X_n$ are the given “n” observations then their arithmetic

mean denoted by \bar{X} is given by: $\bar{X} = \frac{X_1 + X_2 + \dots + X_n}{n}$

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

Where, \bar{X} denotes means X_1, X_2 and X_n are given set of observations and n denotes the no of items observed.

2. Standard Deviation (SD): The measurement of the disperse necessary of the data from mass of figure in a series able an average is known as dispersion. The standard deviation measure the absolve dispersion. The greater the amount of dispersion greater the standard deviation will be. The small standard deviation means a high degree of uniformity of the observation well as homogeneity of a series and vice- versa.

$$S.D. = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2}$$

Where, S.D. = Standard Deviation

N = Number of observation

3. Coefficient of Variation (CV): The coefficient of variation is the relative measure of dispersion, comparable across which is defined as the ratios of the standard deviation to the mean expressed percent (Richard I. Levin & Devid S. Rubin 1994).

In symbol $CV = \frac{SD}{\bar{X}} \times 100$

Where, SD= Standard Deviation

\bar{X} = Mean Average

The higher CV denotes to the higher variability of variable and vice-versa.

X= Sum of set of observations

4. Correlation Coefficient (r): Coefficient of correlation analysis is the statistical tools generally used to describe the degree to which one variable is related to another variable. On the basis of the theory of correlation, the analysis can study the comparative changes occurring in two related phenomena and their cause effect relation can be examined. In this study, simple correlation coefficient and multiple coefficients of correlation will be utilized to determine the relationship of various factors with dividend and variation of shares. The data related to dividend over the different years will be tabulated and their relationship between them will be drawn out. The equation for the coefficient of correlation is as follows:

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

Where,

N = Total no of observation

XY = Value of X and Y set of variable.

X= Total value of set of variables X.

Y = Total value of set of variables Y.

5. Coefficient of Determination (R²): The coefficient of variation is the primary way that can measure the extent or strength of the association that exist between two variables, X and Y because there can be used a sample of point of developed regression lines. Also, the coefficient of determination is the amount of the variation in 'y' that is explained by the regression.

6. T-statistics |t|: Mainly, for the sample size less than 30, t-statistic can be used. Thus, to test the validity of our assumption this test is used. For the t-statistics of small size, the t-value is

determined initially and compared with the table value at certain level of degree of freedom. Here, 10% and 1% level of significant has been used.

7. Standard Error of Estimation (SEE): The standard error of estimation (SEE) measures the variability or scatter of the observed value around the regression line. In effect it indicates the reliability of the estimating equation the standard error of estimate interprets the large the standard error of estimate, the greater the scattering or dispersion of points around the regression line.

8. Regression Analysis: “In regression analysis an estimating equation is developed that is a mathematical formula that relates the known variables to the unknown variables” (Richard I. Levin, David S. Rubin 1997). Correlation analysis tells the direction of movement but it does not tell the relative movement in the variables under study. Regression analysis helps us to know the relative movement in the variables. The known variables are the independent variables and the variable that is attempted to calculate is the dependent variable. For the study simple regression analysis will be used.

A mathematical formula that relates the dividend per share to the market price per share is presented as following ways.

There regression equation of MPS and DPS is:

$$MPS = a + bDPS$$

Where,

MPS = Market Price per Share

a = y- intercept

DPS = Dividend per share

Again, to determine whether the variables earning per share is related to dividend decision of the companies or not. For determination of relationship the following regression equation has been the utilized.

$$MPS = a + bREPS$$

Where,

MPS = Market Price per Share

REPS = Retained Earning per Share

a = y – intercept

b = Slope of the line

To obtain the regression line equation the value of the constants 'a' and 'b' are calculated by using the following two normal equations that are as follows.

$$y = Na + b \sum x$$

$$\sum xy = a \sum x + b \sum x^2$$

Where,

N=Number of observation in the sample.

This analysis enables us to know whether EPS is the influencing factor of market value per share or not. This analysis also tests the dependency of market value per share on dividend per share. This model has been formulated considering earning per share and Dividend per share as basic factors. Since dividend is high if company has reasonable earning and market value per share similarly, market price of the stock is also influenced by several factors like Dividend per share and earning per share.

a. Regression Constant (a): The value of constant, which is the intercept of the model, indicates the average level of dependent variable when independent variable is zero. In other

words, it is better to understand that 'a' (constant) indicates the mean or average effect on dependent variable of all the variables omitted from the model.

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

Chapter IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter is to carry out data analysis. In this chapter, collected data and other information on dividend policy and its impact on market price of share of commercial banks are presented. This chapter concentrated in presenting and analyzing financial information important in determining market price of share. It attempts to analyze earning per share, dividend per share, dividend payout ratio, dividend yield ratio, price earning ratio, profitability ratio to disentangle effect of these variables on market price of selected commercial banks.

4.1. Analysis of Financial Indicators of Sample Banks

4.1.1. Earning Per Share Analysis:

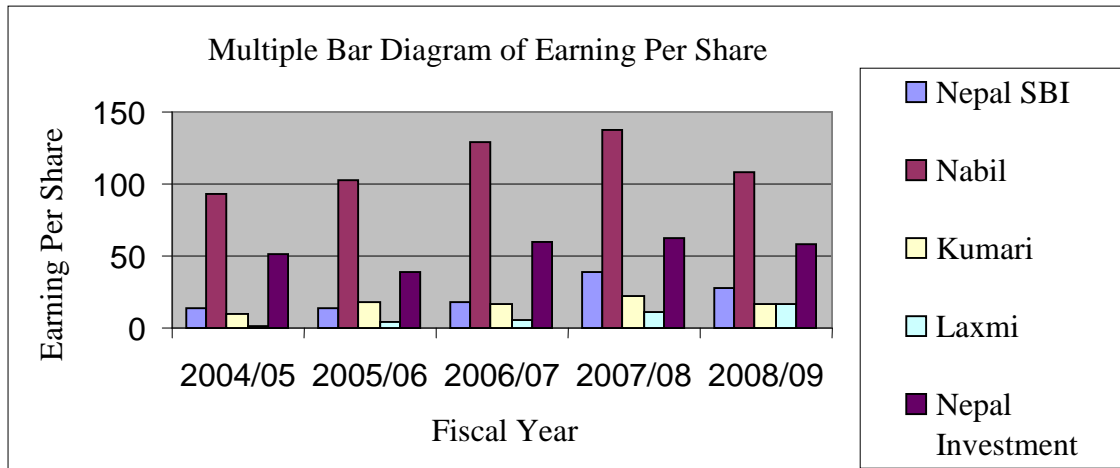
All the business firms always seek to have and more earning so that they could sustain efficiently in the comparative market. The following table shows all the details relating to earning per share of respective banks.

Table 4.1.1
Earning Per Share Analysis (In Rs.)

Year	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
2004/05	14.26	92.61	9.74	1.9	51.7
2005/06	13.29	103.45	17.58	4.34	39.5
2006/07	18.27	129.21	16.59	5.8	59.35
2007/08	39.35	137.08	22.7	10.75	62.57
2008/09	28.33	108.31	16.35	16.45	57.87
Average	22.7	114.13	16.59	7.85	54.20
S.D.	11.05	18.47	4.62	5.79	9.12
C.V.	48.67	16.19	27.83	73.83	16.82

Source: Annual report of the banks

Figure 4.1.1



The table 4.1.1 shows that EPS of the concreted Banks from 2004/05 to 2008/09. Normally, the performance and the achievement to business organization are measured in terms of its capital to generate earning. Higher EPS shows higher strength while lower EPS shows weaker strength of business organization.

In the starting year 2004/05, the table shows that the EPS of Nabil is highest, which amount to Rs. 92.61. While the EPS of Nepal Investment, Nepal SBI, Kumari and Laxmi are Rs.51.70, Rs.14.26, and Rs.9.74 & Rs.1.90 respectively. The date related to the Year 2005/06 that EPS of Nabil & Kumari are increased slowly that the EPS of Nepal SBI and Nepal Investment decreases.

In the year 2006/07 the Nabil, Nepal Investment, Nepal SBI & Laxmi's EPS increases but EPS of Kumari goes to down decrease up to Rs. (17.58-16.59) in amount. In the year 2007/08 all the banks increases their EPS in comparisons with the previous year. To the year 2008/09 Laxmi bank's EPS on word increased consistently while EPS of remaining banks decreases. On average

EPS of Nabil is highest among five sample banks which is Rs. 114.132. Rest four banks EPS are Nepal Investment Rs.54.198, Nepal SBI Rs.22.7, and Kumari Rs. 16.592 & Laxmi Rs.7.848.

Here S.D. of Nabil, Nepal SBI, Nepal Investment, Laxmi and Kumari are 18.474, 11.04905, 9.11575943, 5.794288 & 4.617691 respectively. A small S.D. measures a high degree of uniformity of the observation as well as homogeneity of a series and vice-versa. It is preferable to state that the rate of fluctuations which the help of coefficient of variation of above data. The coefficients of variable of the EPS of these five sample banks are 48.6742, 16.18652, 27.83083, 73.8314, and 16.8194 respectively. It shows that EPS of Nabil is lowest fluctuation among five banks. But Laxmi has highest fluctuation in EPS then others. It is apparent that the general analysis of EPS cannot give true picture of dividend policy of a bank. Therefore, it is necessary to measure the other necessary tools as well.

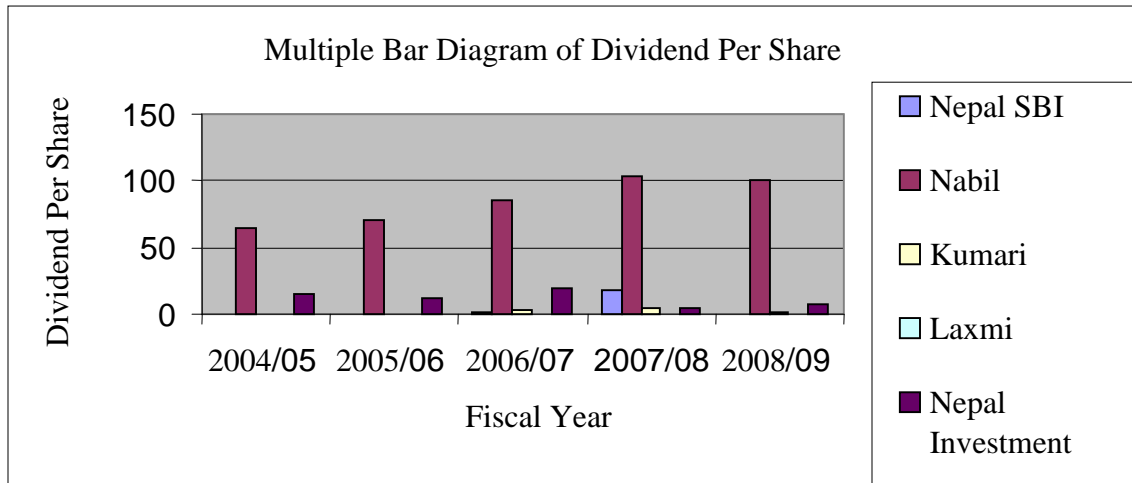
4.1.2 Dividend Per Share Analysis:

Table 4.1.2
Dividend Per Share (In Rs.)

Year	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
2004/05	0	65	0	0	15
2005/06	0	70	0	0	12.5
2006/07	0.91	85	3.49	0	20
2007/08	18.23	104	4.78	0	5
2008/09	0	100	1.72	0	7.5
Average	3.83	84.8	1.99	0	12
S.D.	8.06	17.40	2.12	0	5.97
C.V.	210.61	20.52	106.23	0	49.74

Source: Annual Report of Banks

Figure 4.1.2



From the table 4.1.2 shows the impact on dividend on share price of the concerned joint venture banks from the year ended 2004/05 to 2008/09. In the year 2004/05 NABIL paid highest cost of dividend Rs. 65 per share at all. On the other hand Nepal Investment paid Rs. 15. But Nepal SBI, Kumari and Laxmi paid zero dividends in this year. The date relating to the year 2005/06 DPS of Nabil increased but DPS of Nepal Investment is decreased. Other remaining banks not paid dividend in this year.

Nabil paid Rs. 85 per share as dividend which was the highest dividend for the year 2006/07. In this year Nepal SBI, Kumari and Nepal Investment paid Rs.0.913, Rs.3.49 and Rs.20 respectively. But also this year Laxmi paid no dividend. In year 2007/08 Nabil paid Rs.104, this was the highest dividend for this year. In year 2008/09 dividend per share Nabil and Kumari decreased, but Nepal Investment's increased. From above analysis we know Nepal SBI and Laxmi no paid dividend at last year also.

On the average, Nabil paid dividend per share Rs.84.8. But Laxmi paid no dividend in all year. In all year was Rs. 0 per share which is lowest average DPS. Here, S.D. of Nepal SBI, Nabil, Kumari, Laxmi, Nepal Investment are 8.060328, 17.39828, 2.122838,0 & 5.9686682. A small S.D. measures the highest of a series and vice-versa. It preferable to state that the rate of fluctuations with the help of coefficient of variation (C.V.) of above data. Nepal SBI's CV is 210.6065 which show that the highest fluctuations in cash dividend paid. On other hand Nabil show minimum CV i.e.20.51684. But Laxmi paid no any cash dividend and there is no any fluctuation and CV was 0.

4.1.3 Dividend Payout Ratio Analysis: (DPS/EPS)

Dividend payout ratio is highly influences by the Earning per share. The ratio highly influences the Earning per share because change in dividend per share can bring effective change in Earning per share.

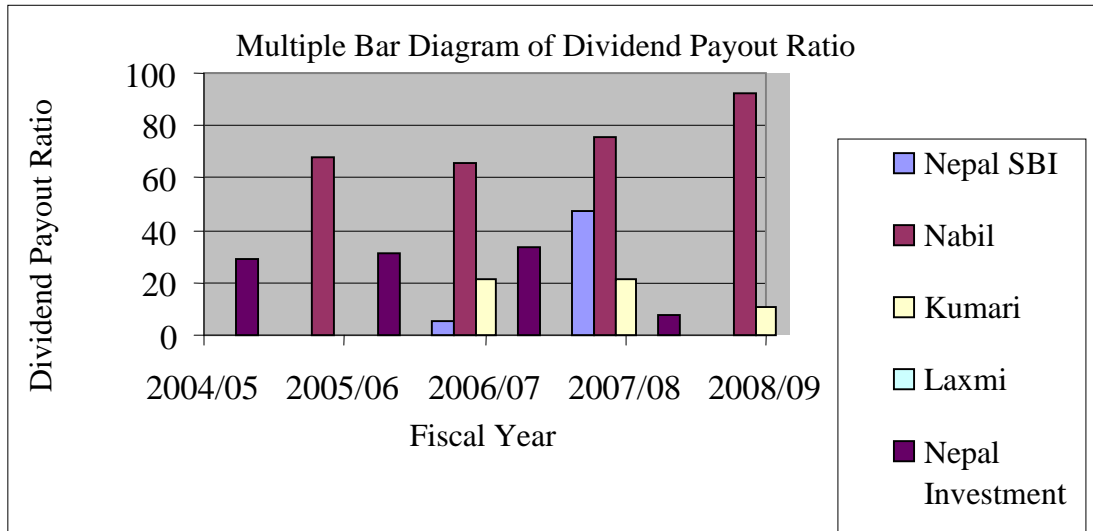
Table 4.1.3

Dividend Payout Ratio (In %)

Year	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
2004/05	0	70.19	0	0	29.01
2005/06	0	67.67	0	0	31.65
2006/07	5	65.78	21.05	0	33.7
2007/08	47.59	75.87	21.05	0	7.99
2008/09	0	92.33	10.53	0	12.96
Average	10.52	74.37	10.53	0	23.06
S.D.	20.84	10.73	10.53	0	11.74
C.V.	198.11	14.43	99.99	0	50.92

Source: Annual report of the Banks

Figure 4.1.3



The table 4.1.3 shows that the dividend payout ratio of the five sample banks from the year 2004/05 to 2008/09. In the year 2004/05 Nabil and Nepal Investment paid 70.19% & 29.01% respectively. Whereas Nepal SBI, Kumari, & Laxmi has paid no dividend. In year 2005/06 payout ratio of Nabil is highest among the banks that is 67.67 which is lower than the ratio of 2004/05. In this year 2006/07 only Laxmi no paid dividend. All other banks Nepal SBI, Nabil, Kumari, and Nepal Investment paid 5%, 65.784%, 21.05%, and 33.7% respectively.

In year 2007/08 dividend payout ratio simultaneously increases of all banks except Laxmi. The payout ratio of Nepal SBI dropped from 5% to 47.59% with in 1 span of year 2008/09. Highest dividend payout ratio of Nabil is 92.33% in the year 2008/09. The dividend payout ratio of Nabil looks improved in this year compare to the preceding year.

While comparing the average dividend payout ratio of five starting from 2004/05 to 2008/09. It is found that Nabil has highest average dividend payout ratio i.e. 74.3688%. In contrary to Nepal

Investment, Kumari and Nepal SBI are 23.062%, 10.526% & 10.518% respectively are quite good and Laxmi's 0 is the lowest one.

The calculation of the coefficient of variation of the Dividend yield ratio of five banks suggests that Dividend yield ratio of Nabil is more consistent (i.e. 14.43375 fluctuation) it means 85.56625% consistent. The CV of Nepal SBI , Kumari, Nepal Investment are 198.10487,99.9905& 50.9157 respectively and Laxmi has no CV as there is no any dividend paid in all five years.

4.1.4 Dividend Yield Ratio Analysis :(DPS/MPS)

Dividend yield ratio is highly influences by the market value per share. The ratio highly influences the market value per share because change in dividend per share can bring effective change in market value of that share. Therefore, before allocation of a market scenario and price fluctuation it is to be studied and evaluated for the long run survival of the company.

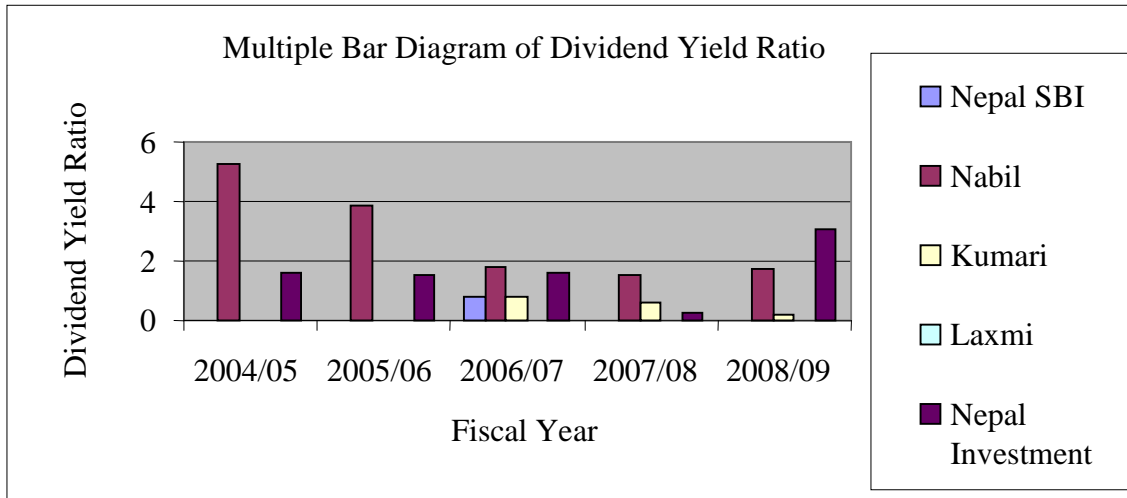
Table 4.1.4

Dividend Yield Ratio (In %)

Year	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
2004/05	0	5.28	0	0	1.6
2005/06	0	3.9	0	0	1.56
2006/07	0.82	1.79	0.79	0	1.59
2007/08	0	1.56	0.58	0	0.29
2008/09	0	1.70	0.17	0	3.06
Average	0.16	2.85	0.31	0	1.62
S.D.	0.37	1.67	0.36	0	0.98
C.V.	223.61	58.55	1.16	0	60.62

Source: Annual report of the banks

Figure 4.1.4



The table shows that dividend yield analysis for the year 2004/05 to 2008/09. In the year 2004/05 date related to dividend yield of Nabil & Nepal Investment are 5.28% & 1.596% respectively. Other remaining banks no paid dividend in this year. It means Laxmi is not acquired dividend yield. Nabil and Nepal Investment has decreased dividend yield in the year 2005/06 i.e.3.9%, 1.56%. In year 2006/07 all banks has dividend yield ratio except Laxmi. Both year 2007/08 and 2008/09 dividend yield ratio slightly increase. There was no dividend yield of remaining two banks in these years. They are Nepal SBI and Laxmi.

In average Nabil dividend yield 2.84666% is highest at all. But dividend yield of Laxmi is lowest i.e.0%. 0.1634%, 0.307% and 1.6184% are average dividend yield of Nepal SBI, Kumari and Nepal Investment respectively.

The S.D. of Nepal SBI, Nabil, Kumari, Laxmi & Nepal Investment are 0.365374, 1.666632, 0.3573222, 0 & 0.981123489 respectively. Among these S.D. of Nabil is highest one and S.D. of Laxmi is lowest one. A small S.D. measures the high degree of uniformity of observation as small homogeneity of series and vice- versa.

The coefficient of variation analysis shows the Dividend yield of Nabil fluctuation is least i.e. 58.5482%. While Nepal SBI, Kumari and Nepal Investment are 223.607%, 111.639% and 60.62305% fluctuating. But there is no coefficient of variation of Laxmi due to zero dividend paid in all five year's by this bank. In aggregate Nabil is effective for distribution of dividends on the basis of market price of share.

4.1.5 Price Earning Ratio Analysis: (MPS/ EPS)

P/E ratio is the investor's exception towards the company's financial performance. It gives the knowledge of financial protection towards owner which also indicated the market appraisal of the different banks.

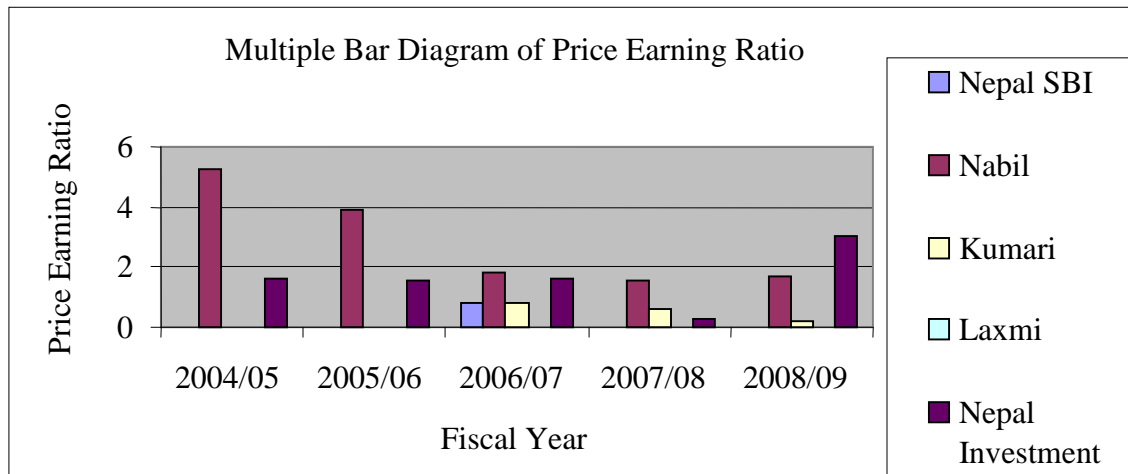
Table 4.1.5

Price Earning Ratio (In times)

Year	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
2004/05	21.54	14.27	0	82.11	18.18
2005/06	25.21	17.34	20.99	65.68	20.25
2006/07	33.59	36.84	26.71	63.44	21.23
2007/08	29.89	48.7	36.56	64.18	27.63
2008/09	53.34	54.2	61.47	67.66	42.33
Average	32.71	34.27	29.15	68.61	25.92
S.D.	12.40	18.02	22.48	7.71	9.83
C.V.	37.91	52.58	77.16	11.24	37.91

Source: Annual report of the banks.

Figure 4.1.5



The table 4.1.5 depicts the price earning ratio of the five sample banks. This study helps us to classify the relationship between earning per share and market value per share. In the year 2004/05, most of the bank's P/E ratios are normal except Kumari. The PE ratio of Laxmi is greater than others i.e. 82.11 times. In year 2005/06 PE ratio of Laxmi is decreased i.e. 65.68 times. But in the year 2006/07 PE ratio of Nepal SBI, Nabil, Kumari, Laxmi and Nepal Investment are 33.59 times, 36.84 times, 26.71 times, 63.44 times and 21.23 times respectively. In this year also Laxmi has the highest PE ratio among given sample banks.

In the year 2007/08, all bank's PE Ratio increased then previous year 2006/07. Again, in the year 2008/09 PE ratio of Nepal SBI, Nabil, Kumari, Laxmi, Nepal Investment are 53.34 times, 54.2 times, 29.146 times, 68.614 times and 25.924 times respectively. Average PE ratio of Nepal SBI, Nabil, Kumari, Laxmi & Nepal Investment is 32.714 times, 34.27 times, 29.146 times and 25.924 times respectively.

The coefficient of variation analysis shows that the PE ratio of Laxmi is least fluctuation i.e. 11.244208%. On the other hand CV of Nabil is highly fluctuating i.e. 77.13563%. But Nepal

SBI, Nabil & Nepal Investment's CV show little more fluctuating than that of Laxmi i.e. 37.91358%, 52.5779% & 37.9062%.

4.1.6 Profitability Ratio Analysis: (Gross Profit/ Total Assets)

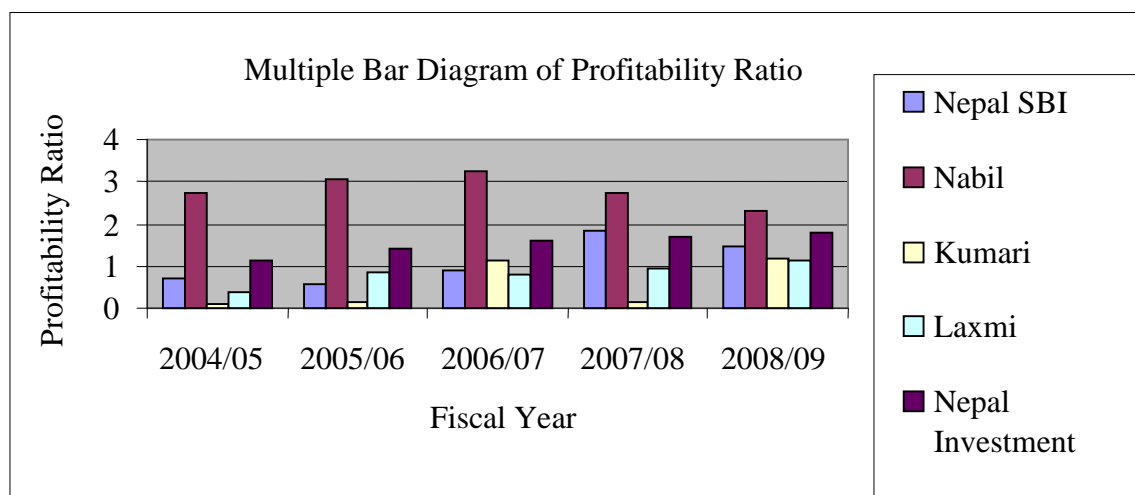
Table 4.1.6

Profitability Ratio Analysis (In %)

Year	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
2004/05	0.72	2.73	0.089	0.4	1.13
2005/06	0.55	3.06	0.118	0.83	1.42
2006/07	0.9	3.23	1.15	0.79	1.61
2007/08	1.83	2.72	0.143	0.95	1.69
2008/09	1.44	2.32	1.16	1.13	1.77
Average	1.09	2.81	0.53	0.82	1.52
S.D.	0.53	0.35	0.57	0.27	0.26
C.V.	48.95	12.49	106.96	32.86	16.78

Source: Annual report of the banks

Figure 4.1.6



The table 4.1.6 shows profitability ratio analysis for the year 2004/05 to 2008/09. In this year Profitability Ratio of Nepal SBI, Nabil, Kumari, Laxmi, Nepal Investment is 0.72%, 2.73%,

0.089%, 0.4% and 1.13% respectively. Nabil, Kumari, Laxmi, Nepal Investment's profitability ratio are increased in the year 2005/06. But Nepal SBI's profitability ratio is decreases then previous year's profitability ratio. In the year 2006/07 all sample banks profitability ratio are increases. In the year 2007/08 both banks Nabil and Kumari has decreases their profitability ratio i.e. 2.72% and 0.143% but all remaining bank's profitability ratio are increases. Again Kumari, Laxmi and Nepal Investment's profitability ratio increases in the year 2008/09 i.e. 1.16%, 1.13% & 1.77% respectively. But Nepal SBI and Nabils's profitability ratio is decreased in this year then previous i.e. 1.44% and 2.32%. In average profitability ratio of Nepal SBI , Nabil, Kumari, Laxmi, Nepal Investment are 1.088%, 2.812%, 0.532%, 0.82% & 1.524% respectively.

The coefficient of variation analysis shows that the profitability ratio of Nabil is least fluctuating i.e. 12.49079%, while Nepal SBI, Kumari, Laxmi and Nepal Investment are 48.95285%, 106.9645%, 32.859% & 16.7779% respectively fluctuating.

4.1.7 Market Value Per Share and Net Worth Per Share Analysis:

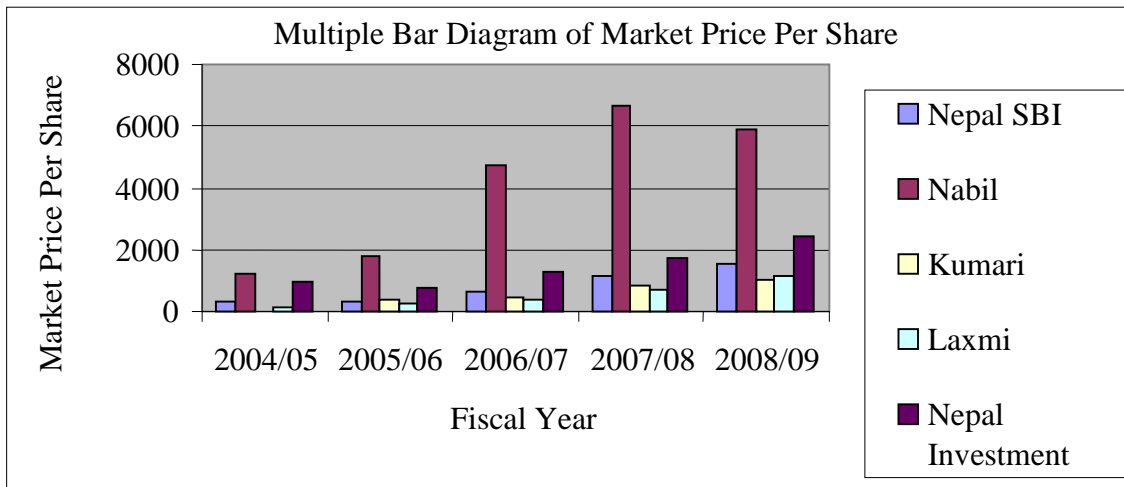
Table 4.1.7

Market Value Per Share / Net Worth Per Share Analysis (In Rs.)

Year	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
2004/05	307/ 131.8	1231.71/223.1 8	271/95.88	156/98.47	940/307.94
2005/06	335/134.05	1793.82/267.3	369/103.15	285/99.04	800/216.23
2006/07	612/146.80	4760.10/301.3 7	443/101.52	368/101.32	1260/246.88
2007/08	1176/159.5	6675.8/337.2	830/103.52	690/105.53	1729/199.83
2008/09	1511/153.4	5870.4/381.4	1005/138.2	1130/111.22	2450/239.67
Average	788.2/145.	4066.37/302.	529.4/108.5	525.8/103.18	1435.8/242. 1
S.D.	534.05/12.0 2	2436.426/61.1 4	396.8/16.87	391/5.43	669/41.29
C.V.	67.76/8.28	60/20.24	75/15.55	74/5.26	47/17.06

Source: Annual report of the banks.

Figure 4.1.7



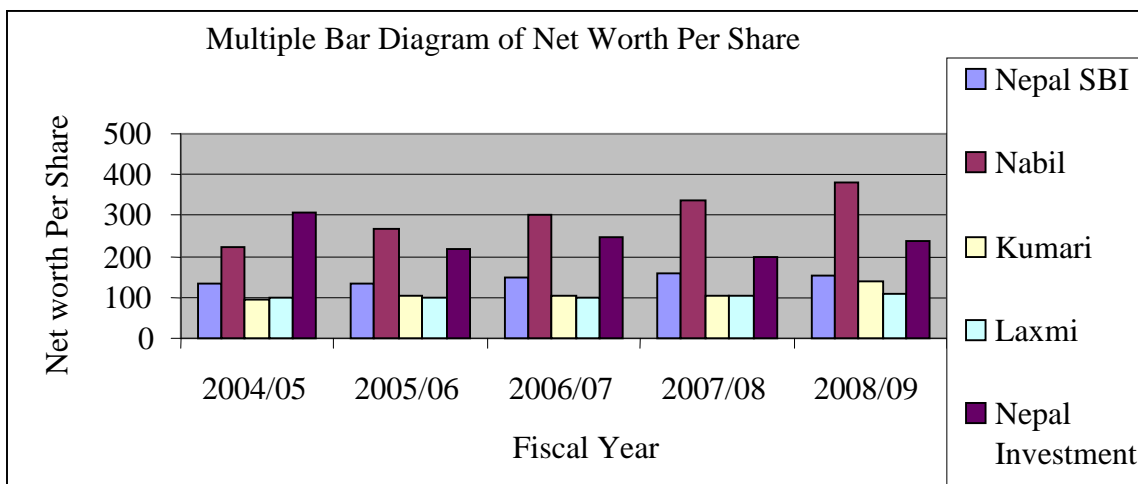


Table 4.1.7 shows that the Proportion of Market value per share on Net worth per share of the concerned banks from the year 2004/05 to 2008/09. Net worth per share is known as the actual value of share. Market value per share means to evaluate value of share in the market. In the year 2004/05 MVPS and Net worth per Share of Nepal SBI, Nabil, Kumari, Laxmi and Nepal Investment are Rs.307 & Rs.131.88, Rs.1231.71 & Rs.223.18, Rs.0 & Rs.95.88, Rs.156 & Rs.98.47, and Rs.940 & Rs.307.94 respectively. In the year 2005/06 MVPS & Net worth of Nepal Investment decrease by Rs.140 & Rs.91.71, but MVPS & NWPS of all remaining banks are increases in this year.

The data related to the 2006/07 year MVPS & NWPS of all banks are increase but NWPS of Kumari decrease by Rs.1.20. In year 2007/08 MVPS & NWPS of all Banks are increased except Net worth of Nepal investment bank. In the year 2008/09 MVPS of Nepal SBI, Nabil, Kumari, Laxmi and Nepal Investment are Rs.1511, Rs.5870.4, Rs.1005, Rs.1130, and Rs.2450. It shows that except Nabil all other banks MVPS also increase in the year 2008/09. But Net worth per share of above banks is Rs. 153.44, Rs.381.36, Rs.138.22, Rs.111.22 and Rs.239.67 respectively.

From above data we know except Nepal SBI all remaining banks NWPS also increases in the year 2008/09.

The coefficient of variation analysis shows that MVPS of Kumari is most consistent among the sample banks i.e.74.9654. But C.V. of Nepal SBI, Nabil, Laxmi and Nepal Investment are 67.755%, 59.9166%, 74.371%& 46.663% respectively. The coefficient of variation analysis shows that NWPS of Nabil is 20.2393 which are most consistent among the sample banks.

4.2 Correlation Coefficient and Regression Equation:

To make the study more result oriented statistical tools have been used that the raw data to useful and describe the data. Using the statistical weapons, the study has succeeded to classify the relation and differences of related variables. The study applied the degree of correlation, simple regression of the market price, dividend per share and the retained earning per share of the selected commercial banks for other relevant factor mean, standard deviation of the variables, coefficient of determination , standard error of estimation, t-value and coefficient of variations have been determined for the analytical purpose .

4.2.1 Statistical Relationship Between EPS And DPS:

Table no.4.2.1

Statistical Relationship Between EPS and DPS

Statistical tools	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
mean X(\bar{X})	22.7	114.13	16.59	7.85	54.20
x	11.05	18.47	4.62	5.79	9.12
CV X	48.67%	16.19%	27.83%	73.83%	16.82%
N	5	5	5	5	5
Mean Y(\bar{Y})	3.83	84.8	1.99	0	12
y	8.06	17.40	2.12	0	5.97
CV Y	210.61%	20.52%	106.23%	0%	49.74%
a	-10.93	6.27	-3.60	0	19.95
b	0.613	0.69	0.34	0	-0.15
r_{xy}	0.84	0.73	0.73	0	-0.25
R^2	0.71	0.53	0.54	0	0.050
S.E.E.	5.04	13.72	1.67	0	6.72
t	2.69	1.84	1.87	0	-0.40

Where,

X= Earning per share

Y= Dividend per share

a,b = The parameter of regression

Analyzing the above data we find Nabil Bank has highest mean of EPS of Rs. 114.13 and Laxmi has lowest mean of EPS of Rs.7.85. Similarly Nabil has highest mean of DPS has Rs. 84.8 and Laxmi has lowest mean of DPS is Rs.0. Highest S. D. for EPS is 18.47 & lowest standard deviation for EPS is 4.62. The dispersion of EPS for Nabil is highest & lowest for Kumari bank. These are 18.47 and 4.62 respectively. Similarly dispersion of DPS for Nabil is highest & lowest for Laxmi. They are 17.40 & 0 respectively.

C.V. of EPS for Laxmi Bank has highest and for Nabil has lowest. This indicates Laxmi has less uniformity and consistency among selected bank while Nabil has highest uniformity and consistency on its earning among sample banks. Highly positive Correlation between EPS and DPS was 0.84. This indicates while increase in EPS by one rupee DPS will be increased by 0.87 rupees. Coefficient of determination is 0.71. The regression equation of y on x is $0.201 + 0.688x$.

4.2.2 Statistical Relationship Between DPS and MPS:

Table No.4.2.2

Statistical Relationship Between DPS and MPS:

Statistical tools	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
Mean $X(\bar{X})$	3.83	84.8	1.99	0	12
x	8.06	17.40	2.12	0	5.97
CV x	210.53%	20.52 %	106.23 %	0%	49.74 %
N	5	5	5	5	5
Mean $Y(\bar{Y})$	788.2	4066.37	583.6	525.8	1435.8
y	534.05	2436.42	316.95	391.04	669.96
CVy	67.76%	59.92%	54.31%	74.37%	46.66%
a	686.42	-7659.19	426.98	0	2263.42
b	26.59	138.27	78.37	0	-68.97
r_{xy}	0.40	0.99	0.53	0	-0.61
R^2	0.16	0.97	0.28	0	0.38
S.E.E.	564.85	445.29	311.51	0	-610.39
$ t $.76	10.81	1.07	0	-1.35

Where,

X= Dividend per share

Y= Market price per share

a, b = The parameter of regression

Analyzing the above data we find Nabil Bank has highest mean of DPS of Rs. 84.80 and Laxmi has lowest mean of DPS of Rs.0. Similarly Nabil has highest mean of MPS has Rs. 4066.365 and Laxmi has lowest mean of DPS is Rs.525.50. Highest S. D. for DPS is 17.398 & lowest standard deviation for DPS is 0. The dispersion of DPS for Nabil is highest & lowest for Laxmi. Similarly dispersion of MPS for Nabil is highest & lowest for Kumari. Which are 2436.426 & 316.951 respectively.

C.V. of DPS for Nepal SBI Bank has highest i.e. 210.529% and for Laxmi has lowest one i.e. 0%. This indicates Nepal Investment has less uniformity and consistency among selected bank while Laxmi has highest uniformity and consistency on its earning among sample banks. Highly positive Correlation between DPS and MPS was 0.987. This indicates while increase in DPS by one rupee MPS will be increased by 0.987 rupees. Highest Coefficient of determination is 0.974. The regression equation of MPS on DPS is $2263.421 - 68.968 \text{ DPS}$.

4.2.3 Statistical Relationship Between REPS and MPS:

Table No.4.2.3

Statistical Relationship Between REPS and MPS

Statistical tools	Nepal SBI	Nabil	Kumari	Laxmi	Nepal Investment
Mean $X(\bar{X})$	18.87	29.33	14.59	7.84	42.20
x	6.11	13.20	3.38	5.79	11.96
CV x	32.38%	45.01%	23.18%	73.85%	28.35%
N	5	5	5	5	5
Mean $Y(\bar{Y})$	788.2	4066.37	583.6	525.8	1435.8
y	534.05	2436.43	316.95	391.04	669.96
CVy	67.76%	60%	54.31 %	74.37%	46.663
a	-820.84	5004.48	-28.69	-2.56	-457.71
b	85.26	-31.98	41.96	67.32	44.87
rx _y	0.98	-0.17	0.45	0.99	0.80
R ²	0.951	0.30	0.201	0.98	0.64
S.E.E.	136.54	2770.77	327.24	31.40	462.97
t	7.63	-0.31	0.87	24.85	2.32

Analyzing the above data we find Nepal Investment Bank has highest mean of REPS of Rs. 42.198 and Laxmi has lowest mean of REPS of Rs.7.84. Similarly NABIL has highest mean of MPS has Rs. 4066.365 and Laxmi has lowest mean of DPS is Rs.525.50. The dispersion of REPS for Nabil is highest & lowest for Kumari. Highest S. D. for REPS is 13.203 & lowest standard deviation for REPS is 3.383. Similarly dispersion of MPS for Nabil is highest & lowest for Kumari. Which are 2436.426 & 316.951 respectively.

C.V. of REPS for Laxmi Bank has highest i.e. 73.85% and for Kumari has lowest one i.e. 23.18%. This indicates Laxmi has less uniformity and consistency among selected bank while

Kumari has highest uniformity and consistency on its earning among sample banks. Correlation coefficient between REPS and MPS of selected commercial banks are positive except Nabil Bank. Laxmi was highly positive correlated then others i.e.0.998. This indicates while increase in REPS by one rupee MPS will be increased by 0.998 rupees. Highest Coefficient of determination is 0.996. The regression equation of MPS on REPS of Nepal SBI, Nabil, Kumari, Laxmi & Nepal Investment are $-820.841+85.263X$, $5004.484-31.983X$, $-28.697+41.957X$, $-2.56+67.324X$ & $-457.704+44.872X$ respectively.

4.2.4. Major Findings

1. The topic covers some main findings and important point discovered in this study. These findings may certainly help to point out certain necessity for the improvement of existing conditions.
2. From the descriptive analysis, the researcher found there is not any consistency in dividend policy in the sample firms. It has indicated the need of dividend strategy as well as the need of proper analysis of the respective sector of the firms.
3. Most of the Nepalese commercial banks from the very past have not profit planning and investment strategy, which has imbalanced the whole position of the firms. It means there is not consistency even in the earnings.
4. According to the analysis the companies have not maintained a constant pay out. Some companies have study upward dividend that explains they are following how regular plus additional dividend. More stable dividends ultimately have considerable impact on the valuation of shares in case there are rational investors in market, but the Nepalese management of the commercial banks till does not analyze this matter.

5. Earning per share of Laxmi is increasing consequently then other are fluctuate.
6. The dividend distribution is irregular in those banks except Nabil & Nepal Investment. In average Nabil have more than 50% dividend payout ratio on other hand Laxmi have not paid dividend yet. Other remaining banks dividend payout ratio is less then 50%.
7. Through the analysis of correlation between DPS and EPS there has been observed five commercial banks, some have positive relationship except Nepal Investment Bank. But the relationship cannot be computed of Laxmi as its DPS is 0 in all the selected sample period. So in conclusion dividend is the factor which affects EPS. Dividend is not only one factor, which affects EPS; it is only one major factor among other factors.
8. Positive relationship between DPS & EPS. Which indicates both change in some direction but degree of rapidity is high for DPS in comparison EPS.
9. On the basis of correlation coefficient between DPS and MPS all sample banks have positive relation except Nepal Investment Bank. But the relationship cannot be computed of Laxmi as its DPS is 0 in all the selected sample period. Which indicates DPS is not only one factor that effect MPS. Declaration of dividends has low positive effects on MPS.
10. On the basis of correlation coefficient between REPS and MPS all sample banks have positive relation except Nabil Bank. Which indicates REPS is not most important factor that effect MPS. Declaration of dividends has high positive effects on MPS.
11. The MPS is affected by the financial position and the dividend paid by the firm, in this regards the MPS of the sample firms is seen to be fluctuated. It denotes Nepalese investors are not treated fairly.
12. The analysis shows that the shareholder expectation not considered net worth of all Banks is less than market price of share. Higher MPS indicates higher expectation in future.

Chapter V

SUMMARY, CONCLUSION & RECOMMENDATION

5.1 Summary

Dividend distribution is the very important factor to any organization for effective goal achievement to satisfy the shareholders. Dividend service it's a simple, comprehensive signal of management's interpretation of the firm's recent performance and its future prospects. Dividend refers to that portion of firms net earning which are paid out to the shareholders in return of their investment. Paying dividend to shareholder is an effective way to attract new investors to invest share. The return to the shareholder is affected by the dividend policy adopted by the company. This is mainly due to the fact that dividend policy determines the amount of earning to be distributed to shareholders and the amount to be retained for investment in the firm. There is a reciprocal relationship between retained earnings and cash dividend. If the firm increases its retained earnings, then, its cash dividend will decrease and vice versa. Dividend policy of the firm is a crucial area of financial management. It is in the sense that it has to decide between distribution of profits to shareholders and retaining them for reinvestment in the firm. The company's decision on the dividend policy should maximize the shareholders wealth. A company at the growth stage requires lot of funds to finance profitable investments opportunities. Generally, a company can select for raising debt, issue of equity and utilization of retained earnings are preferable because external equity is more expensive than internal equity.

Most of the things about dividend policy and brief introduction of this study have been already presented in the first chapter. The available literature related to dividend policy is reinvested.

Moreover, research methodology is described in third chapter. All the available data are presented and analyzed in the fourth chapter. In the final chapter, an attempt has been made to present summary, conclusion and recommendation.

Among many commercial banks, five banks namely Nepal SBI, Nabil, Kumari, Laxmi & Nepal Investment are selected for study. The main objective of the study to see the relationship among various financial indicators as dividend per share, earning per share, dividend pay out ratio, dividend yield, price earning ratio, profitability ratio, Retained Earning ratio and market value per share. The study has revealed the following facts.

Nepal has not sufficient rules and regulation to control the financial institution. By the same way, commercial banks of Nepal have not satisfactory result about dividend decision. In practices, every firm has followed own types of dividend policies. The relationship between dividend and market price per share should be like that of nail and meat. But the relation is not good in situation under develop capital market like Nepal. Dividend distribution is not matching with the earning of commercial banks. Similarly, no proper relationship between dividend and market value per share of share exists. Company with lower returns records rigid price where as company making sound return don't become rigid in price of share. Thus the return of the company is not reflecting the market price of share.

In an underdeveloped capital market of Nepal where other information can be misinterpreted dividends serve as a simple comprehensive signal of management interpretation of the firm's recent performance and its future prospects. The newness of the capital market, lacks of

investment's knowledge make Nepal a unique investment in which to conduct this study. This study mainly aims of examining the relationship between dividends per share, earning per share and analyzing the reaction of stock price of dividend announcement. This study is based on secondary source of information. The relationship between earning per shares, dividend per share with market price per share was examined by using secondary data of 5 commercial Banks listed on NEPSE for the period of 2005 to 2009. The study on relationship between dividends per share was examined by using mathematical model. This model examined the relationship between DPS & REPS with MPS by calculating the correlation, regression mean, standard deviation, coefficient of variance, standard error etc.

The dividend decision made by the companies has not followed stable trend, which is difficult to forecast for coming year dividend because of confusing policy of the companies. Some of the companies have been treating as compulsion while determining the dividends of the companies, affection factors are many factors. In this changing scenario of encouraging secondary market it is timely to study the intervention of dividend on MPS. At present the commercial banks are increasing in trend and completion for their own existence in this competitive environment. As the objectives of the study, selected companies have been reached inference about the implication of the dividend.

5.2 Conclusion

The above mentioned major findings lead this study to conclude that the sample banks have got sufficient earnings but some of the banks are paying high dividend while other are paying low dividend. Other things remaining the same, financial position of higher dividend paying banks in

comparatively better than that of lower dividend paying banks. Another major findings lead this study conclude that, comparatively dividend per share is not respectively more stable than the dividend payout ratio. Another conclusion is that the market value per share is affected by dividend.

A wide policy should be maintained between shareholders interest and corporate growth from internally generated funds. The funds some times could not be used in case of lack of investment opportunities. In such a situation, distributions of dividend to share holders is taken as best become shareholders have greater investment opportunities to employ elsewhere.

Lastly, the sample banks have not clearly defined dividend policy and they have not followed the consistency in dividend distribution policy so that there are varies result and not in uniformity of Dividend payout ratio of the sample banks.

5.3. Recommendations

The major decision of the firm is its dividend policy the percentage of earnings it pays in case to its stockholders Dividend payout of course, reduces the amount of earnings retained in the firm and affects the total amount of internal financing. The firm should retain earning only in keeping with its investment opportunities. If there are not sufficient investment opportunities providing expected returns in excess of the required return, the unused funds should be paid out as dividends. Nepalese Commercial banks retained their earnings but earnings are not increasing. Nepalese Commercial banks retained earning without attractive investment opportunities so EPS is in decreasing condition. Nepalese managements have not properly considered the expectation

of investors. The cash dividend announcement has a significant affect on market price of share. Thus, the Nepalese Commercial banks must be considered the effect of dividend on market price of share while declaring dividend.

Management of Nepalese commercial Banks has not to follow proper dividend policy for all years. The dividend announcement has a significant effect on market price of share, thus the Nepalese managements of Commercials Banks must consider this fact.

Nepalese capital market is not so developed and perfect. Nepalese investors are not rational investors so; the programs of educating the shareholders should be initiated. The shareholders of association of Nepal established by the aware, shareholders should be recognized. Extending the authority of Nepal Stock Exchange for protecting the interest of shareholders legislation related denuded policy should be implemented and there should be finely information in company activities.

1. Most of the banks have had great fluctuation of dividend per share, earning per share, dividend yield, dividend payout ratio, and price earning and share price in terms of coefficient of variation. Such fluctuation increase in risk position of investors. Therefore, company should to stabilize these variables.
2. There is lack of rules binding companies to pay dividend. The legal rules for the treatment of dividend are most for the smooth growth of national economy. Some regulating acts are silent on these matters most of the companies are paying dividend less than interest rate paid by commercial banks. In this situation, it is necessary to enact legal rules that bind companies

to pay dividend and that regulates and market self – functioning to the stock market for this purpose. NEPSE, SEBON and other concerned parties should do work together.

3. Companies should have long term vision regarding earning and dividend payment that helps to cope with challenging competitive situation of present world. Companies should define their vision clearly considering their future plans, expansion in business, future economy of the country. Considering various internal and external factors, companies should choose whether to adopt stable dividend policy or constant payout ratio or low plus extra or leaving dividend as residual.
4. One organization should be the intellectual shareholders for working in favor of Nepalese investors. This should be reorganization to promote the activities and to protect the interest of investors. There are not any organizations fully develop to protect investor's interest.
5. The fluctuation in earning per share and dividend payout ratio of the banks seems higher. It may cause confusion in the mind of investors/ shareholders. This sort of fluctuation in earning and pay out ratio clearly indicates that banks do not have their target rate of earning and payout ratio. In this situation, banks are advice to have target rate of earning and target ratio that will help banks to build good image in stock market and investors will be ease on making investment decision.
6. Shareholders should be given an option to choose between stock dividend and cash dividend instead of declaring stock or cash dividend arbitrary. For this dividend declaration should be proposed to the annual general meeting of shareholders for approval.
7. 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. On the other hand, SEBON should provide all the necessary information regarding

the company's activities. The information regarding secondary market and capital market is not duly flash out today. Therefore, concerning body should timely provide all the information about this factor.

8. Having seen the history of dividend paying companies, it is seen that the net profit after tax is the main base for distributing the dividend. Thus, it is suggested that investors who want to purchase the equity share and immediate return should invest the share of higher profit earning companies.
9. The activities of Nepal Stock Exchange Ltd. and Security Board Nepal should be made wide these organizations. These organizations should be revitalized equipping them with facilities.
10. In every organization the manager should be able to return their duties and responsibilities and to protect shareholders interest but not for operation of the company desired by themselves. Organization should be formed by the intellectual shareholders for working in favor of Nepalese investors, which should be recognized by the government. The government should encourage this kind of organization to promote the activities and to protect the interest of investor's interest. Investors should be well informed and communicate about dividend policy and other valuable information by arranging talk programmed publishing pamphlets and using public communications means for awareness of the investors.

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APPENDICES

Appendix I

Statistical relationship between EPS & DPS

1. Nepal SBI Bank Ltd.

Year	EPS(X)	DPS(Y)	XY	X ²	Y ²
2004/05	14.26	0	0	203.3476	0
2005/06	13.29	0	0	176.6241	0
2006/07	18.27	0.913	16.68051	333.7929	0.833569
2007/08	39.35	18.23	717.3505	1548.423	332.3329
2008/09	28.33	0	0	802.5889	0
Total	113.5	19.143	734.031	3064.776	333.166469

$$\text{Mean of EPS } \bar{X} = \frac{\sum X}{N} = 22.694$$

$$\text{Standard deviation (} \sigma_x) = \sqrt{\frac{\sum X^2}{N} - \bar{X}^2} = 11.045$$

$$\text{Coefficient of variance (C.V.)} = \frac{\sigma_x}{\bar{X}} = 48.674\%$$

$$\text{Correlation co-efficient (r)} = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} = 0.8407$$

$$\text{Coefficient of determination (r}^2) = 0.707$$

$$\text{Mean of DPS } \bar{Y} = \frac{\sum Y}{N} = 3.8286$$

$$\text{Standard deviation of Y (} \sigma_y) = \sqrt{\frac{\sum Y^2}{N} - \bar{Y}^2} = 8.060328$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{\sigma_y}{\bar{Y}} = 210.6065\%$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{\sum Y^2 - \frac{(\sum Y)^2}{N}}{n-2}} = 5.04$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum (X - \bar{X})^2}} = 0.228$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 2.689$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b \sum x \quad \text{and} \quad \sum XY = a \sum x + b \sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n \sum XY - \sum X \cdot \sum Y}{n \sum X^2 - (\sum X)^2} = 0.6133$$

$$a = \bar{Y} - b \bar{x} = -10.93$$

2. Nabil Bank Ltd.

Year	EPS(X)	DPS(Y)	XY	X ²	Y ²
2004/05	92.61	65	6019.65	8576.612	4225
2005/06	103.45	70	7241.5	10701.9	4900
2006/07	129.21	85	10982.85	16695.22	7225
2007/08	137.08	104	14256.32	18790.93	10816
2008/09	108.31	100	10831	11731.06	10000
Total	570.66	424	49331.32	66495.72	37166

$$\text{Mean of EPS } \bar{X} = \frac{\sum X}{N} = 114.132$$

$$\text{Standard deviation of X (} \sigma_x) = \sqrt{\frac{\sum X^2}{N} - \bar{X}^2} = 18.474$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{\sigma_x}{\bar{X}} = 16.1865$$

$$\text{Correlation co-efficient (r)} = \frac{N \cdot \sum XY - \sum X \cdot \sum Y}{\sqrt{N \cdot \sum X^2 - (\sum X)^2} \cdot \sqrt{N \cdot \sum Y^2 - (\sum Y)^2}} = 0.731$$

Coefficient of determination (r^2) = 0.533

$$\text{Mean of DPS} = \bar{Y} = \frac{\sum Y}{N} = 84.8$$

$$\text{Standard deviation of Y (} y) = \sqrt{\frac{\sum Y^2}{N} - \frac{(\sum Y)^2}{N^2}} = 17.39828$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{s_y}{\bar{Y}} = 20.517$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{\sum Y^2 - \frac{(\sum Y)^2}{n}}{n-2}} = 13.719$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum (X - \bar{X})^2}} = 0.371$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 1.835$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b\sum x \quad \text{and} \quad \sum XY = a\sum x + b\sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n\sum XY - \sum X \cdot \sum Y}{n\sum X^2 - (\sum X)^2} = 0.688$$

$$a = \bar{Y} - b\bar{x} = 6.267$$

3. Kumari Bank Ltd.

Year	EPS(X)	DPS(Y)	XY	X ²	Y ²
2004/05	9.74	0	0	94.8676	0
2005/06	17.58	0	0	309.0564	0
2006/07	16.59	3.49	57.8991	275.2281	12.1801
2007/08	22.7	4.78	108.506	515.29	22.8484
2008/09	16.35	1.722	28.1547	267.3225	2.965284
Total	82.96	9.992	194.5598	1461.765	37.993784

$$\text{Mean of EPS } \bar{X} = \frac{\sum X}{N} = 16.592$$

$$\text{Standard deviation of X (} s_x) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2} = 4.618$$

$$\text{Coefficient of variance (CV}_x) = \frac{s_x}{\bar{X}} = 27.831$$

$$\text{Correlation co-efficient (r)} = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} = 0.734$$

$$\text{Coefficient of determination (r}^2) = 0.539$$

$$\text{Mean of DPS } \bar{Y} = \frac{\sum Y}{N} = 1.9984$$

$$\text{Standard deviation of Y (} s_y) = \sqrt{\frac{\sum Y^2}{N} - \left(\frac{\sum Y}{N}\right)^2} = 2.123$$

$$\text{Coefficient of variance (CV}_y) = \frac{s_y}{\bar{Y}} = 106.2269$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{\sum Y^2 - \frac{(\sum Y)^2}{N} - \frac{(\sum XY - \frac{\sum X \sum Y}{N})^2}{N \sum X^2 - (\sum X)^2}}{n-2}} = 1.665$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum (X - \bar{X})^2}} = 0.18$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 1.871$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = n a + b \sum X \quad \text{and} \quad \sum XY = a \sum X + b \sum X^2$$

Solving these two normal equations we get,

$$b = \frac{n \sum XY - \sum X \cdot \sum Y}{n \sum X^2 - (\sum X)^2} = 0.337$$

$$a = \bar{Y} - b \bar{X} = -3.6$$

4. Laxmi Bank Ltd.

Year	EPS(X)	DPS(Y)	XY	X ²	Y ²
2004/05	1.9	0	0	3.61	0
2005/06	4.34	0	0	18.8356	0
2006/07	5.8	0	0	33.64	0
2007/08	10.75	0	0	115.5625	0
2008/09	16.45	0	0	270.6025	0
Total	39.24	0	0	442.2506	0

$$\text{Mean of EPS } \bar{X} = \frac{\sum X}{N} = 7.848$$

$$\text{Standard deviation of X } (s_x) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2} = 5.7943$$

$$\text{Coefficient of variance of X } (CV_x) = \frac{s_x}{\bar{X}} = 73.831\%$$

$$\text{Correlation co-efficient } (r) = \frac{N \sum XY - \sum X \cdot \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \cdot \sqrt{N \sum Y^2 - (\sum Y)^2}} = 0$$

$$\text{Coefficient of determination } (r^2) = 0$$

$$\text{Mean of DPS } \bar{Y} = \frac{\sum Y}{N} = 0$$

$$\text{Standard deviation of Y } (s_y) = \sqrt{\frac{\sum Y^2}{N} - \left(\frac{\sum Y}{N}\right)^2} = 0$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{t_y}{\bar{Y}} \times 100$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{Y^2 Z a^2 + Y Z b^2 - XY}{n Z^2}} = 0$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{(X Z \bar{X})^2}} = 0$$

$$\text{T- Value } |t| = \frac{b}{Sb} \times 100$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = n a + b \sum x \quad \text{and} \quad \sum XY = a \sum x + b \sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n \sum XY - \sum X \cdot \sum Y}{n \sum X^2 - Z \bar{X} \sum X}$$

$$a = \bar{Y} - Z \bar{X} b = -3.6$$

5. Nepal Investment Bank Ltd.

Year	EPS(X)	DPS(Y)	XY	X ²	Y ²
2004/05	51.7	15	775.5	2672.89	225
2005/06	39.5	12.5	493.75	1560.25	156.25
2006/07	59.35	20	1187	3522.423	400
2007/08	62.57	5	312.85	3915.005	25
2008/09	57.87	7.5	434.025	3348.937	56.25
Total	270.99	60	3203.125	15019.5	862.5

$$\text{Mean of EPS } \bar{X} = \frac{\sum X}{N} = 54.198$$

$$\text{Standard deviation of X (} \sigma_x) = \sqrt{\frac{\sum X^2}{N} - Z \bar{X}^2} = 9.115759$$

$$\text{Coefficient of variance of X (CV}_x\text{)} = \frac{\sum x}{X} \times 16.8194$$

$$\text{Correlation co-efficient (r)} = \frac{N \cdot \sum XY - \sum X \cdot \sum Y}{\sqrt{N \cdot \sum X^2 - (\sum X)^2} \cdot \sqrt{N \cdot \sum Y^2 - (\sum Y)^2}} \times 0.224$$

$$\text{Coefficient of determination (r}^2\text{)} = 0.05$$

$$\text{Mean of DPS} = \bar{Y} = \frac{\sum Y}{N} = 12$$

$$\text{Standard deviation of Y (s}_y\text{)} = \sqrt{\frac{\sum Y^2}{N} - \bar{Y}^2} = 5.968668$$

$$\text{Coefficient of variance of Y (CV}_y\text{)} = \frac{\sum y}{Y} \times 49.7389$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{\sum Y^2 - \frac{(\sum Y)^2}{n}}{n-2}} = 6.717$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum (X - \bar{X})^2}} = 0.368$$

$$\text{T- Value } |t| = \frac{b}{Sb} = -0.398$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b \sum x \quad \text{and} \quad \sum XY = a \sum x + b \sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n \sum XY - \sum X \cdot \sum Y}{n \sum X^2 - (\sum X)^2} = -0.147$$

$$a = \bar{Y} - b \bar{x} = -3.6$$

Appendix II

Statistical relationship between DPS and MPS

1. Nepal SBI Bank Ltd.

Year	DPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	0	307	0	0	94249
2005/06	0	335	0	0	112225
2006/07	0.913	612	558.756	0.833569	374544
2007/08	18.23	1176	21438.48	332.3329	1382976
2008/09	0	1511	0	0	2283121
Total	19.143	3941	21997.24	333.1665	4247115

$$\text{Mean of DPS} = \bar{X} = \frac{\sum X}{N} = 3.8286$$

$$\text{Standard deviation of X (} s_x) = \sqrt{\frac{\sum X^2}{N} - \bar{X}^2} = 8.060328$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{s_x}{\bar{X}} = 210.529$$

$$\text{Correlation co-efficient (r)} = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} = 0.401$$

$$\text{Coefficient of determination (r}^2) = 0.1608$$

$$\text{Mean of MPS } \bar{Y} = \frac{\sum Y}{N} = 788.2$$

$$\text{Standard deviation of Y (} s_y) = \sqrt{\frac{\sum Y^2}{N} - \bar{Y}^2} = 534.0456$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{s_y}{\bar{Y}} = 67.755$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{Y^2 - Za - YZb - XY}{n - 2}} = 564.846$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum X^2}} = 35.039$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 0.759$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b\sum x \quad \text{and} \quad \sum XY = a\sum x + b\sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n\sum XY - \sum X \cdot \sum Y}{n\sum X^2 - (\sum X)^2} = 26.585$$

$$a = \bar{Y} - b\bar{x} = -3.6$$

2. Nabil Bank Ltd.

Year	DPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	65	1231.71	80061.15	4225	1517110
2005/06	70	1793.82	125567.4	4900	3217790
2006/07	85	4760.096	404608.2	7225	22658514
2007/08	104	6675.8	694283.2	10816	44566306
2008/09	100	5870.4	587040	10000	34461596
Total	424	20331.83	1891560	37166	1.06E+08

$$\text{Mean of MPS } \bar{X} = \frac{\sum X}{N} = \frac{424}{5} = 84.8$$

$$\text{Standard deviation of X (} s_x) = \sqrt{\frac{\sum X^2}{N} - \bar{X}^2} = \sqrt{\frac{37166}{5} - 84.8^2} = 17.39828$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{s_x}{\bar{X}} = \frac{17.39828}{84.8} = 20.5168\%$$

$$\text{Correlation co-efficient (r)} = \frac{N\sum XY - \sum X \cdot \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \cdot \sqrt{N\sum Y^2 - (\sum Y)^2}} = 0.987$$

$$\text{Coefficient of determination (r}^2) = 0.974$$

$$\text{Mean of DPS } \bar{Y} = \frac{\sum Y}{N} = \frac{20331.83}{5} = 4066.365$$

$$\text{Standard deviation of Y (} y) = \sqrt{\frac{\phi Y^2}{N}} = 2436.426$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{\text{†}y}{Y} = 59.9166$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{Y^2 Z a - Y Z b - XY}{n Z^2}} = 445.293$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{(X Z X)^2}} = 12.797$$

$$\text{T- Value } |t| = \frac{b}{SE} = 10.809$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\phi Y Xna \Gamma b\phi x \text{ and } \phi XY Xa\phi x \Gamma b\phi x^2$$

Solving these two normal equations we get,

$$b X \frac{n\phi XY - \phi X \cdot \phi Y}{n\phi X^2 - Z\phi X^2} = 138.273$$

$$a = \bar{Y} - Zbx = -7659.193$$

3. Kumari Bank Ltd.

Year	DPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	0	271	0	0	73441
2005/06	0	369	0	0	136161
2006/07	3.49	443	1546.07	12.1801	196249
2007/08	4.78	830	3967.4	22.8484	688900
2008/09	1.722	1005	1730.61	2.965284	1010025
Total	9.992	2918	7244.08	37.99378	2104776

$$\text{Mean of MPS } \bar{X} = \frac{\phi X}{N} = 1.9984$$

$$\text{Standard Deviation of X (} x) = \sqrt{\frac{\phi X^2}{N}} = \sqrt{\frac{4528.38}{100}} = 2.122838$$

$$\text{Coefficient of Variance (CV}_x) = \frac{s_x}{\bar{X}} = \frac{2.122838}{106.2269}$$

$$\text{Correlation Coefficient (r)} = \frac{N \cdot \phi XY - \phi X \cdot \phi Y}{\sqrt{N \cdot \phi X^2 - (\phi X)^2} \cdot \sqrt{N \cdot \phi Y^2 - (\phi Y)^2}} = 0.525$$

$$\text{Coefficient of Determination (r}^2) = 0.2756$$

$$\text{Mean of DPS} = \bar{Y} = \frac{\phi Y}{N} = 583.6$$

$$\text{Standard Deviation of Y (} y) = \sqrt{\frac{\phi Y^2}{N}} = \sqrt{\frac{99280.36}{100}} = 316.9508$$

$$\text{Coefficient of Variance (CV}_y) = \frac{s_y}{\bar{Y}} = \frac{316.9508}{583.6}$$

$$\text{Standard Error of the estimate (SEE)} = \sqrt{\frac{Y^2 Z a - Y Z b - XY}{n Z 2}} = 311.506$$

$$\text{Standard Error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{(X Z X)^2}} = 73.37$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 1.068$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\phi Y = Na + b \phi X \quad \text{and} \quad \phi XY = Na \phi X + b \phi X^2$$

Solving these two normal equations we get,

$$b = \frac{n \phi XY - \phi X \cdot \phi Y}{n \phi X^2 - (\phi X)^2} = 78.374$$

$$a = \bar{Y} - b \bar{X} = 426.978$$

4. Laxmi Bank Ltd.

Year	DPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	0	156	0	0	24336
2005/06	0	285	0	0	81225
2006/07	0	368	0	0	135424
2007/08	0	690	0	0	476100
2008/09	0	1130	0	0	1276900
Total	0	0	0	0	

$$\text{Mean of MPS } \bar{X} = \frac{\sum X}{N} = 0$$

$$\text{Standard deviation of X (} \sigma_x) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2} = 0$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{\sigma_x}{\bar{X}} = 0$$

$$\text{Correlation co-efficient (r)} = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} = 0$$

$$\text{Coefficient of determination (r}^2) = 0$$

$$\text{Mean of DPS } \bar{Y} = \frac{\sum Y}{N} = 525.8$$

$$\text{Standard deviation of Y (} \sigma_y) = \sqrt{\frac{\sum Y^2}{N} - \left(\frac{\sum Y}{N}\right)^2} = 391.04$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{\sigma_y}{\bar{Y}} = 74.371$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{Y^2 - a - bY}{n-2}} = 0$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum (X - \bar{X})^2}} = 0$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 0$$

Regression equation of y on x is Y = a + bx

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b \sum x \quad \text{and} \quad \sum XY = a \sum x + b \sum x^2$$

Solving these two normal equations we get,

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

$$a = \frac{\sum Y - b \sum x}{n}$$

5. Nepal Investment Bank Ltd.

Year	DPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	15	940	14100	225	883600
2005/06	12.5	800	10000	156.25	640000
2006/07	20	1260	25200	400	1587600
2007/08	5	1729	8645	25	2989441
2008/09	7.5	2450	18375	56.25	6002500
Total	60	7179	76320	862.5	12103141

$$\text{Mean of MPS } \bar{X} = \frac{\sum X}{N} = 12$$

$$\text{Standard deviation of X (} \sigma_x) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2} = 5.969$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{\sigma_x}{\bar{X}} = 49.74\%$$

$$\text{Correlation co-efficient (r)} = \frac{N \sum XY - \sum X \cdot \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} = -0.614$$

$$\text{Coefficient of determination (r}^2) = 0.377$$

$$\text{Mean of DPS } \bar{Y} = \frac{\sum Y}{N} = 1435.8$$

$$\text{Standard deviation of Y (} \sigma_y) = \sqrt{\frac{\sum Y^2}{N} - \left(\frac{\sum Y}{N}\right)^2} = 669.99$$

$$\text{Coefficient of variance of Y (CV}_y\text{)} = \frac{s_y}{\bar{Y}} \times 100 = 46.66$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{\sum Y^2 - \frac{(\sum Y)^2}{n}}{n-2}} = 610.386$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum X^2 - \frac{(\sum X)^2}{n}}} = 51.132$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 1.349$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b \sum x \quad \text{and} \quad \sum XY = a \sum x + b \sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n \sum XY - \sum X \cdot \sum Y}{n \sum X^2 - (\sum X)^2} = -68.968$$

$$a = \bar{Y} - b \bar{x} = 2263.421$$

Appendix III

Relationship between REPS & MPS

1. Nepal SBI Bank Ltd.

Year	REPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	14.26	307	4377.82	203.378	94249
2005/06	13.29	335	4452.15	176.624	112225
2006/07	17.357	612	10622.48	301.265	374544
2007/08	21.12	1176	24837.12	446.054	1382976
2008/09	28.33	1511	42806.63	802.5889	2283121
Total	94.357	3941	87096.2	1929.88	4247115

$$\text{Mean of MPS } \bar{X} = \frac{\sum X}{N} = 18.871$$

$$\text{Standard deviation of X (} s_x) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2} = 6.11$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{s_x}{\bar{X}} = 32.38\%$$

$$\text{Correlation co-efficient (r)} = \frac{\sum XY - \frac{\sum X \sum Y}{N}}{\sqrt{\left(\sum X^2 - \frac{(\sum X)^2}{N}\right) \left(\sum Y^2 - \frac{(\sum Y)^2}{N}\right)}} = 0.975$$

$$\text{Coefficient of determination (r}^2) = 0.951$$

$$\text{Mean of EPS } \bar{Y} = \frac{\sum Y}{N} = 788.2$$

$$\text{Standard deviation of Y (} s_y) = \sqrt{\frac{\sum Y^2}{N} - \left(\frac{\sum Y}{N}\right)^2} = 534.05$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{s_y}{\bar{Y}} = 67.76\%$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{\sum Y^2 - \frac{(\sum Y)^2}{N} - \frac{(\sum XY - \frac{\sum X \sum Y}{N})^2}{\sum X^2 - \frac{(\sum X)^2}{N}}}{n-2}} = 136.535$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum (X - \bar{X})^2}} = 11.177$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 7.629$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b \sum x \quad \text{and} \quad \sum XY = a \sum x + b \sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n \sum XY - \sum X \cdot \sum Y}{n \sum X^2 - (\sum X)^2} = 85.263$$

$$a = \bar{Y} - b \bar{x} = -820.841$$

2. Nabil Bank Ltd.

Year	REPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	27.61	1231.71	34007.51	762.3121	1517109.52
2005/06	33.45	1793.82	60003.28	1118.903	3217790.19
2006/07	44.21	4760.096	210443.8	1954.524	22658513.9
2007/08	33.08	6675.8	220835.5	1094.286	44566305.6
2008/09	8.31	5870.4	48783.02	69.0561	34461596.2
Total	146.66	20331.83	574073.1	4999.081	106421315

$$\text{Mean of MPS } \bar{X} = \frac{\sum X}{N} = 29.332$$

$$\text{Standard deviation of X (} \sigma_x) = \sqrt{\frac{\sum X^2}{N} - \bar{X}^2} = 13.203$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{\sigma_x}{\bar{X}} = 45.01\%$$

$$\text{Correlation co-efficient (r)} = \frac{N \sum XY - \sum X \cdot \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} = -0.173$$

$$\text{Coefficient of determination (r}^2) = 0.030$$

$$\text{Mean of EPS } \bar{Y} = \frac{\sum Y}{N} = 4066.365$$

$$\text{Standard deviation of Y (} y) = \sqrt{\frac{\phi Y^2}{N}} = 2436.426$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{\text{Standard deviation of Y}}{\bar{Y}} = 0.305$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{Y^2 Z a^2 + Y Z b^2 - XY^2}{n Z^2}} = 2770.768$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{(X Z X)^2}} = 104.932$$

$$\text{T- Value } |t| = \frac{b}{Sb} = -0.305$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b \sum x \quad \text{and} \quad \sum XY = a \sum x + b \sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n \sum XY - \sum X \cdot \sum Y}{n \sum X^2 - (\sum X)^2} = -31.983$$

$$a = \bar{Y} - b \bar{x} = 5004.484$$

3. Kumari Bank Ltd.

Year	REPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	9.7	271	2628.7	94.09	73441
2005/06	17.58	369	6487.02	309.06	136161
2006/07	13.1	443	5803.3	171.61	196249
2007/08	17.92	830	14873.6	321.13	688900
2008/09	14.628	1005	14701.14	213.98	1010025
Total	72.928	2918	44493.76	1109.9	2104776

$$\text{Mean of MPS } \bar{X} = \frac{\sum X}{N} = \frac{2918}{5} = 583.6$$

$$\text{Standard deviation of X (} s_x) = \sqrt{\frac{\sum X^2}{N} - \bar{X}^2} = \sqrt{\frac{17000}{5} - 583.6^2} = 3.383$$

$$\text{Coefficient of variance (CV}_x) = \frac{s_x}{\bar{X}} = \frac{3.383}{583.6} = 0.0058 \text{ (0.58\%)}$$

$$\text{Correlation co-efficient (r)} = \frac{\sum XY - \frac{\sum X \sum Y}{N}}{\sqrt{(\sum X^2 - \frac{(\sum X)^2}{N})(\sum Y^2 - \frac{(\sum Y)^2}{N})}} = 0.448$$

$$\text{Coefficient of determination (r}^2) = 0.201$$

$$\text{Mean of DPS } \bar{Y} = \frac{\sum Y}{N} = \frac{1583.6}{5} = 316.72$$

$$\text{Standard deviation of Y (} s_y) = \sqrt{\frac{\sum Y^2}{N} - \bar{Y}^2} = \sqrt{\frac{50000}{5} - 316.72^2} = 316.951$$

$$\text{Coefficient of variance (CV}_y) = \frac{s_y}{\bar{Y}} = \frac{316.951}{316.72} = 1.0007 \text{ (0.07\%)}$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{\sum Y^2 - \frac{(\sum Y)^2}{N} - \frac{(\sum XY - \frac{\sum X \sum Y}{N})^2}{\sum X^2 - \frac{(\sum X)^2}{N}}}{n-2}} = 327.238$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum X^2 - \frac{(\sum X)^2}{N}}} = 48.368$$

$$\text{T- Value } |t| = \frac{b}{Sb} = \frac{0.867}{0.0178} = 48.71$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b\sum x \text{ and } \sum XY = a\sum x + b\sum x^2$$

Solving these two normal equations we get,

$$b_X = \frac{n\sum XY - \sum X \cdot \sum Y}{n\sum X^2 - (\sum X)^2} = 41.957$$

$$a = \bar{Y} - Zb_X = -28.697$$

4. Laxmi Bank Ltd.

Year	REPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	1.9	156	296.4	3.61	24336
2005/06	4.34	285	1236.9	18.8356	81225
2006/07	5.8	368	2134.4	33.64	135424
2007/08	10.75	690	7417.5	115.5625	476100
2008/09	16.45	1130	18588.5	270.6025	1276900
Total	39.24	2629	29673.7	442.2506	1993985

$$\text{Mean of MPS } \bar{X} = \frac{\sum X}{N} = 7.84$$

$$\text{Standard deviation of X (} s_x) = \sqrt{\frac{\sum X^2}{N} - \bar{X}^2} = 5.79$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{s_x}{\bar{X}} \times 100 = 73.85\%$$

$$\text{Correlation co-efficient (r)} = \frac{N\sum XY - \sum X \cdot \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}} = 0.998$$

$$\text{Coefficient of determination (r}^2) = 0.996$$

$$\text{Mean of EPS } \bar{Y} = \frac{\sum Y}{N} = 525.8$$

$$\text{Standard deviation of Y (} s_y) = \sqrt{\frac{\sum Y^2}{N} - \bar{Y}^2} = 391.04$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{s_y}{\bar{Y}} \times 100 = 74.37$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{Y^2 Z a^2 + Y Z b^2 - XY}{n Z^2}} = 31.4$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{(\sum X - Z\bar{X})^2}} = 2.71$$

$$T\text{- Value } \left| t \right| \frac{b}{S_b} = 24.846$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b \sum x \quad \text{and} \quad \sum XY = a \sum x + b \sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n \sum XY - \sum X \cdot \sum Y}{n \sum X^2 - (\sum X)^2} = 24.846$$

$$a = \bar{Y} - b \bar{x} = -2.56$$

5. Nepal Investment Bank Ltd.

Year	REPS(X)	MPS(Y)	XY	X ²	Y ²
2004/05	36.7	940	34498	1346.89	883600
2005/06	27	800	21600	729	640000
2006/07	39.35	1260	49581	1548.423	1587600
2007/08	57.57	1729	99538.53	3314.305	2989441
2008/09	50.37	2450	123406.5	2537.137	6002500
Total	210.99	7179	328624	9475.754	12103141

$$\text{Mean of MPS } \bar{X} = \frac{\sum X}{N} = 42.198$$

$$\text{Standard deviation of X (} s_x) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2} = 11.962$$

$$\text{Coefficient of variance of X (CV}_x) = \frac{s_x}{\bar{X}} = 28.35\%$$

$$\text{Correlation co-efficient (r)} = \frac{N \sum XY - \sum X \cdot \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} = 0.801$$

$$\text{Coefficient of determination (r}^2) = 0.642$$

$$\text{Mean of DPS} = \bar{Y} = \frac{\sum Y}{N} = 1435.8$$

$$\text{Standard deviation of Y (} s_y) = \sqrt{\frac{\sum Y^2}{N} - \frac{(\sum Y)^2}{N^2}} = 669.987$$

$$\text{Coefficient of variance of Y (CV}_y) = \frac{s_y}{\bar{Y}} = 46.66\%$$

$$\text{Standard error of the estimate (SEE)} = \sqrt{\frac{\sum Y^2 - \frac{(\sum Y)^2}{N}}{n-2}} = 462.967$$

$$\text{Standard error of regression co-efficient (Sb)} = \frac{SEE}{\sqrt{\sum X^2 - \frac{(\sum X)^2}{n}}} = 44.872$$

$$\text{T- Value } |t| = \frac{b}{Sb} = 2.319$$

Regression equation of y on x is $Y = a + bx$

Where,

a = Regression constant

b = Regression coefficient (Slope of the regression)

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

$$\sum Y = na + b\sum x \quad \text{and} \quad \sum XY = a\sum x + b\sum x^2$$

Solving these two normal equations we get,

$$b = \frac{n\sum XY - \sum X \cdot \sum Y}{n\sum X^2 - (\sum X)^2} = 44.872$$

$$a = \bar{Y} - b\bar{x} = -457.704$$

Appendix one: Specification of questionnaire

A survey of management’s view on dividend policy in Nepal

Section A: Respondent profiles and fact findings

1. Name of respondent (optional):
2. Name of organization (optional):
3. Date of organization establishment:
4. Experience of respondent (In this organization): years.
5. Does your company have been registered in Nepal stock exchange? Tick the alternative.

a. Yes <input type="checkbox"/>	b. No <input type="checkbox"/>
---------------------------------	--------------------------------
6. Does your company ever pay dividend,

Cash Dividend	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Stock Dividend	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

Section B: Views assessment

7. Do you think that earnings statements of a firm are relevant in determining value and trading of the shares in the market?

a. Yes <input type="checkbox"/>	b. No <input type="checkbox"/>
---------------------------------	--------------------------------
8. Why company pays dividend?

a. To signal the market with good message.	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 30px;"></div> <div style="border: 1px solid black; width: 40px; height: 30px;"></div> <div style="border: 1px solid black; width: 40px; height: 30px;"></div> <div style="border: 1px solid black; width: 40px; height: 30px;"></div> <div style="border: 1px solid black; width: 40px; height: 30px;"></div> </div>
b. To influence the market price of the share.	
c. To attract the attention of possible investors.	
d. To fulfill shareholder’s expectation.	
e. To distribute over capital.	
- Please Specify if any other important motive of dividend:

9. Do you think that dividend decisions are residual decision of a firm?

a. Yes <input type="checkbox"/>	b. No <input type="checkbox"/>
---------------------------------	--------------------------------
10. What do you suggest if a company has sufficient amount of profit but liquidity problem to pay cash dividend. (tick any one)
 - a. Do not pay any forms of dividend

- b. Pay stock dividend
- c. Borrow and pay cash dividend.
- d. Issue new shares and pay cash dividend
- e. Specify, if any other suggestion:

11. In your view, is dividend decision a more important decision compared to other finance decision

a. Yes

b. No

12. Which dividend policy would you recommend for Nepalese commercial banks?
Please check any one.

a. Constant dividend per share.

b. Constant payout ratio

c. Constant DPS and extra dividend

d. Residual dividend policy

13. In your view, does Market Price per share affected by Dividend per Share?

a. Yes

b. No

14. Which one of the following play most important role to increase market price of a share?

- a) Dividend
- b) Retained Earning
- c) Earning per share
- d) Sales Activity level)

14. Do your firm have target payout ratio?

a. Yes

b. No

If yes mark the percentage of your payout.

a. Less than 10 percent

b. 10 to 20 percent

c. 20 to 40 percent

d. 40 to 60 percent

e. More than 60 percent

15. Do you think that dividend payment policy of a commercial Banks can be explained by any clear accounting figures? If yes mention the factors that influence dividend policy of a firm.

.....

Thank you for kind information