## **CHAPTER - I**

## INTRODUCTION

## 1.1. Background of the Study

In the capital market, all firms operate in order to generate earnings. Shareholders make investment in equity capital with the expectation of making earning either directly on the form of dividend or indirectly in the form of capital gains in future. Thus, shareholders wealth can increase thought either dividends or capital gains. Once a company makes a profit, it should decide on what to do with the profit. It could be continued to retain the profit within the company, or it could pay out the profit to the owners of the company in the form of dividend. Dividends are payment made to stockholders from a firm's earning in return to their investment. Whether those earnings were generated in the current period or in previous periods and policy refers to the decision about how much earning, at what form should be distributed. Thus, dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained or reinvestment in the firm. The objective of a dividend policy should be to maximize shareholder's wealth position.

"Speaks Lauder than a thousands word" (Solomon, Ezra: 1963). Higher dividend s can directly benefit shareholders because they reduce resources which managers can use sub optimally. Some economist believes that management decides to pay dividends in order to reduce agency cost. (Easter book,F.H.:1989). Management is forced to go to the capital market for Additional financing, Each time it attempt to raise fresh capital, its operations are intensely scrutinized by investment ,bankers, Accounts and other market professionals. Because these parties have a comparative advantages over the bondholders in monitoring the firm's activities,

dividend payments accompanied by subsequent new financing may lower monitoring costs and thereby increase the firm value (Rao, R.K.S. op cit p. 466). The clue to stock dividend distributions may lie in their perceived substitutions for relatively low cash dividend (Lakonishok, Josef and Lev, Baruch: 1987).

The history of securities market began with the floatation of shares to the general public by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937. However, the development of securities market could not be a national policy for a long time. Then industrial policy of Nepal led to the development of securities markets with the established of Securities Marketing Centre (SMC) in 1976. Before the establishment of SMC, there were no institutional arrangement to undertake and to mange the new issues of securities. Initial Public Offerings (IPOs) had to be made as per the provision of Company Act, 1936, which were not adequate and relevant. The Act had not even included preference share as corporate security. It was recognized as corporate security only by Company Act, 1964.

SMC started secondary trading of securities in 1981, which was restricted to government bonds. Till 1983, the concept of well-structured secondary market had not evolved in Nepal. No separate Act existed to regulate the trading of securities. The Securities Exchange Act, 1983 was enacted in 1983. The Act restricted the exchange of unlisted securities. The SMC was renamed Securities Exchange Centre (SEC) in 1984. The SEC was the only institution at that time managing and operating primary and secondary markets of long-term government and corporate securities.

A need to develop different institutional mechanisms relating to securities market was strongly felt to avoid potential conflict of interest between the services provided. The first amendment in the Securities Exchange Act, 1983 in 1993 paved the way for the restructuring of securities market in Nepal, which led to the

establishment of Securities Board of Nepal (SEBON) in 1993 with a mandate to regulate and develop the securities market. SEBON started to register securities and grant approval for issuing securities to the public in 1993. The first amendment in the Act also led to conversion of SEC into Nepal Stock Exchange Ltd. (NEPSE) in 1993 with the objective of operating and managing secondary transaction of securities. The initial efforts led to the opening of a full-fledged stock exchange in January 13, 1994.

The second amendment in Securities Exchange Act, 1983 was made in 1997. This amendment made provision for registering securities business persons in SEBON. As per the provision of the second amendment, SEBON provided licenses to the securities business persons in 1997. The amendment made mandatory provisions for the listed companies to submit annual and semi-annual report to SEBON. This amendment also required securities business persons to submit annual reports incorporating the securities transactions carried out by them to SEBON.

Presently, there are 40 brokers, two securities dealers, nine issue managers and one stock exchange and 135 listed companies in the Nepalese securities market.

#### 1.2. Statement of the Problem

Dividend policy is an integral part of financial management decision of a business firm. It is relevant in all institutions that mobilize funds in terms of return and investment. It has been accepted as a distinct discipline in the earlier stage of 21<sup>st</sup> century. Dividend refers to that portion of a firm's net earning which are paid out to the shareholders. Whether dividends have an influential on the value of the firm is the most critical question in dividend policy. If dividends are irrelevant, the firm should retain earnings 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. But

Nepalese commercial bank has not been able to provide satisfactory result on dividend decision. Government policy is also partly responsible on the dividend decision. Commercial banks in Nepal have no consistency policy on dividend decision and dividend distribution doesn't match with the earning as well as there is no proper relationship between dividend and quoted market price of share. Procedure of dividend is also not well managed and declared in commercial bank. Top management declares the dividend haphazardly without following proper guideline. These commercial banks have no clear outline of the payment procedure in the dividend policy so that market knows when these banks declare dividend and pay, how they pay and when they pay.

Shareholders make investment in equity capital with the expectation of making earnings. Dividend is kind of earning that the shareholders expect form their investment. But, the dividend decision is still a fundamental as well as controversial area of managerial finance. The effect of dividend on market price of stock is the subject matter of the study.

There are many empirical studies on dividend and stock price m developed capital market. For example, few of them are Linter (1950), Modigliani and Miller (1961), Friend and Puckett (1964), Walter (1966), Van Horne and McDonald (1971). However, no simple and conclusive relationship exists between the amount paid out in dividend and the market price of the share. There is still a considerable controversy concerning the relation between dividend and common stock price.

Theoretically, the share price should fail down after the book closure by an amount to the amount of cash dividend, in case the company is going to distribute cash dividend. For example, if the share price of XYZ Company on one day before the book closure was Rs. 300 and the company had declared Rs.10 per share as

cash dividend, which was to be formalized in the coming AGM. The price per share in the first transaction after the book closure should be around Rs. 290.

To sum up, the study deals with the following issue:

)	Do the Companies Paying large dividends have a good financial position?
	Whether the companies with higher payout have improved financial
	positions?
J	Are the Companies with dividend yield having improved financial ratios?
J	What is the relationship between dividends a stock price?
J	What are the motives of paying cash and stock dividend? Whether dividend
	is a residual decision?
J	What are the major factors affecting corporate dividend policy?
J	What kind of dividend policy should be followed by Nepalese enterprises?

# 1.3. Objectives of the Study

The main objectives of this study are:

- 1. To examine the cash dividend practice in Nepal.
- 2. To analyze the trend of cash dividend payment by the Nepalese companies from various sectors.
- 3. To analyze the impact of cash dividend on the share price in Nepal.

Compare to the developed countries, the role of the corporate sector in under developed countries in rather limited even the study of the corporate dividend behaviors of Nepalese companies in important for different reasons.

# 1.4. Significance of the Study

In the capital market the investor can earn return in two ways one is dividend and other is capital gain. The term dividend is defined as a return from investment in equity shares. So dividend is important factor for investor while investing in equity shares. This study helpful to investor to take rational decision like: - where to invest, how to invest, what portfolio should be made to obtain maximum profit from their investment. In Nepalese context, most of investors are investing in the stock without knowledge of company and performance and dividend policies. This study helps to aware the Nepalese investors.

This study is useful to the firms also. They know the investor objective's from this study there are basically two types of objective one is receive dividend and other is receive capital gain. Knowing the objective of investor they can develop their plan and policies.

Basically this study is conducted to help the investor while investing in share capital. So that they can make correct decision at right time about impact of dividend in market price and make investment. Objective of study is also to keep investor free from being cheated.

## 1.5. Limitations of the Study

- 1. The study is mainly concentrated on the cash dividend practice in Nepal.
- 2. The study has ignored the price-level change.
- 3. The data present in the study are secondary in nature & completely historical.
- 4. The result & the interpretation are completely are rigid & from the view-point of the researcher.
- 5. The empirical test for the F/Y 2002/03 was not feasible due to the unavailability of the secondary data.

## 1.6. Organization of the Study

The whole study has been divided into five chapters.

### **Chapter - I Introduction**

This chapter deals with the introductory part of the study, which includes background of the study, statement of the problem, objective of study, significant and limitation of the study.

# **Chapter - II** Review of literature

This chapter deals with review of the different literature in regard to the theoretical analysis and review of book, articles and thesis related to the study field. Therefore it includes conceptual framework and other related studies.

## Chapter - III Research Methodology

This chapter deals with research methodology used to carry out the research. It is includes research design, population and sample, source and technique of data collection, data analysis tools.

## **Chapter – IV** Data Presentation and Analysis

This chapter is the main part of the study, which includes analysis and interpretation of the data using financial and statistical tools. Similarly this chapter also includes the major finding of the study.

## Chapter - V Summary, Conclusions & Recommendations

The whole study is summarized and concluded in this final chapter. A list of recommendations derived from the analysis is also presented in this chapter. A list of bibliography will be presented; the necessary supplements & mathematical & statistical calculations are presented at various segments as appendices.

## **CHAPTER - II**

### REVIEW OF LITERATURE

## 2.1. Conceptual Framework

#### 2.1.1 Dividend

The term dividend is defined as a return from investment in equity shares. The profit made by the firm which is distributed to the shareholders termed as dividend. Every firm after making profit either retain the money for further investment or distribute it among the shareholders. The firm should decide whether to keep the money as retained earning or pay the dividend. The dividend policy is the policy followed by the firm regarding the dividend versus retention decision. It is not necessary that all business organization follow the same dividend policy. Dividend policy of different organization may same or different, but the policy followed by the firm should be suitable for both the shareholders as well as the firm itself.

Dividend means some kind of consistent approach to the distribution versus retention decision rather than making the decision on the purely adhoc basis from period to period. In ordinary share dividend implies to the pro distribution of earning either in the form at direct cash or additional stock in accordance with proportionate holdings. In fact dividend is the profit distributed to the shareholders by an institution. It may be in cash, share and combination of both. Dividend policy decision is one of the three decisions of financial management because it affects the financial structure, the flow of funds, corporate liquidating and investors' attitudes. Dividend decision of the firm is a very crucial controversial area of financial management. The main aspect of dividend policy is to determine the amount of earning to be distributed to the shareholder and the amount to be retained in the firm. When a company pays out a portion of its earning to

shareholders, in the form of dividend, the shareholder gets benefit directly. If the firm retains the funds to exploit other growth opportunities the shareholders can expect to benefit indirectly through future increase in the price of their stock. Thus, shareholders wealth can be increase through either dividend or capital gains. The policy of the company on the dividend of its profits between distribution to shareholders as dividend and retention is known as dividend policy.

Investors buy shares of firms with the hope of sharing profits earned by firms. Since the motive of shareholder is to receive returns on their investment. Nothing please them more than knowing the firm earning more and more profits, more dividends coming in and the stock price increasing. If profits are distributed, benefits are directs and are at present. If they are invested, the benefits are indirect and come in some future period in the form of expected stock price increase that results in capital gain when they sell shares.

There is a reciprocal relation between retained earning and cash dividend. When the amount of retain earning is high, the company declares less dividend and when dividend paid is a big amount than retain earning reduced, which reduce the opportunity to reinvest and expand the organization. "Since dividend would be more attractive to shareholder, one might think that there would be a tendency for corporations to increase distribution of dividend. But one might equally pressure that gross dividends would be reduced some what, with an increase in net after tax dividends still available to stockholders, and increase in retained earnings for the corporation." (Throp, 1977) So dividend decision is one of the major decisions of managerial finance. This decision consist the crucial decision of choosing between distributions of profit to shareholder or plugging them back into the business. Dividend decision has great influence on financial structure, flows of funds, corporate liquidity and so on.

The relationship between dividend and the value of the share is not clear cut. The financial manager must understand the various conflicting factors which influence the dividend policy before deciding the allocation of its company's earnings into dividends and retain earnings. "There are, however, conflicting opinions regarding the impact of dividends on the valuation of the firm. According to one school of thought, dividends are irrelevant so that the amount of dividends paid has no effect on the valuation of a firm. On the other hand, certain theories consider the dividend decision as relevant to the value of the firm measured in terms of the market price of the shares." (Khan, et.al, 1992) Thus dividend are irrelevant, is based on the assumption that the investors are indifferent between dividends and capital gains. So long as the firm is able to earn more than the equity capitalization rate, the investors would be content with the firm retaining the earnings. In contrast, if the return is less than the equity capitalization rate, investors would prefer to receive the dividend.

Dividend refers to the part of earnings made by the firm that is distributed to the shareholders as return of their investment over equity share whether those earnings were generated in the current period or in previous periods. In other words, it is the rewards to shareholders for bearing the risk of uncertainty (Ghimire, 2002:8). The objective of the dividend policy should be to maximize the shareholder's return so that value of his investment is maximized (Pandey, 1995: 16).

In fact, dividend is the portion of the net earnings, which is distributed to the shareholders by a company. After successfully completing the business activities of a company, if the financial statement of it shows the net profit, the Board of Directors (BOD) decides to declare dividend to shareholders. Therefore, the payment of corporate dividend is at the discretion of the BOD.

## 2.1.2. Theories Regarding Dividend

## i. Residual Theory

When dividend policy is treated as a secondary decision and primary emphasis is given to investment policy than dividend policy is considered as residual theory of dividend. "The residual theory of dividend suggests that dividend paid by a firm should be viewed as a residual amount or left after all acceptable investment opportunities have been undertaken" (Lawrence, et.al: 1991). It is assumed that internal source of fund is cheaper than external source of fund, so the firms are more interested to retain the earning rather than distribution of cash dividend. "When we treat dividend policy as strictly as financing decision, the payment of cash dividend is a passive residual" (Van Horne, et.al:1997).

Residual theory is that, in which the first priority is given to the profitable investment opportunities. If there are profitable opportunities, the firm invest is those and residual income (if any) is distribute to shareholders. Residual theory of dividends means,' A theory that suggests that the dividend paid by the firm should be the amount left over after all acceptable investment opportunities have been under taken.' (Gitmen, 1988: 616) Using this approach the Firm would treat the dividend decision in three steps as follows:

- Step -1: Determine the optimum level of capital expenditure which would be the level generated by the point of intersection of the investment opportunities schedule (IOS) and weight managerial cost of capital (WMCC) function.
- Step -2: Using the optimal capital structure proportion, it would estimate the total amount of equity financing needed to support the expenditures generated in step 1.
- Step -3: Because of the cost of retained earnings is less than the cost of new common stocks, retained earnings would be used to meet the equity

requirement determined in step 2. If retained earnings are inadequate to meet this need, new common stock would be sold. If the available retain earning are in excess to this needs, the surplus amount would be distributed as dividends (Bhattarai, 2006:349-350).

### ii. Wealth Maximization Theory

Under wealth maximization theory, large dividends is announced and distributed to shareholders in order to (or in hope with) maximize the wealth of the shareholders. Basically, it is applicable for those companies, which are just established and to those companies it will be beneficial whose financial profits are in decreasing trends. The main purpose of the wealth maximization theory of dividend is to make assurance to the stockholders that they are interesting in the firm, which has not better market value.

## 2.1.3. Types of Dividend

Keeping these theories into considerations, dividend can be paid in different forms. Among them some are discuss below:

#### a. Stock Dividend/ Bonus Share

Stock dividend or Bonus shares represent a distribution of shares in addition to the cash dividend to the existing shareholders. A stock dividend occurs when the board of director authorized a distribution of common stock to the existing shareholders. Its payment simply involves transferring a portion of retained earning to the capital stock account. Stock dividend is simply a means of recapitalization of earning by making the shareholders feel that they are getting something of value. Under stock dividend each stockholder receives additional shares of stock but the proportionate holding of each remains the same. This has the effect of increasing the number of outstanding shares of the company as a result the decrease in EPS which effect the reduction in the market price of the

share. Since the shares are distributed proportionately, share holders retain his proportionate ownership of the company.

Although the declaration of a stock dividend is within the power of the directors, the matter may have to be submitted to the stockholders if the corporation has to amend the certificate of incorporation to increase the amount of capital stock. Most companies issue enough un-issued stock to declare stock dividend at a moderate rate.

There are several aspects of a stock dividend: conserves cash, Indicate higher future profit, Raises futures dividend for investors and has high psychological value and enhance prestige (Clifton & Richard, 1975:243).

## **b.** Property Dividend

Any assets or any part of any assets if physical divisible may be paid as dividend, if there is a legal source of dividend i.e. surplus. Occasionally a corporation has been known to pay dividend in the form of merchandise owned or produced by it. Stockholder cannot be compelled to the property distributable to him on account of dividend. If stockholder refuse to take property dividend, the company may retain it in trust for him or possibly sell it for his benefit. He doesn't have option to receive equivalent amount of cash in lieu of a property dividend. But, in Nepal there is no any practice of paying property dividend

## c. Script Dividend

A scrip dividend is a distribution of surplus to the stockholders in the form of notes or promises to pay the amount of dividend at a certain time. The notes are called 'dividend certificates' or scrip. Sometime companies need cash generated by business earning to meet business requirements or with-hold the payment of

cash dividend because of temporary shortage of cash. In such circumstance the company may issue scrip dividend payable at future dates.

### d. Bond Dividend

With the theory and concept of script dividend, if dividends are paid in the form of bond (to shareholders), promising that it will mature in future date is known as bond dividend. Therefore the intention and purpose of bond dividend is also the postponement of dividend payment for some time. The only difference between bond and scrip dividend is that bond carries relatively longer maturity date than scrip dividend.

Bonds used to pay carry interest and it means that the company assumes the fixed obligation of interest payment annually and principal amount of bond at maturity date. Bond dividend posses the following characteristic:

- Bond dividends are the means to dividend postponement for a while but more it is obligation.
- It couldn't bring back the psychological value as the cash dividend.
- Bond and scrip dividend are same, only the difference between these are maturity time i.e. scrip has relatively less maturity time than bond dividend.

## e. Straight Split and Reserve Split

Stock split as already mentioned would be the adjustable cash dividend replacement. It helps to satisfy the following three reasons:

- To make the share more attractive, the company may practice stock split.
- Stock split would increase the transaction value of share.
- Stock split is itself the indication of higher profit in future.

When the market price of share of a company is falling gradually, the company may adopt reserve split which may increase the market price of share and help to maintain efficient situation of the company. The reduction of the number of outstanding shares by increasing per share values known as reserve split.

### f. Stock Repurchase

It is the process of repurchasing back outstanding share of any company. A corporation's repurchase of its stock can serve as a tax advantages substitute for dividend payout. Repurchase have the effect of raising share prices so that shareholders can be tax at the capital gain rate instead of ordinary dividend rate on cash dividend. Company can repurchase its shares in two ways:

- ) Open market repurchase
- Tender (Offer) repurchase

Open market repurchase usually (but not always) involve gradual programs to buy back shares over a period of time. In tender offer, the company usually specifies the number of shares it is offering to repurchase, a tender price and a period of dime during which the offer is in effect. If the number of shares actually tendered by the shareholders exceeds the maximum number specified by the company, then the purchases are usually made on a pro-rata basis. Alternatively, if the tender offer is under subscribed the firm may decide to cancel the offer of extend to expiration date. Share tendered during the extension may be purchased on either pro-rata or FCFS (First Come First Served) basis (Weston & Copeland, 1991:682-683).

The repurchase of stock holds major three reasons i.e. for stock option, for acquisition and for retiring the stock. However, Nepalese Company Act 1997, section 47 has prohibited company for repurchasing its own shares, it states that no company shall purchase its own shares or supply loans against the security of its own shares.

Stock is repurchased specially when the firm has abnormally high profits and is not in a position to effectively utilize surpluses. By repurchasing stocks, the remaining stockholders receive future benefits instead of current high dividend. The point to be noted whether the benefits of repurchase out weights the portion of profits the remaining stockholders are to give up for repurchasing stocks.

The repurchase effects are as follows:

- The stock repurchases reduce the number of outstanding stocks.
- It increases EPS and also DPS if the payout ration is not changed,
- It increases the proportional ownership of existing stockholders.
- It increases the stock price as net worth per share increases.

## g. Cash Dividend

The most common way to pay dividend is in the form of cash. Cash dividends are ordinarily plain form retained earning. Most of shareholders investing in corporations desire to have cash dividend out of earnings. A company should have enough cash in its bank account when cash dividends are declared. If the company doesn't have enough bank balance at the time of paying cash dividend, arrangement should be made to borrow funds. Payment of cash dividend shouldn't lead liquidity of corporations. The current liquidity and management's standard regarding cash dividend should be properly considered in cash dividend decision.

The cash account and the reserves account of a company will be reduced when the cash dividend is paid. Both the total assets and the net worth of the company are reduced by the distribution of cash dividend. Beside the market price of the share affected in most cases by the amount of cash dividend distributed.

Cash dividend is simply the dividend paid in cash or the proportion of net earnings, which are distributed to shareholders, as cash in proportion to their shares of company. Actually, it is most popular and widely used form of dividend, all over the globe.

Generally, stockholders have strong preference for cash dividend. Both the total assets and net worth of the company are reduced by same amount, when the cash dividend is announced or distributed. Moreover, the share price will fall (or may not) after the cash dividend. Therefore, the need is that, the firm should have sufficient fund for the distribution of the cash dividend among shareholders or if the firm does not have sufficient fund for the distribution; it should borrow from any source. For the better cash dividend stability, cash planning, budgeting and control mechanism are suggested or required. Cash dividend has the direct impact on the shareholders. The volume of the cash dividend depends upon earnings of the firm and on the management attitude or policy.

Cash dividend has psychological value for stockholders. Each and everyone like to collect their return in cash rather than non-cash means. So cash dividend is not only a way to earnings distribution but also a way of perception improvement in the capital market. The objectives of the cash dividend are:

- To distribute the earnings to shareholders, as they hold the proportion of the share.
- To build an image in the capital market so as to create favorable condition to raise the fund at the needs.
- To make distribution easy and to account easily.

## 2.2. Dividend Policy

Dividend policy determines the decision of earnings between payment to stockholders and reinvestment in the firm. Retain earnings are not of the most significant sources of fund for financing corporate group, but dividends constitute the cash flow that accrue to stockholders (Weston and Copeland, 1991:657).

The third major decision of the firm is its dividend policy, the percentage of earnings it pays in cash to its stockholders. Dividend payout, of course, reduces the amount of earnings retain in the firm and affect the total amount of internal financing. The dividend payout ration obviously depends on the way earnings are measured for case of exposition, we use account net earnings but assume that these earning can form true economic earnings. In practice, net earning may not conform and may not be an appropriate major of the ability of firm to pay dividends (Van Home, 2000:350).

Dividend policy refers to the issue of how much of the total profit a firm should pay to its stockholders and how much to retain for investment so that the combined present and future benefits maximize the wealth of stockholders. The dividend policy, however, not only specifies the amount of dividend, but also form of dividend, payment procedure etc.

In general, dividend policy is concerned with the following matters.

- Amount of dividend to be paid- the policy outlines the basis to determine the amount of dividend to be paid.
- Form of dividend- cash dividend or stock dividend
- J Payment procedure
- Stock repurchases and stock splits (Pradhan, 1992:376)

Dividend policy according to the application could be categorized as follows:

# a. Stable Dividend Policy

When the firm constantly pays a fix amount of dividend and maintains it for all times to come regardless of fluctuations in the level of its earnings, it is called a stable dividend policy. In this dividend policy, the dividend will be paid regularly. A consistent dividend policy is to enhance the share price by satisfying the firm's clientele and by providing consistently positive signal about future earnings

prospects. This policy is applicable in the line 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 company's earnings. This policy has three forms:

#### > Stable Dividend Per Share

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. This policy is completely rational policy and poses the strategic financial management; therefore, it is related to the company's ability to pay dividends.

## > Stable Payout Ratio

If the firms distribute a certain percentage of its profit as dividend in every year is known as stable payout ratio. The ratio of dividend to earning is called payout ratio. If the firms simply applied the target payout rate to each year earnings, dividend could fluctuate widely.

## **➤ Low Regular Plus Extra Policy**

If the company usually pays dividend constantly to stockholders at a fix rate and do not change the payment ratio unless it is believed that the changes in earnings are permanent. When the earning of a firm is swelling, it may have decided to distribute a part of increased earnings as extra dividend. It is known which earnings exceed annual dividend requirement by some given amount and it will be skipped subsequently, when business earning will drop to normal level. It could be the better policy to that company whose stockholders prefer at least a certain amount of regular income or return.

### b. No immediate Dividend Policy

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

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

In fact, this policy should follow by issue of bonus shares.

## c. Regular Stock Dividend Policy

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

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

## d. Irregular Dividend Policy

It is the policy in which, the firm does not pay any fixed amount of dividend every year or dividend varied in correspondence with change in level of earning, i.e. higher earnings means higher dividend and vice-versa. The firm with un-stable

earnings also adopts this policy, when there are investable opportunities the company retains more and when there is not any invest able opportunities, the company distributes the earning as dividend or there is not regularity of dividend payment therefore it is the most used type of dividend policy in the Nepalese context at present.

## 2.3. Factors Affecting Dividend Policy

### 2.3.1. Legal Requirements

Legal rules specify those conditions under which dividend must not be paid.

## a) Capital Impairment Rules

The firm cannot pay dividend out of its paid up capital. If it does so there would be reduction in the capitals purpose of this law is to protect creditors of a corporation.

### b) Insolvency Rule

This rules state that cash dividend should be prohibited, if the company is insolvent. Insolvency in the legal services defined as the situation when the recorded value of liabilities exceeds the recorded value of assets. Similarly in the technical sense, if is the firm's inability to pay its current debtor. The main objective of this rule is to restrict the company from far country shareholders to the determent of creditors when cash is limited.

### c) Undue Retention of Earning Rule

Undue retention of earning mean retention significantly in excess of the present and future investment need of the company. A firm may deliberately retain a large portion of its earning in order to defer income tax payment. The purpose of the law is to prevent companies from retaining earnings for their sake of avoiding taxes and enforce them to pay dividend. It is because shareholders are required to pay taxes on dividend received but they are not taxed on the capital gains unless the

shares are actually sold. In addition the rate of capital gains is lower than that of income tax sale.

### d) Net Profits Rule

It state that dividend must be paid from present or past retained earnings. A firm can not pay cash dividend greater than due amount of current profits plus the accumulated balanced of retained earnings,

## 2.3.2. Liquidity Position/Solvency Position

Company dividend policy will have important-amplifications on its liquidity position, because dividend represents a cash overflow. The greater cash position and overall liquidity a company has the greater its ability to pay dividend. If a company pays out as dividend most of what earns, then for business requirement it has to depend upon outside resources. A growing and profitable company may not be liquid since its funds may get into fixed assets and permanent working capital.

Similarly solvency position of the company is also affected by the dividend policy. A continuous retention of earning reduces the need for outside funds and the risk of insolvency. But in the other hand retained earnings would steadily increase the cost of capital of the firm when all the borrowed funds are being replaced by internally generated funds; cost of capital of the funds would be the cost of equity.

## 2.3.3. Ability to Borrow

Though a company is not sufficient liquid, but it can borrow the funds at the time of need. Such firms can pay high dividend to its investors. A well established, reputed and profitable firm has easy accessibility to the management in paying dividend.

## 2.3.4. Repayment of Debt

Firms may have the policy to extinguish its past debts by means of retained earning. If such alternative are being adopted then such firm will retain more pays less a dividend.

### 2.3.5. Restrictions in Debt Contracts

At the time of raising long-term debt there may be provisions of debt agreements, which may prevent the payment of dividend entirely, or to a certain conditions are fulfilled. Such sort of restriction has made the management's freedom to decide about dividend payments limited.

## **2.3.6. Age of Firm**

A new young growing concern requires large amount of funds to finance its growth requirements. Therefore the management must follow consecutive dividend policy to plough larger earnings. But and old and established company having reached saturation point may follow high dividend pay-out policy.

#### 2.3.7. Growth Rate of Firm

A rapidly growing concern will have constant needs of long-term funds to seize favorable opportunities for which it has to retain more and pays less as dividend.

#### 2.3.8. Clientele

Different dividend policies attract different types of investors or different clienteles. High and stable payoffs attract investors specially pensioners, widows and other who prefer a large economically weaker persons proportion of their total return in current income on the other hand. Wealthy individuals and employed persons in top salary income brackets may not benefit by current dividend incomes received, due to the differential in tax rates on capital gains and dividend.

#### **2.3.9.** Control

Dividend policy may also be strongly influenced by shareholder or management control objective. If the company pays substantial dividend, it may need to raise capital through the issue of common stock, by which the controlling interest of the company may be diluted. In order to hold control the company may prefer a low dividend payoff.

### 2.3.10. Internal Investment Opportunity

When the firm has opportunities to earn, returns greater those available to shareholders outside the firm retention and reinvestment is appropriate (Weston & Copeland, 1992: 659-660)

## 2.4. General Payment of Dividend

In common sense, 'dividend' is the receipt by the shareholders of parts of profits of the company, it refers to the share of the net profits of a joint stock company payable to each shareholders or member. Thus, dividend can only be paid out of profits.

A trading company is formed for the purpose of earning profit and such as, the power to declare dividend is inherent or implied in the case of a trading company. It need not be expressly provided for in its memorandum or articles.

It is for the board of directors to recommend the rate of dividend to be declared. The shareholders cannot enforce the distribution of profit and no shareholders can claim the declaration of dividend unless the directors fraudulently decline to pay them.

How much of the profit shall be distributed to the shareholders in the form of dividend is a matter of internal management of the company and it is for the

shareholders and director to decide the issue the court will not interfere with their decision.

The board of directors recommends the rate of dividend at the annual general meeting, which is to be approved by the shareholders. The shareholders may reduce the rate of dividend but in no case they have the right to increase the rate recommended by the directors. Dividend become payable only when a resolution is shareholders at the meeting.

Dividend may be declared and paid out of the profits of the financial year in year respect of which the dividend is declared or out of the profits of previous years.

Companies are not entitled to pay any dividend unless appropriate rate of depreciation on the asset of the company has been provided for out of the profits of the company. If, company has not provided depreciation provision for any previous fiscal years, that should be deducted from the profits.

If the company incurred any loss in any previous financial years, such loss should be deducted form profits.

A dividend becomes a debt from the date on which it is declared and becomes payable the shareholder entitled to it can enforce its payment through court.

Dividend can be declared only at the annual general meetings. Once a company has declared a dividend for a financial year at an annual general meeting, a further dividend cannot be declared in respect of the same year at a subsequent general meeting.

Dividend can be declared only in respect of the particular financial year for which the annual general meeting has been converted. The profits earned in past year and remaining accumulated may be paid as dividend in respect of the financial year for which the annual general meeting has been convinced.

No dividend can be paid out of capital. Such payment is ultra virus, even if sanctioned by the memorandum or the articles. The directors who are guilty of such payment are bond to repay the amount to the company.

### 2.5. Payment Procedure followed by Companies

The actual payment procedure is of some importance, and the following is an outline of the payment sequence.

#### 1. Declaration Date

After the meeting of board of directors, they declare the regular dividend. They issue a statement containing percent of dividend, record of holder-day, payment date.

### 2. Holder of Record Date

In that date, the company closes its stock transfer books and make up a list of the shareholders as of that day. If the date is notified of the sale or transfer of some stock before holder of record date, the new owner receives a dividend. If notification is received after the holder of record date, the old stockholder gets the dividend.

#### 3. Ex-dividend Date

The date when the right to the dividend leaves the stock is called the ex-dividend date. In this case, the ex-dividend date is four days before holder of record date. Therefore if someone wants to receive the dividend, he/she must buy the stock four days before the holder of record day.

### 4. Payment Date

The Company should pay dividend, which was decide in the declaration date and percent of dividend (Weston & Copeland, 1992: 658).

## 2.6. Ex- Dividend Day Tests

The ex-dividend test involved the ex-dividend behavior of common stock prices. Investors buying the stock before ex-dividend date are entitles to the dividend declared; purchases on or after the ex-dividend date are not entitled to the dividend.

An early study of the phenomenon was by Elton & Gruber. In a sample of companies, they found that on average a stock declined by 0.78 of the dividend on the ex-dividend date. They interpret this result as consistent with a clientele effect where investors in high tax brackets show a preference for capital gains over dividends, & vice versa.

Similarly other many studies have been made in this matter. In a number of these studies, the evidence is consistent with the foregoing, namely, that stock prices decline on the ex-dividend day but less than the amount of the dividend (Bhattarai, 2007:392-393).

### 2.7. Financial Signaling

Cash dividends, then, may be viewed as a signal to investors. Presumably, companies with good news about their future profitability will want to tell investors. Rather than make a simple announcement, dividends may be increased to add conviction to the statement. When a firm has a target-payout ratio that is stable over time & it changes this ratio, investors may believe that management is announcing a change in the expected future profitability of the firm. The signal to investors is that management & the board of directors truly believes things are

better than the stock price reflects. In this vein, Miller & Rock suggest that investors draw inferences about the firm's internal operating cash flows from the dividend announcement. The notion is based on asymmetric information. Management knows more about the true state of the company's earnings than do outside investors.

Accordingly, the price of the stock may react to any unanticipated change in dividends. To the extent dividends provide information on economic earnings not provided by reported accounting earnings & other information, share price will respond (Van Horne, 2005:334-335).

## 2.8. Quality Rating of Companies in Nepal

Nepalese capital market is still lacking an independent quality rating agency. But, NEPSE, the sole secondary market of Nepal, categorizes the listed companies into two categories: Category "A" & Category "B", on different criteria. According to the NEPSE criteria, only those companies are included in "A" categories that have:

- ➤ Paid-up capital exceeding Rs. 20 million
- Reported profit for the last three consecutive fiscal years
- ➤ Have at least 1,000 shareholders
- ➤ Shares of the company should be trading in the stock exchange for a price above the face value
- ➤ The company should have submitted the annual report to NEPSE within six months of the end of the fiscal year.

Organizations not falling under these criteria are kept in "B" category. If not fulfilled the criteria for long-term by the financial institutions they are de-listed by the NEPSE (Bhattarai, 2006:298).

## 2.9. Legal Provision Regarding Dividend Practice in Nepal

Company Ordinance, 2005 makes some legal provision for dividend payment in Nepal. These provisions may be seemed as under:

Dividends and subsections of this section are as follows:

Section 46: Shareholder & Debenture-holder Register Book

Subsection (1)

Every company should establish shareholder & debenture-holder register book as prescribed by law at company registrar office.

### Subsection (2)

- 1. Following description should be clearly mentioned in the shareholders' register book:
  - a) Shareholder's full name & address.
  - b) No. of shares holding by shareholder.
  - c) Total amount paid by shareholder & remaining balance if any.
  - d) Registered date of Shareholder's Certificate.
  - e) Cancellation date of Shareholder's Certificate.
  - f) Ownership right on share after the death of the registered shareholder.

### Section 182: Dividend

#### Subsection (1)

Expect in the following circumstances, dividend shall be distributed among the shareholders within 45 days from the date of decision to distribute them,

- a) In case any law forbids the distribution of dividends.
- b) In case of right to dividend is disputed.
- c) In case dividends cannot be distributed within the time limit mentioned above owing to circumstance beyond anyone's control and without any fault on the part of the company.

## Subsection (2)

Government owned companies either fully or partly can't issue dividend without permission of government and also necessary direction in the matter of dividend.

## Subsection (3)

In case dividends are not distributed with the time limit mentioned in subsection (1), adding interest at prescribed rate.

## **Subsection (4)**

Only the person whose name stands registered in the register of existing share holders at the time of declaring the dividend shall be entitled to it.

### Subsection (5)

The Company can't issue any form/amount as dividend expected separate reserve amount for the distribution of dividend.

#### Subsection (6)

The Company should deduct the operating cost, deprecation amount, payable, adjustment for previous year's losses by-law before distributing dividend from profit.

### Subsection (7)

Under this section company can distribute interim dividend if it is provisioned in rules & if the dividend is verified by audit report & attested by the BOD.

#### Subsection (8)

Except the amount declared from AGM, the company cannot distribute dividend from fund affecting the company's reserve.

## **Subsection (9)**

If the shareholder does not come to take the dividend within the 5 F/Y from the declaration date, the amount would be safe guarded according to section 186 of company act,

### Subsection (10)

If any shareholder comes to take the dividend amount according to section 183 within 1 month of before the expiry date, the notice should be published publicly in national daily.

### Subsection (11)

After the dividend declared form AGM, the company should establish separate book of account within 45 days & distribute to the shareholders & the amount should not be used for other purpose by the company.

# 2.10. Review of the Major International Studies

**Linter** (1956) conducted a study, which is focused in the behavioral aspect of dividend policy. He investigated dividend pattern of 28 different companies of America and found that, firm generally predetermines the desired payout and tries to achieve it and rarely considers other factors. The model developed firm is his research is as follows:

$$\begin{split} DIV^*_{t} &= pEPS_t \qquad \qquad (i) \\ \&, \ DIV_{t^-} DIV_{t^-1} &= a + b(DIV^*_{t^-} DIV_{t^-1}) + e_1 \qquad \qquad (ii) \\ or, \ DIV_{t} &= a + b \ DIV^*_{t} + (a + b) \ DIV_{t^-1} + e_1 \qquad \qquad (iii) \\ where, \\ DIV^*_{t} &= Firm's \ desired \ payment \\ EPS &= Earning \ per \ share \\ p &= Targeted \ pay-out \ ratio \end{split}$$

A= Constant relating to dividend growth

B= Adjustment factor relating to the previous period's dividend & new desired level or dividend where b<1.

Major finding of this study are as follows:

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

**Walter** (1957) argues that the choice of dividend policies almost always affect the value of enterprises. His model, one of the earlier theoretical works shows clearly the importance of the relationship between the firm's internal rate of return, r, and its cost of capital, k, in determining the dividend policy that will maximize the wealth of shareholders. Walters's model is based on the following assumptions (Pandey, 1975: 741).

- The firm finances all investment through retain earnings, that is debt or new equity is not issued.
- The firm's internal rate of return, r, and its cost of capital, k is constant.
- All earnings are distributed as dividend or reinvested internally immediately.
- Beginning earnings and dividends never change. The value of the for share, EPS, and the dividend per share DPS may be changed in the model to determine results, but any given value of EPS/DPS are assumed to remain constant for ever in determining the given value.
- The firm has a very long infinite life.

Walter's formula to determine the market price per share is as follows.

$$P = \frac{DPS}{K} + \frac{r(EPS - DPS)/k}{K} = \frac{DPS + r(EPS - DPS)/k}{K}$$

where

P = market price per share

DPS = Dividend per share.

EPS = Earning per share.

r = internal rate of return. (Average).

K = Cost of capital/ capitalization rate.

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

### Growth Firm r>k

Firm having r>k may he referred as growth firm. The optimum payout ratio for a growth firm is 0. The market values per share p increases as payout ratio declines when r>k.

#### Normal Firm r=k

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

## Declining Firm r<k

Firm having r<k may be referred as declining firm. The optimum payout ratio for a declining firm is 100%. The market values per share p increases as payout ratio increases when r<k.

Thus, in Walter's Model the dividend policy of the firm depends on the availability of investment opportunities and the relationship between the firms internal rate of return, r, and its cost of capital, k.

The firm should use earning to finance investment if r>k, should distribute all earnings when r<k and would remain indifferent when r=k. Thus dividend policy is the financing decision. When dividend policy is treated as a financing decision, the payment of cash dividend is a passive residual (Solomon, 1963:139-140).

**Modigliani and Miller's** (1961) model (M-M) dividend policy of the firm is irrelevant. It doesn't affect the wealth of the shareholder. They argue that the value of the firm depends on the firms earning, which result from its investment policy. Thus, when investment decision of the firm is given the dividend decision- the split of earnings between dividends and retains earnings is of no significance in determining the variable of the firm. Modigliani and Miller's model hypothesis of irrelevance is based ion the following assumptions (Pandey, 1995:751-752).

- The firm operates in profit capital markets where investors behave rationally, information freely available to all and transaction and floatation cost do not exist. Perfect capital markets also imply that no investor is large enough to affect the market price of share.
- Taxes do not exist or there is no difference in the tax rate applicable to the capital gains and dividends. This means that investors value a rupee of dividend as much as a rupee of capital gains.
- The firm has a fixed investment policy.
- Risk of uncertainty does not exist .i.e. investors are able to forecast future prices and dividend with certainty and one discount rate is appropriate for all securities and all time periods. Thus, r=k=kt for all t.

Modigliani and Miller's Model provide falling model to prove their theory.

### **Market Value of Share**

The market value of share at the beginning of the period is equal to the present of dividend paid at the end of the period plus the market price of the share at the end of the periods.

Symbolically,

$$P_0 = \frac{D_1 \Gamma P_1}{1 \Gamma Ke}$$
 (i)

Where

 $P_0$  = Market price of share at the beginning of the period

 $D_1$  = Dividend of the share at the end of the period

 $P_1$  = Market price per share at the end of the period

 $K_e$  = Cost of the equity capital

Market price of share at the beginning of the period. Dividend of the share at the end of the period. Market price per share at the end of the period. Cost of the equity capital.

## **No External Financing**

If no external financing exist, the market value of firm can be computed by multiplying both sides by number of outstanding shares as follows:

$$nP_0 = \frac{nfD_1 \Gamma P_1 A}{1 \Gamma Ke}$$
 (ii)

Where

n = Number of outstanding share.

#### **New Shares**

If retain earning is not sufficient to finance the investment opportunities, issuing new shares is the other alternatives. Assuming that m is the number of newly issued equity share at the price of  $P_1$  the value of firm at time 0 will be:

$$nP_{o} = \frac{f_{n}D_{1} \Gamma P_{1} A f_{n} \Gamma m A Z m f P_{1} A}{1 \Gamma K_{e}}$$
 (iii)

Where

n = Number of shares at the beginning

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

#### **Total Numbers of Shares**

A firm can play dividends and raise funds to undertake the optimum investment policy. If the firm finances all investment opportunities either by issue of new equity of retains earnings, the total number of new shares can be computed on the following way:

$$MP_1 = I - (E - nD_1)$$
 (iv)

Where

 $MP_1$  = Amount obtained from the sales of new shares

I = Amount required for new investment during the period

E = Total earning during the period

 $E-nD_1 = Retained earning$ 

 $nD_1$  = Total dividend paid

Substituting MP<sub>1</sub> of equation (iv) to equation (iii) we get

$$nP_0 = \frac{f_n D_1 \Gamma P_1 A f_n \Gamma m AZ 1 \Gamma f_E Z n D_1 A}{1 \Gamma K_e}$$

A firm, which pays dividends, will have to raise funds externally to finance its investment plans. Modigliani and Miller's arguments, that dividend policy doesn't affect the wealth of the share holders, imply that when firm pays dividend,

external financing offsets its advantage. This means that the terminal value of the share decline when dividends are paid .Thus, the wealth of shareholders—dividend plus terminal price-remains unchanged. As a result, the present value per share after dividends and external financing is equal to the present value per share before the payment of dividend. Thus the shareholders are different between payments of dividend and retention of earnings.

Modigliani and Miller asserts that there hypothesis of dividend irrelevance is not affected if the firm raises external funds by issuing debts instead of shares. When external financing involves debts Modigliani and Miller invoke their indifference hypothesis with respect to leverage (Pandey, 1995: 753-754).

Gordon (1962) develops own very popular model explicitly relating the market values of the firm to dividend policy. Gordon made a study on the dividend policy and market price of the stock and concluded that the dividend policy of a firm influences the market value of stock. He explained, 'The investor's preferred present dividend rather that future capital gains. He further explained that the dividend policy has direct relation with the value of stock even if the internal rate of return is equal to the required rate of return.

Gordon's model is based on the following assumptions:

- The firm is an all equity firm.
- ) No external financing is available. Consequently retain earning would be used to financial expansion.
- The internal rate of return, r, of the firm is constant. This ignores the diminishing marginal efficiency of the investment.
- The appropriate discount rate, k, for the firm remains constant. Thus, Gordon's models also ignore the effect of a change in the firms risk class and its effect of k.

- The firm and its stream of earning are perpetual.
- The corporate taxes do not exist.
- The relation ratio b, ones decide upon, is constant. Thus the growth rate g=br, each constant forever.
- K>br =g. if this condition is not fulfilled we can't get a meaningful value for the share.

According to Gordon's Dividend Capitalization Model the market value of a share is equal to the present value of an infinite stream of dividend to be received by the share. Thus:

$$P_0 = \frac{D_1}{\text{fi } \Gamma K A} \Gamma \frac{D_2}{\text{fi } \Gamma K A} \dots \Gamma \frac{D_n}{\text{fi } \Gamma K A^1}$$

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

$$P = \frac{EPS (1 - b)}{(Ke - br)}$$

Where

P = market price per share

EPS = earning per share

b = retention ratio

ke = cost of capital

1-b = payout ratio

br = growth rate

Gordon's relevant theory is a popular theory of dividend as investor's prefer current dividends earnings rather than expected higher future income so as to eliminate the risk associated with future capital gain. Gordon stressed that the higher payout increases the dividend yield and hence increases the value of stock. But the assumption of this model is also far from the reality (Pandey, 1995:745-746).

Friend and Puckett (1964) conducted a study on the relationship between dividend policy and price of stock by running regression analysis on the data taken from 110 firms from five industries in the year 1956 to 1958. Industries taken as samples were chemicals, electric utilities, food, steels, and electronics. These industries were selected to permit a' distinction made between the results for growth and non-growth industries and to provide a basis for comparison with the results by other authors for earlier years. They also considered cyclical and non-cyclical industries in their study. The study period covered a boom year for the economy when stock prices leveled off after rise (1956) and a depressed for the economy when stock prices, however rose strongly (1958). They used dividends, retained earnings and price earning ratio as independent variable in their regression model of price function and dividends as supply function. Earnings, previous year's dividend and price earning ratio are independent variable in the dividend function. Symbolically, their price function and dividend supply function are as follows:

Their study based on the following assumption:

- Dividends react with year-to-year fluctuation in earnings.
- Price doesn't contain speculative components.
- Earnings fluctuation may not sum zero over the sample.

The regression results based on the equation of:

 $P_t$ = a + b  $D_t$  +  $CR_t$ +dh $(E/P)_{t-1}$  shows the customary strong dividend and relatively weak retained earning in three of the five industries, i.e. chemicals, foods and steels. They again tested other regression equation by addition of lagged earning price ratio to the above equation and result the following equation:

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

Where,

 $P_t$ = per share price at time t

 $D_t$ = Dividends at time t

 $R_t$ = Retain earning at time t

(E/P)<sub>t-1</sub>= Legged earning price ratio

Dividend supply function  $D_t = e + fE_t + gD_{t-1} + d(E/P)_{t-1}$ 

Where,

 $E_t$ = Earning per share at time t

 $D_{t-1}$ = Last year dividend

They found that more than 80% of the variation in the stock price could be explained by three independent variables. Dividends have predominant influence of stock price in the same three out of five industries but they found the difference between the dividend and retained earnings coefficient are not quite so marked as in the first set of regression. They also found that the dividend and retained earning coefficient are closer to each other for all industries in the both the years except for steels in 1956 and the correlations are higher again except for steels.

They also calculate the dividend supply equation ( $D_t$ =  $e + fE_t + gD_{t-1} + d(E/P)_{t-1}$ ) and derived price equation for four-industry group in 1958. The derived price equation showed that there were no significant changes' from those obtained in the single equation approach as explained above. They argued that the stock price or more accurately the price-earning ratio does not seem to have a significant effect on dividend payout. On the other hand they noted that the retained earnings effect increased relatively in the three of the four cases tested. Further their result suggested, price effects on dividend supply are probably not a serious source of bias on the customary deviation of dividend and retained earnings effects of short-term income movement are sufficiently great. Further they used lagged price as a

variable instead of lagged earning price ratio and showed that more than 90 percent of variation in stock prices can be explained by three independent variables and retained earnings received greater relative weight than dividends in most of the cases. The only exception was steels and food in 1958. They considered chemicals, electronics, and utilities as growth industries in these groups and the retained earnings effect was larger than the dividends effect for both the years covered. For the other two industries, namely food and steels, there was no significant systematic difference between the retained earnings and dividends coefficient.

Similarly, they tested the regression equation,  $P_t = a + bD$ , + cR, by using normalized earnings again, which they obtained by subtracting dividends from normalized earnings. This process of normalized earnings was based on the period 1950 to 1961. They again added prior year's normalized earning price variable and compared the results and found that there was significant role of normalized earnings and retained earnings but the effect of normalized price earning ratio was constant. When they examined the later equation they found that the difference between dividend and retained earnings coefficient disappeared. Finally they conclude that management might be able to increase price somewhat by raising dividend in food and steel industries.

They conducted more detailed examinations of chemical samples which disclosed that the result obtained largely reflected the undue regression weighting given the three firms with price deviating most from the average price in the sample of twenty firms and retained earnings as a price determinant.

Finally, Friend and Puckett concluded that, management might be able, at least in some measure, to increase stock prices in non-growth by raising dividends payout and in growth industries by greater retention.

Van Horne and McDonald (1968) conducted a more comprehensive study on dividend policy and new equity financing. The purpose of this study was to investigate the combined effect of dividend policy and new equity financing decision on the market value of the firm's common stocks. The required data were collected from 86 electric utility firms. They tested two regression models for the utilities industries. By using following models or methodology, they compared the result obtained for the firms, which both type pay dividends and engage in new equity financing with other firms in an industry sample. First model was,

$$P_0/E_0 = a_0 + a_1(g) + a_2(D_0/E_0) + a_3(Lev) + u_1$$

Where,

P<sub>0</sub>/E<sub>0</sub>=Closing market price in 1986 dividend by average EPS for 1967 and 1968.

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

 $D_0/E_0$ = Dividend payout, measured by cash dividend in 1968 dividend by earnings in 1968.

Lev = Financial risk, measured by interest charges dividend by the different of operating revenues and operating expenses.

Second Model was,

$$P_0/E_0 = a_0 + a_1(g) + a_2(D_0E_0) + a_3(Lev) + a_4(Fa) + a_5(F_b) + a_6(F_c) + a_7(F_d) + u$$

Where,

Fa,  $F_b$ ,  $F_c$  &  $F_d$  are dummy variables corresponding to 'New Issue Ratio' (NIR) group A and D.

It is noted that they had grouped the firms in five categories A, B, C, D and E by NIR. For each firm the value of dummy variables representing its NIR group is one and the values of remaining dummy variables are zero,

Again, they tested the following regression equation for electronic components industry.

Po/ 
$$E_0 = a_0 + a_1(g) + a_2(D_0E_0) + a_3(Lev) + a_4(OR) + u$$

Where,

Lev = Financial-risk, measured by long-term debt plus preferred stock dividend by net worth as the end of 1986.

OR = Operating risk, measured by the standard error for the regression of operating earning per share on time for 1960 through 1968, and rest are as in first model above.

They concluded that for electric utility firms in 1968, share value was not adversely affected by new equity financing in the presence of cash dividends; expect for those in the highest new issue group and it made new equity a more costly form of financing than the retention of earnings. They also indicated that the payment of dividends through excessive equity financing reduces share prices. For electronics, electronic-components industry a significant relationship between new equity financing and value was not demonstrated.

**Gupta** (1973) conducted in imperial study on bonus issue. This study attempts to test some popularly health beliefs about the effect of bonus share issue on dividend and share prices. The period of study extends over 24 years from 1948 to 1971. The coverage is restricted to Indian companies quoted on any stock exchanges. The study covers the total of 919 bonus issues. He used simple statically tools such as percentage, frequency distribution, average, and standard deviation to study and analyze the data.

The basic objective of the study was:

- To study the effect of bonus share issues on dividends and share price changes associated with bonus issues. Some of the important specific questions to which this study concentrates to analyze:
  - i. To what extent can bonus issue announcement be regarded as indicating the management intentions of increasing the dividend distribution in the near future?
  - ii. An increase in the dividend quantum does follow the bonus issue?
  - iii. What is the magnitude of dividend increase and is this magnitude directly related to the ratio of bonus issue?
  - iv. Whether the aggregate market valuation of a company's equity capital increases as a result of bonus issue? For this question the study examine the immediate and also the long term, effects of bonus issues of the market valuation of a company's equity after adjusting specifically for the general market movement in share prices.
- It specifically examines how far bonus share represent the real addition to the shareholders wealth and income.
- To examine managerial decision making relating to bonus issues. Does the widely held belief that management tries to maintain the existing dividend rate even after bonus issue have any validity?

His study was wide coverage and immense on bonus share. Following were observed in the connection with bonus share:

- The great majority of the bonus issues in Indian are in relatively high ratio of 20% i.e. 1:5 and above.
- The increase on dividend was not quite as universal as is commonly believed and almost one third of the cases showed no increase in the quantum of dividend distribution following the bonus issue.

- His analysis shows that bonus issues are often but not invariably, accompanied by intentions to raise the dividend payment in immediate future.
- There is no systematic relation exists between the bonus ratios on the own hand and the percent of dividend rates and lower ratios more often among the companies paying lower dividend rates.
- The immediate impact of bonus announcements on the share price is almost invariable favorable, the reason being that a onus announcements is usually interpreted as indication the managements intension to increase the dividend distribution in the immediate future. The actual magnitude of the price rise will depend on the expected dividend increase together with the degree of confidence with which such expectations held in each case.
- In most cases the public was provided with very little information about the real motives behind the bonus issues, hardly on the future rate of dividend.
- The analysis finds that there is a positive correlation between the magnitudes of price rise and the bonus ratio, even in broad terms & disappears by the end of year after bonus announcement. The extent of price after one year shows no regular tendency.

# 2.11. Review of the Major National Studies

**Bhattari** (2052) his study on "Dividend Decision & Its Impact on Stock Valuation" concluded that there is a positive relationship between cash flow & current profit & dividend percentage of share. There are no criteria to adopt dividend payout ratio & it is observed that there is a negative relationship between payout ratio & valuation of shares. Similarly he found that there was a negative relationship between MPS & stockholders' required rate of return also.

**Shah** (2061) in his study on the "Impact of Dividend Practices on Commercial Banking Sectors in Nepal" found that payment of dividend is highly fluctuating and such trend could not impress the market positively. With respect to dividend as a residual decision, the majority of respondent doesn't support that dividend as a residual decision. Majority of respondents expresses that Nepalese shareholders are really not indifferent whether the company pays or does not pay dividend and few point out that shareholders are still indifferent in this aspect. Regarding dividend policy in Nepalese banking sectors, he suggested stability of dividend and un-haphazard payout ratio. Second preference is given to cash balance for dividend is adequately planned and maintained. He found that profitability & high psychological values to the shareholders are the major factors for the dividend decision by the banking sector of Nepal.

**Bhattarai** (2061) in his study on "An Examination of the Effects of Dividend Policy on Market Price of Shares (with reference to five commercial banks listed in NEPSE)" sound that the dividend practices of majority of CBs are neither stable nor constantly growing. Dividends are distributed as an ad-hoc or situational basis. There is a great importance of cash dividend on the fluctuation of the markets price of share. Generally, DPS has a positive impact on MPS in all banks.

**Mudhari** (2062) in his study on the "A Study on the Dividend Policy of the Listed Company and its Effect on Market Price(Case Study of Commercial Bank)" found that MPS is affected by the dividend related financial variable that is, DPS, dividend yield & dividend payout ratio either positively or negatively. He found either positive or negative relation between the MPS & DPS largely depending upon the factors; also affect MPS like, EPS, net worth per share, etc.

**Bista** (2062) in his study on the "Dividend Policy & Practices of Listed Joint Venture Commercial Banks & Manufacturing Companies" found that there was a

positive correlation between DPS & MPS on NSBIBL, NBBL, Nabil & BNL but correlation found no relation in UNL & Nepal Lube Oil Ltd. The study also found that there was also positive impact & relationship between the cash & bank balance & DPS of the sample organization. He has suggested applying strategic dividend policy by the financial institutions, expanding on mobilization of the funds & proper flow of the information by the companies. Similarly he suggested following the legal rules & regulation enacted by the govt. strictly.

Adhikari (2063) in his study on the "Comparative Study of Dividend Policy and Practices of Commercial Banks" found that there were irregularities in the dividend payment by the CBs of Nepal. There was also no stability in DPS than the dividend payout ratio of the CBs. Thus he has recommended the investors to consider the higher profit earning companies' shares to purchase. He also suggested that from the finding there was no stability in DPS, EPS, dividend yield, dividend payout ratio, price earning per share, etc. so they need to stabilize the variables to avert the risk.

#### 2.12. Research Gap

The topic of dividend policy & practice has been a controversial subject for a long time. Although dividend policy is not a new area of research, it is still attracting the attention of financial economists & for many researchers it remains one of the most interesting & puzzling topics in modern corporate finance.

The examination of dividend policy in Nepal has been much more limited. It has been observed that the extent studies in this area have not focused on what determines dividend policy of Nepalese publicly listed companies. Few of them have attempted to study comprehensively based on primary & secondary data but the factors incorporated in the studies are too limited. Therefore, the lack of comprehensive studies on the dividend policy especially on cash dividend practice

in Nepalese capital market does not provide strong justification for the current study. They focused on overall dividend policy implemented by the companies or they tested the dividend payment practices on few international theories or principles.

This study is different from the previous studies on the following ground:

- This study is mainly based on secondary data.
- Cash dividend payment practices have been more emphasized in this study.
- The study tries to examine the homogeneity in the cash dividend payment by various sectors.
- The study tries to find out the MPS effect using the ex-dividend test previously tested by Elton & Gruber.
- The study has attempted to establish the relationship between the theoretical & empirical issues about dividend policy in general.
- The study has tried to found the relationship between the MPS & the cash dividend.

# **CHAPTER - III**

# RESEARCH METHODOLOGY

This chapter presents the short outline of the methods applied in the process of analyzing the capital structure is a systematic method of finding out solution to a problem whereas research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objective in view.

# 3.1. Research Design

For the analysis of the cash dividends payments of the companies listed at NEPSE, analytical as well as descriptive designs are applied to achieve the objective of the research.

#### 3.2. Population and Sample

Mainly the cash dividend paying companies listed at NEPSE is the population samples considered for the study.

The sample used in this research is purposive in nature. There are 135 companies listed at NEPSE currently. Of which 28 financial institutions are taken covering  $20.74\%\beta21\%$  of the total population as sample  $(\frac{28}{135}\,|\,100\%)$ . Normally the financial & non-financial sector can be divided to the total listed companies. Of which commercial banks, development banks, insurance companies, & finance companies are under the financial sectors whereas mfg. & processing companies, trading companies, hydropower companies & others are under non-financial sectors.

# The sample companies taken are:

#### > Commercial Banks

- 1. Nabil Bank Ltd.
- 2. Himalayan Bank Ltd.
- 3. Everest Bank Ltd.
- 4. Nepal Investment Bank Ltd.
- 5. Standard Chartered Bank Nepal Ltd.
- 6. Nepal SBI Bank Ltd

# > Development Banks

- 7. Sanima Bikas Bank Ltd. (previously Sanima Bikas Bittaya Sanstha Ltd.)
- 8. Development Credit Bank
- 9. Business Development & Financial Institution
- 10. Chimeki Bikas Bank Ltd.
- 11. Sahayogi Bikas Bank Ltd.
- 12. Nirdhan Utthan Bank Ltd.

# > Insurance Companies

- 13. Nepal Insurance Company
- 14. Nepal Life Insurance Company
- 15. Himalayan General Insurance Company
- 16. Everest Insurance Company
- 17. NB Insurance Company

# > Finance Companies

- 18. Annapurana Finance Company Ltd.
- 19. Everest Finance Company Ltd.
- 20. Bhajuratna Finance & Saving Company Ltd.

- 21. Ace Finance Company Ltd.
- 22. Nepal Abbas Bikas Bittya Co. Ltd.
- 23. Nepal Merchant Banking & Finance Ltd.

# Manufacturing & Processing Companies

- 24. Unilever Nepal Ltd. (previously Nepal Lever Ltd.)
- 25. Bottlers Nepal Ltd.

# > Trading Companies

- 26. Bishal Bazar Company Ltd.
- 27. Salt Trading Company Ltd.

# > Hydropower Companies

28. Chileme Hydropower Company Ltd.

#### 3.3. Sources of Data

This research is based on secondary data. Required data is collected from NEPSE, SEBON Bulletin & Reports of Periodically published by various organizations, previous thesis and dissertation and published by various organizations. The basic sources of data used are as follows:

- a. Annual Reports
- b. Published materials from concerned financial institutions
- c. Financial statements of concerned financial institutions
- d. SEBON Annual Reports
- e. Related books and journals

#### 3.4. Methods of Data Analysis

Mainly financial methods are applied for the purpose of this study. Appropriate statistical tools are also used. Among them correlation analysis & hypothesis tests regarded as major ones is used for this research.

#### 3.5. Tools Used

#### 3.5.1. Arithmetic Mean (A.M)

The mean is the figure we get when the total of all the values in a distribution is divided by the number of values in the distribution. This is calculated by using following formulae:

...Mean (A.M.)
$$X\overline{X}X - \frac{X}{n}$$

# 3.5.2. Standard Deviation (S.D.)

The measurement of the scatter ness of the mass of figure in a series about an average is known as the dispersion. The standard deviation measures the absolute dispersion. This is calculated as follows:

...Standard deviation (S.D.) 
$$X\sqrt{\frac{(X Z \overline{X})}{n}}$$

# 3.5.3. Coefficient of Variation (CV)

The coefficient of variance is the relative measure of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in percent. It is calculated as follows:

...Coefficient of Variation (CV) 
$$X \frac{S.D.}{Mean} \mid 100$$

# 3.5.4. Karl Pearson's Correlation Coefficient (r)

Correlation analysis only helps in determining the extent to which the two variables are correlated but it does not tell us about cause & effect relationship.

...Karl Pearson's Correlation Coefficient(r) 
$$X = \frac{xy}{\sqrt{-x^2}\sqrt{-y^2}}$$

The value of "r" lies between -1 to +1. When r=0, then there is no correlation between two variables.

#### 3.5.5. Karl Pearson's Coefficient of Skewness

A distribution which is not symmetrical is said to be skewed. So, skewness is the lack of symmetry. It gives the degree of departure from symmetry. It relates to the shape of the curve of frequency distribution than its size.

It is calculated by: 
$$S_k fPAX = \overline{X}ZM_o$$

The Karl Pearson's coefficient of skewness lies between -3 & +3.

#### 3.5.6. T-Statistics

To test the validity of our assumption, if the sample size is less than 30, t-test is used. For applying t-test in context of small sample the t-value is calculated first & compared with the t-value on table at certain level of significance for given degree of freedom. If calculated value of "t" exceeds the table value (say 0.05) we can say that the difference is significant at 5% level, but if calculated value is less than the concerning values the difference is not treated as significant. The value is calculated by using following formula:

$$...t \ X \frac{\overline{X} \ Z\mu}{\frac{S}{\sqrt{n}}} \ \& \ ...t_{cal} \ X \frac{\overline{d}}{S_d / \sqrt{n}}$$

#### 3.5.7. F-statistics

The analysis of variance frequently referred to by the contraction, ANOVA is a statistical technique especially designed to test whether the means of more than two quantitative populations are equal. It is applied to find out whether the two samples may be regarded as drawn form the normal populations having the same variance.

The value of "F" is calculated as:

 $...F \, X \frac{Larger \ estimate \ of \ variance}{Smaller \ estimate \ of \ variance}$ 

The calculated value of "F" is compared with the table value for  $V_1$  &  $V_2$  at 5% or 1% level of significance.

#### **CHAPTER - IV**

# DATA PRESENTATION AND ANALYSIS

The main purpose of this chapter is to carry out presentation and analysis of secondary data. First attempt is made to analyze secondary data to analyze the cash dividend payment of companies listed at NEPSE. In this section, different statistical tools like average, standard deviation, coefficient of variation, correlation coefficient, test of hypothesis, etc are used to analyze the cash dividend payments of various sectors' companies.

# 4.1. Number of Cash Dividend Paying Listed Companies

Table 4.1

Number of Cash Dividend Paying Listed Companies

F/Y	<b>Total Listed</b>	Cash Dividend Paying	Ratio
	Companies	<b>Listed Companies</b>	
2002/03	108	32	29.63%
2003/04	114	32	28.07%
2004/05	125	22	17.60%
2005/06	135	37	27.41%
2006/07	135	21	15.56%

Source: SEBON

Figure 4.1

Total Listed & Cash Dividend Paying Companies

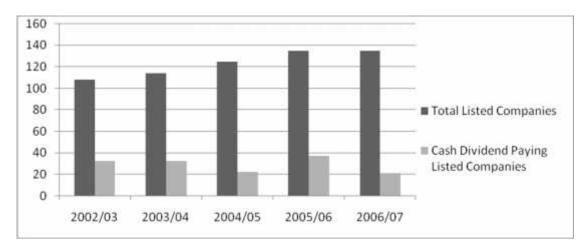
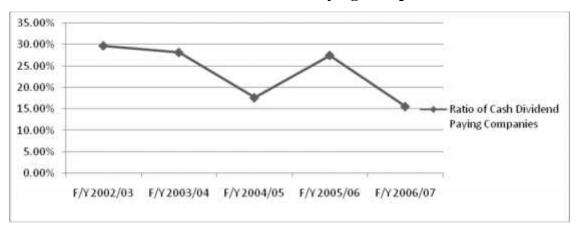


Figure 4.2
Ratio of Cash Dividend Paying Companies



The number of Nepalese listed companies that are paying the cash dividend is seen decreasing in the past few F/Y. About 30% of the total listed companies distributed cash dividend during the F/Y 2002/03. But it went on declining and came to 17.60% in the F/Y 2004/05. Slight increment was seen in the F/Y 2005/06 but again the ratio declined to 15.56% in the F/Y 2006/07. Among the cash dividend paying total financial institutions majority are from the banking sectors or of finance companies. Very few numbers. Of financial institutions are from development banks, manufacturing & processing companies & hydro-power company.

From the correlation calculation we came to conclusion that there is the low degree of negative correlation between the total no. of listed companies & the no. of cash dividend paying listed companies. Though, the general publics are highly attracted towards the shares of the CBs of the country as they are performing well at the secondary market. Similarly they are providing the stock dividend to the shareholders. But the financial performance of the institutions under other sectors is not show good. Even majority of the CBs are also not providing good percentage of the cash dividend to their shareholders.

**Note:** For detail calculation see Annex-I

# 4.2. Dividend Paying Listed Companies Analysis

# 4.2.1. Number of Cash Dividend Paying Sector-wise Listed Companies

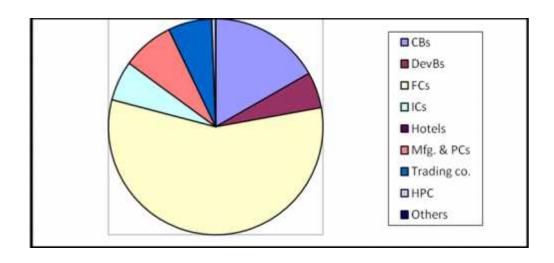
Table 4.2

No. of Cash Dividend Paying Sector-wise Listed Companies

Sector/F/Y	2002/03	2003/04	2004/05	2005/06	2006/07	Total	In %
CBs	3	7	5	6	7	28	16.77%
DevBs	0	1	1	4	3	9	5.39%
FCs	16	19	15	21	24	95	56.89%
ICs	6	1	1	1	1	10	5.99%
Hotels	0	0	0	0	0	0	0.00%
Mfg. & PCs	4	4	2	2	1	13	7.78%
Trading	3	2	2	2	2	11	6.59%
Company							
HPC	0	0	0	0	1	1	0.60%
Others	0	0	0	0	0	0	0.00%
Total	32	34	26	36	39	167	100%

Source: SEBON

Figure 4.3
Sector-wise Cash Dividend Paying Companies



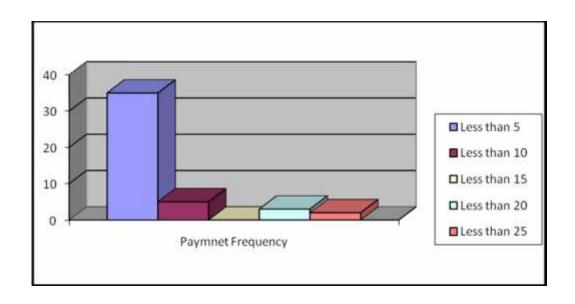
Large portion of the cash dividend is paid by the FCs in every F/Y. So, in total also 56.89% of the total dividend paying companies is covered by FCs. Another highest number of cash dividend companies were from the CBs side with 16.77% of the total composition. None of the hotel & other sectors companies has been able to pay cash dividend. ICs & trading companies have covered same ratio with 6.59%. Mfg. & PCs have also covered 7.78% of the total composition. Though HPC have also covered the composition but at very least portion covering just 0.60% of the total composition.

Table 4.3

No. of Payments by Listed Companies

No. of Payments	Range	Frequency (f)
Less than 5	0-5	35
Less than 10	5-10	5
Less than 15	10-15	0
Less than 20	15-20	3
Less than 25	20-25	2

Figure 4.4
No. of Payments by Listed Companies



From the Karl Pearson's coefficient of skewness, the distribution is found to be positively skewed.

Note: For detail calculation see Annex-II

# 4.2.2. Listed Companies' Cash Dividend Rate-wise Analysis

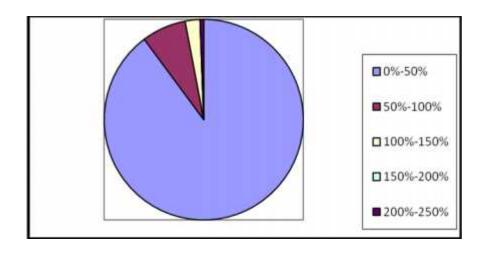
Table 4.4

Cash Dividend Rate-wise Analysis

Dividend	2002/03	2003/04	2004/05	2005/06	2006/07	Total	In %
Rate/F/Y							
0%-50%	30	31	22	32	35	150	89.82%
50%-100%	2	2	3	3	2	12	7.19%
100%-150%	-	1	1	1	1	4	2.40%
150%-200%	-	-	-	-	-	0	0.00%
200%-250%	-	-	-	-	1	1	0.60%
Total	32	34	26	35	38	167	100%

Source: SEBON

Figure 4.5
Cash Dividend Rate-wise Proportion



Large numbers of listed companies were providing the cash dividend at the range of 0%-50%. More than 90% of the total cash dividends paid are covered within this range. Mainly large no. of FCs & some CBs comes under this range.

Very few companies are seen paying the cash dividend in the rate higher than 100%. Renowned joint venture banks or multinational mfg. & PCs are seen to be the listed companies paying the cash dividend at the rate more than 100% to their shareholders. The rate ranges of 100%-150% & 200%-250% are seen only 2.402% & 0.60% respectively only.

#### **Cash Dividend Payment Situation of Sector-wise Financial Institutions**

# 4.2.1. Cash Dividend Payment Situation of CBs

Table 4.5

Cash Dividend Payment Situation of CBs

(in Rs.)

F/Y	EBL	Nabil	NIBL	SCB(N)L	HBL	NSBIBL
2002/03	CDND	30	CDND	100	25	CDND
2003/04	20	50	20	110	1.32	8
2004/05	20	65	15	110	CDND	CDND
2005/06	CDND	70	12.58	120	11.5	CDND
2006/07	25	85	20	130	30	5
A.M.	13.00	60.00	13.516	114.00	13.564	2.60
S.D.	10.77	18.71	7.35	10.20	12.16	3.32
C.V.	82.85%	31.18%	54.35%	8.95%	89.63%	127.70%

Source: SEBON

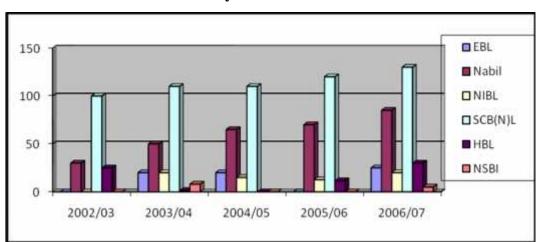


Figure 4.6

Cash Dividend Payment Situation of CBs

Large amount of cash dividend paying "A" class CB of the sample is seen SCB(N)L. The average payment of cash dividend by SCB(N)L was Rs.114 per share of Rs.100 face value. In other word it paid average 114% cash dividend in average to its shareholders. The least average percent was of NSBIBL with only 2.6% cash dividend. NSBIBL has not been able to declare cash dividend to its shareholders. The amount it has declared also is also not seen so satisfactory from the record than the other competitor CBs.

The situation of the Nabil bank is also seen well. It has also been distributing cash dividend regularly. The average cash dividend payment is seen 60% i.e. Rs. 60 per share of Rs.100 face value.

EBL, NIBL & HBL have not also been declaring & paying the cash dividend regularly to its shareholders. The amounts they have paid as a cash dividend are also of very small with average of Rs.13.00, Rs.13.516 & Rs.13.564 respectively.

The C.V of the SCB(N)L is the least among the sample CBs with 8.95%, show the cash dividend payment of the bank is most consistent than other CBs. The most inconsistent CBs in cash dividend distribution are of NSBIBL with C.V. 123.70%. The situation of HBL is also not good, it's C.V, is also seen higher than other sample CBs. The situation of Nabil is seen slighter well with lesser C.V. than of EBL, NIBL, HBL & NSBIBL.

## 4.2.2. Cash Dividend Payment Situation of DevBs

Table 4.6

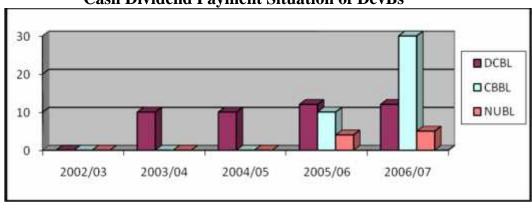
Cash Dividend Payment Situation of DevBs (in Rs.)

F/Y	NUBL	DCBL	CBBL
2002/03	CDND	CDND	CDND
2003/04	CDND	10	CDND
2004/05	CDND	10	CDND
2005/06	4	12	10
2006/07	5	12	30
A.M.	1.8	8.80	8.00
S.D.	2.23	4.49	11.66
C.V.	123.89%	51.02%	145.77%

Source: SEBON

Figure 4.7

Cash Dividend Payment Situation of DevBs



Being categorized as an"A" class development banks by NEPSE also, the situation of cash dividend paying of these bank is not good. Only DCBL has been paying

the cash dividend regularly since past four F/Y. But the amount is seen very minimal with Rs.8.80 per share. Similarly CBBL has been also paying cash dividend since past two F/Y 2005/06 & F/Y 2006/07 with average of Rs.8.00 per share of Rs.100 face value. Being not categorized under an "A" class financial institution also NUBL has been paying the cash dividend to its shareholders. From the C.V. calculation, DCBL is seen more consistent than other DevBs in cash dividend distribution.

# 4.2.3. Cash Dividend Payment Situation of ICs

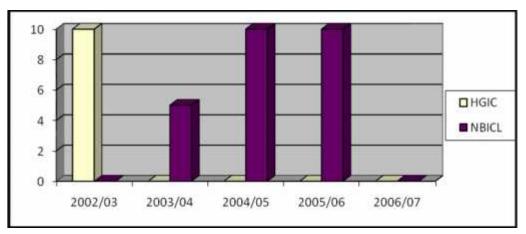
Table 4.7
Cash Dividend Payment Situation of IC
(in Rs.)

F/Y	NBICL	HGIC
2002/03	CDND	10
2003/04	5	CDND
2004/05	10	CDND
2005/06	10	CDND
2006/07	CDND	CDND
A.M.	5	2.00
S.D.	4.47	4
C.V.	89.44%	200%

Source: SEBON

Figure 4.8

Cash Dividend Payment Situation of ICs



The cash dividend situations of the ICs are not so good in record. None of the ICs listed as "A" class financial institutions also have not declared cash dividend since past five F/Y except by HGIC in F/Y 2002/03 only. It has also just paid 10% cash dividend on face value i.e. Rs. 10 per share. Being not categorized as an "A" class company also NBICL has paid cash dividend in the F/Y 2004/05 & F/Y 2005/06 with good consistency in cash dividend distribution.

# 4.2.4. Cash Dividend Payment Situation of FCs

Table 4.8

Cash Dividend Payment Situation of FCs

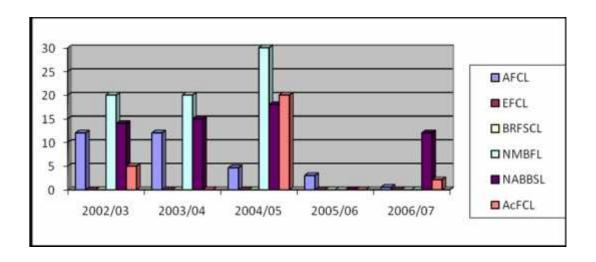
(in Rs.)

F/Y	AFCL	NMBFL	AcFCL	NABBSL
2002/03	12	20	5	14
2003/04	12	20	CDND	15
2004/05	2.632	30	20	18
2005/06	3.158	CDND	CDND	CDND
2006/07	0.53	CDND	2.11	12
A.M.	6.464	14	5.422	11.80
S.D.	4.71	12	7.52	6.21
C.V.	72.87%	85.71%	138.62%	52.63%

Source: SEBON

Figure 4.9

Cash Dividend Payment Situation of FCs



There is large no. of FCs operating in Nepal with the permission of NRB. But most of them are not able to operate in an efficient ways. The financial situation is not so sound to be categorized as an "A" class financial institution. The performance of the share at the secondary market is also not as good as banking sector's shares.

Therefore, being categorized as an "A" class financial institution also they are not being capable of declaring cash dividend to their shareholders. Only one of the FCs has been paying cash dividend namely, AFCL with average of Rs.6.464 only in past five F/Y.

But not being categorized as an "A" class financial institution also NMBFL & NABBSL has paid cash dividend since past F/Y. NMBFL has not paid cash dividend in past two F/Y. Similarly, NABBSL has not paid during the F/Y 2005/06. Being not categorized as an "A" class financial institution also NABBSL have been paying cash dividend more consistently than other FC.

# 4.2.5. Cash Dividend Payment Situation of Manufacturing & PCs Table 4.9

Cash Dividend Payment Situation of Mfg. & PCs

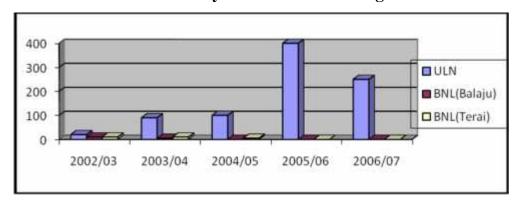
(in Rs.)

F/Y	UNL	BNL		
		BNL(Balaju)	BNL(Terai)	
2002/03	20	10	10	
2003/04	90	5	10	
2004/05	100	CDND	5	
2005/06	400	CDND	CDND	
2006/07	250	CDND	CDND	
A.M.	172.00	3.00	5.00	
S.D.	136.44	4.00	4.47	
C.V.	79.33%	133.33%	89.4%	

Source: SEBON

Figure 4.10

Cash Dividend Payment Situation of Mfg. & PCs



Under Mfg. & PCs, only one company has been included under the "A" class financial institution i.e. UNL. The company has been paying the cash dividend regularly in the past five F/Y. Similarly, the amount of the cash dividend is seen increasing also. BNL has not been able to distribute cash dividend with good amount being one of the renowned multinational soft drink company.

BNL (Terai) is seen more consistent in cash dividend distribution than the BNL (Balaju). The C.V. of BNL (Terai) is lesser than that of BNL (Balaju).

# 4.2.6. Cash Dividend Payment Situation of HPC

Table 4.10

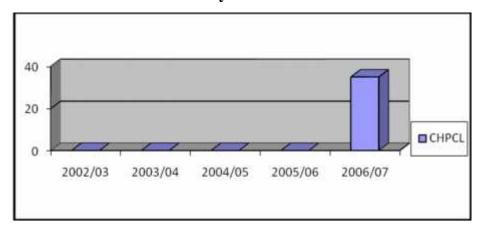
Cash Dividend Payment Situation of HPC

(in Rs.)

F/Y	CHPCL
2002/03	CDND
2003/04	CDND
2004/05	CDND
2005/06	CDND
2006/07	35
A.M.	7.00
S.D.	14
C.V.	200%

Source: SEBON

Figure 4.11
Cash Dividend Payment Situation of HPC



The NEPSE has segregated hydropower sector recently at the trading floor. Under this sector only 2 companies are listed. They are National Hydropower Company & CHPCL. CHPCL has been categorized as "A" class financial institution & thus it has declared Rs.35 cash dividend in the F/Y 2006/07. But in earlier F/Y it has not been able to declare cash dividend.

# 4.2.7. Cash Dividend Payment Situation of Hotel

None of the institutions under the hotel sector has distributed cash dividend to its shareholders since last five F/Y. And even they did not come under the "A" class financial institutions as categorized by NEPSE.

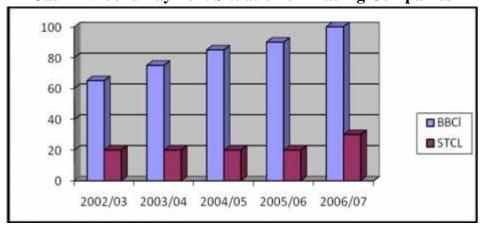
# 4.2.8. Cash Dividend Payment Situation of Trading Company

Table 4.11
Cash Dividend Payment Situation of Trading Company
(in Rs.)

F/Y	BBCL	STCL
2002/03	65	30
2003/04	75	20
2004/05	85	20
2005/06	90	20
2006/07	100	20
A.M.	83	22
S.D.	19.07	4
C.V.	22.98%	18.8%

Source: SEBON

Figure 4.12 Cash Dividend Payment Situation of Trading Companies



None of the institutions under the trading sector companies except BBCL & STCL has distributed cash dividend to its shareholders since last five F/Y. And even they

did not come under the "A" class financial institutions as categorized by NEPSE though they have been paying the cash dividend to their shareholders consistently. STCL is seen more consistent than BBCL.

# 4.2.9. Cash Dividend Payment Situation of Others

None of the institutions under the other sector has distributed cash dividend to its shareholders since last five F/Y.

# 4.3. Ex-dividend Test (Empirical Testing)

#### 4.3.1. For the F/Y 2002/03

Due to unavailability of the secondary data from the SEBON & NEPSE calculations is not feasible for the F/Y 2002/03. There is the record of dividend payment amount but no records of the ex-dividend date.

#### 4.3.2. For the F/Y 2003/04

Table 4.12
Price Effect after Cash Dividend Payment on F/Y 2003/04

(in Rs.)

S. No.	Company	Average	MPS on	Average	e Price Change	
	Name	MPS	Ex-dividend	MPS	On Ex-	After Ex-
		Before	Date	After	dividend Date	dividend Date
1.	BBCL	1457	2003/11/02	1401	+43	-56
			1500			
2.	DCBL	152	2003/11/12	1578	+9	+5
			161			
4.	SCB(N)L	1763	2003/12/05	1701	+12	-62
			1775			
5.	EBL	445 2003/12/21 442	442	-1	-3	
			444			
6.	AFCL	417	2003/12/21	350	-7	-67
			410			
7.	Nabil	803	2004/01/04	798	-3	-5
			800			
8.	HBL	995	2004/03/21	662	-5	-333
			990			
9.	NSBIB	242	2004/03/28	243	-1	+1
			241			

From the above table we see the MPS of the six companies who declared the cash dividend has declined on the ex-dividend date & after the ex-dividend date during the F/Y 2003/04. The large amount loser company was HBL with the MPS decline of Rs.333. The MPS of BBCL was seen increased by Rs.43 on the ex-dividend date.

**Note:** For detail calculation see Annex-III

#### 4.3.3. For the F/Y 2004/05

Table 4.13

Price Effect after Cash Dividend Payment on F/Y 2004/05

(in Rs.)

S.	Company	Average	MPS on Ex-	Average	Price Change	
No.	Name	MPS	dividend	MPS	On Ex-	After Ex-
		Before	Date	After	dividend	dividend
					Date	Date
1.	EBL	687	2004/10/31	682	-2	-5
			685			
2.	UNL	1487	2004/12/17	1500	+13	+13
			1500			
3.	SCB(N)L	1860	2004/12/02	1839	-30	-21
			1830			
4.	DCBL	201	2004/12/18	211	+7	+10
			208			
5.	Nabil	1259	2004/12/22	1248	+6	-11
			1265			
6.	NIBL	1152	2004/12/25	1160	+3	+8
			1155			
7.	NBI	110	2005/02/22	103	-	-7
			110			

Principally, the MPS of the shares should decline on the ex-dividend date & after this date after the declaration of the cash dividend by the companies. But from the above data we see that the MPS of UNL, DCBL & NIBL increased by Rs.13, Rs.7, & Rs.3 respectively. Only the MPS of EBL & SCB (N) L has declined by Rs.2 & Rs.30 on ex-dividend date & Rs.5 & Rs. 21 after ex-dividend date respectively.

Note: For detail calculation see Annex-IV

#### 4.3.4. For the F/Y 2005/06

Table 4.14

Price Effect after Cash Dividend Payment on F/Y 2005/06

(in Rs.)

S. No.	Company	Average	MPS on Ex-	Average	<b>Price Change</b>	
	Name	MPS	dividend	MPS	On Ex-	After Ex-
		Before	Date	After	dividend	dividend
					Date	Date
1.	UNL	2180	2005/09/09	1845	+20	-335
			2200			
2.	SCB(N)L	2392	2005/10/26	2373	+38	-19
			2430			
3.	DCBL	257	2005/11/08	257	+8	-
			265			
4.	Nabil	1660	2005/11/30	1645	-10	-15
			1650			
5.	NIBL	792	2005/12/14	783	-7	-9
			785			
6.	HBL	1135	2005/12/16	1119	+5	-16
			1140			
7.	NBI	110	2005/12/17	102	-	-8
			110			
8.	AFCL	577	2005/12/26	420	+50	-157
			627			

Similar is the situation in the F/Y 2005/06. The MPS of majority of the cash dividend declaring companies is seen increased. Except the MPS of UNL, SCB(N)L, HBL & AFCL majority of the MPS of the companies increased on & after the ex-dividend date. UNL lose Rs.335 after ex-dividend date. Similarly, AFCL also lose Rs.157 after ex-dividend date.

**Note:** For detail calculation see Annex-V

### 4.3.5. For the F/Y 2006/07

Table 4.15
Price Effect after Cash Dividend Payment on F/Y 2006/07

(in Rs.)

S.	Company	Average	Ex-	Average	Price	Change
No.	Name	MPS	dividend	MPS	On Ex-	After Ex-
		Before	Date	After	dividend	dividend
					Date	Date
1.	UNL	2823	2006/09/05	2833	-13	+10
			2810			
2.	Nabil	2312	2006/10/22	2320	+28	+8
			2340			
3.	NIBL	1447	2006/10/26	1712	-12	+265
			1435			
4.	EBL	1328	2006/10/31	1421	+17	+93
			1345			
5.	SCB(N)L	4285	2006/11/08	4357	+115	+72
			4400			
6.	HBL	1303	2006/12/15	1301	-3	-2
			1300			
7.	DCBL	809	2006/12/25	813	-4	+4
			805			
8.	CBBL	68	2006/12/26	124	+37	+56
			105			
9.	CHPCL	757	2007/01/08	795	+60	+38
			817			
10.	NSBIB	790	2007/02/03	802	+10	+12
			800			

During the F/Y 2006/07, 12 sample companies made the cash dividend declaration. But of these also 10 companies shares were trading. Except the MPS of NIBL, DCBL & NSBIB all the other companies' MPS increased on & after the ex-dividend date. The largest gainer was the shares of SCB(N)L with the increase of Rs.115 & Rs.72 on & after the ex-dividend date respectively.

**Note:** For detail calculation see Annex-VI

4.4. Test of Hypothesis

Under this topic, an effort has been made to test the significance regarding the

parameter of the population based on drawn from the population. Generally, the

following steps are followed for the test of hypothesis.

a. Formulation of Hypothesis

i. **Null Hypothesis** 

ii. Alternative Hypothesis

b. Computation of test statistic

c. Fixing the level of significance

d. Finding the criteria region

e. Deciding the two tailed or one tailed test

f. Making decision

4.4.1. Test of Hypothesis on Average No. of Cash Dividend Companies

**Null Hypothesis** ( $H_0$ ): ~ X30 i.e. the average no. of cash dividend paying

financial institutions listed on NEPSE is 30 every F/Y.

Alternative Hypothesis ( $H_1$ ):  $\sim 130$  i.e. the average no. of cash dividend paying

financial institutions listed on NEPSE is not 30 every F/Y.

**Decision:** Since the calculated value of t is less than tabulated value of t, the null

hypothesis is accepted. Therefore, the average no. of cash dividend paying

financial institutions listed on NEPSE is 30 every F/Y.

**Note:** For detail calculation see Annex-VII

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# 4.4.2. Test of Hypothesis on Cash Dividend Payments of CBs

**Null Hypothesis** ( $\mathbf{H}_{o}$ ):  $^{\sim}_{1}X^{\sim}_{2}X^{\sim}_{3}X^{\sim}_{4}X^{\sim}_{5}X^{\sim}_{6}$  i.e. there is no significant difference among mean cash dividend payment of CBs i.e. cash dividend payment of CBs are homogenous.

Alternative Hypothesis (H<sub>1</sub>):  $\sim_1 \sim_2 \sim_3 \sim_4 \sim_5 X_{\sim 6}$  i.e. there is a significant difference among mean cash dividend payment of CBs

**Note:** For detail calculation see Annex-VIII

Table 4.16
One-way AVOVA Table for Cash Dividend Payment of CBs

Source of	Sum of Square	d.f.	Mean Square	F ratio= $\frac{MSC}{}$
Variation				MSE MSE
Between	SSC=	k-1=	MSC=	$F = \frac{MSC}{} =$
samples	46566.93176	6-1=5	46566.93176	MSE
			5	9313.39
			=9313.39	163.089
Within	SSE=	n-k=	MSE=	
samples(Error)	3914.1262	30-6=24	3914.1262	
			24	
			=163.089	
Total	TSS=50481.0588	n-1=29		F=57.11

**Critical Value:** The tabulated value of F at 5% level of significance for 5 & 24 d.f. is 2.62.

**Decision:** Since calculated F is greater than tabulated value, the null hypothesis,  $H_0$  is rejected & hence the alternative hypothesis,  $H_1$  is accepted. Therefore, we

conclude that there is a significant difference among mean cash dividend payment of CBs.

# 4.4.3. Test of Hypothesis on Cash Dividend Payments of DevBs

**Null Hypothesis** ( $\mathbf{H}_0$ ):  $^{\sim}_1 X_{^{\sim}_2} X_{^{\sim}_3} X_{^{\sim}_4} X_{^{\sim}_5} X_{^{\sim}_6}$  i.e. there is no significant difference among mean cash dividend payment of DevBs i.e. cash dividend payment of DevBs are homogenous.

Alternative Hypothesis (H<sub>1</sub>):  $\tilde{1}$   $\tilde{2}$   $\tilde{3}$   $\tilde{4}$   $\tilde{5}$   $\tilde{6}$  i.e. there is a significant difference among mean cash dividend payment of DevBs.

**Note:** For detail calculation see Annex-IX

Table 4.17
One-way AVOVA Table for Cash Dividend Payment of DevBs

Source of Variation	Sum of Square	d.f.	Mean Square	F ratio= $\frac{MSC}{MSE}$
Between	SSC=	k-1=	$MSC = \frac{435.10}{}$	$F = \frac{MSC}{} =$
samples	435.10	6-1=5	5	MSE _
			=87.02	87.02
Within	SSE=	n-k=	$MSE = \frac{805.6}{24}$	33.57
samples(Error)	805.6	30-6=24	24	
			=33.57	
Total	TSS=1240.7	n-1=29		F=2.59

**Critical Value:** The tabulated value of F at 5% level of significance for 5 & 24 d.f. is 3.90.

**Decision:** Since calculated F is lesser than tabulated value, the null hypothesis,  $H_0$  is accepted & hence the alternative hypothesis,  $H_1$  is rejected. Therefore, we conclude that there is no significant difference among mean cash dividend payment of DBs i.e. cash dividend payment of CBs are homogenous.

# 4.4.4. Test of Hypothesis on Cash Dividend Payments of Mfg. & PCs

**Null Hypothesis** ( $\mathbf{H}_0$ ):  $\tilde{\phantom{A}}_1 \times \tilde{\phantom{A}}_2$  i.e. there is no significant difference among mean cash dividend payment of Mfg. & PCs i.e. cash dividend payment of Mfg. & PCs are homogenous.

Alternative Hypothesis ( $\mathbf{H_1}$ ):  $\tilde{\phantom{a}}_1$  i.e. there is significant difference among mean cash dividend payment of Mfg. & PCs i.e. cash dividend payment of mfg. & PCs are not homogenous.

**Note:** For detail calculation see Annex-X

Table 4.18
One-way AVOVA Table for Cash Dividend Payment of Mfg. & PCs.

Source of Variation	Sum of Square	d.f.	Mean Square	F ratio= $\frac{MSC}{MSE}$
Between samples	SSC=67240	k-1=	$MSC = \frac{67240}{1}$	$F = \frac{MSC}{} =$
		2-1=1	1	MSE
			=67240	67240
Within	SSE=9340	n-k=	$MSE = \frac{9340}{8}$	1167.5
samples(Error)		10-2=8	8	
			=1167.5	
Total	TSS=76580	n-1=9		F=57.59

**Critical Value:** The tabulated value of F at 5% level of significance for 1& 8 d.f. is 5.32

**Decision:** Since calculated F is greater than tabulated value, the null hypothesis,  $H_0$  is rejected & hence the alternative hypothesis,  $H_1$  is accepted. Therefore, we

conclude that there is significant difference among mean cash dividend payment of Mfg. & PCs i.e. cash dividend payment of mfg. & PCs are not homogenous.

### 4.4.5. Test of Hypothesis on ex-dividend day test for the MPS of CBs

**Null Hypothesis** ( $\mathbf{H_0}$ ):  $^{\sim}_x \mathbf{X}^{\sim}_y$  i.e. there is no significant difference between the average MPS before & after the cash dividend payment of CBs.

Alternative Hypothesis (H<sub>1</sub>):  $\sim_x \Psi \sim_y$  (Right-tailed test) i.e. the average MPS decreases after the cash dividend payment of CBs.

**Decision:** Since the calculated value of t is less than tabulated value of t, the null hypothesis is accepted. Therefore, there is no significant difference between the average MPS before & after the cash dividend payment of CBs.

**Note:** For detail calculation see Annex-XI

# 4.4.6. Test of Hypothesis on Correlation between MPS & Cash Dividend

Null Hypothesis (H<sub>0</sub>): ... XO i.e. MPS & cash DPS are not correlated.

Alternative Hypothesis  $(H_1)$ : ...  $\Psi 0$  i.e. MPS & cash DPS are positively correlated.

**Decision:** Since the calculated value of z is less than tabulated value of z, the null hypothesis is accepted. Therefore, MPS & cash DPS are not correlated.

**Note:** For detail calculation see Annex-XII

# 4.5. Major Findings of the Study

- 1. The number of cash dividend paying companies listed at NEPSE is seen decreasing since last five F/Y. The no. declined from about 30% to about 16% from F/Y2000/01 to F/Y 2006/07.
- 2. From the correlation calculation we came to conclusion that there is the low degree of negative correlation between the total no. of listed companies & the no. of cash dividend paying listed companies.
- 3. Large portion of the cash dividend is paid by the FCs in every F/Y. So, in total also 57.58% of the total dividend paying companies is covered by FCs. Another highest number of cash dividend companies were from the CBs side with 16.97% of the total composition. None of the hotel & other sectors companies has been able to pay cash dividend. ICs & trading companies have covered same ratio with 5.45%.
- 4. From the Karl Pearson's coefficient of skewness, the distribution is found to be positively skewed. And the average cash dividend paying companies from each sector is found 5 in numbers every F/Y.
- 5. Large number of listed companies was providing the cash dividend at the range of 0%-50%. More than 90% of the total cash dividends paid are covered within this range. Very few companies are seen paying the cash dividend in the rate higher than 100%. Renowned joint venture banks or multinational mfg. & PCs are seen to be the listed companies paying the cash dividend at the rate more than 100% to their shareholders. The rate ranges of 100%-150% & 200%-250% are seen only 2.42% & 0.31% respectively only.
- 6. Large amount of cash dividend paying CB of the sample is seen SCB(N)L. The average payment of cash dividend by SCB(N)L was Rs.114 per share

- of Rs.100 face value. NSBIB has not been able to declare cash dividend to its shareholders. EBL, NIBL & HBL have not also been declaring & paying the cash dividend regularly to its shareholders.
- 7. Only DCBL has been paying the cash dividend regularly since past four F/Y. But the amount is seen very minimal with Rs.8.80 per share. Similarly CBBL has been also paying cash dividend since past two F/Y 2005/06 & F/Y 2006/07 with average of Rs.8.00 per share of Rs.100 face value.
- 8. The cash dividend situations of the ICs are not so good in record. None of the ICs have not declared cash dividend since past five F/Y except by HGIC in F/Y 2002/03 only. It has also just paid 10% cash dividend on face value i.e. Rs. 10 per share.
- 9. Most of the FCs is not being capable of declaring cash dividend to their shareholders. Only one of the FCs has been paying cash dividend namely, AFCL with average of Rs.6.464 only in past five F/Y.
- 10. Under Mfg. & PCs, the company has been paying the cash dividend regularly in the past five F/Y. Similarly, the amount of the cash dividend is seen increasing also. BNL has not been able to distribute cash dividend with good amount being one of the renowned multinational soft drink company.
- 11. The NEPSE has segregated hydropower sector recently at the trading floor. CHPCL has declared Rs.35 cash dividend in the F/Y 2006/07. But in earlier F/Y it has not been able to declare cash dividend. But the dividend id declared as an interim dividend.

- 12. None of the institutions under the hotel, trading & other sectors have distributed cash dividend to its shareholders since last five F/Y.
- 13. None of the institutions under the trading sector companies except BBCL & STCL has distributed cash dividend to its shareholders since last five F/Y. They have been paying the cash dividend to their shareholders consistently. STCL is seen more consistent than BBCL.
- 14. Under ex-dividend test, the MPS of the six companies who declared the cash dividend has declined on the ex-dividend date & after the ex-dividend date during the F/Y 2003/04. The large amount loser company was HBL with the MPS decline of Rs.333. The MPS of BBCL was seen increased by Rs.43 on the ex-dividend date. But due to the unavailability of data for the F/Y 2002/03 the test was not feasible.
- 15. Principally, the MPS of the shares should decline on the ex-dividend date & after this date after the declaration of the cash dividend by the companies. But from the above data we see that the MPS of UNL, DCBL & NIBL increased by Rs.13, Rs.7, & Rs.3 respectively. Only the MPS of EBL & SCB(N)L has declined by Rs.2 & Rs.30 on ex-dividend date & Rs.30 & Rs. 21 after ex-dividend date respectively.
- 16. Similar is the situation in the F/Y 2005/06. The MPS of majority of the cash dividend declaring companies is seen increased. Except the MPS of UNL, SCB(N)L, HBL & AFCL majority of the MPS of the companies increased on & after the ex-dividend date. UNLL lose Rs.335 after exdividend date. Similarly, AFCL also lose Rs.157 after ex-dividend date.

- 17. During the F/Y 2006/07, 12 sample companies made the cash dividend declaration. But of these also 10 companies shares were trading. Except the MPS of NIBL, DCBL & NSBIB all the other companies' MPS increased on & after the ex-dividend date. The largest gainer was the shares of SCB(N)L with the increase of Rs.100 & Rs.140 on & after the ex-dividend date respectively.
- 18. Since the calculated value of t is less than tabulated value of t, the null hypothesis is accepted. Therefore, the average no. of cash dividend paying financial institutions listed on NEPSE is 30 every F/Y.
- 19. Since calculated F is greater than tabulated value, the null hypothesis, H<sub>o</sub> is rejected & hence the alternative hypothesis, H<sub>1</sub> is accepted. Therefore, we conclude that there is a significant difference among mean cash dividend payment of CBs.
- 20. Since calculated F is lesser than tabulated value, the null hypothesis, H<sub>o</sub> is accepted & hence the alternative hypothesis, H<sub>1</sub> is rejected. Therefore, we conclude that there is no significant difference among mean cash dividend payment of DevBs i.e. cash dividend payment of DevBs are homogenous.
- 21. Since calculated F is greater than tabulated value, the null hypothesis,  $H_0$  is rejected & hence the alternative hypothesis,  $H_1$  is accepted. Therefore, we conclude that there is significant difference among mean cash dividend payment of Mfg. & PCs i.e. cash dividend payment of mfg. & PCs are not homogenous.

- 22. Since the calculated value of t is less than tabulated value of t, the null hypothesis is accepted. Therefore, there is no significant difference between the average MPS before & after the cash dividend payment of CBs.
- 23. Since the calculated value of z is less than tabulated value of z, the null hypothesis is accepted. Therefore, MPS & cash DPS are not correlated.

### CHAPTER - V

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

### **5.1. Summary**

Nepal is an underdeveloped country having low per capita income about \$310 and low corporate growth rate. During the Rana period, there was no any development in financial sector and other sector which contribute to development of the country. After the Rana period there was a little development but it was not satisfactory for the economic development of nation. After the restoration of democracy in 1990 and universal echo of economic liberalization, Nepal has implemented liberal economic policy. As a result, many more companies are established in different sectors such as industrial, tourism, transportation, trade and mostly in financial sector who contribute to build up economic of the country. Nepal is a country trying to develop its economy through global trend and cooperation with developed countries. Development on the financial terms is the efficient flow and generation of the funds in the most productive sectors. The nation having effective fund collection of funds from the nook and corners of the country and investing them in the productive sectors are the developed and established country in the present world.

The primary objective of investors investing in stocks is dividend. But the earning of shareholders can be dividend as dividend gain and capital gain. High payout

satisfies the dividend need where as increase in market price of stock increases capital gain. Dividends implies to the portion of earnings that is rewarded to the shareholders where as dividend policy refers to the course of action that management uses in establishing portion of retain earning that is paid to the shareholders in the form of dividends. Dividend conveys pro rata allocation of earnings either in the form of straight cash or additional stock in harmony with the proportionate share holding. Therefore, firm should make a proper balance between dividends and retained earning. In Nepalese perspective, both are in practice. But majority of the companies listed are practicing stock dividend more than the cash dividend. For the increase in the required amount of paid-up capital by the CBs & DevBs also they are more interested on issuing stock dividend by them.

Dividend distribution is the very important factor to any organization for effective goal achievement to satisfy the shareholders. Actually, paying dividend to shareholders is an effective way to attract new investors to invest in shares. Due to decision of earnings of a company between dividends pay out & retention of earnings of a company between dividend pay out & retention of earnings, its effect on market value of shares is a crucial question. So, a wise policy should be maintained between shareholders' interest & corporate growth from internally generated funds. The funds sometimes could not be used in case of lack of investment opportunities. In such a situation distribution of dividend to shareholders is taken as the best because shareholders have greater investment opportunities to employ elsewhere.

Dividend serves as a simple, comprehensive signal of management's interpretation of the company's recent performance & its future prospects. Dividend refers to that portion of a firm's net earning which are paid out to the shareholder in return of their investment. Paying dividend to shareholder is an effective way to attract

new investors to invest share. Many factors are responsible to affect the dividend policy of companies such as earning, liquidity position, legal restrictions, liquidity, financial condition, access to the capital market, investment opportunity and so on.

In Nepal there is more practice of stock dividend than cash dividend. The trend has also shown that the corporate sectors are more providing stock dividend or bonus shares than the payment of the cash dividend to their shareholders. The situation of the payment of cash dividend by the financial institutions except few banks & finance companies is seen well but from other sectors the situation is worst.

Thus, the study attempts to determine the impact of cash dividend on stock price. For this whole purpose different descriptive, financial and statistical analysis was done using various methodologies.

#### 5.2. Conclusion

Different types of dividend are paid by the companies operating all over the world. They may be in different forms. The main reason of the dividend payment is to provide the benefit to the shareholders of the company, wealth maximization & to make them they are the part of the company. In Nepal, there is a practice of providing either stock dividend or cash dividend by the companies to their shareholders. But in past recent years, the corporate sectors of Nepal are more interested on providing stock dividend to their shareholders than cash dividend. The reason behind this was for the wealth maximization & increases the capital amount & meets the standard requirement as prescribed by the central bank of the country.

From the study we find out that mainly the CBs of the Nepal are seen the regular dividend paying financial institutions. Similarly on the basis of paying companies

the large percent of FCs have occupied in the cash dividend paying listed companies. About 58% of the total cash dividend paying companies FCs occupies them. More than 90% of the listed companies are paying cash dividend under the 0%-50% dividend rate range during each F/Y. Similarly, we know that the companies having the good earning record can only provide the dividend to its shareholders. So, in Nepalese context, CBs have the good & fair earning track record thus, the majority cash dividend paying companies in Nepal are seen CBs mainly.

From Karl Pearson' correlation analysis we found, there is a very low degree of negative correlation between total listed companies & cash dividend paying companies.

Similarly, from the CV calculation for comparative study among the respective sector's companies, also we saw that the companies paying the cash dividend are also not paying consistently.

Renowned CBs like SCB(N)L & Nabil have a good consistency record of paying cash dividend to their shareholders. Similarly, DCBL is also seen more consistent on cash dividend payment than the other DevBs.

Some emerging companies under finance companies & development banks in Nepal have also been paying the cash dividend regularly to its shareholders. Mfg. & PCs like UNL & BNL have also been paying cash dividend to its shareholders. UNL have more consistency in the cash dividend payment as well as it has been paying good amount of cash dividend to its shareholders also. Some leading & well-known trading companies namely: BBCL & STCL has been also paying cash dividend regularly to its shareholders.

Under the ex-dividend day test or empirical testing most of the leading financial institutions are ignoring even the international norms relating to the changes in the MPS. Under the empirical testing it have been proved that a stock price declined by 0.78 of the dividend on the ex-dividend date. They interpret this result as consistent with a clientele effect where investors in high tax brackets show a preference for capital gains over dividends, & vice versa. But in Nepalese perspective the MPS of certain financial institutions is seen increased heavily on & after ex-dividend date. However, from t-test, the calculated value of t is less than tabulated value of t, the null hypothesis is accepted. Therefore, there is no significant difference between the average MPS before & after the cash dividend payment of CBs.

From the hypothesis calculation, we found the average no. of cash dividend paying financial institutions listed on NEPSE is 30 every F/Y under t-statistics. From F-statistics test we found, there is a significant difference among mean cash dividend payment of CBs, there is no significant difference among mean cash dividend payment of DevBs i.e. cash dividend payment of DevBs are homogenous. And similarly, there is significant difference among mean cash dividend payment of mfg. & PCs i.e. cash dividend payment of mfg. & PCs are not homogenous. From Z-statistic test, we found that MPS & cash DPS are not correlated.

#### **5.3. Recommendations**

- 1. Proper co-ordination among the GON, NRB, Insurance Board, SEBON & NEPSE should be maintain while making laws, acts, rules & regulations relating to the dividends.
- 2. Shareholders should be given an option to choose between stock dividend & cash dividend instead of declaring stock or cash dividend arbitrary. For this, dividend declaration should be proposed to the AGM of shareholders

for approval.

- 3. Proper inspection & directions should be given from the central bank, insurance board & GON regarding the payment of cash dividend by the financial institutions.
- 4. The NEPSE & SEBON should properly handle, guide & inform the shareholders & the related companies about the MPS increase or decrease from the impact of dividend declaration.
- 5. Don't make investment in the stock of insurance companies, hotel, development banks and other sector on the basis of cash dividend.
- 6. Each & every company should provide the information regarding the activities & performance, so that investors can analyze the situation & invest their money in the best company. On the other hand, NEPSE should provide all the necessary information regarding the company's activities.
- 7. 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 investor who want to purchase the equity share & immediate return should invest the share of higher profit earning companies.
- 8. The investor should also think of the HPC sector portfolio for the investment diversification. As Nepal has a huge potentiality in generation of the hydro-power, there is a good future for the better performance of new coming HPC also.

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ANNEX-I

Karl Pearson's correlation coefficient (r)

Correlation coefficient between total listed companies and cash dividend paying listed companies

F/Y	Total	<b>Total Cash</b>	$X=X-\overline{X}$	$y=Y-\overline{Y}$	$x^2$	y <sup>2</sup>	xy
	listed	dividend					
	compani	paying					
	es	listed					
	( <b>X</b> )	companies					
		<b>(Y)</b>					
2002/03	108	32	-15.4	3.2	237.16	10.24	-49.28
2003/04	114	32	-9.4	3.2	88.36	10.24	-30.08
2004/05	125	22	1.6	-6.8	2.56	46.24	-10.88
2005/06	135	37	11.6	8.2	134.56	67.24	95.12
2006/07	135	21	11.6	-7.8	134.56	60.84	-90.48
N=5	X = <b>61</b>	<i>Y</i> = <b>144</b>	x <b>=0</b>	y <b>=0</b>	$x^2 =$	$y^2 =$	xy =
	7				597.2	194.8	-85.6

$$\overline{X} \times \frac{x}{n} \times \frac{617}{5} \times 123.4$$

$$\overline{Y} \times \frac{y}{n} \times \frac{144}{5} \times 28.8$$

...
$$r \times \frac{xy}{\sqrt{x^2}\sqrt{y^2}}$$

$$\times \frac{Z85.6}{\sqrt{597.2}\sqrt{194.8}}$$

$$\times \frac{Z85.6}{24.4377 | 13.9571}$$

$$\times Z0.25$$

**Finding:** There is a very low degree of negative correlation between total listed companies & cash dividend paying companies.

ANNEX-II
Karl Pearson's Coefficient of Skewness for Cash Dividend Paying Listed
Companies

Sector/F/Y	2002/03	2003/04	2004/05	2005/06	2006/07	Total
CBs	3	7	5	6	7	28
DevBs	0	1	1	4	3	9
FCs	16	19	15	21	24	95
ICs	6	1	1	1	1	10
Hotels	0	0	0	0	0	0
Mfg. & PCs	4	4	2	2	1	13
<b>Trading Company</b>	3	2	2	2	2	11
HPC	0	0	0	0	1	1
Others	0	0	0	0	0	0
Total	32	34	26	36	39	167

No. of	Range	Mid	Frequency	c.f	$d' X \frac{x Z12.5}{d}$	fď	fd <sup>'2</sup>
<b>Payments</b>		Value	<b>(f)</b>		h		
		( <b>x</b> )					
Less than 5	0-5	2.5	35	35	-2	-70	140
Less than 10	5-10	7.5	5	40	-1	-5	5
Less than 15	10-15	12.5	0	40	0	0	0
Less than 20	15-20	17.5	3	43	1	3	3
Less than 25	20-25	22.5	2	45	2	4	8
			N=45			$\mathbf{f}d$	fd <sup>'2</sup>

Here, h=5, Assumed Mean (A) =12.5

...Mean(
$$\overline{X}$$
) Xa  $\Gamma \frac{fd'}{N} \mid h$ 
X12.5  $\Gamma \frac{fZ68A}{45} \mid 5$  X5

...† 
$$/s.d. Xh \mid \sqrt{\frac{fd}{N}} Z \frac{fd}{N}^2$$

$$X5 \mid \sqrt{\frac{156}{45} Z \frac{Z68}{45}}^2$$

$$X5.45$$

Mode is the value which occurs most frequently in a set of observations & around which the other items of the set cluster densely.

By inspection, range 0-5 is the modal range with highest frequency of 35.

Thus, 
$$l=0$$
,  $f_0=0$ ,  $f_1=35$ ,  $f_2=5$ ,  $h=5$ 

$$_{1}$$
=  $f_{1}$ -  $f_{0}$ =35-0=35

$$_2$$
=  $f_1$ -  $f_2$ =35-5=30

...
$$Mode(M_0) X l \Gamma \frac{\zeta_1}{\zeta_1 \Gamma \zeta_2} | h X 0 \Gamma \frac{35}{35 \Gamma 30} | 5 X 2.69 \beta 3$$

Karl Pearson's Coefficient of Skewness  $S_k f P A X = \frac{\overline{X} Z M_o}{\dagger} X \frac{5 Z 3}{5.45} X 0.37$ 

**Conditions:** 

- 1) If  $S_k = 0$ , the distribution is symmetrical.
- 2) If  $S_k > 0$ , the distribution is positively skewed.
- 3) If  $S_k < 0$ , the distribution is negatively skewed.

Here,  $S_k > 0$  i.e. 0.37>0, thus the distribution is positively skewed.

Here, 
$$\frac{N}{2} = \frac{45}{2} = 22.5$$

The cumulative frequency (c.f ) just greater than 22.5 is 35 & the range corresponding to 35 is 0-5.

...Median(
$$M_d$$
)  $Xl\Gamma \frac{\frac{N}{2}Zc.f.}{f} \mid h X0\Gamma \frac{22.5Z0}{35} \mid 5 X3.2$ 

...  $Mean(\overline{X}) > Median(M_d) > Mode(M_0)$ , i.e. 5 > 3.2 > 3 thus, the distribution is positively skewed.

ANNEX-III

Average MPS Calculation for Ex-dividend Test of F/Y 2003/04

Company	2003/10/15	2003/10/16	2003/10/22	Ex-dividend  Date 2003/11/2	2003/12/12	2003/12/18	2003/12/30
BBCL	1400	1470	1500	1500	1400	1400	1402
		1457		Average		1401	J
	2003/11/5	2003/11/6	2003/11/10	2003/11/12	2003/11/13	2003/11/14	2003/11/19
DCBL	151	150	155	161	158	157	156
		152		Average		157	J.
	2003/12/1	2003/12/3	2003/12/4	2003/12/5	2003/12/8	2003/12/9	2003/12/12
SCB(N)L	1760	1756	1774	1775	1771	1782	1550
		1763		Average		1701	
	2003/12/17	2003/12/18	2003/12/19	2003/12/21	2003/12/22	2003/12/23	2003/12/24
EBL	445	445	444	444	441	442	442
		445		Average		442	

Company	2003/9/12	2003/9/15	2003/12/9	Ex-dividend Date 2003/12/21	2004/1/9	2004/1/23	2004/1/25
AFCL	420	420	410	410	350	350	350
		417		Average		350	J.
	2003/12/30	2003/12/31	2004/2/2	2004/1/4	2004/1/5	2004/1/6	2004/1/7
Nabil	810	800	800	800	800	800	795
		803		Average		798	
	2004/2/24	2004/2/26	2004/2/272	2004/3/21	2004/3/26	2004/4/5	2004/4/6
HBL	994	997	994	990	630	661	694
		995		Average		662	
	2004/3/15	2004/3/19	2004/3/26	2004/3/28	2004/4/1	2004/4/2	2004/4/5
NSBIB	245	240	241	241	240	245	245
		242	N.	Average		243	'

ANNEX-IV

Average MPS Calculation for Ex-dividend Test of F/Y 2004/05

Company	2004/10/26	2004/10/27	2004/10/28	Ex-dividend Date 2004/10/31	2004/11/1	2004/11/2	2004/11/3	
EBL	690	685	685	685	685	680	680	
		687	l	Average		682	J.	
	2004/11/18	2004/11/26	2004/12/16	2004/12/17	2004/12/23	2004/12/27	2005/1/15	
UNL	1510	1450	1500	1500	1500	1500	1500	
		1487		Average		1500		
	2004/11/29	2004/11/30	2004/12/1	2004/12/2	2004/12/3	200412/4	2004/12/5	
SCB(N)L	1889	1860	1830	1830	1840	1840	1838	
		1860		Average		1839		
	2004/1210	2004/12/14	2004/12/17	2004/12/18	2004/12/20	2004/12/21	2004/12/22	
DCBL	198	198	208	208	212	210	212	
		201		Average		211		

Company	2004/12/17	2004/12/20	2004/12/21	Ex-dividend Date 2004/12/22	2004/12/23	2004/12/24	2004/12/29
Nabil	1230	1266	1280	1265	1260	1270	1215
		1259		Average		1248	,
	2004/12/22	2004/12/23	2004/12/24	2004/12/25	2004/12/27	2004/12/28	2004/12/29
NIBL	1147	1155	1155	1155	1163	1162	1154
		1152		Average		1160	
	2004/12/29	2005/1/10	2005/1/10	2005/2/22	2005/2/25	2005/3/1	2005/4/21
NBI	110	110	110	110	110	100	100
		110	1	Average		103	,

ANNEX-V
Average MPS Calculation for Ex-dividend Test of F/Y 2005/06

Company	2005/9/6	2005/9/7	2005/9/8	Ex-dividend Date 2005/9/9	2005/11/23	2005/11/24	2005/11/29
UNL	2140	2200	2200	2200	1800	1885	1850
		2180		Average		1845	
	2005/10/9	2005/10/23	2005/10/25	2005/10/26	2005/10/27	2005/10/30	2005/11/7
SCB(N)L	2370	2400	2405	2430	2446	2472	2200
		2392		Average		2373	
	2005/10/30	2005/11/5	2005/11/7	2005/11/8	2005/11/10	2005/11/13	2005/11/24
DCBL	255	255	260	265	261	261	248
		257		Average		257	
	2005/11/24	2005/11/27	2005/11/29	2005/11/30	2005/12/1	2005/12/6	2005/12/7
Nabil	1660	1660	1660	1650	1700	1631	1605
		1660		Average		1645	

Company	2005/12/11	2005/12/12	2005/12/13	Ex-dividend Date 2005/12/14	2005/12/15	2005/12/16	2005/12/20	
NIBL	800	790	785	785	788	790	770	
		792	1	Average		783		
	2005/12/13	2005/12/14	2005/12/15	2005/12/16	2005/12/18	2005/12/19	2005/12/20	
HBL	1126	1140	1140	1140	1135	1123	1100	
		1135	1	Average	1119			
	2005/11/29	2005/12/13	2005/12/15	2005/12/17	2005/15/18	2005/2/23	2005/3/18	
NBI	110	110	110	110	110	100	95	
		110		Average	102			
	2005/12/20	2005/12/21	2005/12/22	2005/12/26	2006/2/20	2006/3/26	2006/4/4	
AFCL	563	570	598	627	400	420	441	
		577		Average		420		

ANNEX-VI

Average MPS Calculation for Ex-dividend Test of
F/Y 2006/07

Company	2006/10/17	2006/10/18	2006/10/19	Ex-dividend Date 2006/10/22	2006/10/26	2006/10/31	2006/11/1	
Nabil	2295	2300	2340	2340	2340	2300	2320	
		2312		Average		2320		
	2007/1/29	2007/1/31	2007/2/1	2007/2/3	2007/2/4	2007/2/5	20072/6	
NSBIB	785	785	800	800	800	805	800	
	790			Average	802			
	2006/12/12	2006/12/12 2006/12/13 2006/12/14		2006/12/15	2006/12/17	2006/12/18	2006/12/19	
HBL	1305	1305	1300	1300	1300	1301	1303	
		1303 Average			1301			
	2006/11/5	2006/11/6	2006/11/7	2006/11/8	2006/11/9	2006/11/12	2006/11/13	
SCB(N)L	4255	4300	4300	4400	4440	4550	4081	
	4285			Average	4357			

Company	2006/10/26	2006/10/29	2006/10/30	Ex-dividend  Date 2006/10/31	2006/11/1	2006/11/2	2006/11/6		
EBL	1300	1340	1345	1345	1365	1440	1458		
		1328		Average		1421			
	2006/10/17	2006/10/18	2006/10/19	2006/10/26	2006/10/29	2006/10/30	2006/10/31		
NIBL	1456	1450	1435	1435	1414	1423	2300		
	,	1447		Average		1712			
	2006/12/20	2006/12/21	2006/12/24	2006/12/25	2006/12/26	2006/12/27	2006/12/28		
DCBL	810	801	815	805	805	816	819		
		809		Average	813				
	2006/8/24	2006/8/27	2006/8/30	2006/9/5	2006/9/7		2006/10/12		
UNL	2810	2850	2810	2810	2900	2750	2850		
		2823		Average		2833			
	•	2006/4/3	2006/11/27	2006/12/26	2007/4/2	2007/4/3	2007/4/4		
CBBL	-	100	105	105	120	120	132		
	68			Average	124				

Company	2007/1/3	2007/1/4	2007/1/7	Ex-dividend  Date 2007/1/8	2007/1/9	2007/1/10	2007/1/11	
CHPL	735	745	790	817	810	775	800	
	757			Average	795		,	

### **ANNEX-VII**

### Test of Hypothesis on Average No. of Cash Dividend Companies:

**Null Hypothesis** ( $\mathbf{H_o}$ ): ~ X30 i.e. the average no. of cash dividend paying financial institutions listed on NEPSE is 30 every F/Y.

Alternative Hypothesis ( $H_1$ ): ~ | 30 i.e. the average no. of cash dividend paying financial institutions listed on NEPSE is not 30 every F/Y. (two-tail) Let X denotes the average no. of cash dividend paying financial institutions listed

Calculation of  $\overline{X}$  & S

X	d=X-A(30)	$d^2$
32	2	4
32	2	4
22	-8	64
37	7	49
21	-9	81
n=5	d <b>=6</b>	$d^2 = 202$

We have 
$$\overline{X} = A \Gamma \frac{d}{n} X30 \Gamma \frac{fZ6A}{5} X28.8$$

on NEPSE.

Also, s=
$$\sqrt{\frac{1}{n \, \text{Z1}}}$$
  $d^2 \, \text{Z} \frac{f}{n} \, d \frac{d}{\Lambda} \, \text{X} \sqrt{\frac{1}{5 \, \text{Z1}}} \, 202 \, \text{Z} \frac{f \text{Z} 6 \frac{\Lambda}}{5}} \, \text{X} 6.98$ 

Test statistics,

Degree of freedom (d.f)= n-1=5-1=4

Level of significance, r = 0.05

### **ANNEX-VIII**

# Test of Hypothesis on Cash Dividend Payments of CBs:

**Null Hypothesis** ( $\mathbf{H}_0$ ):  $^{\sim}_1 X_{^{\sim}_2} X_{^{\sim}_3} X_{^{\sim}_4} X_{^{\sim}_5} X_{^{\sim}_6}$  i.e. there is no significant difference among mean cash dividend payment of CBs i.e. cash dividend payment of CBs are homogenous.

Alternative Hypothesis (H<sub>1</sub>):  $\tilde{\phantom{a}}_{1} |_{2} |_{3} |_{4} |_{5} |_{6}$  i.e. there is a significant difference among mean cash dividend payment of CBs

<i>X</i> <sub>1</sub>	<i>X</i> <sub>2</sub>	<i>X</i> <sub>3</sub>	<i>X</i> <sub>4</sub>	<i>X</i> <sub>5</sub>	$X_6$	$X_1^2$	$X_2^2$	$X_3^2$	$X_4^2$	$X_5^2$	$X_6^2$
0	30	0	100	25	0	0	900	0	10000	625	0
20	50	20	110	1.32	8	400	2500	400	12100	1.7424	64
20	65	15	110	0	0	400	4225	225	12100	0	0
0	70	12.58	120	11.5	0	0	4900	158.2564	14400	132.25	0
25	85	20	130	30	5	625	7225	400	16900	900	25
$x_1$	<i>X</i> <sub>2</sub>	<i>X</i> <sub>3</sub>	$X_4$	<i>X</i> <sub>5</sub>	$X_6$	$X_{1}^{2}$	$X_2^2$	$x_3^2 =$	$X_4^2$	$x_5^2 =$	$X_{6}^{2}$
=	300	= 67.50	570	= 67.92	=	=	=	1183.256	=	1658.992	=
65	300	67.58	570	67.82	13	1425	19750	4	65500	4	89

$$T = x_1 \Gamma x_2 \Gamma x_3 \Gamma x_4 \Gamma x_5 = 65 + 300 + 67.58 + 570 + 67.82 + 13 = 1083.40$$

C.F.=
$$\frac{T^2}{N} \times \frac{(1083.4)^2}{30} = 39125.19$$
  
T.S.S.=  $x_{1_1}^2 \Gamma \quad x_2^2 \Gamma \quad x_3^2 \Gamma \quad x_4^2 \Gamma \quad x_5^2 ZC.F.$   
=1425+19750+1183.2564+65500+1658.9924+89-39125.19  
=50481.058

S.S.C.=
$$\frac{(X_1)^2}{n_1} \Gamma \frac{(X_2)^2}{n_2} \Gamma \frac{(X_3)^2}{n_3} \Gamma \frac{(X_4)^2}{n_4} \Gamma \frac{(X_5)^2}{n_5} \Gamma \frac{(X_6)^2}{n_6} ZC.F.$$

$$= \frac{(65)^2}{5} \Gamma \frac{(300)^2}{5} \Gamma \frac{(67.58)^2}{5} \Gamma \frac{(570)^2}{5} \Gamma \frac{(67.82)^2}{5} \Gamma \frac{(13)^2}{5} Z39125.19$$

$$= 46566.93176$$

S.S.W.=T.S.S.-S.S.C.= 50481.058-46566.93176=3914.12704

#### **ANNEX-IX**

Test of Hypothesis on Cash Dividend Payments of DevBs:

**Null Hypothesis** ( $\mathbf{H_0}$ ):  ${}^{\sim}_1 X {}^{\sim}_2 X {}^{\sim}_3 X {}^{\sim}_4 X {}^{\sim}_5 X {}^{\sim}_6$  i.e. there is no significant difference among mean cash dividend payment of DevBs i.e. cash dividend payment of CBs are homogenous.

Alternative Hypothesis (H<sub>1</sub>):  $\tilde{1}$   $\tilde{2}$   $\tilde{3}$   $\tilde{4}$   $\tilde{5}$   $\tilde{6}$  i.e. there is a significant difference among mean cash dividend payment of DevBs.

$X_1$	<i>X</i> <sub>2</sub>	<i>X</i> <sub>3</sub>	<i>X</i> <sub>4</sub>	<i>X</i> <sub>5</sub>	$X_6$	$X_1^2$	$X_2^2$	$X_3^2$	$X_4^2$	$X_5^2$	$X_{6}^{2}$
0	0	0	0	0	0	0	0	0	0	0	0
0	10	0	0	0	0	0	100	0	0	0	0
0	10	0	10	0	0	0	100	0	100	0	0
0	12	0	30	0	4	0	144	0	900	0	16
0	12	0	0	0	5	0	144	0	0	0	25
$x_1 =$	$x_2 =$	$x_3 =$	$x_4 =$	<i>x</i> <sub>5</sub> =	$X_6 =$	$X_1^2 =$	$x_2^2 =$	$x_3^2 =$	$x_4^2 =$	$x_5^2 =$	$X_6^2 =$
0	44	0	40	0	9	0	488	0	1000	0	41

$$T = X_1 \Gamma X_2 \Gamma X_3 \Gamma X_4 \Gamma X_5 \Gamma X_6 = 0 + 44 + 0 + 40 + 0 + 9 = 93$$

C.F.=
$$\frac{T^2}{N} \times \frac{(93)^2}{30} = 288.3$$

T.S.S.= 
$$X_{1_1}^2 \Gamma$$
  $X_2^2 \Gamma$   $X_3^2 \Gamma$   $X_4^2 \Gamma$   $X_5^2 \Gamma$   $X_6^2 \mathbf{Z}C.F.$   
=0+488+0+1000+0+41-288.3  
=1240.7

S.S.C.=
$$\frac{(X_1)^2}{n_1} \Gamma \frac{(X_2)^2}{n_2} \Gamma \frac{(X_3)^2}{n_3} \Gamma \frac{(X_4)^2}{n_4} \Gamma \frac{(X_5)^2}{n_5} \Gamma \frac{(X_6)^2}{n_6} ZC.F.$$

$$= \frac{(0)^2}{5} \Gamma \frac{(44)^2}{5} \Gamma \frac{(0)^2}{5} \Gamma \frac{(40)^2}{5} \Gamma \frac{(0)^2}{5} \Gamma \frac{(9)^2}{5} Z288.3$$

$$= 435.10$$

#### **ANNEX-X**

### Test of Hypothesis on Cash Dividend Payments of Mfg. & PCs

Null Hypothesis ( $\mathbf{H}_0$ ):  $\tilde{\phantom{A}}_1^{\mathbf{X}}$  i.e. there is no significant difference among mean cash dividend payment of Mfg. & PCs i.e. cash dividend payment of CBs are homogenous.

Alternative Hypothesis (H<sub>1</sub>):  $\tilde{\phantom{a}}_1$   $\tilde{\phantom{a}}_2$  i.e. there is a significant difference among mean cash dividend payment of Mfg. & PCs.

<i>X</i> <sub>1</sub>	<i>X</i> <sub>2</sub>	$X_1^2$	$X_2^2$
20	20	400	400
90	15	8100	225
100	5	10000	25
400	0	160000	0
250	0	62500	0
$X_1 =$	<i>x</i> <sub>2</sub> =	$X_{1_{1}}^{2} =$	$x_2^2 =$
860	40	241000	650

$$T = X_1 \Gamma X_2 = 860 + 40 = 900$$

C.F.=
$$\frac{T^2}{N} \times \frac{(900)^2}{10} = 81000$$

T.S.S.= 
$$X_{1_1}^2 \Gamma$$
  $X_2^2 ZC.F$ .  
=241000+650-81000  
=160650

S.S.C.=
$$\frac{(X_1)^2}{n_1} \Gamma \frac{(X_2)^2}{n_2} ZC.F.$$
$$= \frac{(860)^2}{5} \Gamma \frac{(40)^2}{5} Z81000$$
$$= 147920 + 320 - 81000$$
$$= 67240$$

#### **ANNEX-XI**

# Test of Hypothesis on ex-dividend day test for the MPS of CBs

**Null Hypothesis** ( $\mathbf{H_o}$ ):  ${}^{\sim}_x \mathbf{X}^{\sim}_y$  i.e. there is no significant difference between the average MPS before & after the cash dividend payment of CBs.

Alternative Hypothesis (H<sub>1</sub>):  ${}^{\sim}_{x} \Psi {}^{\sim}_{y}$  (Right-tailed test) i.e. the average MPS decreases after the cash dividend payment of CBs.

Before Average	After Average	d=y-x	$\mathbf{d}^2$
MPS(x)	MPS(y)		
803	798	-5	25
1763	1701	-62	3844
445	442	-3	9
242	243	1	1
995	662	-333	110889
1259	1248	-11	121
1152	1160	8	64
1860	1839	-21	441
687	682	-5	25
1660	1645	-25	625
792	783	-9	81
2392	2373	-19	361
1135	1139	-4	16
2312	2320	8	64
790	802	12	144
1303	1301	-2	4
	Contd.		
Before Average	After Average	d=y-x	$\mathbf{d}^2$
MPS(x)	MPS(y)		

4285	4357	72	5184
1328	1458	130	16900
1447	1712	265	70225
n=19		d=-3	$d^2 = 209023$

...
$$\overline{d} \times \frac{d}{n} \times \frac{Z3}{19} \times Z0.16$$
... $S_d \times \sqrt{\frac{1}{n Z1}} \quad d^2 \times \frac{f}{n} \quad d^{\frac{1}{N}} \times \sqrt{\frac{1}{19 Z1}} \quad 209023 \times \frac{fZ3A}{19} \times \sqrt{\frac{1}{18}} \mid 209022.5 \times 107.76$ 

Under  $H_{0,}$ 
... $t_{cal} \times \frac{\overline{d}}{S_d / \sqrt{n}} \times \frac{Z0.16}{107.69 / \sqrt{19}} \times Z0.006$ 
... $|t_{cal}| \times 0.006$ 
...Degree of freedom (d.f) = n-1=19-1=18

...Level of significance, r = 0.05

**Critical Value**: The tabulated value of t at  $\Gamma = 0.05 \& 18$  d.f. for left-tailed test is 1.734.

**Decision**: Since the calculated value of t is less than tabulated value of t, the null hypothesis is accepted.

#### **ANNEX-XII**

# Test of Hypothesis on Correlation between MPS & Cash Dividend

Null Hypothesis ( $H_0$ ): ... X0 i.e. MPS & cash DPS are not correlated.

Alternative Hypothesis  $(H_1)$ : ...  $\Psi 0$  i.e. MPS & cash DPS are positively correlated.

### Calculation of Karl Pearson's Correlation Coefficient

MPS(X)	Cash	X	y	$\mathbf{x}^2$	$\mathbf{y}^2$	xy
	DPS(Y)					
800	50	-389	-8	151321	64	3112
760	20	-429	-38	184041	1444	16302
1771	110	582	52	338724	2704	30264
444	20	-745	-38	555025	1444	28310
250	8	-939	-50	881721	2500	46950
990	1.32	-199	-56.68	39601	3212.6224	11279.32
161	10	-1028	-48	1056784	2304	49344
420	12	-769	-46	591361	2116	35374
1260	110	71	52	5041	2704	3692
1163	15	-26	-48	676	2304	1248
1840	110	651	52	423801	2704	33852
212	10	-977	-48	954529	2304	46896
685	20	-504	-38	254016	1444	19152
1510	100	321	42	103041	1764	13482
1670	65	481	7	231361	49	3367
788	12.58	-401	-45.42	160801	2062.9764	18213.42
2446	120	1257	62	1580049	3844	7793.4
1123	11.5	-66	-46.5	4356	2162.25	3069

261	12	-928	-46	861184	2116	412688
627	3.158	-562	-54.842	315844	3007.644964	30821.204
2200	400	-989	342	978121	116964	-338238
2340	85	1151	27	1324801	729	31077
680	5	-509	-53	259081	2809	26977
			<u>J </u>			Contd.
MPS(X)	Cash	X	y	$\mathbf{x}^2$	$y^2$	xy
	DPS(Y)					
1300	30	111	-28	12321	784	-3108
4440	130	3251	72	10569001	5184	234072
1365	25	176	-33	30976	1089	-5808
1414	20	2250	-38	5062500	1444	-8550
805	12	-384	-46	147456	2116	17664
816	35	-373	-23	139129	529	8579
2900	250	1711	192	2927521	36864	328512
1575	75	386	17	148996	289	6562
110	10	-1079	-48	1164241	2304	51792
110	10	-1079	-48	1164241	2304	51792
x =	y =			$x^2 =$	$y^2 =$	xy =
39236	1907.558			32621662	215663.493764	916672.944

$$\overline{X} \times \frac{x}{n} \times \frac{39236}{33} \times 1188.97 \, \beta \, 1189$$

$$\overline{Y} \times \frac{y}{n} \times \frac{1907.558}{33} \times 57.80 \text{ } \beta \text{ } 58$$

...
$$r \times \frac{xy}{\sqrt{x^2}\sqrt{y^2}}$$

$$X \frac{916672.944}{\sqrt{32621662}\sqrt{215663.493764}}$$

$$X \frac{916672.944}{5711.54 \mid 464.40}$$

$$X \Gamma 0.35$$

... Test statistic; under,  $H_0$ 

...
$$z_{col}$$
 X1.1513  $\log_{10}$   $\frac{1\Gamma r}{1Zr}$ 
X1.1513  $\log_{10}$   $\frac{1\Gamma 0.35}{1Z0.35}$ 
X0.37

...Level of significance,  $\Gamma = 0.05$ 

...Critical Value: We see the critical value at 5% level of significance for right-tailed test is +1.645.

# [Critical value ( $Z \Gamma$ ) of Z]

Nature of	<b>Level of significance(</b> ∩)
Alternative	
Hypothesis	

	1%	2%	4%	5%	10%
Two tailed test	±2.576	±2.326	±2.054	±1.960	±1.64
					5
Right tailed test	+2.326	+2.054	+1.751	+1.645	+1.28
					2
Left tailed test	-2.326	-2.654	-1.751	-1.645	-1.282

**Decision:** Since the calculated value of z is less than tabulated value of z, the null hypothesis is accepted. Therefore, MPS & cash DPS are not correlated.

# **Cash Dividend Announcement in 2002/03**

Name of Listed Company	Dividend in (%)	Dividend in Rs.			
Commercial Bank					
Standard Chartered Bank (Nepal) Ltd.	100	100			
Himalayan Bank Ltd.	25	25			
Nabil Bank Ltd.	30	30			
Development Bank	L	Nil			
<b>Finance Company</b>					
Siddhartha Finance Ltd.	15	15			
Pashchimanchal Finance Co. Ltd.	10	10			
Narayani Finance Ltd	20	20			
Mahalaxmi Finance Ltd.	25	25			
Union Finance Co. Ltd.	10	10			
Ace Finance Co. Ltd.	5	5			
National Finance Co. Ltd.	20	20			
Nepal Housing & Merchant Finance Ltd.	15	15			
Gorkha Finance Ltd.	15	15			
Nepal Abas Bikas Bitta Co. Ltd	14	14			
Universal Finance & Capital Markets	8.11	8.11			
Ltd.					
Nepal Finance & Saving Co. Ltd.	15	15			
Annapurna Finance Co. Ltd.	12	12			
Pokhara Finance Ltd.	11.90	11.90			
Nepal Merchant Bank & Finance Ltd.	20	20			
Lalitpur Finance Co. Ltd.	2.63	2.63			
Insurance company					
Himalayan General Insurance Co. Ltd.	10	10			
Sagarmatha Insurance Co. Ltd.	8	8			

United Insurance Co. Ltd.	10	10
Premier Insurance Co.(Nepal) Ltd.	10	10
Alliance Insurance Co. Ltd	7	7
Neco Insurance Co. Ltd.	10	10
<b>Manufacturing and Processing Company</b>	y	
Bottlers Nepal (Balaju) Ltd.	10	10
Bottlers Nepal (Terai) Ltd.	10	10
Nepal Lever Ltd.	20	20
Nepal Lube Oil Ltd.	15	15
Hotel		Nil
Trading Company		
Bishal Bazar Co. Ltd.	65	65
Salt Trading Corporation Ltd.	30	30
Nepal Trading Ltd.	10	10

ANNEX-XIV

Cash dividend Announcement in 2003/04

Name of Listed Company	Dividend in (%)	Dividend in Rs.
Commercial Bank		
Standard Chartered Bank (Nepal) Ltd.	110	110
Bank of Kathmandu Ltd.	5	5
Nepal Investment Bank Ltd.	20	20
Everest Bank Ltd.	20	20
Nabil Bank Ltd.	50	50
Himalayan Bank Ltd.	1.32	1.32
Nepal SBI Bank Ltd.	8	8

<b>Development Bank</b>					
Development Credit Bank Ltd.	10	10			
<b>Finance Company</b>					
Pokhara Finance Ltd.	25	25			
Mahalaxmi Finance Ltd.	20	20			
Nepal Merchant Banking & Finance Ltd.	20	20			
Pashcliimiinchal Finance Co. Ltd.	30	30			
Nepal Housing & Merchant Finance Ltd.	10	10			
Nepal Abas Bikas Bitta Co. Ltd.	15	15			
Annapurna Finance Co. Ltd.	12	12			
Shree Investment & Finance Co. Ltd.	25	25			
Universal Finance Co. Ltd.	12	12			
Navadurga Finance Co. Ltd.	10	10			
Central Finance Co. Ltd.	10	10			
International Leasing & Finance Co. Ltd.	10	10			
Premier Finance Co. Ltd	12	12			
NB Finance & Leasing Co. Ltd.	10	10			
Siddhartha Finance Ltd.	15	15			
Citizen Investment Trust	12	12			
United Finance Ltd.	5	5			
Gorkha Finance Ltd.	23	23			
Butwal Finance Ltd.	16.67	16.67			
<b>Insurance Company</b>					
NB Insurance Co. Ltd.	5	5			
Manufacturing and Processing Company					
Bottlers Nepal(Balaju) Ltd.	5	5			
Bottlers Nepal(Tarai)Ltd.	10	10			
Nepal Lever Ltd.	90	90			
		·			

Nepal Lube Oil Ltd.	15	15
Hotel		Nil
Trading Company		
Bishal Bazar Co. Ltd.	75	75
Salt Trading Corporation Ltd.	20	20

ANNEX-XV

Cash dividend Announcement in 2004/05

Name of Listed Company	Dividend in (%)	Dividend in Rs.
Commercial Bank		
Standard Chartered Bank (Nepal) Ltd.	110	110
Bank of Kathmandu Ltd.	10	10
Nepal Investment Bank Ltd.	15	15
Everest Bank Ltd.	20	20
Nabil Bank Ltd.	65	65
Development Bank	1	
Development Credit Bank Ltd.	10	10
<b>Finance Company</b>	1	
Pokhara Finance Ltd.	15	15
peoples Finance Ltd.	10	10
Ace Finance Co. Ltd.	20	20
Mahalaxmi Finance Ltd.	10	10
Annapurna finance Co. Ltd.	2.632	2.632
Pashchimanchal Finance Co. Ltd.	20	20
Gorkha Finance Ltd.	10	10

Central Finance Co. Ltd.	1.05	1.05
International Leasing & Finance Co. Ltd.	10.53	10.53
Nepal Abas Bikas Bitta Co. Ltd.	18	18
Nepal Merchant Bank & Finance Ltd.	30	30
Navadurga Finance Co. Ltd.	5	5
Union Finance Co. Ltd.	3	3
United Finance Ltd.	5	5
Citizen Investment Trust	15	15
Insurance company		
NB Insurance Co. Ltd.	10	10
<b>Manufacturing and Processing Company</b>	I	
Bottlers Nepal(Tarai)Ltd.	5	5
Unilever Nepal Ltd.	100	100
Trading Company	I	I
Bishal Bazar Co. Ltd.	85	85
Salt Trading Corporation Ltd.	20	20
Hotel		Nil
Others		Nil

### **ANNEX-XVI**

# Cash dividend Announcement in 2005/06

Name of Listed Company	Dividend in (%)
Commercial Bank	
Himalayan Bank Ltd.	11.5%
Standard Chartered Bank(Nepal) Ltd.	120%
Bank of Kathmandu Ltd.	15%
Nabil Bank Ltd.	70%
Nepal Investment Bank Ltd.	12.58%
Nepal Industrial & Commercial Bank Ltd.	10%
<b>Development Bank</b>	
Development Credit Bank Ltd.	12%
Nirdhan Utthan Bank Ltd.	4%
Paschimanchal Bikash Bank Ltd.	5%
Chimeki Bikash Bank Ltd.	10%
<b>Finance Company</b>	
Kathmandu Finance Co. Ltd.	0.527%
Peoples Finance Ltd.	10%
Navadurga Finance Co. Ltd.	6%
Mahalaxmi Finance Ltd.	10%
Gorkha Finance Co. Ltd.	10%
International Leasing & Finance Co. Ltd	10%
Goodwill Finance Co. Ltd.	20%
Nepal Merchant Banking & Finance Ltd.	30%
Citizen Investment Trust	15.79%
Lumbini Finance & Leasing Co. Ltd.	23.53%
Nepal Housing & Merchant Finance Ltd.	5%
Shree Investment & Finance Co. Ltd.	10%
Kist Merchant Banking & Finance Ltd.	10.53%

Standard Finance Ltd.	21%	
Om Finance Co. Ltd.	10%	
Annapurna Finance Co. Ltd.	3.158%	
Premier Finance Co. Ltd.	6%	
Universal Finance Ltd.	10%	
Paschimanchal Finance Co. Ltd.	10%	
United Finance Co. Ltd.	7.5%	
World Merchant Banking & Finance Ltd.	10%	
<b>Insurance Company</b>		
NB Insurance Co. Ltd.	10%	
Manufacturing and Processing Company		
Unilever Nepal Ltd.	400%	
Nepal Lube Oil Ltd.	15%	
Trading Company		
Bishal Bazar Co. Ltd.	90%	
Salt Trading Corporation Ltd.	20%	
Hotel	Nil	
Others	Nil	

### **ANNEX-XVII**

# Cash dividend Announcement in 2006/07

Name of Listed Company	Dividend in (%)
Commercial Bank	
Nabil Bank Ltd.	85%
Nepal Investment Bank Ltd.	20%
Standard Chartered Bank (Nepal) Ltd.	130%
Himalayan Bank Ltd.	30%
Nepal SBI Bank Ltd.	5%
Everest Bank Ltd.	25%
Bank of Kathmandu Ltd.	18%
<b>Development Bank</b>	
Development Credit Bank Ltd.	12%
Nirdhan Utthan Bank Ltd.	5%
Chimeki Bikas Bank Ltd.	30%
<b>Finance Company</b>	
NIDC Capital Markets Ltd.	10%
National Finance Ltd.	0.53%
Nepal Share Markets & Finance Ltd.	10.53%
Annapurna Finance Co. Ltd.	0.53%
Kathmandu Finance Ltd.	10%
Citizen Investment Trust	18.42%
Nepal Abbas Bikas Bittya Co. Ltd.	12%
Ace Finance Co. Ltd.	2.11%
Gorkha Finance Co. Ltd.	1.053%
Mahalaxmi Finance Co. Ltd.	10%
Goodwill Finance Co. Ltd.	10.53%
Lumbini Finance & Leasing Co. Ltd.	5.26%
Siddhartha Finance Co. Ltd.	10%

United Finance Co. Ltd.	10%	
International Leasing & Finance Co. Ltd.	15%	
Shree Investment & Finance Co. Ltd.	11.40%	
Central Finance Co. Ltd.	6.32%	
Primer Finance Co. Ltd.	6%	
Nawadurga Finance Co. Ltd.	1.58%	
Butwal Finance Co. Ltd.	0.53%	
Fewa Finance Co. Ltd.	10.53%	
Kist Merchant Banking & Finance Ltd.	10.53%	
World Merchant Banking & Finance Ltd.	12%	
Royal Merchant Banking & Finance Ltd.	5.79%	
<b>Insurance Company</b>		
Prudential Insurance Co. Ltd.	6%	
Hotel	Nil	
Manufacturing and Processing Company		
Unilever Nepal Ltd.	250%	
Trading Company		
Salt Trading Corporation Ltd.	20%	
Bishal Bazar Co. Ltd.	100%	
Hydropower Company		
Chilime Hydropower Company	35%	
Others	Nil	