

Chapter I

Introduction

1.1 Introduction and background of the study :

Bank has always been the most important and the largest of financial intermediaries, almost everywhere. Bank creates money administer the payments system and intermediate between the saving and investments. Economic development of the country largely depends upon the effective mobilization of its financial resources. Banks and other various financial institutions are playing vital role in the economic development of the country. Bank and financial institutions have increased the industrial development as well as educational development. Actually, they regulate different policy so that the economic standard of the country automatically uplifted. So, if there is insufficiency of banking and financial facilities, the growth of the economic development automatically becomes slow. Various banks and financial companies in private sector are being establishment with local and foreign investment.

Commercial banks are the major component of the financial system. They work as the intermediary between depositors and lenders and facilitate in overall development of the economy, with major thrust in industrial development.

Commercial bank came into existence mainly with the objectives of collecting the idle funds, mobilizing them into productive sector and causing and overall economic development. The bankers have the responsibility of safeguarding the interest of the depositors, the shareholders and the society they are serving.

A commercial bank is synonymous to bank. According to Nepal Commercial Bank Act 2031 "A commercial bank is a bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transaction."

In our context, the bank or the financial companies work with the objective of developing economy. These companies operate to generate earnings. The shareholders or public money are invested in different sectors. After such investment the profit generated from it is distributed among the shareholders. The shareholders always expect to get rewarded out of their investment in return. Such sharing or distribution to those who provided equity to the institutions is referred as dividend. It is the distribution of the portion of earnings made by the firm out of the entire earnings to the shareholders as the return to their investment. But all the earnings are not distributed as dividend. The sharing kept, as reserve by the company is known as retained earning. Retained earning is one of the most significance sources of funds required for company growth. Dividend policy determines the allocation of net profit between payments to shareholders and reinvestment in the firm.

Once a company makes a profit, they must decide on what to do with those profits. They could continue to retain the profits within the company or they could payout the profits to the owners of firm in the form of dividends. Once the company decides on whether to pay dividends, they may establish a somewhat permanent dividend policy, which may in turn impact on investors and perceptions of the company in the financial markets. What they decide depends on the situation of the company now and in the future. It also depends on the preferences of investors and potential investors. Different firm adopt different approaches to distribute dividend according is to maximize shareholders wealth, the firm should use large amount of profit for payment of dividend. But the firm's objective is to expansion of its business, the firms retain profit to finance in investment programme.

In the simple term dividend is the part of earnings, which is announced to distribute between the stockholders. In one way it is the cost of sacrificing hard money but as an investment. But unfortunately, some company pay whole earnings as divided and some company do not and some company retains more and pays less as dividend. In practice, company pays whole earnings as dividend at the beginning to create better image and existence in the financial market but later they may change their policy and announce a certain percent of dividend payout term. The decision to keep some

portion of earnings or pay dividend is known as dividend policy. Therefore, dividend policy is one of the major decisions of financial management because it affects the value of firm as well as overall financing decision like financial structure, the flow of funds and corporate liquidity. Wealth maximization is the major objective of the dividend policy. At the end of the fiscal year management has to decide how much money should be kept as retention and how much should be distributed to the shareholder. Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute the cash flows that accrue to stockholders.

In Nepal there are only few companies that pay dividend. But after the establishment of joint venture banks, they have shown new trend of paying dividend to shareholders that has brought new hopes for productive mobilization of funds. So dividend policy is one of the most important financial decisions.

1. "A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out a specific operation industrial or commercial investment, production or trade."¹ (*Gupta, 1984*)

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

"The issue of how much a company should pay its stockholders as dividends is that has concerned managers for a long time. It has often been pointed out that a company that raises its dividends often experiences an increase in its stock price and that a company that lowers its dividends has a falling stock price. This seems to suggest that dividends do matter, in that they affect stock price. But this causal relationship has been refuted by several researchers on the grounds that dividends se do not affect

stock prices; rather, it is the informational content of dividends that affect stock price." 2 .(Rao, 1992)

According to Khan and Jain, "Dividends are distributed out of the profits; the alternative to the payment of dividends is the retention of earnings/profits. The retained earnings constitute an easily accessible important source of financing the investment requirements of firms. There is, thus, a type of reciprocal relationship between retained earnings and cash dividends. Larger retentions, lesser dividends; smaller retentions larger dividends. Thus, the alternative uses of the net earnings dividends and retained earnings are competitive and conflicting."

The concept of the banking has developed in England with the effort of ancient goldsmith who possessed strongest safe values where valuable goods such as gold, silver and diamonds could be kept safely. Depositors obtained receipts from goldsmith for their deposit. At that time it was found that deposit with goldsmiths could serve as money. Gradually, it was found that all deposited money was not withdrawn at once. Hence they started bending on interest to people. In this way bank was originated. The first modern banking institution was established in Venice in 1157 A.D. and spread all over world. In Nepal under the prime minister ship of Ranodeep Singh "The Tejarath Adda" was established to give loan for the civil servant. Later on general public was allowed to get loan from there. The first banking institution was established in 1994 B.S. in the name of "Nepal Bank Limited" under Nepal Bank Act.1993.

In Nepal in the mid 1980's government permitted for the establishment of foreign joint venture banks there is new trend for distributing dividend. That is why; the important decision of the firm is its dividend policy.

1.2 Statement of the problem

In Nepal there is no similar way on dividend distribution. Usually dividends are paid monthly, quarterly, semi annually or annually. But in Nepal, it paid annually. Some companies may pay whole earnings within the year as dividend. Actually the usual dividend payout ratio seems to be 40% but recently the trend of payment of dividend is increasing after the establishment of joint venture banks.

In the theory of finance, dividend decision is a crucial as well as a controversial area of managerial finance. Dividend policy may affect such area like financial structure, the flow of funds, corporate liquidity, stock prices and investor's satisfaction etc. Now a day's people are interested and attracted to invest in shares for the purpose of getting greater returns. The dividend policy is an effective tool to attract new investors, maintain present investor and to maintain goodwill of the company. Dividend the most inspiring factor for the investment on shares of the company is thus desirable for the stockholders point of view.

Commercial bank in Nepal has not satisfactory result about dividend decision because of the different government rules and regulations acting and reacting in the banking operation. There is no limit to the identification of the problem about dividend policy that is visible in Nepalese commercial bank. There are only a few companies in Nepal that pay dividend to shareholders.

Dividend distribution is not matching with the earnings of the commercial banks. Specially joint venture banks have sufficient earnings and are capable to pay dividend. But they are not following appropriate dividend policies. While their earning is low but they pay high dividend and some time earning is high they pay low dividend. The above facts inspire to study what are the factors that affect the dividend decision and valuation of the shares. Besides, the above matter following are the purpose of this study.

- a) How the bank is performing in Nepalese Commercial bank market?
- b) What is the relationship between dividend and stock price?
- c) Does the dividend policy affect DPS, EPS, DPR, PE Ratio, Liquidity ratio, Market value per share?
- d) Whether there is uniform dividend payout ratio or not?

1.3 Objectives of the study:

The objective of a dividend decision should be to maximize the shareholders return, so that the value of his investment is maximized. This study is aimed at assessing the prevailing practices of Nepalese commercial bank regarding dividend. The main objectives of this study are as follows.

- a. To examine the dividend practice of the banks.
- b. To explore the relationship between dividends with earning per share, net profit and net worth.
- c. To explore whether there is a uniformity of dividend distribution or not.
- d. To explore whether the dividend issuance attract the investors.

1.4 Significance of the study:

Getting more return form the limited sources of investment is the essential part for every investor while they seek to invest indifferent sector. In the recent year, people are very much interested to invest in share for getting greater return. So, dividend policy is and effective way for attracting the larger number of investors and maintaining goodwill of company. Despite investors high expectation there are almost none of the firm adopting clear dividend policy in Nepal. The significance of the study is as follows.

- a. This study will be very helpful for the further researcher to find more details on the same topic.
- b. It may useful to government for policy making, controlling, and supervision and monitoring.

- c. It may be useful to concerned people like shareholders managers and policy makers.
- d. It covers the partial fulfillment of M.B.S.

1.5 Limitation of the study:

This study will be limited by the following factors.

- a. The study is only conducted on the secondary data. So the result depends on the reliability of secondary data.
- b. The study covers a period of five fiscal year.
- c. Only three commercial banks are taken as sample due to lack of time.
- d. This study covers only dividend related factors.

1.6 Chapter plan (Organization of the study):

This study has been organized into five chapters.

Chapter first deals with the introductory part of the study. It includes general background, statement of the problem, objectives of the study, significance of the study, limitation of the study and at last organization of the study. Chapter second deals with review of literature. It includes a discussion on the conceptual framework on dividend policy, factors affecting dividing policy and review of the major studies. Chapter third explains the research methodology used to evaluate dividend practices of commercial banks in Nepal. It consists research design, sources of data, population and sample, statistical tools and financial tools. Chapter fourth deals with the presentation and analysis of relevant data and information through a definite course of research methodology. Chapter fifth deals with major findings, summary, conclusion and recommendation.

Chapter II

Review of Literature

2.1 Conceptual Framework.

Dividend decision of the firm is yet another crucial area of financial management. The important aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm. In simple words, dividend refers to a portion of earning which is distributed to shareholders in return of their investment in share capital. And the policy of company on the division of its profits between distribution to shareholders as dividend and retention for its opportunity investment is known as dividend policy. All aspects and questions related to the payment of dividend are contained in the dividend policy. Dividend policy determines the amount of earnings to be retained and paid out by the firm. "The dividend policy must be formulated with basic objectives in mind-maximizing the wealth of the firm's owners and providing for the sufficient financing. These objectives are not mutually exclusive but rather interrelated." 1.

(Gitman, 1994)

Dividend policy involves the decision to payout earning versus retaining them for reinvestment in the firm. Any change in dividend policy has both favorable and unfavorable effects on the firm's stock price. Higher the dividends means higher the immediate cash flows to investors, which is good, but lower future growth, which is bad. The dividend policy should be optimal which balances the opposing forces and maximizes stock price. (Thapa and Gautam, 2004:1)

Generally, there are two types of shares: Preference shares and equity shares. Dividend paid on preference shares is called preference dividend, which is generally fixed and payable before payment of equity dividend. There is no choice to management for the preference dividend. But there is full choice about the rate of equity dividend. Dividend decision is the major decision of financial management. It

is in the sense that the firm has to choose between distributing profits to shareholders and sloughing them back into the business. The dividend decision is depends upon the objectives of the management for wealth maximization of the shareholders and owners.

The shareholders (owners) of the company expect two kinds of benefit from common stock investment. The benefit may be either dividend or capital gain. Capital gain is the selling price of stock minus the purchasing price of the stock. Shareholders always want to maximize the value of the firm. The firm distributes profits as dividend if the action maximized the wealth of the owners but if not retains them to invest internally.

Dividends are generally paid in cash because it is easy to paid shareholders. There is a reciprocal relationship between retained earnings and cash dividends; larger retention, lesser dividends; smaller retention, larger dividends. Thus, the alternative uses of the net earnings, dividends and retained earnings are competitive and conflicting. If the company pays the earning as a dividend, they are benefited directly and if company retains in the business to finance the business opportunities they are benefited indirectly through the incensement of the market price of share that is capital gain. In both of the case shareholders get benefit. Since dividend would be more attractive factor to the shareholders one might think that there would be a tendency for corporation to increase distribution of dividend. But one might equally pressure that the gross dividend would be reduced some what with an increase in net after tax dividend. Tax dividend still a major decision of financial manager available to shareholders so it would be wise policy to maintain balance between shareholders interest with that of corporate growth from initially generated fund. So in conclusion it can be said that dividend decision is a major decision of financial management.

2.1.1 Forms of Dividend

The most popular form of dividend is cash dividend. Different companies follow different types of dividend policy. Corporation needs to follow different types of dividend in view of the corporations' objectives and policies, which they implement. In Nepalese context, most of the corporations are paying cash and stock dividends.

"The type of dividends that corporations follow is partly of a matter of attitude of directors and partly a matter of the various circumstances and financial constraints that bound corporate plans and policies."2. (*Shrestha, 1980*)

In our country only cash and stock dividend are declared and paid. According to changing needs to corporations, dividend is distributed in several forms. They are as follows:

I. Cash Dividend:

Cash dividend is the dividend, which is distributed to the shareholders in cash out of earnings of the company. When cash dividend is paid both the total assets and the net worth of the company are reduced. The market price of the share drops in most cases by the amount of the cash dividend distributed.

II. Stock Dividend (Bonus Share):

Distribution of additional shares to the existing shareholders as dividend is known as stock dividend. It is also known as bonus share. "A stock dividend simply is the payment of additional stock to stockholders nothing more than a recapitalization of the company; a stockholders proportional ownership remains unchanged. (Van Horne, 1998:334) this has the effect of increasing the number of outstanding shares of the company. The declaration of the stock dividends will increase the paid up share capital and reduces the reserves and surplus of the company. It doesn't affect the ownership of the company

III. Bond Dividend:

It is a dividend that is distributed to the shareholders in form of bond. It is issued for existing shareholders. When the company generates more profit for a longtime, it issues bonds. In other words, corporation declares dividend in form of its own bond with a view to avoid cash outflows.

IV. Interim Dividend :

Generally, dividend is declared in the last of the financial year. It is called regular dividend. If the dividend is declared before the end of financial year that is called interim dividend.

V. Special Dividend :

When directors of the company do not want to change the dividend separately and the companies have good cash and reserves this dividend is issued.

VI. Property Dividend :

The payment of assets or property in any form other than cash is known as property dividend. Whenever the firms have assets that are no longer necessary in the operations of the business or in extra ordinary circumstances, the company follows this type of dividend. For example company's own products and the securities of subsidiaries that have been paid as property dividend. This method of paying dividend is rarely used.

VII. Scrip Dividend :

Scrip dividend is that type of dividend which is paid in promissory notes. The company may declare dividend in the form of scrip when earnings justify dividends but the company's cash position is temporarily weak and doesn't permit cash dividend. Scrip is a form of promissory note promising to pay the holder at specified later date. Scrip dividends are justified only when the company has

really earned profit and have only to wait for the conversion of other current assets into cash in the course of operation.

In general, the forms of dividends popular in Nepal are cash dividend and stock dividend, although there are different forms of dividend.

2.1.2 Theories of Dividend:

There are different types of dividend theories have been advanced in financial management; they are relevant or irrelevant in dividend decision. Among them some relevant and irrelevant theories have been discussed below.

Residual Theory of Dividend:

This theory suggests the company to distribute its earnings to shareholders in the form of cash dividend, only when the firm has retained earning left over after financing all possible acceptable investment opportunities. This theory states that profit should be used first in all profitable investment plans, which reflect equal or higher rate of return. Further, it is less expensive for the firm to use retained earnings than is to issue new common stock. (Gautam and Thapa, 2004:9.4)

"The starting point in the theory is that investors prefers to have the firm retain and reinvest earnings exceeds the rate of return the investor can obtain on other investments of comparable risk."³³J.Fred Weston and Eugene F.Brigham, Managerial Finance, 7th edition, (Newyork:Dryden Press,1987)P.682 It assumes that the internally generated funds are comparatively cheaper than the funds obtained from external sources. It is because the retained earning or internally generated funds does not imply any flotation cost as in the external sources by issuing new shares.

At last, it can be concluded that dividend policy is affected by the company's investment opportunities and the availability of internally generated funds where

dividends are paid only after all acceptable investment have been financed. So, according to this theory dividend policy is totally passive in nature.

2.1.3 Stability of Dividend.

A stable dividend policy is a long-term policy. It does not affect by variation in earning from year to year. The dividend will be paid out regularly. Though amount of dividend may fluctuate from year to year and may not be related with earning. Shareholders also generally favor this policy and value stable dividends higher than fluctuating ones. All other things remaining same, stable dividends may have a positive impact on the market price of the share.

The shareholders generally prefer stability or regularity of dividends because the company distributes a stable dividend over the year the market price of the shares may be increase. It is suitable for those companies, which have got stable income. In other words, that are the term dividend stability refers to the consistency or lack of variability in the stream of dividends. There are three types of dividend stability are as follows.

a. Constant Dividend per Share

Constant Dividend per share means that the dividend can be fixed either in amount or in percentage. According to this form of stable dividend policy a company follows a policy of paying a certain fixed amount per share as dividend every year. Various companies follow this type of dividend every year. Various companies follow this type of dividend payment policy in the market. This policy doesn't imply that the dividend per share will never increase. When the company reaches new levels of earnings and expects to maintain it the annual dividend per share may be increase. It is easy to follow when earning is stable. If the earning pattern of a company shows wide fluctuations it is difficult to maintain such policy.

b. Constant Payout Ratio

The ratio of dividend to earning is known as payout ratio. Paying a fixed percentage of net earning every year is called constant payout ratio. Some companies may follow a policy of constant payout ratio. According to this policy of constant payout ratio. According to this policy the amount of dividend will fluctuate in direct proportion to earnings. In other words, there is positive relationship between the level of earning and the percentage rate of dividend. Dividend will be paid to the shareholders if the company has profits. It suggests that dividend are paid when profit are earned and avoided when it incurs losses.

c. Low Constant Dividend per Share plus Extra Dividend :

The low regular dividend per share plus extra dividend is a compromise between the first two policies. According to this policy the low regular dividend can usually be maintained even when earnings decline and extra dividend can be paid when excess funds are available. It gives the firm flexibility but it leaves investors some what uncertain about what their dividend income will be. This policy may be the best policy, if the firm's earning is quite volatile.

2.1.4 Conflicting Theories on Dividends:

In this conflicting theory on dividends, two basic schools of thought on dividend policy have been expressed in the theoretical literature of finance. First school of holds that dividend policy can affect the value of a firm through investor's preferences. Myron Gordon, John Linter and Walter are the theorists of this school of thought. These theorists argue that investor's required rate of return increases as the dividend payout in reduced because investors are more use of receiving dividends payments that income from capital gains that presumably result from retained earnings. These theorists suggest that earnings of a firm with a low payment ratio are typically capitalized at higher rates than the earnings of high payout firm (Thapa, Gautam, 2004:9.8-9.11)

The other school associated with Professor Mettro Miller and Franco Modigliani holds that investors are indifferent to dividend and capital gains and so dividends have no effect on the wealth of shareholders. They argue that the value of the firm depends on the income produced by its assets, not on how this income is split between dividends and retained earnings. According to them value of the firm depends upon the firm's earnings, which depends on dividend on its investment policy. The manner in which earnings are dividend in to dividends and retained earnings does not affect the value of the firm.

2.2 Factors Affecting Dividend Policy:

Many factors may affect a firm's decision about its dividends. The company's decision regarding the amount of earnings to be distributed as dividends depends on a number of factors. Some of these factors are trying to mention below.

I. Legal Restriction (Rules/ Consideration):

Legal rules always play the important role for the limitation of the amount of dividends. Certain legal rules may limit the amount of dividends that a firm may pay. First statutory restrictions may prevent a company from paying dividends. While specific limitations vary by state, generally a company may not pay dividend.

- i. If the firm's liabilities exceeds its assets.
- ii. If the amount of dividend exceeds the accumulated profits (retained earnings) and
- iii. If the dividend is being paid from capital invested in the firm. Legal rules are significant in what they provide the framework within which dividend policies can be formulated

II. Liquidity Position:

The cash or liquidity position of the firm affected its dividend policy. The payment of dividends means cash outflow. Payment of dividend is possible

only if the firm has sufficient earnings. But, if firm invests in fixed assets from its sufficient retained earnings, cash amount is available to make dividend payment. Indeed a growing firm, even a very profitable one typically had a pressing need for funds. So, the company must have to manage adequate liquidity position as well as retained earnings.

III. Need to repay Debt:

The need to repay debt is also one of the factors that affected to the company in paying dividends. It influences the availability of cash flow to pay dividend. When a firm issues debt capital, it must be refunded in maturity in order to retire debt, retention of earning is essential. So, the dividend policy is affected by retained earning.

IV Rate of Assets Expansion (Opportunities for investment):

If the has future profitable investment opportunities the firm likely to reinvest the earnings rather than pay dividends. The more rapid the rate at the need for financing assts expansion, the greater the future need for funds, the more likely the firm is to retain earnings rather than pay them out.

V Profit Rate:

The rate of return on assets determines the relative ness of paying out earnings in the form of dividends to stockholders. It other things remain same, high profit rates is the indicator of high dividend payout.

VI Control:

Maintaining the controlling vote is very important for many small firms and certain large ones. These owners would prefer the use of debt and retained profit to finance new investments rather than issue new stock. As a result dividend payout will be reduced.

VII Tax position of stockholder:

The tax position of the corporations affects its dividend policies. Paying dividend is not only the action of company but it also should consider the preferential need of the stockholder. The shareholder with high income tax brackets prefers to receive, low dividend and high rate of retention. Corporation owned by largely tax payers in high income tax where as corporation owned by small investors tends towards higher dividend payout.

VIII Restriction on loan Agreement:

Restriction on loan agreement directly affects on dividend policy of a firm. Such restrictions are designed to protect the position of lender and preference shareholders. Restrictions on debt contracts may specify that dividend may be paid out of earnings generated. After signing the loan agreement and only when net working capital is above a specified amount certain amount of earning to reinvest as well.

IX Borrowing Capacity of the company:

The financial condition or capability of a firm depends on its use of borrowings and interest charges payable. All firms don not have equal access to the capital markets. A large well established company with good profit and stability of earnings has easy access to capital markets with greater ability to borrow. On the other hand a small new and growing company is restricted from to raise equity and debt funds from capital markets because it is more risky for potential investors. Thus, a well-established company is likely to have a higher dividend payout ratio than a small new or growing company.

X Inflation

The price of the assets rises up in the situation of inflation. Funds generated from depreciation may be inadequate to replace the equipment. Thus, the fund should be expensed more than reserve earlier or the amount from earning

should spend for assets and earning reduced by the way dividend payment is affected. Therefore inflation is another factor that affects the firm's dividend decision.

2.3. Review of Major Studies.

2.3.1 Walter's Study.

Walter studied on "Dividend policy and common stock price" in 1966. He advocated that dividend policy affects the stock price. He has said that dividend policy always affects the value of the firm. The relationship between firm's internal rate of return and cost of capital is determining factors to retain earnings or distribute dividend. As long as the internal rate of return is greater than the cost of capital, the stock price will be enhanced by retention and will vary with dividend payout. In this way Walter's model is also known as "Optimal theory of dividend." The basic assumptions of the Walter's model are as follow.

1. The firm finances all investment through retained earning. The external sources if funds like debt or new equity capitals are not used.
2. Firm's internal rate of return r and cost of capital (k) are constant.
3. All earnings are either distributed as dividend or reinvested internally.
4. The value of earning per share and dividend per share are assumed to be constant forever.
5. The firm has very long (perpetual) life.

Based on above assumptions, this model to determine the market price per share is as follows:

$$P = \frac{D + (r/k)(E-D)}{K}$$

OR

$$P = \frac{D}{K} + \frac{r(E-D)}{K}$$

Where,

P= Market price per share

D=Dividend per share

E=Earning per share

K=Cost of capital or market capitalization rate.

r = Internal rate of return

In Walter's model, the optimum dividend policy depends on the relationship between the firm's internal rates of return (r). And it's cost of capital (k). Walter's view on the optimum dividend payout ratio can be summarized as follows:

i. $r > k$ (Growth Firm)

When the internal rate of return is higher than cost of capital, the firm is said to be a growth firm. If the internal rate of return is greater than cost of capital, It is better to retain retained earnings. These firms are able to re invest earnings at a rate[®], which is higher than the rate expected by shareholders (k). They will be maximizing the value per share if they follow a policy of retaining all earnings for internal investment. The market value per share increases by decreasing the dividend in such a condition. The market value per share will be maximum at zero dividends.

ii. $r = k$ (Normal Firm)

If the firm has $r = k$, there is not any role of dividend on stock prices fluctuation. In such a condition the payment of dividend or retained them does not affect the share price. It is a condition of indifference. The firm can either enjoy by paying profits as dividend is paid and invested by shareholders outside the firm, gets same return as the firm gave them in case of retained since $r = k$.

iii. $r < k$ (Declining Firm)

If the internal rate of return[®] is less than cost of capital (k), it indicates that the shareholders can earn a higher return by investing elsewhere. In such case fore maximizing the value of shares dividend also should be maximized by

distributing the entire earning as dividend, the value of the shares will be at optimum value. The dividend payout ratio would give on optimum dividend policy. The market value per share increases as payout ratio increases when $r < k$.

2.3.2 Gordon's Model.

Another one very popular model is developed by Myron J. Gordon (1962), which concluded that dividend policy of a firm affects its value even in a situation where the return on investment and required rate of return are equal. This study explains that investors are not indifferent between current dividend and retention of earnings with the prospects of future dividend and retention of earnings with the prospects of future dividend and retention of earnings with the prospects of future dividend and capital gain. The conclusion of this study is that investor gives more emphasis to the present dividend more than future capital gain. According to this study, and increase in dividend payout ratio leads to increase in the stock price for the reason that the investor consider the dividend yield is less risky than the expected capital gain. Gordon's model is known as Growth Model.

Gordon's Model is based on the following assumptions:

1. The firm is an all equity firm, and it has no debt.
2. The cost of capital (k) and internal rate of return[®] are constant.
3. The firm and its stream of earnings are perpetual.
4. No external financing is available in the market.
5. The cost of capital (k) of the firm is greater than the growth rate (g) of the firm ($k > g$) to get meaningful value.
6. The corporate taxes do not exist.
7. The retention ratio (b) once decided upon is constant therefore the growth rate (g) = br is constant forever.

Based on above assumptions the formula for finding out the market value per share, proposed by Gordon is given below:

$$P = \frac{E(1-b)}{K-br}$$

Where,

P = Market price of a share.

E = Earning per share.

(1-b) = Dividend payout ratio

K= Cost of capital or capitalization rate

Br = growth rate

b = Retention ratio

Based on this study, we can get the following fact.

a. $r > k$ (Growth firm)

In growth firm the share price tends to decline in correspondence with increase in payout ratio or decrease in retention ratio. i.e. high dividends corresponding to earnings leads to decrease in share price are negatively co-related.

b. $r = k$ (Normal Firm)

Share prices remain constant in correspondence to the changes in dividend policies. So, dividend and stock prices are free from each other.

c. $r < k$ (Declining Firm)

The share prices tend to rise in correspondence with rise in dividend payout ratio. It means dividend and stock prices are positively correlated with each other in a decline firm.

In this way Walter's model's conclusion about dividend policy are similar to the conclusion of Gordon's model. This is due to similarities in assumption. But the assumptions of this model are far from the reality. Therefore their models are called relevance theory in the literature of finance models are called relevance theory in the literature of finance models are called relevance theory in the literature of finance.

2.3.3. Modigliani and Miller's Study:

Franco Modigliani and Merton Miller first propounded the major argument indicating that dividends are irrelevant in 1961. It is popularly known as M.M. Approach. It is sometime termed as "Dividend Irrelevance Model."

The first time in this history of finance, advocated that dividend policy does not affect the value of the firm. i.e. dividend policy has no effect on the share prices of the firm. They said that the value of the firm is determined by the earnings power of the firm's assets or its investment policy that the manner in which the earning stream is split between dividend and retained earnings does not affect this value. As per MM theory the firm's value is independent of its dividend policy.

The critical assumptions included in this theory are as follows.

1. The firm operates in perfect capital market in which all investors are rational. Information is available to all free of costs and securities are divisible.
2. There are no transaction costs. The securities can be purchased and sold without payment any commission or brokerage etc.
3. Risk of uncertainty does not exist.
4. Taxes do not exist.
5. The firm has a fixed investment policy, which is not subject to change.

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

Step 1.

Market Value of Share

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

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

Where,

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

D_1 = Dividend per share at the end of the period.

P_1 = Market price of share at the end of the period.

K_e = Cost of equity capital

Step 2

No external financing.

If no new external financing exists the market value of firm can be computed by multiplying both sides by the number of the outstanding shares (n) as follows.

$$\frac{np_0}{1+K_e} = n(D_1+P_1) \dots\dots\dots(2)$$

Where,

N= number of outstanding share.

Step3. New Shares:

Assume that the retained earning is not sufficient to finance the new investment needs of the funds, in that case issuing the new shares is the other alternative and Δn is the number of new shares issued at the end of year 1 at price of P_1 , and step 2 can be written as

$$np_0 = \frac{nD_1 + (n + \Delta n) P_1 - \Delta n P_1}{1+k_e} \dots\dots\dots(3)$$

Where,

Δn = No. of equity shares at the end of the years.

n = No. of shares at the beginning.

Step 4.

Total number of shares:

The issuing of new stock is determined by the amount of investment in period 1 not financed by retained earning. The number of new shares can be finding out in the following way.

$$nP_1 = I - (E - nD_1)$$

or

$$nP_1 = I - (E + nD_1) \dots\dots\dots (4)$$

Where,

nP_1 = Amount came from selling new shares to finance the capital requirement.

I = Total new investment required.

E = Total earning of the firm during the period.

nD_1 = Total dividend paid during the period.

$(E - nD_1)$ = Retained earning.

Step 5.

If we substitute eq. (4) into eq. (3) we get eq. (5)

$$nP_0 = \frac{nD_1 + (n + \Delta n) P_1 - (I - E + nD_1)}{1 + k_e}$$

OR

$$nP_0 = \frac{nD_1 + (n + \Delta n) P_1 - I + E - nD_1}{1 + k_e}$$

OR

$$nP_0 = \frac{(n + \Delta n) P_1 - I + E}{1 + k_e} \dots\dots\dots (5)$$

Conclusion

There is no any role of dividend (D_1) in equ. (5). so MM concludes that dividends do not count therefore dividend policy is irrelevant and dividend policy has no effect on the share price.

2.3.4 Linter's study (1956):

Linter conducted a study in 1956, which is focused in the behavioral aspect of dividend policy. He investigated a partial adjustment model as he tested the dividend patterns of 28 companies. He concluded that a major portion of the dividend of a firm could be expressed in the following way:

$$D^*_t = P \cdot \text{EPS}_t$$

$$D_t - D_{t-1} = a + b (D^*_t - D_{t-1}) + e$$

Where,

D^*_t = Desired dividend

P = Targeted payout ratio

EPS_t = Earning per share

a = Constant relating to dividend growth

b = Adjustment factor relating to previous period's dividend and desired level
Of dividend ($b > 1$)

The major findings of this study are as follows:

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

2.3.5. Deepak Chawala and G. Srinivasan's Study

Chawala and Srinivasan studied the impact of dividend and retention on share price. They took 18 chemicals and 13 sugar companies and estimated cross section relationship for the years 1969 and 1973. The required data were collected from the official directory of Bombay stock exchange. They used two stage least square techniques for estimation. This study was made with these following objectives:

1. To estimate a model to explain share price dividend and retained earnings relationship.
2. To test the dividend retained earnings hypothesis.
3. To examine the structural changes in the estimated relations over time.

1. Price function,

$$P_t = [D_t, R_t, (P/E)_{t-1}]$$

2. Dividend supply function

$$D_t = E_t, D_{t-1}, (P/E)_{t-1}]$$

3. Identify

$$E_t = D_t + R_t$$

Where,

P = Market price per share

D = Dividend per share

R = Retained earning per share

(P/E) = Deviation from the sample average of price earning ratio.

t = Subscript for time

They used two stages least square technique of estimation and in case of chemical industry they found the estimated co-efficient had the correct sign and co-efficient of that the stock price and dividend supply variation can be explained by their independent variables. But in case of sugar industry they found that the sign for retained earnings in negative. Finally, they concluded that dividend hypothesis holds well in the chemical industry. Both dividend and retained earnings significantly explain the variation in share price in chemical industry.

2.3.6. Shlomo Benartzi, Roni Michaely and Richard Thaler's study (Benartzi, Shlomo, et: al: 1997 PP.1007-1304)

Shlomo Benartzi, Roni Michaely and Richard Thaler's concluded a research on "Do changes in dividends signals the future or the past?" in 1997. They collected all companies that trade on the New York Stock Exchange (NYSE) or on the American Stock Exchange (AMEX) for at least two years during the period 1979-1991, using the center for research in security prices (CRSP) and computed tapes. They excluded all foreign companies from the sample.

Many firms pay dividends, even though doing so is costly in various ways. The market reaction to dividend changes implies that dividends are good and more is better. It is not surprising, then that many theories assume or imply that dividends provide information to the market. They also found some evidence that dividend increasing firms are less likely to have subsequent earnings decrease than firms that do not change their dividend despite similar earning growth. In this sense, changes in dividend do signals something about the present the current increase in earning is permanent.

2.4 Review of Journals and Articles in Nepalese perspective.

There are very few studies in Nepal, which have looked into corporate dividend behavior. Among them the two major studies are reviewed as follows:

2.4.1 Radhe Shyam Pradhan's study

Dr. Radhe Shyam Pradhan's conducted on a comprehensive study on stock market behavior in a small capital market in the year 1992. This study was based on the data collected for 17 enterprises from 1986 to 1990.

The objectives of this study were as follows:

- To access the stock market behavior in Nepal.
- To examine the relationship of market equity, market value to book value, price earnings and dividends with liquidity, profitability, leverage, assets turnover and interest coverage.

Major findings of his study were as follows:

1. Higher the earnings on stocks larger the ratio of dividend per share to market price per share.
2. Dividend per share and market price per share was positively correlated.
3. Positive relationship between the ratio dividend per share to market price per share and interest coverage.
4. Positive relationship between dividend payout and liquidity.
5. The relationship between dividend payout and profitability is positive.
6. Positive relationship between dividend payout and turnover ratios.
7. Positive relationship between dividend payout and interest coverage.
8. Liquidity and leverage ratios are more variable for the stock paying lower dividends.
9. Earnings, assets turnover and interest coverage are more variable for the stock paying higher dividends.

2.4.2 Manohar Krishna Shrestha's Study

We can find very few articles related to dividend policy that is being published in Nepalese context. Dr.M.K.Shrestha writes one of those related to dividend published. In 1981 the study presented by him was "Public Enterprises: Have they Dividend Paying Ability? It gives short glimpse of dividend performance of some public enterprises of the time in Nepal.

Dr.Shrestha has highlighted following issues in his article:

- HMG Expects two things from the public enterprises:
 - i. They should be in a position to pay minimum dividend and
 - ii. The public enterprises should be self-supporting in financial matters in future years to come but none of these two objectives are achieved by the public enterprises.
- One reason for this inefficiency is caused by excessive government interference in day to day affairs. On the other hand, high ranking officials of HMG appointed on directors of Board do nothing but simply show their bureaucratic personalities. Bureaucracy has been the enemy of efficiency and this led corporation to face losses. Losing corporations are therefore, not in position to pay dividend to government.
- The reason is the lack of self criticism and self-consciousness. The lack of favorable leaders is one of the biggest constraints to institution building, moreover, corporate leadership come as managers of corporations have not been able to identify themselves regarding what they can contribute as manager of corporations. So, HMG must be in a position to develop a financial target in corporate investment by imposing financial obligation on corporation.
- The article point out the irony of government biasness that government has not allowed banks to follow an independent dividend policy and HMG must be in a position to develop a financial target in corporate investment by imposing financial obligation on corporation.

He has suggested the need of criteria as:

1. Adopt a criteria guided policy to drain resources from corporation through the medium of dividend payment.
2. Realization by managers about the cost of equity and dividend obligation.
HMG should follow the following criteria to trap the resources through dividend:
 - Proper evaluation of public enterprises on capability of paying dividend through corporate co-ordination committee.
 - Circulating the information to all public enterprises brought the minimum rate of dividend.
3. Imposition of fixed rates of dividend by government to financially sound Public enterprises.
4. Specifying performance criteria such as profit target in terms of emphasis, priorities, timing and plans and developing a strategic plan, which is not just a statement of corporation aspiration but must be done to convert the aspiration to reality.
5. Identification of corporation objectives in corporation Act, company Act or special character so as to clarify the public enterprise managers regarding their financial obligation to dividend to HMG.

2.5 Review of Thesis

Prior to this thesis, several thesis has been written by some student. Out of them some studies that are supposed to be relevant for this study have been reviewed in this section.

2.5.1 Buddhi Sagar Timilsina's study:

He has performed a research work on "Dividend Policy". A comparative study between NGBL and NIBL. For this research work he has taken ten's year data from 1989/90 to 1998/99. The objectives of this study were as follows:

- To highlight dividend practices of the banks.
- To analysis the relationship of dividend with various important variables such as earnings per share, stock prices, net profit and net worth.
- To provide workable suggestion and possible guidelines to overcome various issues and gaps based on the findings of the analysis.

The major findings of the study were as follows:

- The positive relationship between dividend per share with earning per share, net profit, stock prices and net worth in these sample banks.
- There is not uniform of dividend distribution policy is both the sample banks.
- The pattern of dividend payout ratio of both the banks shows the conservative dividend policy followed by the banks.
- A change in dividend per share affects the share price and net worth differently in different banks.
- Change in earning per share and net profit affects dividend per share differently in different banks.

2.5.2 Hari Ram Aryal's study :

He has performed a research work on dividend policy"

"Comparative study between Nepal Arab Bank Ltd. And Nepal Grindlays Bank Ltd.".

It covers only eight fiscal years beginning from 1987/88 to 1994/95. The main objectives of this study are as follows.

- To highlight dividend practices of the banks.
- To analyze the relationship of dividend with various important variables such as earning per share, net profits, net worth and stock prices.
- To provide a workable suggestion and possible guidelines to overcome various issues and gaps based on the findings of the analysis.

He concluded the findings of this study were as follows:

- The positive relationship between dividend per share with earning, net profit, net worth and stock prices.
- Changing in dividend per share affects the share prices differently.
- There is not uniform of dividend distribution policy in both the banks.

2.5.3 Ramesh K.C's Study:

The topic was "Dividend policy of Joint Venture Banks in Nepal." Based on this study he has concluded the findings as follows:

- Joint Venture Bank in Nepal is growth bank.
- Investment in their stocks is less risky.
- Their market value per share are significantly fluctuated and traded on high price.
- DPS of these banks is correlated with their EPS.
- Retained earning ratios of these banks are fluctuation in smaller proportion. EPS is raised at the satisfactory level.
- Declaration of dividend rate is found higher in comparison to other sectors.
-

2.5.4 Subhas Kunwar's Study:

A thesis entitled "Dividend Policy: A comparative study between Nepal Insurance Company Limited and National and General Insurance Company Limited" conducted by Mr. Subhas Kunwar in 2001. The main objectives of his study are as follows:

- To examine the influence of financial indicators on share price.
- To show the relationship between dividend per share and other financial indicators.

- To check the consistencies among DPS, EPS, D/P ratio etc. of the sampled insurance companies.
- To identify the dividend policy undertaken by each company and the appropriateness of the policy undertaken.
- To provide useful suggestions to formulate optimal dividend policy and maximize stock price on the basis of findings.

Conclusion of his study these are many factors that influence the dividend and the market value of share such as earnings, liquidity position, efficiency and leverage. These factors indicate the financial position of the company. If the company has good performance in terms of these factors it will be able to provide returns in the form of dividends to its shareholders.

2.5.4 Nabaraj Adhikari's Study.

He has submitted a thesis "Corporate dividend practices in Nepal, 1999. The study is based on primary and secondary data analysis. The specific objectives of his study are as follows.

- To analysis the proportion of portfolio formed on dividends.
- To test the relationship between dividend and stock price.
- To survey the opinions of financial executives on corporate dividend practices.

Conclusion of his study is that there are differences in financial position of high dividend paying and low dividend paying companies. Other things remaining the same, financial position of high dividend paying companies is comparatively better than that of low dividend paying companies. Another interest conclusion of his study is that market price of shares affected by dividends. Lastly, financial executives of Nepal reject dividends as a residual decision in Nepalese companies.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a way to solve the research problem systematically. This is the steps, guidelines, and tools used in the research by the researcher. It considers the logic behind the methods used in the context of research study and explains why particular method or technique is used.

Really, it is one of the most important parts of the research which provides outlines of the research and also present method and process of entire research. It highlights about how the research problem has been defined, what data have been collected, what particular method has been adopted, why the hypothesis has been formulated etc.

3.2 Research Design

The research design is more descriptive because secondary data have been used to analysis the using variables which is related to dividend policy of the commercial banks. The annual reports published by the relative banks and statements of the banks published by NEPSE are used in this research. So, the research is both analytical and descriptive. The data are analyzed by using financial and statistical tools.

3.3 Sources of Data Collection

This study can used two method of data collection i.e. Primary and Secondary data. Secondary data are used for the study.

The required data for the analysis are collected annual report provided by the concerned banks. Supplementary data and information are collected from annual number of institution and authorities i.e. Security Exchange Board of Nepal, Nepal Stock Exchange Limited, Central Library T.U, Shanker Dev Campus Library. Various data and information are also collected from the journals, periodical bulletions, magazines, newspapers and internet.

3.4 Populations and Sampling

There are many banks whose shares are traded actively in stock market; hence it is not possible to study all of them regarding the study topic. Therefore, sampling will be done selecting from population. The populations are as follows.

S.N.	Commercial Banks	Established Date	Head Office
1.	Nepal Bank Ltd.	1937/11/15	Kathmandu
2.	Rastriya Banijya Bank	1966/01/23	Kathmandu
3.	Nabil Bank	1984/07/16	Kathmandu
4.	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu
5.	Standard Chartered Bank	1987/01/30	Kathmandu
6.	Himalayan Bank Ltd.	1993/01/18	Kathmandu
7.	Nepal Bangladesh Bank	1993/06/05	Kathmandu
8.	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu
9.	Everest Bank Ltd.	1994/10/18	Kathmandu
10.	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu
11.	Nepal Credit and Commercial Bank	1996/10/14	Kathmandu
12.	Lumbini Bank Ltd.	1998/07/17	Naryanghat
13.	Nepal Industrial and Commercial Bank Ltd.	1998/07/2	Biratnagar
14.	Macchapuchhre Bank Ltd.	2000/10/03	Kathmandu
15.	Kumari Bank Ltd	2001/04/03	Pokhara
16.	Laxmi Bank Ltd.	2002/04/03	Kathmandu
17.	Siddhartha Bank Ltd	2002/12/24	Kathmandu
18.	Agricultural Development Bank Ltd.	1968/01/02	Kathmandu
19.	Global Bank Ltd.	2007/01/02	Birgunj, Parsa
20.	Citizen Bank Ltd.	2007/06/21	Kathmandu
21.	Prime Bank Ltd.	2007/09/24	Kathmandu
22.	Sunrise Bank Ltd.	2007/10/12	Kathmandu
23.	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu
24.	Nepal Development and Credit Bank Ltd	2008	Kathmandu
25.	NMB Bank	2008	Kathmandu

The selected samples are as follows;

1. Nepal Investment Bank Ltd.
2. Standard Chartered Bank Nepal Ltd. and

3. Nepal SBI Bank Ltd.

3.5 Method of Analysis

Various statistical and financial tools are used in this study. Wide varieties of methodology have been applied according to the reliability and consistency of data. Before using the analytical tools to compare the result, the data containing in the financial statements have been grouped and rearranged so as to make comparison easy. For the purpose of analysis the data of five years were taken as sample from 2004 to 2008.

3.6 Analysis of Financial Indicators and Variables

I. Divided per Share (DPS)

DPS indicates the portion of earning distributed to the shareholders on per share basis and calculated by dividing the total dividend to the total dividend to equity shareholders by the total no of equity share outstanding.

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

II. Dividend in percent

The ratio of dividend per share to the paid up price ordinary share is called dividend percent.

$$\text{Dividend percent} = \frac{\text{Dividend per share}}{\text{Paid up price per share}}$$

Dividend Payout Ratio (DPR)

It is the percentage of the profit on share that is distributed as dividend. This ratio indicates what percentage of profit is distributed as dividend and what percentage of profit is retained for the growth of the company. It is calculated as;

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

And,

$$\text{Retention ratio} = 1 - \text{DPR}$$

III. Earning Per Share (EPS)

EPS is the ratio of net profit after taxes to number of equity shares outstanding. It measures the return on each equity shareholders. It is calculated to determine the earning capacity of the company. It is calculated as:

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

IV. Price Earning Ratio (PE Ratio)

P/E ratio is the ratio between market price per share and earning per share. It reflects the price currently paid by the market for each rupees of currently reported earning per share. It is calculating by dividing the market value per share by earning per share.

$$\text{P/E ratio} = \frac{\text{Market value per share (MVPS)}}{\text{Earning value per share (EPS)}}$$

V. Earning Yield and Dividend Yield

Earning Yield and dividend yield both are expressed in terms of market value per share. Earning yield and dividend yield are two important profitability ratios from the point of view of the ordinary shareholders. Earning yield can be calculated as the ratio of earning per share to the market value per ordinary share.

$$\text{Earning yield} = \frac{\text{Earning per share}}{\text{Market value per share}}$$

Similarly the dividend yield indicates the relationship between dividend per share and market value per share. It is calculated as:

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Market value per share}}$$

VI. Market price per share (MPS)

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

3.7 Statistical Tools

I. Mean or Average (\bar{X})

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

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

Where

X = sum of the sizes of the items.

N = number of items.

II. Standard Deviation

The measurement of the scatter ness of the mass of figures in a series about an average is known as dispersion. The standard deviation measures the absolute dispersion of a distribution. The greater amount of dispersion, greater the standard deviation. A small standard deviation indicates high degree of uniformity of the observation as well as homogeneity of a series and a large standard deviation indicates low degree of uniformity. It is calculated for selected dependent and independent variables specified in the analysis model. It is usually denoted by the Greek Letter (σ)

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

Where, N = number of items in the series

\bar{X} = mean

x = variable

III. Coefficient of Variation

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

IV. Co-efficient of Correlation

Co-efficient correlation may be defined as the degree of linear relationship existing between two or more variables. From the theory of correlation, the analysis is can

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

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

Where,

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

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

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

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

r_{xy} = value of coefficient correlation between X and Y set of variable.

$Cov(x, y)$ = covariance between two set of variables 'x' and 'y'

σ_x = standard deviation of set variable x.

σ_y = standard deviation of set variable y.

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

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

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

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

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

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

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

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

V. Coefficient of Determination (r^2)

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

VI. Regression Analysis

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

a. Market value per share on earning per share

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

$$y = a + bx$$

Where,

y = market value per share

a = constant

b = coefficient

x = Earning per share

b. Market Value Pet Share on Dividend per Share

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

$$Y = a + bx$$

Where,

Y = Market value per share

a = Regression constant

b = Regression coefficient

x = Dividend per share

VII. Multiple Regression Analysis

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

$$\text{DIV} = a + b_1 \text{EPS} + b_2 \text{MVPS} + b_3 \text{NWPS}$$

a= some constant

b= Regression coefficient of the variable

EPS= Earning per share

MVPS=Market value per share

NWPS=Net worth per share

The above model has been formulated considering earning per share, market value per share and net worth per share as basic factors. Since dividend is high if company has reasonable earning, market value per share and net worth per share.

Similarly market price of the stock is also influenced by several factors like dividend per share and earning per share. Thus multiple regression models of MVPS dependent up on DPS and EPS formulated as:

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

Where,

MVPS = Market value per share

DPS = Dividend per share

EPS = Earning per share

VIII. Standard Error of Estimate (SEE)

The standard error of estimate measures the variability around the line of regression. It also measures the accuracy of the estimated figures. The lesser

the value of SEE of estimate the better is the model fitted. If standard error of estimate is Zero then there is no variation about the line and the correlation will be perfect.

IX. Regression Constant (a)

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

X. Regression coefficient (b)

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

XI. t- statistics

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

Formula

$$t = \frac{x_1 - x_2}{s \sqrt{\frac{n_1 n_2}{n_1 + n_2}}}$$

Where,

X_1 = Mean of the first sample

X_2 = Mean of the second sample

n_1 = number of observation in the first sample.

n_2 = number of observation in the second sample.

s = combined standard deviation.

XII. F- Test

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

Formula,

$$F = \frac{\textit{(Variance between sample)}}{\textit{(Variance within sample)}}$$

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

XIII. Test of Hypothesis

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

a) First hypothesis

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

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

b) Second Hypothesis

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

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

c) Third Hypothesis

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

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

CHAPTER IV

Data Presentation and Analysis

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

4.1 Financial Analysis

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

Table 4.1

Dividend per share of three commercial banks from 2004 to 2008

<u>Year</u>	<u>NIBL</u>	<u>SCBL</u>	<u>NSBI</u>
2003/04	20	110	8
2004/05	15	110	0
2005/06	12.50	120	0
2006/07	20	130	5
2007/08	5	80	12.59
Average	14.50	110	5.118
Standard Deviation (S. D.)	5.57	16.73	5.01
Coefficient of Variance (C.V.)	38.41	15.20	97.89

Source: Annual Reports of Commercial banks

Appendix-1

From the above table we can know the impact of dividends on the share price of the above mentioned banks during the period of five years i.e. from 2003 to 2008.

Among the three banks, NSBI does not pay the regular dividend. The average dividend pays by SCBL (Rs.110) is the highest. The minimum dividend was paid by NIBL (Rs.5) in the year 2007/08 and NSBI (Rs.5) in 2006/07 and the minimum dividend was paid by SCBL (Rs.130) in 2006/07.

By observing the C.V. of above commercial banks, we can arrange the above banks in the following descending orders of their consistency SCBL>NIBL>NSBI. It means there are least fluctuations in dividend payment of SCBL while dividend paid by NSBI has vast fluctuations. In other word, the dividend paid by NSBI is more variable than other banks while SCBL is less variable among them.

Table 4.2

Earning per share of three commercial banks from 2004 to 2008

<u>Year</u>	<u>NIBL</u>	<u>SCBL</u>	<u>NSBI</u>
2003/04	39.56	149.30	11.47
2004/05	51.70	143.55	14.26
2005/06	39.50	143.14	13.29
2006/07	59.35	175.84	18.27
2007/08	62.57	167.37	39.35
Average	50.54	155.84	19.33
Standard Deviation (S. D.)	9.66	13.33	10.26
Coefficient of Variance (C.V.)	19.11	8.55	53.08

Source: Annual Reports of Commercial banks

Above table shows that earning per share of the three commercial banks from the year 2004 to 2008. It shows that all the banks have earned form their investment and it's the earning which shows the strength of the firm. Among the three banks, the maximum earning was made by SCBL (Rs.175.84) in the year 2006/07 and minimum earning was made by NSBI (Rs.11.47) in the year 2003/04.

On average, the EPS of SCBL (Rs.155.84) is the highest followed by NIBL (Rs.50.54) and NSBI (Rs.19.33). S.D. measures for uniformity and homogeneity, so the small the S.D. (Rs.9.66) of NIBL shows the high uniformity in the earning while high S.D. (Rs.13.33) of SCBL shows the lack of uniformity in the earnings.

By observing, the C.V. of above three commercial banks we can arrange the above banks in the following descending order of their consistency SCBL > NIBL > NSBI. It means there are no more fluctuations in earning of SCBL while earning on NSBI shows vast fluctuations. In other word, the dividend paid by NSBI is more variable while SCBL is less variable among them.

Table 4.3

Price Earning Ratio of three commercial banks from 2004 to 2008

<u>Year</u>	<u>NIBL</u>	<u>SCBL</u>	<u>NSBI</u>
2003/04	20.10	10.98	22.24
2004/05	18.18	12.16	21.54
2005/06	20.25	16.38	25.21
2006/07	21.23	21.47	33.49
2007/08	27.63	35.25	29.89
Average	21.48	19.25	26.47
Standard Deviation (S. D.)	3.23	8.81	4.58
Coefficient of Variance (C.V.)	15.04	45.75	17.29

Source: Annual Reports of Commercial banks

Since PE Ratio is the relationship between the earning and market value per share, PE ratio reflects the price currently paid by the market for each rupee of currently resorted earning per share.

From the above table, it can be seen that the PE ratio of commercial banks were found to be normal. The average PE ratio of the banks can be set in the decreasing order as NSBI > NIBL > SCBL, it means the PE ratio of NSBI is the greatest and SCBL is lowest among the three banks.

The C.V. analysis shows that C.V. of SCBL (45.75), NSBI (17.29) and NIBL (15.04) which means NIBL is most consistent in PE ratio among other banks.

Table 4.4
Dividends Payout Ratio of three commercial banks from 2004 to 2008

<u>Year</u>	<u>NIBL</u>	<u>SCBL</u>	<u>NSBI</u>
2003/04	50.56	73.68	69.76
2004/05	29.01	76.63	0.00
2005/06	31.65	83.83	0.00
2006/07	33.70	73.93	27.37
2007/08	7.99	47.80	32.00
Average	36.23	71.17	43.04
Standard Deviation (S. D.)	8.44	12.25	18.99
Coefficient of Variance (C.V.)	23.29	17.21	44.12

Source: Annual Reports of Commercial banks

From above table, it can be observed the DP ratio of different three commercial banks from year 2004 to 2008. We can categorize the above banks as per the following assumptions.

Conservative Dividend Policy: DP ratio < 20%

Moderate Dividend Policy: DP ratio from 20% to 50%

Aggressive Dividend Policy: DP ratio > 50%

In the year 2003/04 all the banks paid dividend. NIBL has DP ratio 56.56%, SCBL has DP ratio 69.76%. In this year all the three banks had followed aggressive dividend policy.

In the year 2004/05 and 2005/06 NSBI was only the bank which has not paid any dividend and NIBL have followed the moderate dividend policy and paid 29.01 and 31.65 dividend respectively. SCBL have followed aggressive dividend policy and paid 76.63 and 83.83 dividend respectively.

In the year 2006/07, NIBL and NSBI paid 33.70 and 27.37 dividend respectively and had followed moderate dividend policy. SCBL has paid 73.93 dividends, as it has followed aggressive dividend policy.

In the year 2007/08, NIBL has followed conservative dividend policy as it has DP ratio of 7.99% and SCBL and NSBI has followed moderate dividend policy and paid 47.80 and 32 dividend respectively.

In average NIBL (36.23) and NSBI (43.04) followed moderate dividend policy while SCBL (71.57) followed aggressive dividend policy. The most DP ratio was in the year 2005/06 of SCBL (83.83%) and the least DP was of NIBL (7.99%) in the year 2007/08.

By observing the C.V., we can conclude that NIBL (23.29%) and SCBL (17.21%) have the consistent DP ratio and NSBI (44.12%) have large fluctuation on the DP and said to be not consistent.

Table 4.5
Dividend Yield of three commercial banks from 2004 to 2008

<u>Year</u>	<u>NIBL</u>	<u>SCBL</u>	<u>NSBI</u>
2003/04	2.52	6.71	3.14
2004/05	1.60	6.30	0.00
2005/06	1.56	5.12	0.00
2006/07	1.59	3.44	0.82
2007/08	0.29	1.36	1.07
Average	1.51	4.59	1.68
Standard Deviation (S. D.)	0.71	1.97	1.04
Coefficient of Variance (C.V.)	47.02	42.92	61.90

Source: Annual Reports of Commercial banks

Dividend yield highly influences the market value per share as change in dividend per share can be effective change in the market value of share. The above table shows the dividend yield analysis of three commercial banks from 2004 to 2008.

In the year 2003/04, SCBL acquired the most (6.71%) dividend yield while NIBL (2.52%) acquired the least and NSBI acquired 3.14% dividend yield. In the year 2004/05 and 2005/06 NSBI did not acquire less dividend yield, NIBL and SCBL acquired less dividend yield from previous year.

In the year 2006/07 and 2007/08, all the banks acquired dividend yield but NIBL and SCBL acquired less and NSBI acquired more dividend yield from the previous year.

From the analysis of five years average dividend yield, SCBL (4.59) have the highest dividend yield. The coefficient of variance analysis shows that the dividends yield of SCBL (42.92%) is the most consistent followed by NIBL (47.02%). By the C.V. of NSBI (61.90%) seems to be more fluctuating.

Table 4.6

Market Value per Share of three commercial banks from 2004 to 2008

<u>Year</u>	<u>NIBL</u>	<u>SCBL</u>	<u>NSBI</u>
2003/04	795	1640	255
2004/05	940	1745	307
2005/06	800	2345	335
2006/07	1260	3775	612
2007/08	1729	5900	1176
Average	1104.80	3081	537
Standard Deviation (S. D.)	354.89	1601.97	342.69
Coefficient of Variance (C.V.)	32.12	52	63.82

Source: Annual Reports of Commercial banks

Market value per share evaluates value of shares in the market. In the year 2007/08, SCBL MPS was the highest of all i.e. 5900 and least MPS was 255 of NSBI in the year 2003/04. The average MPS of NSBI was least (537) and highest of SCBL (3081). The highest MPS was of SCBL in every year from 2004 to 2008.

The above banks can be arranged in the descending order of consistency as NIBL (32.12%), SCBL (52%) and NSBI (63.82%). the above C.V. shows that NIBL is more consistent and NSBI more fluctuating.

4.2 correlation analysis

Table 4.7

Correlation between DPS and MPS of three commercial banks

Bank	Coefficient of correlation (r)	Relationship	r ²	Probable Error
NIBL	-0.6329	Negative	0.4001	0.181
SCBL	-0.582	Negative	0.338	0.199
NSBI	0.745	Positive	0.555	0.134

Source: Annual Reports of Commercial banks

Appendix 2

Above table shows the relationship between DPS and MPS of three commercial banks respectively from the period of five years starting from 2004 to 2008. Among the three banks, two banks i.e. NIBL and SCBL are negatively correlated. Although coefficient of correlation (r) of NSBI (0.745) is greater than its P.E. (0.134), it is not significant as its $r < 6P.E.$

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

Table 4.8

Correlation between EPS and MPS of three commercial banks

Bank	Coefficient of correlation (r)	Relationship	r ²	Probable Error
NIBL	**0.902	Positive	0.8133	0.0562
SCBL	*0.764	Positive	0.5839	0.1256
NSBI	**0.985	Positive	0.9711	0.0090

Source: Annual Reports of Commercial banks

Appendix 3

* Correlation is significant at 0.05 levels (1-tailed)

** Correlation is significant at 0.01 levels (1-tailed)

The above table shows the relationship between EPS and MPS of NIBL, SCBL and NSBI respectively. Positive correlations have existed in all the three banks NIBL (0.902), SCBL (0.764) and NSBI (0.985). The correlation between PE ratio and MPS of SCBL (0.764) is significant at 0.05 level (1-tailed) and NIBL (0.902) and NSBI (0.985) is significant at 0.01 levels (1-tailed). From the above table, all the three banks shows the higher degree of relationship, where $r > 6PE$ in all. Therefore, it can be concluded that stock price is highly affected by their earning per share.

Table 4.9

Correlation between PE ratio And MPS of three commercial banks

Bank	Coefficient of correlation (r)	Relationship	r ²	Probable Error
NIBL	*0.898	Positive	0.8057	0.0584
SCBL	**0.994	Positive	0.9888	0.0036
NSBI	0.675	Positive	0.4555	0.1642

Source: Annual Reports of Commercial banks

Appendix 4

* Correlation is significant at 0.05 levels (1-tailed)

** Correlation is significant at 0.01 levels (1- tailed)

From above table it can be seen the relationship between PE ratio and MPS of the three different banks. Positive correlation occurs between all the banks. Although NSBI's coefficient of correlation (r) is greater than PE, it is not significant as its $r < 6PE$ while that of NIBL and SCBL's $r > 6PE$. That's why NIBL is significant at 0.05 levels (1-tailed) and SCBL is significant at the 0.01 level (1-tailed). It shows that PE ratio has positive effect in the stock price.

Table 4.10
Correlation between DP ratio And MPS of three commercial banks

Bank	Coefficient of correlation (r)	Relationship	r ²	Probable Error
NIBL	*-0.8244	Negative	0.6796	0.0966
SCBL	*-0.8603	Negative	0.7401	0.0784
NSBI	0.0642	Positive	0.0041	0.3004

Source: Annual Reports of Commercial banks

Appendix 5

* Correlation is significant at 0.05 levels (1-tailed)

Above table shows the relationship between DP ratio and MPS of three banks in the time period from 2004 to 2008. NIBL and SCBL show the negative relationship and have the correlation coefficient of -0.8244 and -0.8603 respectively and NSBI is positively correlated as correlation coefficient is 0.064.

High degree of negative relation exists in NIBL and SCBL which is significant at 0.05 levels (1-tailed). from above relationship between DP and MPS of banks in more case it shows negative relation so it can be said that DP affect on stock price negatively.

Table 4.11
Correlation between DY and MPS of three commercial banks

Bank	Coefficient of	Relationship	r ²	Probable Error
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	correlation (r)			
NIBL	*-0.867	Negative	0.7517	0.0749
SCBL	** -0.989	Negative	0.9788	0.0064
NSBI	-0.070	Negative	0.0050	0.3001

Source: Annual Reports of Commercial banks

Appendix 6

* Correlation is significant at 0.05 levels (1-tailed)

** Correlation is significant at 0.01 levels (1- tailed)

The above table shows relationship between DY and MPS. It shows negative relationship between DY and MPS in all the three banks NIBL (-0.867), SCBL (-0.989) and NSBI (-0.070). Among three banks NIBL and SCBL exist high degree of negative relation which is significant at 0.05 levels (1-tailed) and at 0.01 levels (1-tailed) respectively. It means DY affect on stock price negatively of the above two banks.

4.3 Regression Analysis

Table 4.12

. Regression between MPS and EPS of three commercial banks

Banks	Constant (a)	Regression Coefficient (b)	Standard error	R2	SEE	t-value
NIBL	-570.451	33.150	9.1676	0.8134	197.9283	3.616
SCBL	-1234.092	91.858	44.7633	0.5840	1333.9528	2.052
NSBI	-99.413	32.927	3.2836	0.9710	75.3012	10.028

Source: Annual Reports of Commercial banks

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

From the table, it can be seen that the regression coefficient (b) of NIBL (33.150), SCBL (91.858) and NSBI (32.927) is positive which shows the positive correlation between MPS and EPS of concerned banks, which implies one rupee increase in EPS leads to an average of about Rs.33.150 increase in MPS of NIBL, Rs.91.858 in SCBL and Rs.32.927 in NIBI respectively holding other variable constant which can effect on MPS.

The coefficient of determination (R²) of NIBL (0.8134), SCBL (0.5840) and NSBI (0.9710) indication 81.34%, 58.40% and 97.10% of stock variation is explained by variation in EPS of NIBL, SCBL and NSBI respectively.

Table4.13

Regression between MPS and DPS of three commercial banks

Banks	Constant, a	Regression Coefficient, b	Standard error	R ²	SEE
NIBL	1689.758	-40.342	28.4923	0.4006	354.7265
SCBL	9213.500	-55.750	44.9343	0.3391	1681.2875
NSBI	266.30	52.8930	27.3303	0.5553	295.0391

Appendix 8

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

From the above table, we can see the regression coefficient (b) of NSBI (52.893) is positive which shows the positive correlation between MPS and DPS of NSBI, which implies one rupee increase in DPS leads to an average of about Rs.52.893 increase in MPS of NSBI holding other variables constant which can effect on the MPS.

The regression coefficient (b) is negative in NIBL (-40.342) and SCBL (-55.750) which indicates the negative correlation an implies one rupee increase in DPS leads to an average decrease on Rs.40.342 in NIBL and Rs.55.750 in SCBL. NIBL and SCBL show that these banks' MPS does not depends on DPS.

Similarly, the coefficient of determination (R²) of NIBL (0.4006), SCBL (0.3391) and NSBI (0.5553) indicates 40.06%, 33.91% and 55.53% stock variation is explained by variation in DPS of NIBL, SCBL and NSBI respectively.

4.4 Test of Hypothesis

4.4.1 First Hypothesis

Null Hypothesis (H₀): $\mu_1 = \mu_2 = \mu_3$ i.e. There is no significant difference in DPS of sample banks.

Alternative Hypothesis (H₁): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. There is significant difference in DPS of sample banks.

Dividend per Share

Year :. Bank	NIBL	SCBL	NSBI
2003/04	20.00	110	8.00
2004/05	15.00	110	0.00
2005/06	12.50	120	0.00
2006/07	20.00	130	5.00
2007/08	5.00	80	12.59

F- Test statistic

Correction Factor (C.F.) = 28001.38

Total Sum of Squares (TSS) = 35352.39

Sum of Square due to Row or Between Banks (SSR) = 33680.84

Sum of Square due to error or within Banks (SSE) = 1671.54

Table 14. One-Way ANOVA table for DPS

Sources of variation	Sum of Squares	Degree of Freedom (d.f.= n-1)	Mean Sum of Square (MS)	F-ratio
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Between Banks	33680.84	2 (3-1)	16840.42	120.89
Within Banks	1671.54	12 (15-3)	139.30	
Total	35352.38	14 (15-1)		

Appendix 9(A)

Critical Value: The tabulated value of F at 5% level of significance for 2 and 12 d.f. is 3.89

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

4.4.2 Second Hypothesis

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

Alternative Hypothesis (H_1): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. There is significant difference in DPS of sample banks.

Earning Per Share

Year ∴ Banks	NIBL	SCBL	NSBI
2003/04	39.56	149.30	11.47
2004/05	51.70	143.55	14.26
2005/06	39.50	143.14	18.27
2006/07	59.35	175.84	39.35
2007/08	62.57	167.37	39.35

F- test statistic

Correction Factor (C.F.) = 84903.83

Total Sum of Squares (TSS) = 53044.04

Sum of Square due to Row or Between Banks (SSR) = 51164

Sum of Square due to error or within Banks (SSE) = 1880.06

Table 15. One-Way ANOVA table for EPS

Sources of variation	Sum of Squares	Degree of Freedom (d. f.= n-1)	Mean Sum of Square (MS)	F-ratio
Between Banks	5114.00	2 (3-1)	25582.00	163.29
Within Banks	1880.06	12 (15-3)	156.67	
Total	53044.06	14 (15-1)		

Appendix 9(B)

Critical Value: The tabulated value of F at 5% level of significance for 2 and 12 d.f. is 3.89

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

4.4.3 Third Hypothesis

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

Alternative Hypothesis (H_1): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. There is significant difference in DPS of sample banks.

Dividend Payout Ratio (DPR)

Year .: Banks	NIBL	SCBL	NSBI
2003/04	50.56	73.68	69.76

2004/05	29.01	76.63	0.00
2005/06	31.65	83.83	0.00
2006/07	33.70	73.93	27.37
2007/08	7.99	47.80	32.00

F- test statistic

Correction Factor (C.F.) = 27128.61

Total Sum of Squares (TSS) = 11188.96

Sum of Square due to Row or Between Banks (SSR) = 6211.29

Sum of Square due to error or within Banks (SSE) = 4977.68

Table 16. One-Way ANOVA table for DPR

Sources of variation	Sum of Squares	Degree of Freedom (d.f.= n-1)	Mean Sum of Square (MS)	F-ratio
Between Banks	6211.29	2 (3-1)	3105.65	7.49
Within Banks	4977.68	12 (15-3)	414.81	
Total	1118.97	14 (15-1)		

Appendix 9(c)

Critical Value: The tabulated value of F at 5% level of significance for 2 and 12 d. f. is 3.89

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

4.5 Major Findings

The major findings of the study are stated as follows;

1. The average dividend per share (DPS) shows that there is no regularity in dividend payment. The SCBL has the highest DPS Rs.130 to the shareholders. The C.V. of the

DPS is 15.20%. NIBL and NSBI pay the lowest DPS Rs.5 and highest fluctuation C.V. 97.89%.

2. By observing the data of three commercial banks (NIBL, SCBL, NSBI) earning per share, the coefficient of variation indicates that there is no consistency of EPS. The C.V. is 8.55% of SCBL and that of NIBL is 19.11% and NSBI is 53.08%. SCBL has the highest average EPS Rs 155.84 and NSBI has the least average EPS is 19.33.

3. The average price-earning ratio (P/E) of NSBI is 26.47% and SCBL's P/E ratio is 19.25%. NSBL has highest P/E ratio. P/E ratio of SCBL is more unstable than others. Higher the P/E ratio indicates the favorable condition of the banks, so NSBI has favorable performance during the research period.

4. The analysis of DPR shows that in an average SCBL have the highest DPR 71.17% and least fluctuation. NIBL and NSBI's DPR is more fluctuating.

5. The average dividend yield of the banks under the study indicates that the dividend yield is quite low. SCBL has average dividend yield 4.59% and NSBI 1.68% and NIBL 1.51%.

6. The average market value per share (MVPS) shows that there is quite high level of fluctuation. SCBL has higher average MVPS Rs.3081 but average MVPS of NSBI so Rs.537 which is lowest in comparison to SCBL.

7. The DPS of SCBL is positively correlated with EPS, MPS and PE ratio. But the correlation between DPS and MPS, DPR and MPS and DY and MPS of this bank is negative.

8. The relationship between DPS of NIBL with EPS, MPS and PE ratio is positively correlated and relation between DPS & MPS, DPR & MPS and DY & MPS is negative.

9. The DPS of NSBI is positively correlated with EPS, PE ratio, DPR, DY and MPS.

10. The regression between MPS and EPS indicates that the regression coefficient (b) is positive in all the three banks NIBL, SCBL and NSBI.

11. The regression of MPS and DPS shows that regression coefficient (b) is positive in NSBI and negative in two banks NIBL and SCBL.

12. The first hypothesis between DPS of NIBL, SCBL and NSBI is greater than the tabulated value at 5% level of significance. So, null hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted which is significance.

13. The second hypothesis between EPS of three commercial banks is greater than the tabulated value at 5% level of significance. So, null hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted which is significance.

14. The third hypothesis between DPR of three commercial banks is greater than the tabulated value at 5% level of significance. So, null hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted which is significance.

Chapter V

Summary, Conclusion and Recommendation

In this chapter, three major aspects of the study are discussed; at the beginning all the findings have been summarized and some conclusions have been drawn up based on findings. The gaps found and factors to cause those gaps are also presented. This chapter is very important in the sense that;

- a) It shows a glance of the study what was observed during research.
- b) It concludes the findings in an understandable form and
- c) It provides some suggestion to the concerned authority as well as practitioner and academicians.

The recommendation is presented in this chapter considering major findings and gaps found there too.

5.1 Summary

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

This study attempts to analyze the dividend policy of commercial banks. The study is based on secondary data for a period of 2003/04 to 2007/08. To analyze the dividend payment practices of banks, different financial ratios have been calculated and interpreted.

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

It is found from the study that banks are paying dividend but there is instability of dividend and inconsistent payout ratio is the most applied phenomenon of Nepalese dividend distribution practices. The study shows that none of the banks have well defined and appropriate dividend policy. They don't seem to follow the optimum dividend policy of paying regular dividend as per the shareholders expectation. It might cause uncertainty among shareholder. A change in dividend per share and payout ratio affects the share price differently in different banks.

In Nepal, only a few listed companies have paying regular dividend to their shareholder. Further companies have not been following stable dividend policy. On the other hand, the dividend payout ratio of listed companies in Nepal has not been able to distribute fair dividends. The theoretical statement of this study is to study the dividend practices of sampled bank therefore, it is concluded that more or less the dividend policy depends on the earning per share of a company: the earning per share and dividend per share having the positive relation may also impact on market price of share. For this argument, there were two multiple regression formed.

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

The market price of share is affected by the financial position and the dividend paid by the firms. In the regards the MPS of the sample banks are seem to be fluctuated. It

denotes Nepalese investors are not treated fairly. The lack of financial knowledge and the market inefficiency has affected the market price of the share in all the sample banks.

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

5.2 Conclusion

In this section, the gaps perceived in this study are presented as conclusions. The issues related to dividend and other relevant factors found while analyzing the variables are also presented here. Then possible causes to perceive this gap will be scrutinized as far as possible.

1. There is lack of rules and regulations that bind companies to pay dividend every year. Not only the companies do not have dividend policy but also the government does not have any clear policy towards dividend.
2. There seems instability of dividend and inconsistency in dividend payout ratio of the banks.
3. Every year EPS and MPS highly fluctuation. The CV of EPS has ranged from 8.55 to 53.08 percent. Similarly market prices per share are also fluctuating. This short of fluctuation causes not to win public faith.
4. The average dividend yield of banks has ranged from 1.051 percent to 4.59 percent. The highest percent of 4.59 % is also cannot be considered so encouraging figure.

5. Shareholders in Nepal are not conscious. Taking the advantage of unconscious shareholders, the company management does not show the commitment promised in prospectors while raising capital. Promoter rules investors mentioning to pay attractive dividends, when company makes profit. However in reality, most of the companies are deviated from their statement as promise in prospectus.
6. Government does not have any clear policy towards dividend and to improve the efficiency of the companies. The number of companies can not earn enough profit and bureaucrats accused the cause of inefficiency to managers which is not sound.

5.3 Recommendation

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

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

BIBLIOGRAPHY

Gupta, D.P. (1984). *The Banking System: Its role in Export Development, The Financing of Exports from developing countries.* (International Trade Center, UNCTAD/GATT, Geneva)

Rao, R.K.S. (1992). *The Dividend Policy Decision.* Financial Management Concept and Application. New York: Mac Million Publishing Company. (2nd edition).

Gitman, Lawrence J. (1994). *Principles of Managerial Finance,* New York: Haper Collin's College Publisher. (7th edition)

Fred Weston. J. and Brigham, Eugene F. (1987). *Managerial Finance.* New York: Dryden Press. (7th edition)

Christy, George A. and Roden, P.P. (1976). *Finance Environment and Decision.* New York: Harper and Row Publishers.

Linter, J. (1956), *Distribution of incomes of corporations among dividends, retained earnings and taxes.* America Economic Review.

Chawala, D. and Srinivasan, G. (1987). *Impact of dividend and retention on share price – An econometric study, decision,* vol. 14.

Benartzi, S., Michaely, R. and Thaler, R. (1997). *"Do change in dividends signals the future or the past?"* The Journals of Finance.

Pradhan, R.S. (1993). *Stock Market Behavior in a small market: A case of Nepal,* The Nepalese Management Review, Vol. IX

Shrestha, M.K. (1980). *Financial Management, (Theory and Practice).* Kathmandu: Curriculum Development Center, T.U.

Timilsina, Buddhisagar. (2001). *"Dividend Policy: Comparative study between Nepal Grindlays Bank Ltd. and Nepal Indosuez Bank Ltd."* Unpublished Master's Degree Thesis. Kathmandu: Tribhuvan University.

Aryal, H.R. (1997). *Dividend policy: Comparative study between Nepal Arab bank ltd and Nepal Grindlays Bank Ltd.* Unpublished Masters' Degree Thesis. Kathmandu: Tribhuvan University.

K.C., Ramesh. (1991). *"Dividend Policy of Joint Venture Banks in Nepal".* An unpublished MBA, Thesis (CDM, T.U.).

Kunwar, Subhas, (2001). *"Dividend Policy: A comparative study between Nepal Insurance Company Ltd and National and General Insurance Company Ltd"*. Unpublished Master Degree Thesis, Kathmandu: Shanker Dev Campus.

Adhikari, Nabaraj. (1999). *Corporate Dividend Practices in Nepal*, Unpublished Master Degree Thesis, and Kathmandu: T.U. Kirtipur

Annual reports of selected banks.

Walter, James E. (1996). *Dividend policies and common stock prices*. Journal of finance, vol. 11

Gordon, Myron J. (1962). *The investment, financing and valuation of corporation*. Home wood 111. Richard D. Irwin.

Miller, M. and Modigliani, F. (1961). *Dividend policy, growth and the valuation of the share*. Journal of Business.

Wolff, H.K. and Pant, P.R. (1975). *A handbook for social science research and thesis writing*. Kathmandu: research division, Tribhuvan University. (4th edition)

Joshi, P.R. (2001). *Research Methodology*, Buddha academic publishers and distributors Pvt. Ltd.

Khan, M.Y. and Jain, P.K. (1992). *Financial Management*. New Delhi: Tata MC Graw-Hill Publishing Company Limited. (Second edition)

Horne, V. (1998). *Financial Management And Policy*. New Delhi: Prentice hall of India Pvt. Ltd.

Jaayers, R.S. (1987). *Modern Banking*. London: Oxford University Press.

Arkin, H. and Catlon, R. (1966). *Statistical Method*. New York: Barnes and Noble.

Dean, W.H. (1973). *Finance*. New York: The Dryden Press Library Congress.

Gautam, R.R. (1998). *Dividend Policy*. Comparative study on dividend policy of Grindlays Bank Ltd. Nepal Indosuez Bank Ltd. And Nepal Arab Bank Ltd. Unpublished Master's Thesis, Kathmandu: T.U.

Sharma, P.K. and Chaudhary, A.k. (2060). *Capital Structure Management*. Kathmandu: Khanal Books Prakashan.

Gautam, R.R. and Thapa, K. (2060). *Capital Structure Management*. Kathmandu: Ashmita Books Publishers and Distributors.

Websites:

www.nepalstock.com

(website of Nepal stock exchange)

www.nibl.com.np

(website of Nepal Investment Bank)

www.nrb.org.np

(website of Nepal Rastra Bank)

www.nepalsbi.com

(website of Nepal SBI Bank)

www.standardchartered.com

(website of Standard Chartered Bank)