CHAPTER-I
INTRODUCTION

1.1. General background

It is needless to say that our country is a small market where few economic activities are emerging in the recent years. The paramount feature of our economy is based on agriculture. A large portion of GDP is equipped with agriculture i.e. 33.4 percent and the contribution of industrial, commercial and trading sectors is 20.5 percent which clearly reveals the domination of agriculture in the economy. The developed economies of the world are the consequences of the development of industrial and commercial sectors. Unless we shift from agriculture to industrial and commercial sector, the economy of our country will not be enhanced (economic survey 2065/66).

The history of industrial development is very short in Nepal. Comparatively, industrialization and commercialization are the new phenomenon in Nepal (Pant; 2007). Establishment of Biratnagar Jute Mills in 1994B.S. marked the beginning of organized industry in Nepal. In the years that followed, industrial growth was accelerated. Similarly, the growth of industry in Nepal was accelerated when the government initiated the five years development plans from 2013B.S. The government on its own investment established the industries in sectors like cement, sugar, paper, bricks etc. After 1980s the government changed the strategy and shifted its development strategy from state–led development to market-led economy. As a result, many of the public sector industrial units were privatized in early 1990s and a number of large corporate houses came into existence from the private investment and joint venture investment. Bank and financial institutions along with insurance companies began to operate throughout the nation.

Sound financial structure of the nation is the symbol of rapid economic growth. Financial structure comprises financial institutions, large corporate houses, intermediary business, financial markets, financial policies, rules, regulations etc. Suitable industrial and commercial policies adopted by the nation foster the economic development. In the lack of required policies our country is still in the infant stage of economic prosperity. Establishment of large corporate houses, wider operation of

them, and industry friendly environment in the nation are the real foundations of the economy. The investment friendly environment only helps in the accumulation of huge capital via various finance companies, insurance companies and other intermediary firms.

Still the number of large investors and industrialists in Nepal is limited. General people are not aware about the saving and capital formation. This is due to lack of education in one hand and due to lack of encouraging policy towards investment in another. People have a large fund but they spend the fund in unproductive sectors like real estate, housing etc businesses. Investment in industrial and commercial sectors is comparatively less. So, the government is nowadays, formulating policies which encourage saving and investment in corporate sectors.

The advent of number of financial institutions is educating the people directly or indirectly in the capital formation and investment which are the major issues of capital market development. Economizing in consumption, saving is being the part of their income nowadays. This saving is turning into investment either in corporate sector or in others which is accelerating the wheel of economy to some extent.

Why people make the investment is a major issue of today. People save their income and make investment mainly for the purpose of generating additional income in the future. Basically, the investment made in corporate productive sectors like industry, trade and commerce yield more than the other unproductive activities. A number of investment alternatives are available in our capital market though it is very small and in the infant stage of development. Investment in shares, debentures, preference shares, corporate bonds issued by the organized institutions and treasury bills, development bonds etc issued by the government are the major investment alternatives. The investment decision of either small or large investor severely affected by the return that they expect to receive from the investment. Hence, return is the major consideration for the investment. The return may be in the different forms. Investor gets dividend as return from the investment in shares and interest as return from debentures, bonds, and other forms of borrowings.

Most of the investor are wise to invest their saving funds in stocks with the expectation of future cash inflow as dividend and maximize their holdings in the market. The dividend and the value of the firm are linked with the earning power of the firms which ultimately affects the market price of shares. In the literature of finance, dividend is not a new concept but the implication of dividend is still the matter of debate and study. Investors view dividend as the major determinant of investment decision, firms view that it is a major determinant of the value of the firm and capital market views it as a major determinant of market price of shares exposure of the companies. Thus, a number of decisions are interrelated with dividend. Dividend decision is one of the three crucial decisions of corporate finance and has great significance in its financial structure, funds flow, stock price, growth of firms etc. Therefore, corporate dividend policy decision is not an easy, straight forward and simple job as many people conceive it (Hackett; 1981). Corporate dividend policy has long been regarded as an unsolved economic puzzle, which requires rational resolution if the prevailing economic paradigm of corporate finance is to continue (Miller; 1986). Specifically speaking, dividend policy is a major policy of the firm which is related to the distribution and retention of earning available from the operation of business. To meet the shareholders expectation of return and wealth maximization goal of the firm, appropriate dividend decision is must.

Price of shares in the market is a regular phenomenon and is a function of different variables. Generally, it is determined by the interaction of demand and supply. The negotiation between seller and buyer determines the market price of shares. However, this market value can be different from its real value which is called intrinsic value or book value. Either the market value or intrinsic value both are affected by the dividend policy. Generally, a firm paying higher dividends has higher market value and vice versa. Therefore, dividend policy and market price of shares has always certain co-relation and the consequence of dividend policy can be realized in the market value. Dividend policy remains a source of controversy despite the theoretical and empirical research proved that it is relevant to value the firm and stock price in a side and on other it is irrelevant to value the firm. Hence, a generally accepted simple and conclusive relationship or linkage between dividend policy and stock price is still the matter of study. Though the stock price is not only affected by dividend policy but the effect of dividend policy on it is really significant. Duration effect, rate of return

effect, arbitrage pricing effect and information effect are other effecting factors. However, the major purpose of this research is to explain share price, dividend, and retained earning relationships in our Nepalese context. It attempts to ascertain the effect of dividend payment and retained earnings on market price of shares.

1.1.1 Dividend Policy & Market Price of Stock (MPS)

Once a company makes a profit, it should decide on what to do with the profit. It could continue to retain the profit within the company or it could payout the profit to the owners of the company in the form of dividend. Dividends are payments made to stockholders from a firms earning in return to their investment whether those earnings were generated in the current periods and policy refers to the decision about how much earnings at what form should be distributed. Thus dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained or reinvested in the firm. The objective of a dividend policy is maximization of shareholders wealth position. Dividend policy, however, is still a crucial as well as controversial area of managerial finance. It is more technical area of finance in the sense that it is complex on having numerous implications for the firm. Dividend policy may affect the areas such as financial structure of the firm, funds flow, stock prices, investors' satisfaction, growth of the firm etc like other major decision of the firm, i.e. investment and financing decision, the dividend decision has major role in any organization.

Dividend policy reflects the firm's decision to pay out earnings or to retain them for reinvestment in the firm. The dividend decision is the choice between retention and investment of earnings and the payout of earnings to the shareholders as dividend. It determines the division of earnings between payments to stock holders and reinvestment in the firm. 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 percentage of dividend payout term.

The dividend payout ratio may be different but the common dividend payout ratio is 40 percent as the different studies reveal. Keeping all these things into consideration, it could be said that the actual owner of the firm or company are not treated rightly by

not giving sufficient and reasonable dividend. Moreover in some companies dividend is not announced. But recently the trends of the dividend payment are increasing.

In the Nepalese context, dividend policy is less balanced. Theoretical & practical deviation has proved everything as written is not practiced and everything practiced is not of actual theory. Therefore dividend policy is the practice, strategy or decision made by a firm as per their requirements to establish market reputation as well as to meet general expectations of the shareholders.

The payment of the corporate dividend is at the discretions of the Board of Directors. Most corporations pay dividend quarterly. Dividend may be paid in cash, stock or merchandise. Cash dividend is the most common, merchandise dividends are the least common, Stockholders are not premised a dividend but he/she grows to expect certain payment on historical dividend pattern of the firm. Before dividend are paid to common stockholders the claims of creditors, the government and preferred stockholders must be satisfied.

The regularity of dividend payment and the stability of its rate are the two main objectives aimed by the corporate management. They are accepted as desirable for corporation's credit standing and for the welfare of shareholders. High earning may be used to pay extra dividend, but such dividend should be designated as extra and care should be taken to avoid the impression that the regular dividend is being increased. A stable dividend should not be taken to mean inflexible or rigid policy. On the other hand, it entails the payment of fair rate of return, taking into account the normal growth of the business and the gradual impact of external event. Higher the value of dividend higher will be the market value of the share.

Market price of the stock (MPS) is the trading price of the stock listed in authorized or legal stock exchange. In context of Nepal, MPS is the price that is quoted for purchasing or selling under Nepal Stock Exchange Act or related laws and regulations, on the stock exchange floor.

MPS is the value of stock which can be obtained by a firm from the market. Market value of a share is one of the variables which is affected by the dividend per share and

earnings per share of the firm. If the earning per share and dividend per share are high, the market value per share will also be high. Market value of the share may be higher or lower than the book value. If the firm is growing concern and it's earning power is greater than cost of capital, the market value of the share will be higher than the book value. If the firm's earning capacity is lower than cost of capital MPS will also be lower. MPS is determined by capital market.

Market price of the stock usually fluctuates by the adequate information. No one can earn more in the inefficiency and inefficiency is legally prohibited in order to regulate the security market in every nation. But being focused in this study, dividend policy and its impact on market price of stock, there should be discussed different models and practices which have significant effects in MPS or not. So, MPS and security valuation are integral parts in it. Without valuation no one can quote the price and there is no chance of trading.

Every day in newspaper one can see the market price of the different shares from different companies. The trading of the share definitely requires the MPS which can be obtained by the stock valuation. Share valuation is an economic process that generates rational securities prices. Although the price fluctuations may appear to be chaotic, they are random fluctuations that result from the random arrival of the new information.

Dividend policy and MPS has always correlation; if the company pays high dividend the MPS increases and vice-versa. But in some cases out of this interrelation, the price may remain constant or decrease too. Therefore the information lack or flow is also vital in the analysis of MPS.

1.2 Focus of the Study

Dividend is a major concern for the investor who makes investment in shares. Similarly, it is major financing decision for the firm. A number of studies have been made but a conclusive relationship between dividend price and market price of shares has not developed yet. In Nepalese context, people are making investment in hunch without any required information. Ascertaining the impact of dividend on market

price of shares of the selected organizations, comparison of MPS, EPS and DPS of them are the issues and this research focuses on resolving these issues. Moreover, this study focuses on the dividend practice made by selected commercial banks along with other qualitative discussion. Dividend policy is the general area of interest in the literature of finance and thus, focus of this study will be exactly determining the relation of dividend and market price of shares of the selected commercial banks.

1.3 Statement of Problems

Dividend decision is still a fundamental as well as controversial area of managerial finance. The controversy centers on whether or not the positive association between common stock return and dividend yields reported in a number of empirical studies can be attributed entirely to information effects (Litzenberger and Ramaswami; 1982). Due to complex nature of the problem corporate dividend policy has been a subject of considerable study particularly since the emergence of MM's classical works of irrelevancy theory.

A number of empirical studies have been carried out in the developed and developing capital market to establish a justifiable relationship between dividend and stock price. However, no conclusive relationship has been developed yet. Being a major financial policy, it is still in controversy and no uniform result and conclusion of the previous research is in existence now. Similarly, a small capital market in the developing stage has neither clear rules and regulations nor the corporate culture in the organization. People have miss concept about dividend and firms just make payment of dividend on adhoc basis. Only the bank and financial institutions are regularly dividend paying firms in Nepal. From manufacturing and trading sector only a very few firms make the dividend payment and the effect of same is reflected in stock exchange when the underlying securities are traded there.

Thus, this study has tried to answer the following research question.

a) What is the impact of dividend on market price of share?
b) What is the inter relation between MPS, EPS and DPS?
c) What are the reasons behind the price volatility in addition to dividend?

1.4. Objectives of the Study

a) To analyze the impact of dividend policy on market price of share.

b) To examine the direction and magnitude of relation between financial variables of selected banks.

c) To analyze and explain the relation of MPS with EPS, DPS and retained earning of selected commercial banks.

1.5 Significance of the Study

As dividend is a major and sensitive element in the area of finance and investment. Investors make investment for the purpose of generating future cash inflow to maximize their wealth. It is thus, effective stimuli for the investment and at the same time maintain the goodwill of the company in the market. Similarly, dividend is the external exposure of the company too. Value of the firm, market price of shares, image of the organization etc are affected by the dividend decision. In the midst of these all facts, this study shall be significant to all the stakeholders (shareholders, prospective investors, the company itself, and the regulatory body) to some extent. Moreover, this study will support the future researcher by providing valuable information. Especially, the significance of this study can be summarized in the following points.

- Reporting the exact relation between dividend and market price of shares empowers the investors towards rationality of making investment in secondary market in general.
- The banks under this study will be benefited in the sense that they can formulate the appropriate dividend policy so as to meet the shareholders expectation and to maximize value of the firm.
- From the sample companies a general concept about the co-relation between dividend declaration and market price of share can be developed. Concerned body and policy maker may use this research as a reference to make the necessary provisions regarding dividend.

1.6 Limitations of the study

Basically this research is for the partial fulfillment of MBS. But the research has its own limitations which are listed below:

- This research has been carried out generally for academic purpose and thus, it lacks practical implication.
- This research is mainly based on secondary data as well as primary data.
- Data for the last five years from 2007/08 to 2012/13 has been used to make the study.
- Selection of less number of sample organizations is another limitation of this study.
- The results obtain from study can't be generalized for all similar organization due to varying nature of their operation and business.
- A number of factors affect the market price of shares but study of only an aspect i.e. dividend policy is the focus of the study.
- This is not a comprehensive study about the dividend policy but it is only a supplementary research.

1.7 Organization of the study

This study has been organized into five chapters:

Chapter1: Introduction

This chapter deals with subject matters of the study consisting background of the study , focus of the study, statement of the problem, objective of the study and significance of the study.

Chapter 2: Review of Literature

This chapter deals with review of the different literature of the study field. Therefore it includes conceptual framework along with the review of major books, journals, research works and thesis etc.

Chapter 3: Research Methodology

This chapter deals with research methodology and it includes research design, population and sample, source and technique of data collection, data analysis tools and limitation of the methodology.

Chapter 4: Data Presentation & Analysis

This chapter deals with analysis and interpretation of the data using financial and statistical tools described in chapter three. Similarly this chapter also includes the major finding of the study.

Chapter 5: Summary, Conclusion and Recommendation

This chapter deals with summary of the study held, the conclusion made ultimately and the possible suggestions and recommendations.

Bibliography, appendix and other support documents have also been incorporated at the end of the study.

CHAPTER-II
REVIEW OF LITERATURE

This chapter deals with the reviewing of different sources of dividend policy literature such as books, journals, research papers and unpublished thesis. A number of research and study have been made in the field of dividend policy. The objectives, methodologies and the results they have reported are the contents of this chapter along with the related core concepts of dividend. Thus, conceptual framework and review of related studies in national and international levels are two main contents of this chapter.

2.1 Conceptual Framework

2.1.1 Commercial Bank:

A bank is a financial institution that trade money. It accepts deposit from the public as fixed deposit, current account deposit and saving account deposit. The bank gives money in the form of loans and advances to the needy persons. It provides to customers a cheap medium of exchange like cheques. It gives the facilities transfer of funds, collecting customer's funds, purchase of shares, collecting dividend and purchase and sell foreign exchange etc.

A bank is an establishment, which makes to individuals such advances of money as may be required and safety made and to which individuals in truth money which not required by them for use. A banker is one who in the ordinary course of his business receives money, which he repays by honoring cheques of persons from whom or on whose account he receives it. Therefore a commercial bank is a financial institution that accepts the demand and time deposit from the business, institution and individuals and engaged in both business and consumer lending. It uses funds raised from the public deposits providing loans to different sectors with the prime objectives of profit maximization. Moreover, commercial bank provides technical and administrative assistances to industries and trade businesspersons.

Commercial banks are among the base pillar of economic development of any nation. Especially in the developed countries, the operations of commercial banks record the economic pulses of the economy. The size and composition of commercial bank's transactions mirror the economic happening in the country. For example, the mass failure of commercial banks during the 1930's reflected the phenomenon of severe global depression in the world. Commercial banks have played the vital role in giving a direction for financing the requirements of trade and industry in the country.

Commercial bank not only generates the small savings from the nook and corner of the country, it in the border sense, help to promote secondary as well as primary security markets. Initial public offering (IPO), underwriting and security collateral loans are the examples. Similarly, it draws the community savings into the organized sectors, which can then be allocated among the different economic activities according to the priorities laid down by the planning authorities in the nation.

Basically in the planned economy, commercial bank not only provides economic resources but also provides assistants with technical know-how. They, in other hands, also do not discriminate the investment areas and organization whether the organization is public, joint venture, private sector or government. All these sectors are equally subsumed into the production plans which bank finance. Not only in the highly developed industrial and non-industrial economics of the world where in a way are the commercial and industrial activities paralyzed in the absence of banks. Keeping their doors open, even in the developing countries most economic activities, particularly in the economy's organized sectors are bank based. (Sinkey, 1988 12-14)

It was in the year 1984; when the government after a lot of deliberation threw open the banking sector to the private players. The first bank then to be established was Nepal Arab Bank Limited presently known as Nabil Bank Limited. Prior to this, a fully state owned bank namely Rastriya Banijya Bank (1966) and partly state owned bank namely Nepal Bank Limited (1936) were in operation. Another joint venture bank, Nepal Indosuez Bank Limited was established in (1986) and then the pace of establishment of bank from private ownership got the tremendous momentum in Nepal. After liberalization of the financial sector, the banking sector has made hall mark progress both in terms of number and beneficiaries. By the end of Chaitra 2065,

Nepal Rastra Bank has already licensed institutions as Banks and Non Bank financial institution. Out of them31 are fully fledged commercial banks, 76 Development Banks, 78 Finance Companies, 13 Micro Credit Development Banks, 16 saving and Credit Co-operatives and 45 NGOs (Economic survey 2065/66).

2.1.2 Dividend

Dividend refers to the part of earnings made by the firm that is distributed to the shareholders as return of their investment over equity share whether those earnings were generated in the current period or in previous periods. In other words, it is the rewards to shareholders for bearing the risk of uncertainty (Ghimire; 2002:8). Once a company makes a profit, it should decide on what to do with the profit. It could continue to retain the profit within the company or it could pay out the profit to the owners of the company in the form of dividend. Every firm prefers to make somewhat rational balance between these two alternatives. The firm adopts different approaches to distribute dividend according to their objectives. Given the objective of maximization of shareholders wealth, the firm should use net profits for paying dividends to the shareholders. Conversely, the firm should retain profit to finance the investment opportunities if the objective is to expand the business (Bhurtel; 2002:16).

The objective of a dividend policy should be to maximize the shareholder's return so that value of the investment is maximized (Pandey; 1995:739). Return consists of two components: dividends and capital gains. Dividend policy has a direct influence on these two components of return. The impact of dividend policy on future capital gain is however complex. Capital gains occur in distant future and therefore, are uncertain. Normally, it is said that the low payout policy accelerates earnings growth; investors of growth companies will realize their return mostly in the form of capital gains. But, it is not certain that low payout policy will lead to higher prices in reality. It is quite difficult to clearly identify the effect of payout on share price. Share price is a reflection of so many factors that the long-run effect of payout is quite difficult to isolate. A high payout policy means less retained earnings which will consequently result in slower growth and perhaps lower market price per share. A low payout policy will result into higher growth, higher capital gains and perhaps higher market price per share. Capital gains are, however, more uncertain than current dividend but current dividends are taxed more than capital gain. Therefore, it is quite plausible that

some investors would prefer high- payout companies while others may prefer low-payout companies. Thus, the relationship between dividend and the value of the share is not clear cut (Pandey; 1995:740). There is different decision models developed to analyze the situation and come to a conclusion as a decision. However, these decision models are still conflicting. One school of thought argues that dividend payment has no impact on value of the firm whereas other theories of dividend argue it to be an active variable in valuation (Bhurtel; 2002:16).

2.1.3 Theories of Dividend

In fact, dividend is the portion of the net earnings which is distributed to shareholders by a company. After successfully completing the business activities of a company, if the financial statement of it shows the net profit, the Board of Directors (BOD) decides to declare dividend to stockholders. Therefore, the payment of corporate dividend is at the discretion of the BOD. Most companies pay dividend quarterly. There are two fundamental theories regarding to dividend:

- Residual theory
- Wealth maximization theory

Residual Theory

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

Step 1

Determine the optimum level of capital expenditure which would be the level generated by the point of intersection of the investment opportunities schedule (IOS) and weighted average cost of capital (WACC) function,

Step 2

Using the optimal capital structure proportion, it would estimates the total amount of equity financing needed to support the expenditures generated in step 1.

Step 3

Because the cost of retained earnings K_r is less than the cost of new common stocks K_e, retained earnings would be used to meet the equity requirement determined in step 2. If retained earnings are inadequate to meet these needs, new common stock would be sold. If the available retain earnings are in excess to this needs, the surplus amount would be distributed as dividends.

Wealth Maximization Theory

Under wealth maximization theory, larger dividends is announced and distributed to shareholders. Basically, it is applicable for those companies which are just established and to those companies it will be beneficial whose financial profits are in decreasing trends. The main purpose of the wealth maximization theory of dividend is to make assurance to the stockholders that they are interesting in the firm, which has not better market value. Keeping these theories into considerations, dividend can be paid in different forms. Among them some are discussed below:

2.1.4 Forms of Dividend

The firm can give various types of dividend to the shareholders in the view of the objectives and policies which they implement. Before adopting any dividend policy, the firm must ensure the smooth growth of the firm as well as satisfy the expectation of the shareholders. "The type of dividend that corporation follow is partly a matter of the various circumstances and financial constraints that bound corporate plan and policies"*(Shrestha, 1980; 970).* Some of the major forms of dividends the firms can adopt are discussed below:

2.1.4.1 Cash Dividend

"Cash dividend is simply the dividend paid in cash or the proportion of net earnings which are distributed to shareholders as cash in proportion to their shares of company is known as cash dividend" *(Hasting; 1966).* It is most popular and widely used form of dividend all over the world.

Generally, stockholders have strong preference for cash dividend. Both the total assets and net worth of the company are reduced by same amount when the cash dividend is announced or distributed. Moreover, the need is that, the firm should have sufficient fund for the distribution of the cash dividend among shareholders or if the firm does not have sufficient fund for the distribution it should borrow from any source. For the better cash dividend stability cash planning, budgeting and control mechanism are suggested or required. Cash dividend has the direct impact on the shareholders wealth. It is one of the most interesting matters of the study and the volume of the cash dividend depends upon earnings of the firms and on the management attitude or policy. Cash dividend has the psychological value for stockholders. Each and everyone like to collect their return in cash rather than non-cash means. So cash dividend is not only a way to earning distribution but also a way of perception improvement in the capital market. The objectives of the cash dividend are:

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

2.1.4.2 Stock Dividend and Stock Split

A Stock Dividend is the distribution of additional shares of stock to existing shareholders. "A Stock Dividend is paid in additional shares of stock instead of in cash and simply involves a book-keeping transfer from retained earnings to the capital stock account" *(Weston and Copeland, p; 680).* There is no cash involved in a stock dividend. Net worth remains unchanged and the number of shares is increased. When firm needs to retain high percentage of earnings, they issue stock so that the shareholders of the firm are not disgruntled. "With the stock split, the number of share is increased through a proportional reduction in par value of the stock *(Van Horne, p; 325).* A 10% Stock dividend means that one share of stock for every ten shares already owned is given to each shareholder. In case of 2 for 1 stock split, each shareholder would be given one additional share of stock for every share already owned by each of the shareholder. The stock spilt does not involve any cash payment,

only additional certificates representing new shares are issued. The effect of a Stock Dividend or a Stock Spilt can be summarized as follows:

a) There is no change in the firm's assets or liabilities or in shareholder equity (Assets less liabilities).
b) There is fall in per share earnings, book value and market price and an offsetting rise in the number of shares held by each shareholder.

2.1.4.3 Reverse Spilt

A method that is used to raise the market price of a firm's stock by exchanging certain number of outstanding share for one new share of stock. The effect of Reserve Spilt is a decrease in the number of shares outstanding and an increase in a par or stated value of the shares. The total net worth of the firm remains unchanged. The Reverse Spilt does not involve any cash payments c0 only additional certificates representing new shares are issued.

2.1.4.4 Bond Dividend

Companies/ firms can give dividend in the form of bonds. Bond Dividend helps to postpone the payment of cash. These are given when the firms unable to take the burden of interest of loans. In other words, firms declared dividend in the form of its own bond with a view to avoid cash outflow.

2.1.4.5 Scrip Dividend

Dividend paid in promissory notes is called Scrip Dividend. When earning of the firms justify dividend but the company's cash position is temporarily weak and does not permit cash dividend. It may declare dividend in the form of Scrip. "Scrip dividends are those paid in the company's promises to pay instead of cash"*(Encyclopedia Americana, 1997; 539).* Scrip dividends may bear a definite maturity date or it may be left to the directors. Such dividends may be interest bearing or non-interest bearing.

2.1.4.6 Share Repurchase

Share repurchase is a method in which a firm buys shares of its own stock in cash from the surplus cash. Share repurchase is often viewed as an alternative to paying dividends. A company can reduce the number of shares by repurchasing the shares.

The Stock price must rise after the stock repurchase if the price earnings ratio remains unchanged. "If a firm has excess cash and insufficient investment opportunities to justify the use of these funds, it is in the shareholders interest to distribute the funds. The distribution can be accomplished either by the repurchase of stock or by paying the funds are in increased dividends" *(Van Horne; 330).* Thus, repurchase of stock is considered as an alternative to payment of dividend. Share price for repurchase or the equilibrium price is calculated from the following equation:

$$\text{Repurchase Price } (p^*) = \frac{S \times Pc}{N-n}$$

Where,

S = Total number of shares outstanding.

Pc = Current market price per share.

N = Total number of outstanding shares.

n = Number of shares to be repurchased

2.1.4.7 Interim Dividend

Generally dividend is declared at the last of financial year. This is called is regular dividend whereas directors can declare the dividend before the end of the financial year, this is called interim dividend. Payment of interim dividend is made by the firms which has more certain earning and wants to address the shareholders expectation. This form of dividend payment is rarely used.

2.1.4.8 Property Dividend

Instead of cash, dividend can be given in the form of property. This method of paying dividend is rarely used. This form of dividend may be followed wherever there are assets that are no longer necessary in the operation of the business.

2.1.5 Dividend Policy

The policy, which decides on how much of the earnings a firm, should retain for reinvestment and how much it should pay to shareholders as dividend is known as dividend policy. It is the third major decision of a firm which aims at maximization of shareholders wealth. Dividend policy determines the division of earnings between reinvestment in the firm and payments to shareholders. Retained earnings are one of

the significant for financing corporate growth but dividends refer to the cash flow that accrues to shareholders (Weston and Copeland; 1991:657).

The third major decision of the firm is its dividend policy, the percentage of earnings it pays in cash to its stockholders. Dividend payout, of course, reduces the amount of earnings retain in the firm and affect the total amount of internal financing. The dividend payout ratio obviously depends on the way earnings are measured for ease of explosion, we use account net earnings but assume that these earnings can form true economic earnings. In practice, net earnings may not conform and may not be an appropriate major of the ability of firm to pay dividends (Horne, 2000: 305).

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

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

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

Stability or regularity of dividends is considered as a desirable policy by the management of companies. Three of the more commonly used dividend policies are:

2.1.5.1 Constant Dividend Payment Policy

Constant dividend policy is based on the payment of a fixed rupees dividend in each year/period. A number of companies follow the policy of paying fixed amount per share as dividend every year without considering the fluctuation in the earning of the company. The policy does not imply that the dividend per share of dividend rate will never be increased. When the company reaches at new level of earnings and expects to maintain it, the annual dividend per share may be increased. Investors who have dividends as the only source of their income prefer the constant dividend policy.

2.1.5.2. Constant Payout Ratio Policy

The ratio of dividend to earning is known as dividend payout ratio. When fixed percentage of earnings is paid as dividend in every year, the policy is called constant payout ratio. Since earning fluctuates, following this policy necessarily means that the amount of dividend will fluctuate though the payout ratio remains almost constants. It ensures that dividends are paid when profits are earned and avoided when it incurs losses, regardless of the desire of the share holders.

2.1.5.3 Low Regular Dividend plus Extra Payment Policy

The low regular dividend plus extra payment policy is a compromise between the first two. It gives the firm flexibility but it leaves investors somewhat uncertain about what their dividend income will be. If a firm's earnings are quite volatile, however, this policy is appropriate. A minimum amount will be given regularly. When the company earns more, it gives additional amount as dividend and when company earns less, only minimum payment will be made. Basically, this policy would be appropriate when the earning of the company is not stable and constantly growing.

2.1.6 Factors Influencing Dividend Policy

Many considerations may affect a firm's decision about its dividend policy. Dividend is that decision which is influenced by many internal as well as external factors. Management has to consider economic and non economic factors before establishing dividend policy. Some of them are unique to that company and some of the more general considerations. In practice, the financial executives consider the following factors when approaching with dividend decision.

a) Desire of Shareholders

Shareholders may be interested either in dividend income or capital gains. Wealthy shareholders in a high income tax bracket may be interested in capital gains as against current dividends. A retire and old aged person, whose sources of income is regular dividend in a closely held company prefer high dividend payment. Management usually knows the desires of shareholders and accordingly adopts a dividend policy that satisfies all shareholders. But in a widely held company, numbers of shareholders is very large and they have diverse desires regarding dividends and capital gains. Some shareholders want cash dividends, while other prefers bonus share.

b) Stability of Earning

A firm that has a stable earnings trend will generally pay a larger portion of its earnings in dividends. If earnings fluctuate significantly, a larger amount of the profits may be retained to ensure that enough money is available for investment projects when needed. Therefore, firms having stable earnings more likely to pay out higher earnings or higher percentage of its earnings than the firm with fluctuating.

c) Liquidity position

The cash or liquidity positions of the firm influence its ability to pay dividends. A firm may have sufficient retained earnings but if they are invested in fixed assets, cash may not be available to make dividend payment. Thus, even if a firm has a record of earning, it may not be able to pay cash dividends because of liquidity position. Therefore, the firm must have adequate cash available as well as retained earnings to pay dividends.

d) Past dividend

A firm with record of past dividend payments strive to maintain the same in the future. Dividends are habit forming. If the market does not receive its expected dosage, the stock price will suffer. “The majority of firms surveyed indicated they would maintain their current dividend payments even if they are operating at a net loss for an interim period”.

e) Need to repay debt

When a firm has issued debt to finance expansion or to substitute for other form of financing, it is faced with two alternatives. It can refund the debt at maturity by replacing it with another form of security or it can make a provision of paying off debt. If the decision is to retire the debt, this will generally require the retention of earnings. It decreases cash flow to pay dividend. In such a case also the dividend decision will be effected.

f) Profit Rate

A high rate of profit on net worth makes it desirable to retain earnings rather than to pay them out if the investors will earn less on them.

g) Rate of Asset Expansion

There is need of more financing if a firm is growing rapidly. A high rate of asset expansion creates a need to retain funds rather than to pay dividends.

h) Restrictions in debt contract

Debt contracts, especially when long-term debt is involved, often confine a firm's ability to pay cash dividends. In other words, restrictions in debt contracts may specify that dividends my be paid only out of earnings generated after signing the loan agreement and only when net working capital is above a specified amount. Similarly preferred stock agreements generally state that no cash dividends can be paid on the common stock until all accrued preferred dividends have been paid. These types of limitations persuade the dividend policy of the firm.

i) Tax position of shareholders

The tax position of stockholders also affects dividend policy. Corporations owned by large taxpayers have high income tax brackets tend towards lower dividend payout where as corporations owned by small investors tend towards higher dividend payout.

j) Access to capital market

A firm's access to capital market will be influenced by the age and size of the firm. A large and well established firm with a record of profitability and stability of earning has easy access to capital market and other forms of external financing. In contrast, a small and new firm's ability to raise equity or debt funds from capital market is restricted. So a small and new firm must retain more earning to finance its operation. Therefore, a well-established firm is likely to have a higher payout ratio than a smaller newer firm.

k) Legal Rules

The legal rules constrain dividend payment on certain conditions as follows:

- Capital impairment rule states that dividend should not be paid out of paid up capital, which causes adverse effect on security of creditors and preference shareholders.

- The new profit rule state that dividend must be paid from present profit and or past- retained earnings.
- The insolvency rules state that when liabilities exceed assets, no dividend can be paid.

l) Control

For many small firms and certain large ones, maintaining the controlling vote is very important. These shareholders would prefer the use of debt and retained profits to finance new investments rather than issue new stock. If the current shareholders cannot or do not subscribe the new shares, new stockholders can dilute their controlling interest in the firm. Thus shareholders who are very sensitive to a potential loss of control prefer a low dividend payment policy.

m) Inflation

In indirect way inflation also pay decisive role in dividend decision. Our accounting system is based on historical cost. Depreciation is charged on the basis of original costs at which assets were acquired. When the price increases, funds saved on account of depreciation would not be adequate to replace assets or to keep the capital intact. Consequently, the company may have to retain high percentage of earning to maintain the capital intact or replace equipment.

n) Investment Opportunity

Dividend policy is greatly influenced by the financial needs of the company. A growing firm gives preference to the retention of earnings over the payment of dividends in order to finance its expanding activities. Thus investment opportunities of firm also influence dividend policy.

o) Dividend policy of competitive concerns

Another important factor, which influences the dividend policy, is the dividend policy of other competitive concerns in the market. If the other competing concerns are paying higher rate of dividend than this concern, the shareholders may prefer to invest their money in those concerns rather than in this concerns. Hence, every company

will have decided its dividend policy by keeping in view the dividend policy of other competitive concerns in the market.

2.1.7 Dividend Policy and market price of share (MPS)

Dividend policy of a firm should be to maximize the value of the shareholders wealth. The payment of dividends conveys to shareholders that the company is profitable and financially strong. The growth of the dividends with the growth of earnings of matured companies will communicate very convincing information and consequently the MPS will significantly influence." *(Pandey cit; 689)* MPS is that value which can be obtained by a firm from the market. Market value is one of the variables, which is affected by the dividend per share, earning per share of the firm. If the earning per share and dividend value is high, the market per share will also be high. Market values of the share may be high or low than the book values. If the firm is growing concern and its earning power is greater than the cost of capital, the market value of the share will be higher than the book value. If the firm's earning capacity is lower than cost of capital MPS will also be lower. MPS is determined by capital market.

Market price of the stock usually fluctuated by the adequate information. No one can earn more in the inefficiency and inefficiency is legally prohibited in order to regulate the security in every nation. But being focused in this study, dividend policy and its impact on market price of stock, there should be discussion on different models and practices, which have significant effects in MPS or not. So MPS and security valuation are integral parts. Without valuation no one can quote the price and without price there is no chance of trading.

Greater the perfection availing in the stock market, the higher will be the relevancy of dividend policy over the market price. The cash dividend of the normal firm will have significant effect on the market price since the company is viewed as a firm of the future prospects and growth. The following framework will clear the relationship between the variables.

Independent Variables	Dependent Variable
Cash dividend Stock Dividend Earnings Per Share Dividend Yield Retention Rate	Market price of share

"Share valuation is an economic process, which generates rational securities prices. Although the price fluctuation may appear to be chaotic, they are random fluctuation that results from the random arrival of the new information" *(Francis, 1990; 207).* Market price of the stock (MPS) is the trading price of the stock listed in authorized or legal stock exchanges. Dividend policy and MPS has always correlation, if the company pays high dividend the MPS increases and vice- versa. But in some cases out of this interrelation, the price may remain constant or decrease too. Therefore, the information lack or flow is also vital in the analysis of MPS. In the context of Nepal, MPS is the price that is quoted for purchasing or selling under Nepal Stock Exchange Act or related laws and regulations on the stock exchange.

2.1.8 Legal Provisions Regarding Dividend Policy

No special act has been enacted to make necessary provisions about dividend in Nepal. Company Act 2006 and Bank and Financial Institution Act 2006 have made certain provisions to provide guidelines to declare and distribute dividend to the companies. Section 182 of the Company Act has the following provisions.

- Except in the following circumstances, dividend shall be distributed to the shareholders within 45 days of the decision made to provide dividend.
    1. If any law prohibits the distribution of dividend
    2. If the right to receive dividend is subject to any dispute
    3. If, in a circumstance beyond control of the company or for any reason, dividend cannot be distributed within the said time.

b) A company fully or partly owned by the government of Nepal may distribute dividend only after obtaining approval of the government of Nepal.

c) If the company failure to distribute dividend within specified time, the dividend shall be distributed together with interest prescribed.

d) Only the shareholders whose name is registered in the share register book shall get the dividend.

e) Before paying dividend, a company shall have fully deducted the pre-operation expenses, the amount required to be depreciated in accordance with accounting standards and amount of accumulated loss in previous years.

f) Interim dividend may be distributed on the discretion of the board of directors in the following circumstances.

a) Article of association permits the distribution.

b) If the financial statements of the year from which interim dividend is to be paid is already certified.

g) Annual general meeting is only authorizes to declare and distribute the dividend.

h) The amount of dividend not claimed by the expiry of five years from the date of declaration shall be credited to the investor protection fund.

Similarly, section 179 has made the provisions about bonus shares. The provisions are:

- Out of the amount available for distribution of dividend, a company may by adopting a special resolution in annual general meeting issue bonus shares to its shareholders.
- The distribution of bonus shares must be informed to the office of the company registrar.

Bank and Financial Institution Act 2006 has just introduced a section to restrict the dividend distribution without any other provisions. Section 46(1) of the act prohibits licensed institution to declare or distribute dividends to the shareholders until it has recovered all its preliminary expenses and the losses sustained by it until the previous year as well as until it fulfills the requirements relating to capital fund, risk bearing fund and general reserve fund to be fulfilled under section 44 and the shares set aside for the public subscription are sold and fully paid. Section 46(2) requires every licensed institutions has to obtain the approval of Nepal Rastra Bank before declaring and distributing dividends.

Thus, the regulatory body has not clear provision in one hand and in another they are deregulating to the companies. All the companies are free to formulate the necessary strategies regarding dividend.

2.2 Review of related Studies

2.2.1 Review of Major International Studies

Van Horne & Mc Donald (1971) conducted a more detailed study on *'Dividend Policy and New Equity Financing'.* The purpose of this study was to investigate the combined effect of dividend policy and new equity financing decision on the market value of the firm's common stocks. They explored same basic aspects of conceptual framework, and empirical tests were performed during year end 1968, for two industries, using a well known valuation model, i.e., a cross-section regression model. The required data were collected from 86 electric utility firms included on the COMPUSTAT utility data tape and 39 firms in the electronics and electronic component industries as listed on the COMPUSTAT industrial data type.

They tested two regression models for utilities industries.

First Model was,

$P_0/E_0=a_0+a_1\,(g)+a_2(D_0/E_0)+a_3(lev)+u$[18]

Where,

P_0/E_0 = Closing market price in 1968, divided by average EPS for

The Second Model was,

$P_0/E_0 = a_0+a_1\,(g)+a_2(D_0/E_0)+a_3(lev)+a_4(Fa)+a_5(Fb)+a_6(Fc)+a_7(Fd)+u$[19]

Where,

Fa, Fb, Fc and Fd are dummy variables corresponding to "new issue ratio" (NIR) groups A through D.

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

Where,

$P_0/E_0 = a_0+a_1+ (g) +a_2(D0/E0)+a_3(lev) +a_4(OR)+u$[20]

Lev = Financial risk, measured by long-term debt plus preferred stock dividend by bet worth as of the end of 1968.

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

By using these models, they compared the result obtained for the firms which both pay dividends and engage in new equity financing with other firms in an industry sample. They concluded that for electric utility firms in 1968, share value was not adversely affected by new equity financing in the presence of cash dividends; expect for those in the lightest new issue group and it made new equity a more costly form of financing than the retention of earning. They also indicated that the payment of dividends through excessive equity financing reduces share prices.

James E. Walter (1963) carried out a study on *'Dividend policy: its Influence on the Value of the Enterprise'* and argues that the choice of dividend policies usually affect the value of firm.

Walter argues that dividend policies almost always affect the value of the enterprise. The investment policy of a firm van not is separated from its dividend policy which is just opposite of what MM said. The key argument in support of the relevance proposition of this model is the relationship between the return of firm's investment or its internal rate of return(r) and its cost of capital (k). As long as the internal rate of return (r) is greater than the Cast of capital (k), the stock price will be enhanced by retention and will very inversely with dividend payout.

Basic assumptions of this model are:

- The firm has perpetual life.
- The value of EPS and DPS are assumed to remain constant forever in determining a given value.
- The firm's internal rate of return(r) and cost of capital (k) are constant.

- The firm distributes its entire earnings or retains it for reinvestment immediately.
- The firm finances all investment through retained earnings, that is debt or new equity is not issued.

Based on above assumption, Walter's formula to determine the market price per share is as follows:

Where,

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

P =Market price per share.

DPS =Dividend per share.

EPS =Earnings per share.

R =Internal rate of return.

K =Cost of capital.

According to Walter's model, the optimum dividend policy depends on the relationship between the firm's internal rate of return® and its cost of capital (k). Walter suggested different dividend policy for different types of firm, they are:

Growth Firm (r>k):

Growth firms are those firms which he expends rapidly because of ample investment opportunity; cost of capital or expected rate f return of shareholders.

This firm will maximize the value per share if they follow a policy of retaining all earning for investment. Thus, the correlation between dividend and stock price is negative such firm optimal dividend pay-out is zero.

Normal Firm (r = k):

The firms whose internal rates of return and cost of capital being equal are called normal firms. In such firms whether retains the profit or distributes dividend is matter of indifference. Means, firm's dividend pay-out ratio don't affect share price.

Declining Firm (r < k):

In contact of growth firm, if a firm doesn't have profitable investment opportunities, the shareholders will be better off if earnings are paid out to them so as to enable them to earn a higher return hr using the funds elsewhere. In other words id firm's rate of return(r} is less than lost of capital(k) the relation between dividends and stock price is positive, i.e. increase in DPS yields increase in marker price per share. Thus, optimum payout ratio for a declining firm is 100 percent.

Modigliani & miller's (1961), in their article *'Dividend Policy, Growth & Valuation of Shares'* presented a new model of valuation and argued that dividend policy has no effect on the firm's share price. They developed the drastically new idea that dividend policy of a firm is irrelevant, as it does not affect the wealth of shareholders. This article is the most comprehensive argument for the irrelevant of dividend. In the history of finance, firstly, they declared 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 argued that the value of the firm depends on the firm's earnings which depend on its investment policy. Therefore, as per MM theory. A firm's value is independent of dividend policy. MM's Hypothesis of irrelevance is based on following critical assumptions.

- There are no taxes.
- Risk and uncertainty doesn't exist.
- The firm operates in perfect Capital market.
- The firm has a fixed investment policy which is not subject to change.

They provided the proof on support of their argument in the following manner.

Step 1:

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,

$P_0 = \frac{D1+P1}{1+Ke}$

Where,

P_0 =Market price at the beginning or at the zero period.

Ke =Cost of equity capital (assume constant).

D_1 =Dividend per share.

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

Step 2:

Assuming that the firm doesn't resort to any external financing the market value of the firm can be computed as follows:

$nP_o = n(D_1+P_1)$

$$nP_o = \frac{n(D1+P1)}{1+Ke}$$

Where,

n = Number of equity shares at zero period.

Step 3:

If the firm's internal sources of financing its investment opportunities fall short of the funds required, and Dn is the number of new shares issued at the end of year 1 at price P1, then,

$$nP_0 = \frac{nD1+P1(n+Dn)-DnP1}{1+ke}$$

Where,

n = No. of shares at the beginning

D_n = No. of equity shares issued at the end of the period.

Step 4:

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

$DnP_1 = I – (E – nD_1)$

Or

$DnP_1 = I – E + nD_1$

Where,

DnP1 = the amount obtained from the sale of new shares to finance capital budget.

I= The total amount requirement of capital budget,

E= Earning of the firm during the period.

E- nD_1= Retained earnings.

Step 5:

By substituting the value of DnP1 from equation of step 4 to equation of

Step 6:

we find,

$$nP_0 = \frac{nD1+P1(n+Dn)-1+E-nD1}{1+Ke}$$

$$nPo = \frac{P1(n+Dn)-I+E}{1+Ke}$$

Conclusion:

Modigliani and Miller concluded that dividend policy has no effect on the share price. So, there is no role of dividend in above equation.

In this way, according to Modigliani and Miller's study "It seems that under condition of perfect capital markets, rational investors, absence of tax discrimination between dividend income and capital appreciation, given the firm's investment policy, its dividend policy may have no influence on the market price of the share". However, the view that dividend is irrelevant is not justified, once the assumption is modified is consider the realities of the world. In practice, every firm follows one kind of dividend policy or another. The selection of a certain dividend policy depends on the age and nature of the firm.

Myron Gordon (1962) carried out study and concluded that stock price is affected by dividend payout. He developed a model and states that investors are indifferent between retained earnings and current dividend. In his study, supported and concluded that dividend policy affects the value of shares even in a situation in which the return on investment is equal to the capitalization rate that is (r = ke). It is assumed that investors have a preference for present dividends more than the future capital gain under the condition of uncertainty. This argument stresses that an increase in

dividend pay-out ratio leads to increase in stock price for the reason that investors consider the dividend yield (D1/p0) is less risky than the expected capital gain. Hence, investors required rate of return increases as the amount of decreases. It is clear that positive relationship between the amount of dividend and stock prices.

Basic assumptions of this model are as follows:

- The internal rate of return (r) and cost of capital (ke) are constant.
- The firm and its steam of earnings are perpetual.
- The corporate taxes are ignored.
- The firm is an all equity firm (i.e. no debt exits.)
- No external financing is available so retained earnings would be used to finance any expansion.
- The retention ratio (b) once decided upon is constant. Thus growth rate g = b. r. is constant.
- 'Ke' must be greater than 'g' to get meaningful value.

According to Gordon, the market value of share is equal to present values of future streams of dividend. A simplified version of Gordon's model can be symbolically expressed as.

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

Where,

P = Price of a share

EPS = Earnings per share

b = Retention ratio.

(l-b) = Dividend pay-out ratio.

Ke = Capitalization rate or cost of capital.

b.r. = Growth rate

According to this model following facts are revealed.

Growth Firm (r>ke):

Share price tends to decline in correspondence with increase in pay-out ratio or decrease in retention ratio i.e. high dividends corresponding to earning leads to decrease in share price. Therefore, dividend and stock prices are negatively correlated in growth firm.

Normal Firm (r = ke):
Share value remains constant regardless of change in dividend policies which means dividends and stock prices are free from each other.

Declining Firm (r = ke):
Share price tends to rise in correspondence with rise in dividend pay-out ratio. It means dividend and stock prices are positively correlated with each other in declining firm.

2.2.2 Review of Journal and Articles

Barjacharya (2000.), in his article *"Monetary Policy and Deposit Mobilization in Nepal."* Concluded that domestic saving is one of the prime objectives of the monetary policy in Nepal and commercial banks resources in the form of deposit of private sector and providing credit to the investor in different sector of the economy.

Sharma, (2004), in his article, *"Banking the Future of Completion"* has said due to the bank of the investment revenues bank are tempted to invest without proper credit appraisal and on personal guarantee, whose negative side effects would show colors only after 4 or 5 years. Again he said that private commercial banks have mushroomed only in urban areas where banking transactions in large volume is possible the rural and sub urban areas mostly remain unattended too. This is likely to prevail till competition takes its fall rain in the urban area."

Ojha (2006) published an article *"Financial Performance and Common Stock Pricing."* His objectives of this study were to study and examine the difference of financial performance and stock prices, to examine the relationship of dividends and stock price and to explore the signaling effects in stock price and his major findings of his study were Nepalese stock market is in infancy stage. In general it is very new and just started to develop. Dominance of banking sector is prevalent in the market due to

other industries including finance companies, insurance and manufacturing is not encouraging. Corporate firm with long history have relatively stable profitability parameters that the firm established after the economic liberalization of 1990. Older firms have been issuing bonus share more times than the new one. Dividend per share is relatively more stable than the dividend payout ratio. That's why payout ratio and dividend yields have been highly fluctuating. Due to lack of proper investment opportunity most of the investors have directed their saving towards the secondary stock market. There is significant positive correlation between the dividends paid and stock prices of banking and manufacturing industries. All other have not a perfect correlation between the net worth per share and common stock price.

Timilsina (2007) conducted a research on *"Capital Market Development and Stock Price Behaviors in Nepal."* He published an article with a heading Capital Market. Major Findings of the Study are the coefficient of correlation between earning per share (EPS) and observed market value of share and also between the dividend per share (DPS) and observed market value of share were computed. Also regressions were run to see the influence of the explanatory variables, EPS and DPS on equity prices. A positive correlation was found to exist between EPS and the market price of the share. The coefficient of correlation between dividend per share and the market price was also computed taking DPS as independent variable and market price as dependent variable. A high degree of positive relationship (r= 0.83) was observed between the two variables.

Timilsina concluded that the market price of shares depends on EPS as well as on DPS, but DPS is more prices sensitive and it will have direct and immediate response in the market.

Charles and Christopher (2008), in his article *"Do Banks Provide Financial Slack?"* their main hypothesis is that the banks have the ability to accurately price financial claims thus including a preference for undervalued firms to choose bank debts as their marginal financial source. They refer to this escapes that this information benefit will be weighed against the verity of contracting costs in a firms ultimate financing choice since they expect that these firms are the most likely to be undervalued, these financing are consist dent with the presence of and information.

Benefit to bank debt finance. For identify whether the firms weighted these information benefits of bank finance against other contracting costs they examine the variation. In the sensitivity of the bank loan likelihood to their variables measuring potential under valuation they the find that firms with public debt outstanding tend to exhibit a relatively low sensitivity of bank loan likelihood to these variables. .since they accept that the contracting cost of bank debt information benefits of bank debt against the contracting costs.

The result suggest that for firms with public securities market for the firms to cross the threshold where the information benefits of bank debt finance outweigh the relatives contracting costs. Agricultural projects center has submitted in their report on where "ongoing evaluation of intensive Banking program in (October 1985)" this study has widely covered the whole aspects of IBP. It says due to the wide net work of commercial banks they have now 346 branches at present and the huge amount of ideal funds estimate at Rs. 3226 million in 1984/85 lying with them. The investment of commercial banks in the priority sectors areas seems justified. To generate intensive for commercial banks, it has necessary to raise the interest rate which would sufficiently cover up the cost leading leave some profit margin as well. As the indirect cost of borrowing small loan between two to three thousand rupees is six percentages some active measure could be taken to dower this rate to compensate the small borrows for the proposed rise in the rate of interest.

2.2.3 Reviews from Thesis

Bhattarai (2004) conducted his master's research on *"**Dividend Policy and its impact on Market price of Stock**"* with the data taken from two commercial banks and two insurance companies, analyzed the data of five years from 1995 to 2000 using simple and multiple regression equations has the following objectives:

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

Major findings of his study are as follows:

i. There is not any consistency in dividend policy in the sample firms. It has indicated the need of dividend strategy as well as the need of proper analysis of the respectively sector of the firms.
ii. Most of the Nepalese firm from the very past did not have profit planning and investment strategy, which has imbalanced the whole position of the firms. It means there is no consistency even in the earnings.
iii. The MPS is affected by the financial position and the dividend paid by the firms in this regards the MPS of the sample firms is seem to be fluctuated. It denotes that Nepalese investor is not treated fairly.
iv. The lack of financial knowledge and the market inefficiency has affected the market price of the share in all the firms.

Gautam, (2005) carried out a research on ***"Dividend Policy in Commercial Banks"*** which focuses on the objectives to identify the type of dividend policy that is being adopted and to find out whether the policy.The Main objectives of the study are;

- To examine the impact of dividend on share price.
- To identify the relationship between DPS and other financial indicators.
- To know if there is any uniformity among DPS, EPS and DPR sampled commercial Banks.

The Major findings of the study are as follows.

- There is the largest fluctuation in EPS and DPS,
- The relationship between DPS and EPS is positive; however it is not significant. There may be various other factors beside EPS to affects MPS and the growth rate of dividend is inconsistent.
- It concluded that no sampled commercial banks have followed distinctly defined dividend policy.

Bhurtel (2007) has conducted a study on ***'Dividend Policy and its Impact on Stock Price'.*** The main objectives of his study were;

1. To analyze the properties of portfolio formed on dividend.
2. To examine the relationship between dividend and stock price.

3. To survey the opinion of financial executive's on corporate dividend practices

This study mainly finds followings;

1. From the descriptive analysis, the researcher found there is not any consistency in dividend policy in the sample banks, which has maintained stable dividend per share policy. It has indicated the need of dividend policy as well as the need of investor analysis of the bank
2. Most of the Nepalese firm from the very past not profit planning and investing strategy, which have imbalanced the whole position of the firm. It means there is not consistency even in earning.

Yadav (2008) performed a study on ***"Dividend Policy and Its Impact on Market Price of Stock"*** based on four sample institution listed in NEPSE. Objectives of this study are, to study the prevailing practice of dividend policy to find the impact of dividend policy on market price of shares to analyze the uniformity among DPS, EPS and MPS he used the statistical as well as financial tools for analysis. The major findings are;

1. There is no consistency in dividend policy
2. Most of the Nepalese firms do not have profit planning and investment strategy.
3. Dividend payout ratio is almost 40% each year.
4. MPS is affected by the financial position and dividend payment.
5. Further, informational effects and market inefficiency also make the effect on MPS.

Adhikari (2009) has conducted a study **on** ***"Impact of Dividend on Market Price of Stock."*** The specific objectives were,

1. To examine the practices and effort made in dividend policy in the Nepalese firms with the help of sample firms.
2. To analyzed if there is any uniformity among DPS, EPS, MPS, NWPS and DPS in the sample firms.
3. To examine the impact of dividend on market price of stock.

The findings drawn by the study are as follows,

1. Dividend per share affected the share price validity in difference sector.
2. The relationship between dividend per share and stock price was positive in the sample companies.
3. Changing the dividend policy of dividend per share right to increase the market price of the share.

Chhetri (2010) has performed a study on ***"Dividend and Stock Price of Commercials Banks."*** The main objectives of his study were;

1. What is the relationship between dividend and stock price?
2. Does dividend payout affect the share price?
3. Do the results vary across the finance and non-finance enterprise?
4. What are main motives of paying cash and stock dividend?

The findings drawn by the study are as follows,

1. There is positive relationship between dividends and stock prices in sample companies.
2. Or assuming prefect capital market his study suggests that relationship between dividend and stock price is consistent.

Bista (2011) has conducted a research on ***"Impact of Dividend on Market Price of Shares of Selected Commercial Banks"*** with the aim to highlight the various aspects of dividend policies and practices in Nepal and to analyze the variable such as DPS, DPR, dividend yield and their relation with market value. Collecting the data from secondary source of year form 2006/07 to 2009/10, she analyzed and made the study using financial and statistical tools.

The objectives of this study are;

1. To examine the relationship of dividend with various factors like DPS, EPS, NWPS etc.
2. To find the impact of dividend on market price per share
3. To analyze if there is any uniformity among DPS, MPS, EPS, NWPS in the sample banks.

The findings drawn by the study are as follows,

1. Average EPS, MPS and DPS of commercial banks are fluctuating year by year.
2. There seems to be positive relationship between EPS, DPS, EPS and MPS, DPR and MPS in the sampled banks.
3. There exists negative relationship between dividend yield and MPS.
4. At last multiple regression analysis of MPS on EPS and DPS reveals the positive relation between MPS with EPS and MPS with DPS.

Bhattrai (2012) has performed study *on* ***"Dividend Practice of Commercial Bank and Impact on Stock Price"***. The objectives of the study are as follows;

1. To analyze the impact of dividend on stock price.
2. To identify the relationship of DPS with EPS and MPS.
3. To compare dividend practices of selected commercial banks

The summary of major finding of the study was as under;

1. There is high degree positive relationship between DPS and EPS in most of the banks as they are statically significant.
2. Relationship between DPS and MPS is found to be high degree of positive in most of banks as they are statically significant also.
3. All the selected banks paid dividend in each year which shows that dividend paying practice is established in Nepalese commercial banks.
4. The dividend per share of the Nepalese commercial bank is depending on current earnings. The banking is following earning based dividend policy.

2.3 Research Gap

Various studies in national and international level have been conducted but the justifiable relation of dividend on MPS has not reported yet since they are conducted under certain assumption but the real world is different. A study made in America does not significant for our country since the capital market mechanism is different. Similarly, a research made on a period may not be true at all other points of time; hence, updating those results is must. Due to time and resource constraint, not a comprehensive study has been made. Only taking the sample as representative data

almost studies have been conducted. Therefore, the results cannot be generalized to explain the whole behavior of market.

This research is not a comprehensive research but it is a supplementary research about dividend policy in Nepal. Different scholars has developed linear regression model to describe the relation of DPS and MPS for individual firms separately. Generally, regular dividend paying companies are being the matter of their study. But in this research, the researcher has sampled the companies that are regularly dividend distributing and not distributing companies. Highly reputed, growing and poor performing bank are the firms under study. Study of these three categories of banks in relation to the dividends and MPS, a representative result will be obtained which will explain the relation of MPS and dividend of Nepalese commercial banks. Developing models to explain the relation of MPS with DPS, EPS, RE, lagged DPS, lagged E/P ratio etc in Nepalese commercial banks will be a really a new and distinct study and thus, will be beneficial for further research and studies too.

CHAPTER - III
RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problems. It refers to the various sequential steps to be adopted by a researcher is studying a problem with certain objects in views (Kothari, 1978, p: 19). All the methodological aspects of the study are the main contents of this chapter. Describing the methods and process applied to complete the entire study is methodology. To attain the objectives of the study, sources of data and data collection procedure, sampling methods used, research design applied, tools used etc covers the first part of this chapter. In next section, the tools and techniques that are used to tabulate, interpret and analyze the collected data are depicted. To address the aforesaid problems and to achieve the objectives, this section of the study is directed. However, this chapter describes the methodology employed to conduct the study.

3.1. Research Design

Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances (Kerlinger 1978, p: 300). This study does not strictly follow entire aspect of a single research design. Both qualitative and quantitative types of data and information have been processed. So, descriptive, comparative (co-relational) designs have been used to find the impact of dividend policy on market price of shares. In order to ascertain the extent to which dividend and market price are related; to describe whether these two or more other variables co-vary and if so, to establish the direction, magnitude and form of observed relationship, comparative design would be appropriate. Similarly, descriptive nature of associated problems and other objectives of the study, descriptive design would be additional benefit to make this study complete and meaningful.

In addition to this, casual comparative design has employed. This design has helped to investigate the possible causes affecting market price of shares by observing existing situation and to search the possible factors leading to these results. Hence,

descriptive, co-relational and casual comparative designs have been used to complete this study.

3.2 Population and Sample

All the commercial banks whose securities are listed in NEPSE and whose shares are actively traded in the market are total population of this study. By the end of fiscal year 2012/13, total number of commercial banks listed in NEPSE is 31 represents the entire population of the study. Due to time and resource constraints and due to limited scope of this study, study of behavior of those all is not possible. Hence, using judgmental sampling method, on the basis of financial performance, three out of 31, three has been selected for the study. The bank having high reputation with high performance, bank which is growing in the market and performance is moderate and poorly performed bank have been sampled for the study. The researcher has believed that these three samples would represent each categories of banks in general perception.

i. Nabil Bank Limited (high performance)
ii. Siddhartha Bank Limited (moderate performance)
iii. Nepal Credit and Commerce Bank Limited (poor performance)

Rationale behind sampling these banks:

Quite formal and regular dividend policy can be seen in banks and other few large corporate houses. Therefore, researcher selected the banks to conduct this study. A comprehensive study collecting data from all banks is really impossible due to other constraints along with time and cost. Basically, the researcher wants to make this study representative study of dividend policy of banks in Nepal. Based on the performance in the latest years, a good performing bank, an average performing bank and a poor performing bank are selected to complete this study and to make this study representative.

3.3 Sources and Methods of Data Collection

Secondary data is defined as data collected earlier for a purpose other than the one currently being pursued (Pant; 2005). This research is mainly based on the secondary data as well as primary data. The data relating to dividend policy has been obtained

from concerned banks. In this study, data has been collected from different sources either in published or unpublished forms. Annual reports of the concerned banks, publications of SEBON, NEPSE, NRB, Annual reports of SEBON, Annual trading Reports of NEPSE, Economic Survey published by Ministry of Finance, Research Reports, newspapers, journals, articles, books etc are the major sources of data for this study. In addition to this, data from websites of NEPSE, SEBON, NRB, MOF and concerned banks are other sources of data. The relevant data have been collected by official visit, website search and library visit.

3.4 Data Processing Tools and Techniques

The purpose of processing the data is to change it from an unprocessed form to an understandable presentation so as to obtain answers to the research questions. Presentation of available data in tables and different diagrams help in analyzing and interpreting to draw meaningful conclusions there from. All the collected data, relevant facts have been systematically figured, and tabulated under the different headings for the purpose of analysis. So far as computation is concerned, it has been done with the help of computer program SPSS-11.5 and scientific calculator. Basically, financial and statistical tools have been used to analyze the collected data. The contents of these tools are as follows.

3.4.1 Financial Tools

Financial tools are those which help to study the financial strength and weakness of the sample firms. The financial tools used in this study are briefly presented below.

i) Earning per Share (EPS)

EPS is a financial tool used to know the earning capacity of the firm. Directly or indirectly, the market price of share is affected by the earning capacity of the firm. Thus, it helps in determining the market price of equity shares and in estimating the company's capacity to pay dividend to its equity shareholders. The performance and prospects of the company are also affected by EPS. Higher EPS reveals there is possibility of paying more dividend or issue bonus shares and thus it is true that MPS will be affected by all these factors. Similarly, comparison of EPS will also help in deciding whether equity capital is being effectively used or not. In this research, study

of EPS enables to make a comparison between the sampled banks and its effect on MPS. The ratio can be computed by dividing the earning available to equity shareholders by the total number of equity shares outstanding.

EPS = Earning available to equity shareholders/
Number of equity shares outstanding.

ii) Dividend per Share (DPS)

Dividend per share indicates the part of earning distributed to the equity shareholders on per share basis. DPS shows the portion of earning distributed to the stockholders. In order to flow the positive message in the market about the performance of the company, to meet the shareholders expectation a company makes the dividend distribution after retaining the required funds for internal financing and growth. It is true that higher DPS not only creates positive attitudes among shareholders but also helps to increase the market price of shares. Thus, MPS is also affected by DPS. In this research, study of DPS enable us to know the prevailing practice of dividend distribution in one hand and it works as an indicator of better performance in another. It is calculated by dividing the total dividend distributed to equity shareholders by the total number of equity shares outstanding.

DPS =Total Amount of Dividend paid to Ordinary Shareholders/
Number of equity shares outstanding.

iii) Dividend Payout Ratio (DPR) and Retention Ratio

DPR indicates as to what portion of EPS has been used for paying dividend and what has been retained for plaguing back. This ratio is very important from shareholders point of view as it tells him that if a company has used whole or substantially the whole of its earnings for paying dividend and retained nothing for future growth and expansion purposes, then there will be very dim chances of capital appreciation in the price of shares of such company. DPR is used to evaluate the financing practice and dividend distribution practice of the company. Dividend payment and retained earning both have certain impact on MPS. But the relation of dividend and retained earning is inverse each other. It means one factor has positive impact on MPS and another has negative impact and relation with MPS. In this research, it enables the

researcher to make comparison of different banks. Moreover, it a variable affecting MPS, so, the relation of MPS and DPR will be another part of the study. It is calculated by using the following formula.

DPR = Dividend per Share/ Earning per share

And, Retention Ratio = (1-Dividend payout ratio)

= (1-DPR)

iv) Dividend Yield (DY)

Dividend Yield is a percentage of dividends per share on market price per share .It measure the dividend in relation to market value of share. So, dividend yield is the dividend received by the investors as a percentage of market prices per share in the stock market. This ratio highly influences the market price per share because a small change in dividend per share can bring effective change in the market value of the share. The share with higher dividend yields is worth buying. Thus the price of higher dividend yields increase sharply in the market. Dividend has important guidance to commit funds for the buying of shares in the secondary market. This ratio is important for those investors who are interested in the dividend income. This ratio is calculated by dividing dividend per share by market price of the stock. Thus,

DY Ratio = Dividend per Share/ Market Price per Share

v) Price Earning Ratio (P /E Ratio) / Earning Multiplier

Price-earning ratio is also called the earnings multiplier; Price- earning ratio is the ratio between market price per share and earning per share. In other words, this represents the amount which investors are willing to pay for each rupee of the firm's earnings. The P / E ratio measures investor's expectation and market appraisal of the performance of the firm. The higher P/E ratio implies the high market share price of a stock given the earning per share and the greater confidence of investor in the firm's future. This ratio is computed by dividing earning per share to market price per share. Thus,

P/E Ratio = Market Price Per share/ Earning per Share

vi) Market Price per Share (MPS)

MPS is that value of stock, which can be obtained by a firm from the sale of a share in the market. MPS is one of the variables, which is affected by DPS of the firm. If

the earning per share and dividend per share are high, the market value of the share will also be high. The capital market determines MPS. In this study the market price of share means the rupees value of one share indicated in NEPSE index.

Theoretically, calculated current price of the share can be derived by using the following formula:

$P_0 = D_1 / ks - g$

Or, $P_0 = D_0 (1+g) / ks - g$

P_0=Current market price per share

D_0=Current dividend per share

D_1=Expected dividend per share at the end of yr.1

G=Dividend growth rate

k_s=Investor's required rate of return

= Risk free rate of return + Inflation rate + Market risk premium

i. Present Price = PV of dividends during supernormal growth period + Value of stock price at the end of supernormal growth period discounted back to present.

ii. Price = Dividend/Capitalization rate

3.4.2 Statistical Tools

Besides the financial tools, various statistical tools have been used to conduct this study. The result of analysis has been properly tabulated, compared, analyzed and interpreted. In this study, the following statistical tools are used to analyze the relationship between dividend and other variables.

i) Arithmetic Mean or Average (*X*)

An average is the value, which represents a group of values. It depicts the characteristic of the whole group. It is an envoy of the entire mass of homogeneous data. Generally, the average value lies somewhere in between the two extremes, i.e. the largest and the smallest items. It is also known as simple average. In general, *n X X ,X* .....*X*. 1, 2 3 are the given "n" observations. Then their arithmetic mean, usually denoted by *X* is given by:

$$\text{Arithmetic Mean } (\overline{X}) = \frac{x_1 + x_2 + x_3 \ldots\ldots + x_n}{N}$$

Or, $\overline{X} = \frac{\Sigma X}{N}$

Where, N = number of items $\sum x$ = Sum of size of the items.

ii) Standard Deviation (σ)

The measurement of the scatterness 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 the amount of dispersion, the greater the standard deviation will be, i.e. greater will be the magnitude of the deviations of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series; a large standard deviation means just opposite. Standard deviation is denoted by a Greek letter 'σ" (Sigma) and is calculated as follows:

Standard Deviation (σ) = $\sqrt{\frac{\Sigma x^2}{n} - \left(\frac{\Sigma x}{n}\right)^2}$

Where,

$\overline{X}$ =Mean

x = Variable

n= Number of items in the series

iii) Coefficient of Variation (CV)

The coefficient of variation reflects the relationship between standard deviation and mean. It is the relative measure of dispersion, comparable across, which is defined as the ratios of the standard deviation to the mean expressed in percent (Levin, Richard I. and Rubin, David S.: 1994,p.144).The series with higher coefficient of variation is said to be more variable, less consistent, less stable and less homogenous. On the contrary, the series with less coefficient of variation is said to be less variable, more consistent, more uniform, and more stable and more homogenous. It is denoted by C.V. and is obtained by dividing the standard deviation by arithmetic mean. Thus, in symbol Coefficient of Variation (C.V) = $\frac{SD}{X} \times 100$

SD = Standard Deviation

$\overline{X}$ = Mean average

iv) Coefficient of Correlation (r)

The correlation analysis is the technique used to measure the closeness of the relationship between the variables. Correlation is an analysis of the covariance between two or more variables and correlation analysis deals to determine the degree of relationship between variables (Pant and Choudhary; 2053:299). It is a tool that can be used to describe the degree to which one variable is linearly related to another. It describes not only the magnitude of correlation, but also its direction. The coefficient of correlation is a number, which indicated to what extent two variables are related with each other and to what extent variations in one leads to the variations in the other. The value of coefficient of correlation always lies between ± 1.

A value of -1 indicates a perfect negative relationship between the variables and a value of +1 indicates a perfect positive relationship. A value of zero indicates that there is no relation between the variables. The zero correlation coefficient means the variables are uncorrelated. The closer r is to +1 or -1, the closer the relationship between the variables and closer r is to zero(0), the less close relationship. The algebraic sign of the correlation coefficient indicates the direction of the relationship between two variables, whether direct or inverse, while the numerical value of the coefficient is concerned with the strength, or closeness of the relationship between two variables.

Thus, in this study, the degree of relationship between market price and other relevant financial indicators such as dividend per share, earning per share, dividend payout ratio etc. is measured by the correlation coefficient. The correlation coefficient can be calculated as:

$$r = \frac{n\Sigma XY - \Sigma X.\Sigma Y}{\sqrt{\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

v) Coefficient of Determination (r^2)

The coefficient of determination is the primary way to measure the extent, or strength of the association that exists between two variables, X and Y. It refers to a measure of the total variance in a dependent variable that is explained by its linear relationship to an independent variable. The coefficient of determination is denoted by r^2 and the value lies between zero and unity. The closer the r^2 to unity; the greater will be the

explanatory power. A value of one can occur only if the unexplained variation is zero, which simply means that all the data points in the scatter diagram fall exactly on the regression line. The r^2 is always a positive number. It can't tell whether the relationship between the two variables is positive or negative. The r^2 is defined as the ratio of explained variance to the total variance. Thus,

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

$$\text{Or, } r^2 = 1 - \frac{\text{Unexplained Variance}}{\text{Total Variance}}$$

vi) Regression Analysis

Francis Galeton was the first person to introduce the concept of regression. Regression refers to an analysis, which involves the fitting of an equation to a set of data points, generally by the method of least square. In other words, the regression is a statistical method for determining relationships between the variables by the establishment of an approximate functional relationship between them. It is used to determine that whether the dependent variable is influenced by the given independent variable or not. It is considered as a useful tool for determining the strength or relationship between two (Simple Regression) or more (Multiple Regression) variables. It is also used to predict value of one variable given the value of other variables. Simple Linear regression analysis is used to find the relationship between variables. In this study, the following simple regressions have been analyzed.

(a) Market price per Share on Earning Per Share

MPS = a + b EPS

Where,

a and b are regression coefficient

MPS = Dependent variable

EPS = Independent variable

This model has been constructed to examine the relationship between market Price per Share (dependent Variable) and Earning per Share (independent variable).

(b) Market Price per (MPS) Share on Dividend per Share (DPS)

MPS = a + b DPS

Where,

a and b are regression coefficient

MPS = Dependent variable

DPS = Independent variable

This model has been constructed to examine the relationship between market Price per Share (dependent variable) and Dividend per Share (independent variable).

(c) Market Price per Share on Dividend Payout Ratio

MPS = a + b DPR

Where,

a and b are regression coefficient

MPS = Dependent variable

DPR = Independent variable

This model has been constructed to examine the relationship between market Price per Share (dependent variable) and Dividend Payout Ratio (independent variable).

(d) Market Price per Share on Dividend Yield

MPS = a + b DY

Where,

a and b are regression coefficient

MPS = Dependent variable

DY = Independent variable

The relationship between dividend per share (dependent variable) and earning per share (independent variable) can be explained through this model.

(e) Market Price per Share on Price Earning Ratio

MPS = a + b P/E ratio

Where,

a and b are regression coefficient

MPS = Dependent variable

P/E = Independent variable

The relationship between MPS (dependent variable) and Price Earning Ratio (independent variable) can be explained through this model.

(f) Market Price per share on Retention Ratio

MPS = $a + b$ R/R

Where,

a and b are regression coefficient

MPS = Dependent variable

R/R = Independent variable

This model helps in explaining the relation between MPS (dependent variable) and return ratio (independent variable).

Multiple Regression Analysis

In multiple regression analysis, two or more independent variables are used to estimate the values of dependent variable. It is the extension of simple regression technique. In this study, the following multiple regression analysis have been analyzed

1. Market Price per share on Dividend payout Ratio and Retention Ratio

MPS = $a + b_1$ DPR + b_2 RR

Where, a, b_1 *and* b2 are regression coefficients

MPS = Dependent variable

DPS & R/R = Independent variables

It helps to predict the market price per share based on Dividend payout Ratio and Retention Ratio

2. Market price per share on Earning per Share and Dividend per share

MPS = $a + b_1$ EPS + b_2 DPS

Where, a, b_1 *and* b2 are regression coefficients

MPS = Dependent variable

EPS & DPS = Independent variables

This model helps to predict the Market price per share on price earning per share and Dividend per share.

3. Market price per share on Dividend per Share and Retained Earning per share

MPS = $a + b_1$ DPS + b_2 R/E per share

Where, a, b_1 *and* b2 are regression coefficients

MPS = Dependent variable

DPS & R/E per share = Independent variables

This model helps to predict the Market price per share on Dividend per share and Retained earning per share.

4. Market price per share on Dividend per Share and Retained earning per share

MPS = $a + b_1$ DPS + b_2 R/E + b_3 $(E/P)_{t-1}$

Where, a, b_1, b_2 *and* b3 are regression coefficients

MPS = Dependent variable

DPS, R/E, $(E/P)_{t-1}$ = Independent variables

This model helps to predict the Market price per share on Dividend per share, Retained earning per share and lagged earning price ratio.

5. Dividend per Share on Earning per share lagged dividend per share and lagged earning price ratio.

DPS = $a + b_1$ EPS + b_2 DPS_{t-1} + b_3 $(E/P)_{t-1}$

Where, a, b_1, b_2 *and* b_3 are regression coefficients

DPS = Dependent variable

EPS, DPS_{t-1} and $(E/P)_{t-1}$ = Independent variables

This model helps to predict the dividend per share on earning per share, lagged dividend per share and lagged earning price ratio.

a) Regression Constant (*a*)

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

b) Regression Coefficients (b_1, b_2 *and* b3)

The regression coefficient of each independent variable shows the relationship between that variable and of dependent variable, holding the effects of all other independent variables of the regression model constant. In other words, these coefficients explain how changes in independent variables affect the value of dependent variables estimate.

c) Standard Error of Estimate (S_e)

Practically, the perfect predication is not possible with the help of regression equation. Standard Error of Estimate is used to measure the reliability of the estimating equation. It measures the variability, or scatter of the observed values around the regression line. It also measures the reliability of the estimating equation, indicating the variability of the observed values differ from their predicated values on the regression line.

The larger the value of S.E.E, the greater the scattering or dispersion of points around the regression line, conversely, if S.E.E. is equals to zero, then, there is no variation about the line and the correlation will be perfect. So, we expect the estimating equation to be a 'perfect' estimator of the dependent variable. In that case, all the data points would be scattered around it. Similarly, the smaller the S.E.E., the closer will be the dots to the regression line and the better the estimates based on the equation for this line. Thus, with the help of standard error of estimate, it is possible for ascertaining how well and representative the regression line is as a description of the average relationship between two series.

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

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

To find the answer of research problem, the collected data are necessary to present and analyze by processing. This chapter will present the data on table & figure.The main objective of the study is to present data and analyze them with the help of various financial and statistical tools.

4.1 Analysis of Financial Indicators and Variables

4.1.1 Dividend per share Analysis

Dividend per share indicates the portion of earning distributed in the shareholders on per share basis. It gives financial soundness of the company. Only financially strong companies can distribute dividend. It attracts investors to invest in shares of stock and maintains goodwill. It is an investment in shares of stock and maintains goodwill. It is calculated by dividing the total dividend to equity share holders by the number of ordinary share outstanding.

Table: 4.1

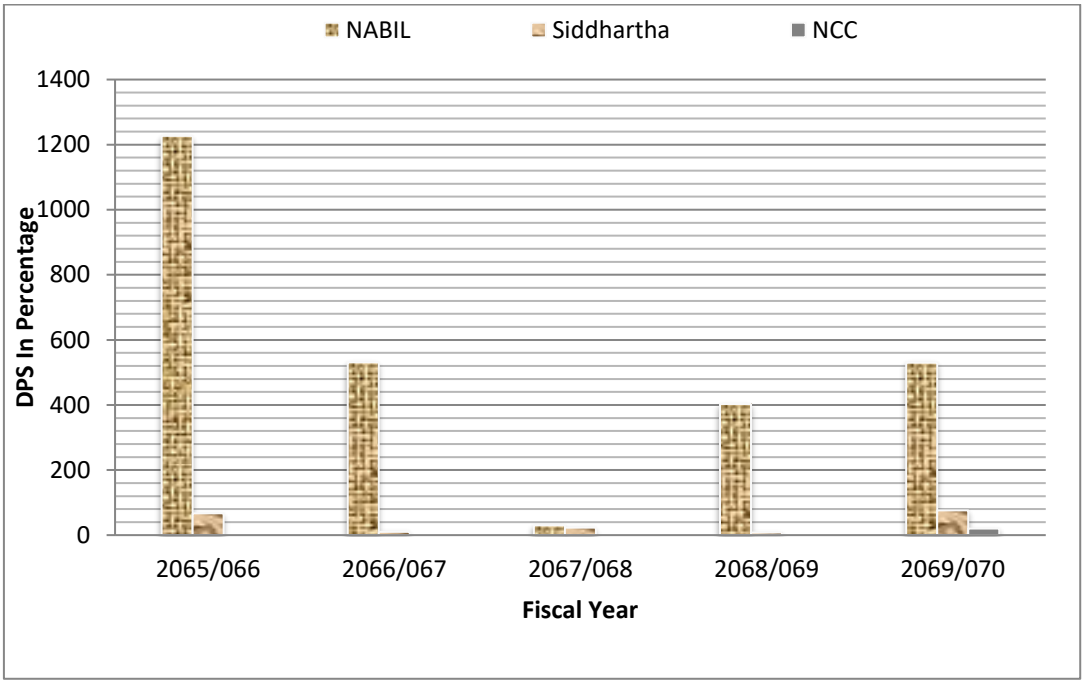
Dividend per Share of Sample Banks

Year	NABIL			SBL			NCC		
	Cash Rs.	Stock Rs.	Total Rs.	Cash Rs.	Stock Rs.	Total Rs.	Cash Rs.	Stock Rs.	Total Rs.
2065/066	35	1192	1227	0.79	67	67	0	0	0
2066/067	30	501	531	10.03	0	10	0	0	0
2067/068	30	0	30	12.79	10	23	0	0	0
2068/069	40	363	403	8.42	0	8	0	0	0
2069/070	40	490	530	10.11	66	76	00.26	19	20
Mean	35.00	509.20	544.20	8.43	28.60	36.80	0.05	3.80	4.00
SD	5.00	432.24	433.28	4.55	34.84	32.35	0.12	8.50	8.94
C.V	14.29	84.89	79.62	53.97	121.82	87.92	223.61	223.61	223.61

Source: Annual Reports of Sample Banks & Appendix XIII, XIV & XV

Table: 4.1

Dividend per Share of Sample Banks



The above table 4.1 shows the dividend per share of the concerned banks from the year 2065/066 to 2069/070. NABIL has paid cash dividend Rs. 35 and stock dividend of Rs. 1192 in the fiscal year 2065/066 and the cash dividend rate is decrease to Rs. 30 in the fiscal year 2066/077 & 2067/068 and increase to Rs. 40 in the fiscal year 2068/069 & 2069/070. Similarly, the SBL paid Rs. 0.79 cash & Rs. 67 stock dividend in the fiscal year 2065/066 after that the cash dividend is increase but stock dividend is fluctuating each year. In the fiscal year 2069/070 SBL has paid Rs. 10.11 cash dividend and Rs. 76 stock dividend. The NCC has not paid any dividend in the fiscal year 2065/066 to 2068/069 but in the fiscal year 2069/070 NCC paid Rs. 0.26 cash dividend and Rs. 19% stock dividend.

Comparing to NCC & SBL with the average value total dividend of Rs. 4 & Rs. 36.80 the NABIL is better with the average value of 544.20. The Standard Deviations of NABIL, SBL and EBL are 433.28, 32.35 and 8.94 respectively, it means NCC has less variability in compare to NABIL & SBL. The CV of total dividend of NABIL, SBL and NCC are 79.62%, 87.92% & 223.61% respectively which indicate that NCC is more variable than NABIL & SBL.

4.1.2 Earnings per Share (EPS)

Earnings per share refer the rupee amount earned per share of common stock outstanding. It measures the profitableness of the shareholders investment. The earnings per share show the profitability of the banks on a per share basis. The higher earning indicates the better achievements in terms of profitability of the banks by mobilizing their funds and vice versa. In other words, the EPS indicates the strength and weakness of the bank.

Earnings per share are computed to know the earning capacity and to make comparison between concerned banks. This ratio can be computed by dividing the earning available to common shareholders by the total number of common stocks outstanding.

Table: 4.2

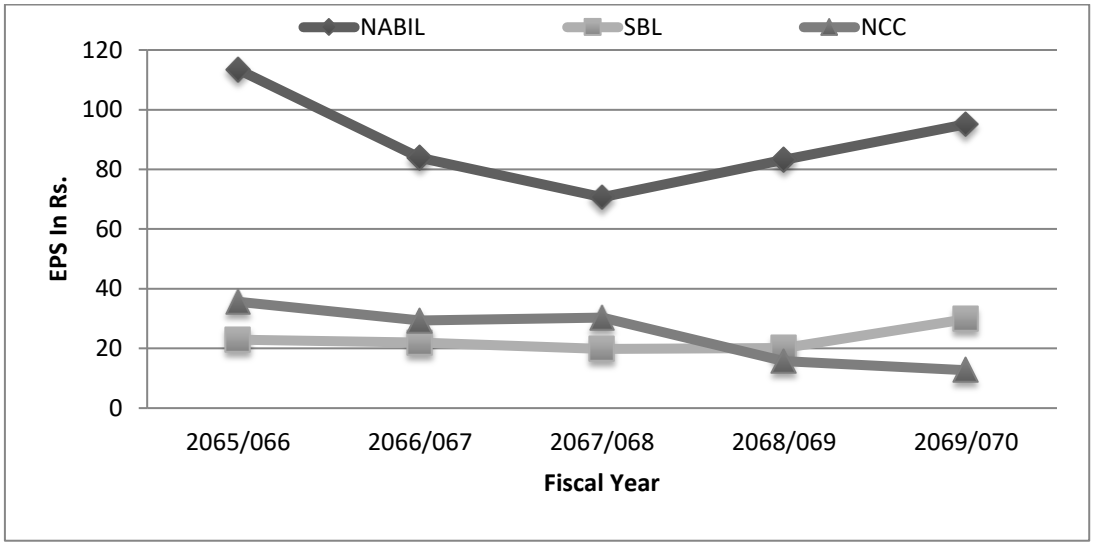
Earnings per Share (EPS In Rs.)

Year	NABIL	SBL	NCC
2065/066	113.44	22.89	35.63
2066/067	83.81	21.99	29.35
2067/068	70.67	19.82	30.28
2068/069	83.23	20.14	15.78
2069/070	95.14	29.80	12.69
Mean	89.26	22.93	24.75
SD	16.05	4.05	9.95
C.V	17.99	17.65	40.21

Source: Annual Reports of Sample Banks from 2065/066 to 2069/070

Figure: 4.2

Earnings per Share of Sample Banks



The above table and figure 4.2 shows the EPS of the concerned banks from 2065/066 to 2069/070. Normally, the performance and the achievement of business organization are measured in terms of its capacity to generate earning. Higher earnings show higher strength while lower earnings show weaker strength of business organization.

In the fiscal year 2065/066, the table shows that the EPS of NABIL is highest over the study period, which amount to Rs. 113.44, the SBL and NCC highest EPS are Rs. 29.80 & Rs. 35.63 in the fiscal year 2069/070 & 2065/066 respectively. The EPS of all sample banks have fluctuating trend over the study period. In comparisons to NCC and SBL, NABIL has higher EPS each year during the study period. Comparing to NCC and SBL with the average value of Rs.24.75 & 22.93 the NABIL is better with the average value of Rs. 89.26. The Standard Deviations of NABIL, SBL & NCC are Rs.16.05, Rs. 4.05 and 9.95 respectively, it means SBL has less variability in compare to NABIL & NCC. The CV of EPS of NABIL, SBL & NCC are 17.99%, 17.65% and 40.21% respectively which indicate that SBL is less variable than NABIL & NCC. SBL is more consistent or less variable than NABIL & NCC.

4.1.3 Dividend Payout Ratio (DPR)

DPR is the proportion of earnings paid in the form of dividend. This ratio reflects what percentage of profit is distributed as dividend and what percentage of profit is retained as reserve and surplus for the growth of the company. It is calculated by dividing by EPS.

Table: 4.3

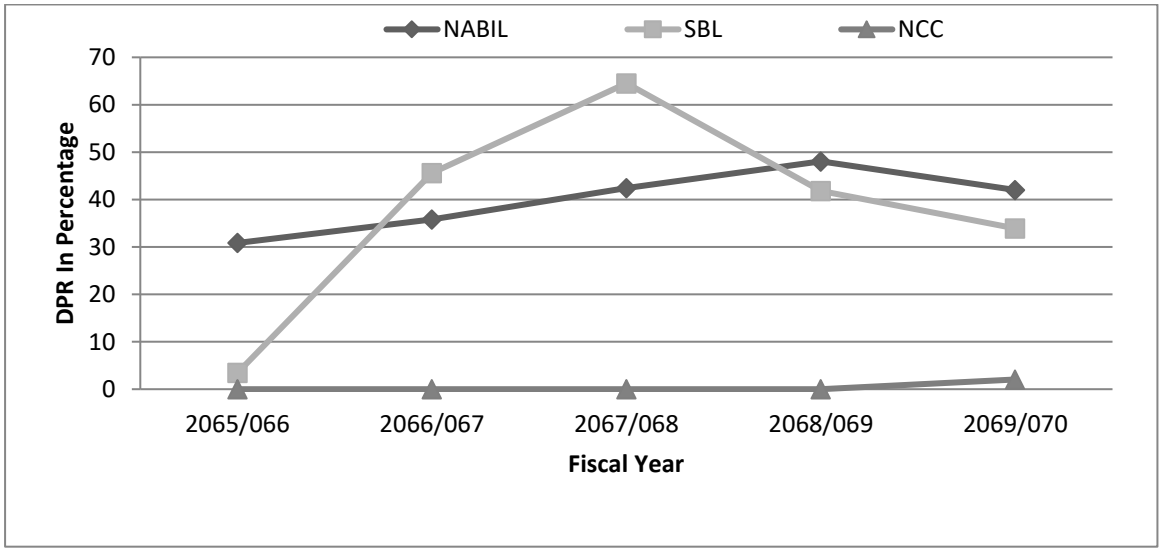
Dividend Payout Ratio (DPR in %)

Year	NABIL	SBL	NCC
2065/066	30.85	3.45	0.00
2066/067	35.80	45.61	0.00
2067/068	42.45	64.53	0.00
2068/069	48.06	41.81	0.00
2069/070	42.04	33.93	2.05
Mean	39.84	37.87	0.41
SD	6.64	22.28	0.92
C.V	16.67	58.85	223.61

Source: Annual Reports from 2065/066 to 2069/070 and Appendix-I

Figure: 4.3

Trend of Dividend Payout Ratio (DPR in %)



The above table and figure 4.3 shows the dividend payout of the concerned banks from the year 2065/066 to 2069/070. In the year 2068/069, NABIL applied moderate dividend policy and paid dividend 30.85%, but in this fiscal year SBL has adopted low dividend policy and paid only 3.45% of dividend and NCC has not paid any dividend. The dividend payout ratio of NABIL is increases each year than previous year except the fiscal year 2069/070. In the fiscal year 2069/070 NABIL is paid 39.84% of cash dividend. Similarly the dividend payout ratio of SBL is fluctuating each year during the study period, the highest dividend paid by SBL is 64.53% in the fiscal year 2067/068 and NCC has not paid any dividend from the fiscal year

2065/066 to 2068/069 but in the fiscal year 2069/070 dividend payout ratio of NCC is 2.05%.

Comparing to NCC and SBL with the average value of 0.41% & 37.87% the NABIL is better with the average value of Rs. 39.84. The Standard Deviations of NABIL, SBL & NCC are 6.64%, Rs. 22.28% and 0.92% respectively, it means NCC has less variability in compare to NABIL & SBL. The CV of EPS of NABIL, SBL & NCC are 6.67%, 58.85% and 223.16% respectively which indicate that NABIL is less variable than SBL & NCC.

4.1.4 Pricing Earning Ratio (P\E Ratio)

P\E ratio indicates the price currently paid by the market for each rupee \ dollar of currently reported earnings per share (EPS). It is also called the earning multiplier. It is the ratio between market price per share and earnings per share. The higher the P\E ratio implies the market share price of a stock given the earning per share and the greater confidence of investors in the firm's future. It is calculated by the dividing market price per share (MPS) by earning per share (EPS). The P\E ratio measures investment's expectation and market appraisal of the performance of the firm.

Table: 4.4

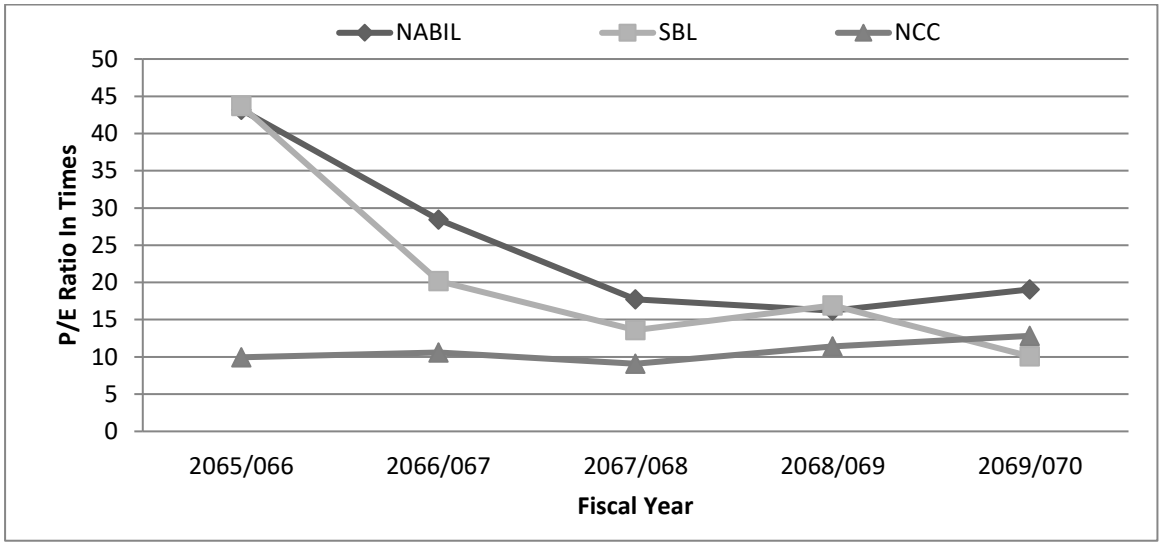
Price Earnings Ratio (P/E Ratio in Times)

Year	NABIL	SBL	NCC
2065/066	43.19	43.70	9.93
2066/067	28.45	20.19	10.58
2067/068	17.72	13.62	9.08
2068/069	16.21	16.91	11.41
2069/070	19.08	10.07	12.83
Mean	24.93	20.90	10.77
SD	11.27	13.29	1.44
C.V	45.21	63.60	13.34

Source: Annual Reports of sample banks from 2065/066 to 2069/070

Figure: 4.4

Price Earnings Ratio



The above table 4.4 depicts the price earnings ratio of the sample banks. This helps to classifying the relationship between earning per share and market price per share. NABIL has the highest PE Ratio of 43.19 times, SBL has 43.70 times and NCC has 12.83 times in the fiscal year 2065/066 & 2069/070 respectively. In all fiscal year except the fiscal year 2065/066, price earnings ratio of NABIL is higher than SBL & NCC. A high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. However, the P/E ratio doesn't tell us the whole story by itself. It's usually more useful to compare the P/E ratios of one company to other companies in the same industry, to the market in general or against the company's own historical P/E.

Comparing to NCC and SBL with the average value of 10.77 & 20.90 times the NABIL is better with the average value of Rs. 24.93 times. The Standard Deviations of NABIL, SBL & NCC are 11.27%, Rs. 13.29% and 1.44% respectively, it means NCC has less variability in compare to NABIL & SBL. The CV of EPS of NABIL, SBL & NCC are 45.21%, 63.60% and 13.34% respectively which indicate that NCC is less variable than SBL & NABIL.

4.1.5 Dividend Yield (DY)

The dividend yield reflects the percentage relationship between dividend per share and market value per share. It measures the dividend in relation to market value of the investors as a percentage of market prices per share in the stock market. It is

calculated by dividing the cash dividend per share (DPS) by the market price per share (MPS). This ratio highly influences the MPS because a small change in DPS can bring effective changes in the market value per share.

Table: 4.5

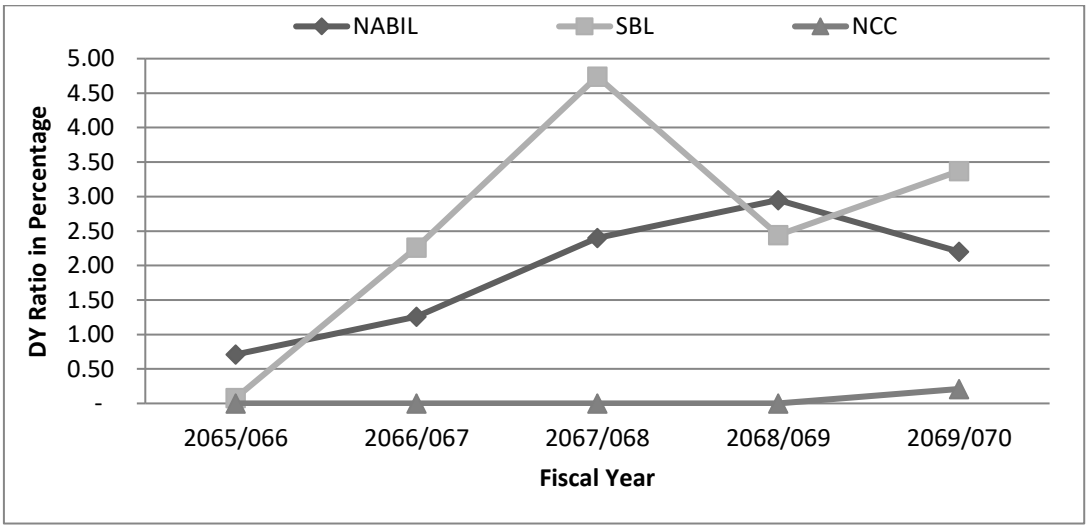
Dividend Yield Ratio (In Percentage)

Year	NABIL	SBL	NCC
2065/066	0.71	0.08	0.00
2066/067	1.26	2.26	0.00
2067/068	2.40	4.74	0.00
2068/069	2.95	2.44	0.00
2069/070	2.20	3.37	0.21
Mean	1.90	2.58	0.04
SD	0.90	1.71	0.09
C.V	47.41	66.23	223.61

Source: Annual Reports from 2065/066 to 2069/070 and Appendix-II

Figure: 4.5

Dividend Yield Ratio



The above table and figure shows dividend yield analysis for the year 2065/066 to 2069/070. Dividend yield highly influences the market value per share because a change in dividend per share can bring effective change in the market value of the share. Therefore, before allocation of dividend to share holders the impact on market

scenario and price fluctuation is to be studied and evaluated for the long run survival of the bank.

In the year 2065/066, the data related to dividend yield of NABIL is 0.71%, SBL is 0.08% and NCC is 0% acquire the shareholders. The highest dividend yield ratio of NABIL is 2.95%, SBL is 4.74% and NCC is 0.21% in the fiscal year 2068/069, 2067/068 & 2069/070 respectively. The dividend yield ratio of NABIL & SBL is fluctuating each year.

Comparing to NABIL& NCC with the average value of 0.04% & 1.90% the SBL is better with the average value of 2.58%. The Standard Deviations of NABIL, SBL and EBL are 0.90%, 1.71% and 0.09% respectively, it means NCC has less variability in compare to NABIL & SBL. The CV of dividend yield ratio of NABIL, SBL and NCC are 47.41%, 66.23% & 223.6% respectively which indicate that NCC is more variable than NABIL & SBL.

4.1.6 Earning Yield (EY)

Earning Yield and Dividend Yield both are expressed in terms of the market value per share. Earning Yield and Dividend yield are two important profitability ratios from the point of view of the ordinary shareholders. The earning yield may define as the ratio of earning per share to the market value per ordinary share.

Table: 4.6

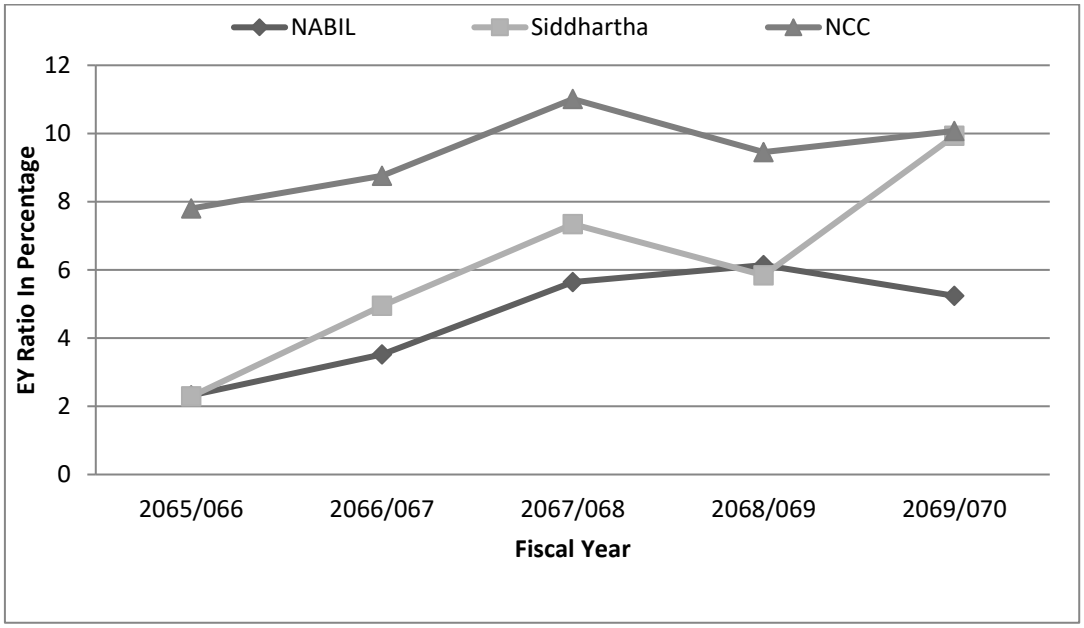
Earning Yield Ratio (In Percentage)

Year	NABIL	Siddhartha	NCC
2065/066	2.32	2.29	7.80
2066/067	3.52	4.95	8.76
2067/068	5.64	7.34	11.01
2068/069	6.14	5.84	9.45
2069/070	5.24	9.93	10.07
Mean	4.57	6.07	9.42
SD	1.60	2.83	1.23
C.V	35.05	46.69	13.03

Source: Annual Reports from 2065/066 to 2069/070 and Appendix-III

Figure: 4.6

Earning Yield Ratio of Sample Banks



In above table and figure 4.6, shows the earning yield ratio of sample banks from the fiscal year 2065/066 to 2069/070. Earning yield ratio of NABIL is 2.32% in the fiscal year 2065/066 it is increasing each year and reaches to 6.14% in the fiscal year 2068/069 but in the fiscal year 2069/070 it is decrease to 5.24%. The earning yield ratio of SBL is fluctuating each year the highest ratio is 9.93% in the fiscal year 2069/070 and lowest ratio is 2.29% in the fiscal year 2065/066 similarly NCC has the highest ratio of 11.01% in the fiscal year 2067/068 and that of lowest is 7.80% in the fiscal year 2065/066. The earning yield ratio of NCC is higher than other sample banks each year during the study period.

Comparing to NABIL & SBL with the average value of 4.57% & 6.07% the NCC is better with the average value of 10.07%. The Standard Deviations of NABIL, SBL and EBL are 1.60%, 2.83% and 1.23% respectively, it means NCC has less variability in compare to NABIL & SBL. The CV of earning yield ratio of NABIL, SBL and NCC are 35.05%, 46.69% & 13.03% respectively which indicate that NCC is lessvariable than NABIL & SBL.

4.1.7 Market Value per Share to Book Value per Share Ratio

This ratio measures the market situation in the competitive open market with respect to book value per share (BVPS) of the firm. This ratio indicates the price, the market

is paying for the share that reported form the banks, or in other words, it is the price of the outsiders, are paying for each rupee reported by the balance sheet of the banks.

Table: 4.7

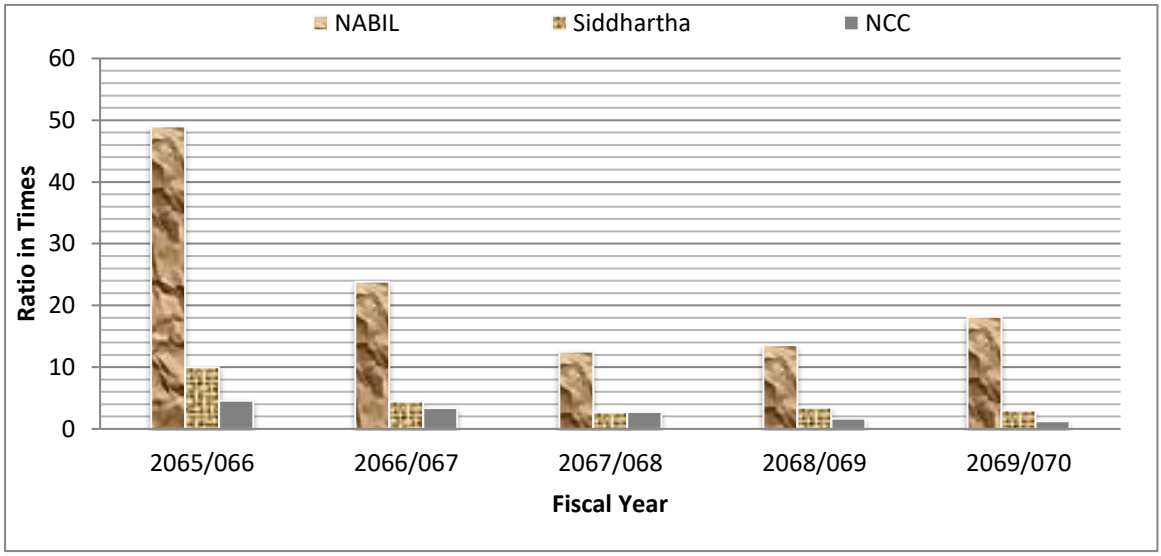
Market Value per Share to Book Value per Share Ratio (In Times)

Year	NABIL	Siddhartha	NCC
2065/066	48.99	10.00	4.57
2066/067	23.84	4.44	3.35
2067/068	12.52	2.70	2.75
2068/069	13.55	3.45	1.67
2069/070	18.15	3.00	1.26
Mean	23.41	4.72	2.72
SD	14.98	3.03	1.33
C.V	64.00	64.12	48.82

Source: Annual Reports from 2062/063 to 2069/070 and Appendix-IV

Figure: 4.7

Market Value per Share to Book Value per Share Ratio of Sample Banks



The above table 4.7 & Figure 4.7 show that the market value per share to book value per share ratio of sample banks. The ratio of NABIL is 48.99 times in the fiscal year 2065/066 and decrease to 12.52 times in the fiscal year 2067/068 after that it is increase and reaches to 18.15 times in the fiscal year 2069/070 but the ratios of SBL is fluctuating, the highest ratio is 10 times in the fiscal year 2065/066 and that of lowest is 2.70 times in the fiscal year 2067/068 similarly the ratio of NCC is

decreasing each year than previous year the highest ratio is 4.57% in the fiscal year 2065/066 and it is decrease to 1.26 times in the fiscal year 2069/070.

Comparing to NCC & SBL with the average value of 2.72 times & 4.72 times the NABIL is better with the average value of 23.41%. The Standard Deviations of NABIL, SBL and NCC are 14.98 times, 3.03 times and 1.33 times respectively, it means NCC has less variability in compare to NABIL & SBL. The CV of MVPS to BVPS ratio of NABIL, SBL and NCC are 64%, 64.12% & 48.82% respectively which indicate that NCC is lessvariable than NABIL & SBL.

4.2 Correlation Analysis

Correlation is a statistical tool design to measure the degree of association between two or more variables.In other word if the changes in one variable affects the changes in other variable,then the variable are said to be co-related when it is used to measure the relationship between two variables, then it is called simple correlation.The coefficient of correlation measures the degree of relationship between to sets of figures. One of the very convenient and useful way of interpreting the value of coefficient of correlation (r) between the two variables is coefficient of determination, which is denoted by r^2. It explains the total variation in dependent variable is explained by independent variable.

The significant of coefficient of correlation (r) is tested with the help of 't' test. If calculated 't' is less then or equal to tabulated value of 't' it falls in the accepted region and null hypothesis is accepted or 'r' is not significant of correlation in the population and if calculated 't' is greater then tabulated 't' null hypothesis is rejected or 'r' is significant of correlation in the population.

4.2.1 Relationship between DPS & EPS

Correlation coefficient between DPS & EPS measures the degree of relationship between DPS and EPS. DPS is dependent variable (X_1) and EPS is independent variable (X_2). The purpose of computing is to find out the relationship between DPS and EPS is going to same direction or opposite direction.

Table: 4.8

Correlation between DPS and EPS

Factors	Banks		
	NABIL	**SBL**	**NCC**
r	0.3720	-0.0433	-0.6773
r^2	0.1384	0.0019	0.4587
Probable Error (PE)	0.2599	0.3011	0.1633
6PE	1.5594	1.8065	0.9796
Remarks	Insignificant	Insignificant	Insignificant
Relationship	Low Degree of positive Correlation	Low Degree of Negative Correlation	Moderate Degree of Negative Correlation

Source: Appendix V, VI & VII

The above table describes the relationship between DPS and EPS during the period of study. The coefficient of correlation (r) between DPS and EPS are 0.3720, -0.0433 and -0.6773 of NABIL, SBL & NCC respectively. This figure shows the negative association between DPS and EPS of SBL & NCC and positive association between DPS & EPS of NABIL.

The coefficient of determination (r^2) of NABIL, SBL & NCC are 0.1384, 0.0019 and 0.4587 respectively, it shows that 13.84%, 0.19% & 0.4587% of the variation in the dependent variable (i.e. DPS) has been explained by the independent variable (i.e. EPS). The correlation (r) is less than 6PE of all sample banks it show that the relationship between DPS & EPS is insignificant.

4.2.2 Relationship between DPR & PER

Correlation coefficient between DPR and PER measures the degree of relationship between DPR and PER. DPR is independent variable (X_1) and total EPR is dependent variable (X_2). The purpose of computing is to find out the relationship between DPR and PER is going to same direction or opposite direction.

Table: 4.9

Correlation between DPR and PER

Factors	Banks		
	NABIL	**SBL**	**NCC**
r	-0.9412	-0.8081	0.0834
r^2	0.8859	0.6530	0.0070
Probable Error (PE)	0.0344	0.1047	0.2995
6PE	0.2066	0.6280	1.7973
Remarks	Significant	Significant	Insignificant
Relationship	High Degree of Negative Correlation	High Degree of Negative Correlation	Low Degree of Positive Correlation

Source: Appendix VIII, IX & X

The above table describes the relationship between DPR and PER during the period of study. The coefficient of correlation (r) between DPR and PER of NABIL, SBL & NCC are -0.9412, -0.8081 & 0.0834 respectively it show the high degree of negative correlation between DPR & PER of NABIL & SBL and low degree of positive correlation of NCC.

The coefficient of determination (r^2) of NABIL, SBL & NCC are 0.8859, 0.6530 and 0.0070 respectively, it shows that 88.59%, 65.30% & 0.7% of the variation in the dependent variable (i.e. PER) has been explained by the independent variable (i.e. DPR).

The value of 6PE of NABIL and SBL are less than the value of 'r' therefore it reveals that the relationship between DPR and PER is significant similarly, the value of 6PE of NCC is greater than the value of 'r' it reveals that the relationship between DPR and PER is insignificant.

4.2.3 Relationship between DPS & MVPS

Coefficient of correlation measures the degree of relationship between two variables, DPS & MVPS. DPS is independent variable (X_1) and MVPS is dependent variable

(X_2). The purpose of computing is to find out the relationship between DPS and MVPS is going to same direction or opposite direction.

Table: 4.10

Correlation between DPS and MVPS

Factors	Banks		
	NABIL	**SBL**	**NCC**
r	-0.0778	-0.9533	0.6164
r^2	0.0061	0.9088	0.3799
Probable Error (PE)	0.2998	0.0275	0.1871
6PE	1.7989	0.1651	1.1223
Remarks	Insignificant	Significant	Insignificant
Relationship	Low Degree of Negative Correlation	High Degree of Negative Correlation	Moderate Degree of Positive Correlation

Source: Appendix XI & XII

From the Table-4.10, the values of coefficient of correlation (r) of NABIL, SBL & NCC are -0.0778, -0.9533 & 0.6164 respectively which shows that there is a negative correlation between DPS and MVPS of NABIL & SBL and positive relation between DPS & MVPS of NCC.

The values of coefficient of determination (r^2) of NABIL, SBL & NCC are 0.0061, 0.9088 & 0.6164 which shows that 0.6%, 90.88% & 61.64% of the total variation in dependent variable (MVPS) is explained by independent variable (DPS).

The value of 6PE of NABIL and NCC are greater than the value of 'r' therefore it reveals that the relationship between DPR and PER is insignificant similarly, the value of 6PE of SBL is less than the value of 'r' it reveals that the relationship between DPR and PER is significant.

4.3 Presentation and Data Analysis of Primary Data

Decision of executive have great influence on success of banking sectors, so study on how executive make dividend decisions are one of the objective of this study. This study will also help on development of realistic theoretical modals and test

empirically the different hypothesis concerning dividend policy. Hence, this chapter is based on primary data analysis mainly deals with qualitative aspects of corporate dividend policy.

For the purpose of collecting primary data, total 10 structured questionnaires have been distributed among commercial banking sectors' Chairman, managing director, general manager, financial manager and branch manager, 48 respondents respond on those questionnaires.

4.3.1 Priority for Dividend Decision

For the importance of major decisions of finance like financial decision, investment decision and dividend decision, respondents are asked to rank for their preference. Among 48 respondents, they ranked their preference according to their view. For first rank three weights has been assigned, for second rank two weights has been given and for third rank one weight has been assigned. After the total rank has been calculated and their average value has been determined by dividend total respondents to find weighted average ranks.

Table: 4.11

Priority for Dividend Decision

Factors	1st rank (weight =3)	2nd rank (weight =2)	3rd rank (weight =1)	Sum of Ranks	Average
Financial decision	28	17	23	141	2.07
Investment decision	18	25	20	124	1.97
Dividend decision	2	6	5	23	1.77

Source: Appendix A

After absorbing the calculation, the total weighted sum and average of financial decision is highest that is 141 and 2.07 respectively. Than second position occupies by investment decision scoring 124 & 1.97 weighted average ranks and finally dividend decision has lowest rank. It indicates that the management of commercial banking sectors most prefers for financial decision and second preference gives to investment decision. Last preference is given to dividend decision. So, the manager is putting their more effort for managing their surplus fund to invest in better opportunity and gives less preference to dividend decisions.

4.3.2 Motives for paying cash dividends

Table: 4.12

Percentage Motives for paying cash dividends

Factors	No of respondents	Percent
To convey information to shareholders that the company is doing well.	12	25%
To draw attention from the investment companies.	4	8.33%
To increase the market value of the firm's stock.	10	20.83%
To fulfill shareholders' expectation	22	45.83%
Total	48	100%

Source: Field Survey

Regarding the motives for cash payment, 45.83% of the respondents support the view that to fulfill shareholders' expectation, which indicate share holder has been given more priority than other factors. However, 25% respondents express their view that to convey information to shareholders that the company is doing well. With respect to increase the market value of the firm's stock 20.83% respondents express their view. Only 8.33% respondents indicate that motive for cash dividend is to draw attention from the investment companies to buy their share.

4.3.3 Dividend as a Residual Decision

Table: 4.13

Dividend as a Residual Decision

Question	Factors	No of respondents	Percent
		Shareholders	
Do you think that dividend is residual decision?	Yes	12	25%
	No	32	66.67%
	No idea	4	8.33%
	Total	48	100%

Source: Field Survey

With respect to dividend as a residual decision, 66.67% of respondent doesn't support that dividend as a residual decision but at the same time 25% respondent support this decision as residual decision in the context of Nepalese banking environment. Whereas 8.33 % respondents feel that they are indeterminate with respect to this

decision. This proposition indicates that in spite of dividend policy is given less preference, new trend has been emerged not to treat dividend as a residual decision. So slowly the manager's preference toward dividend policy has been changing.

4.3.4 Payment or nonpayment of Dividend decision

Table: 4.14

Payment or nonpayment of Dividend decision

Question	Factors	No of respondents	Percent
		Shareholders	
Nepalese shareholders are indifferent whether the company pays or does not pay dividend. Do you agree?	Yes	10	20.83%
	No	36	75%
	No idea	2	4.17%
	Total	48	100%

Source: Field Survey

Table 4.14 explains the investor views on payment and nonpayment of dividend. All the respondents are the investor of the bank share. Majority of respondents, nearly 75% expresses that Nepalese shareholders are not interested whether the company pays or does not pay dividend. 20.83% indicate that shareholders are interest on dividend decision of bank. Remaining 4.17% respondents are neutral in this aspect.

4.3.5 Announcement of Earnings

Table: 4.15

Announcement of earnings

Question	Factors	No of respondents	Percent
		Shareholders	
Do you think that company's announcement of earnings will help to increase market price of a share?	Yes	38	79.16%
	No	7	14.58%
	No idea	3	6.25%
	Total	48	100%

Source: Field Survey

Shareholder of the banks were asked to whether banking sectors announcement of earning will help to increase market price of a share or not, 79.16% respondents express their view that the announcement of earning will help to increase the market price of a share, because it increases in goodwill of the bank and safe guard the shareholders investment. At the same time 14.58% disagree that announcement of earning will help to increase market price of share. Only 6.25% of respondents have no ideas regarding this matter.

4.3.6 Listed banking sector have popular and reasonable stock price range

Table: 4.16

Listed banking sector have popular and reasonable stock price range

Question	Factors	No of Respondents	Percent
		Shareholders	
Should stocks of listed companies have popular and affordable price range?	Yes	28	58.33%
	No	16	33.33%
	No idea	4	8.33%
	Total	48	100%

Source: Field Survey

Regarding the view that stocks of listed banking sectors have popular and affordable price range, 58.33% respondents have positive consideration and 33.33% respondents have negative outlook. 8.33% respondents refuse to give any idea on this matter.

4.3.7 Suggestion Regarding Dividend Policy

Table: 4.17

Suggestion regarding to dividend policy

Factors	No of Respondents	Percent
	Shareholders	
Treatment of dividend as an obligation	4	8.33%
Stability of dividend and un-haphazard payout ratio	20	41.67%
Cash balance for dividend be adequately planned and maintained	15	31.25%
Legislation regarding minimum dividend be enacted	9	18.75%
Total	48	100%

Source: Field Survey

At the suggestion regarding dividend policy in Nepalese banking sectors, majority of respondents (41.67%), suggested stability of dividend and un-haphazard payout ratio. 31.25% respondents feels that cash balance for dividend be adequately planned and maintained. Other group of respondents about 18.75% prescribed that legislation regarding minimum dividend be enacted. However, 8.33% respondents suggested treatment of dividend as an obligation.

4.3.8 Suggestion if the company has no Cash to Pay Dividends

Table: 4.18

Suggestion if the company has no Cash to Pay Dividends

Factors	No of respondents	Percent
	Shareholders	
Stock split decision	14	29.16%
Pay stock dividends	25	52.08%
Do not pay cash or stock dividend at all	9	18.75%
Total	48	100%

Source: Field Survey

Regarding the suggestion, if the bank has no sufficient cash to pay dividend, what policy should be adopted. 52.08% respondents indicate to pay stock dividend but 29.16% suggested stock split decision. Only 18.75% respondent are not in the favor of paying cash dividend and suggested do not pay cash or stock dividends at all.

4.4Major Findings

The major findings of the study derived from the analysis of financial as well as statistical tools of NABIL, SBL and NCC are as follows.

4.4.1 Findings from Secondary Data

- In the cash dividend payment, comparing to NCC & SBL with the average value of 1% & 14.43 the NABIL is better with the average value of 62%. The CV of DPS of NABIL, SBL and NCC are 31.06%, 24.58% & 223.6% respectively which indicate that NCC is more variable than NABIL & SBL.

- Comparing to NCC and SBL with the average value of Rs.24.75 & 22.93 the NABIL is better with the average value of Rs. 89.26 in terms of earning per share. The CV of EPS of NABIL, SBL & NCC are 17.99%, 17.65% and 40.21% respectively which indicate that SBL is less variable than NABIL & NCC.
- In case of dividend payout ratio, comparing to NCC and SBL with the average value of 0.41% & 37.87% the NABIL is better with the average value of Rs. 39.84. The CV of EPS of NABIL, SBL & NCC are 6.67%, 58.85% and 223.16% respectively which indicate that NABIL is less variable than SBL & NCC.
- Comparing to NCC and SBL with the average value of 10.77 & 20.90 times the price earnings ratio of NABIL is better with the average value of Rs. 24.93 times. The CV of EPS of NABIL, SBL & NCC are 45.21%, 63.60% and 13.34% respectively which indicate that NCC is less variable than SBL & NABIL.
- In case of dividend yield, comparing to NABIL & NCC with the average value of 0.04% & 1.90% the SBL is better with the average value of 2.58%. The CV of dividend yield ratio of NABIL, SBL and NCC are 47.41%, 66.23% & 223.6% respectively which indicate that NCC is more variable than NABIL & SBL.
- Comparing to NABIL & SBL with the average value of 4.57% & 6.07% the earring yield ratio of NCC is better with the average value of 10.07%. The CV of earning yield ratio of NABIL, SBL and NCC are 35.05%, 46.69% & 13.03% respectively which indicate that NCC is lessvariable than NABIL & SBL.
- In case of MVPS to BVPS ratio, comparing to NCC & SBL with the average value of 2.72 times & 4.72 times the NABIL is better with the average value of 23.41%. The CV of MVPS to BVPS ratio of NABIL, SBL and NCC are 64%, 64.12% & 48.82% respectively which indicate that NCC is less variable than NABIL & SBL.
- There is negative and insignificant relationship between DPS & EPS of all sample banks.

- There is high degree of negative correlation between DPR & PER of NABIL & SBL and low degree of positive correlation of NCC. The relationship between DPR & PER of NABIL & SBL is significant and the relationship between DPR & PER of NCC is insignificant.
- There is a negative correlation between DPS and MVPS of NABIL & SBL and positive relation between DPS & MVPS of NCC.

4.4.2 Findings from Primary Data

- The management of commercial banking sectors most prefers for financial decision and second preference gives to investment decision. Last preference is given to dividend decision.
- Only 8.33% respondents indicate that motive for cash dividend is to draw attention from the investment companies to buy their share.
- It is found that, 66.67% of respondent doesn't support that dividend as a residual decision. Slowly the manager's preference toward dividend policy has been changing.
- It is found that, the majority of respondents, nearly 75% expresses that Nepalese shareholders are really not indifferent whether the company pays or does not pay dividend.
- Majority of the respondents i.e. 79.16% respondents express their view that the announcement of earning will help to increase the market price of a share.
- If the bank has no sufficient cash to pay dividend, 52.08% respondents indicate to pay stock dividend but 29.16% suggested stock split decision.

CHAPTER - V

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

This chapter focuses on summarizing the study held with the researcher's conclusion. The next attempt in this chapter will be made for the recommendations on the basis of findings. For this whole purpose the chapter is sub divided into summary, conclusion and recommendation as following.

5.1Summary

Dividend decision of the firm is yet another crucial area of financial management. Dividend refers to the distribution of earning to common stockholders in return to their investment. Paying dividend to shareholders is an effective way to attract new investors to invest in shares. The important aspect of dividend policy is to determine the amount of earning to be distributed to shareholders and the amount to be retained in the firm. Retained earnings are the most significant internal sources of financing for the growth of the firm. Dividend policy refers to the issues of how much of the total profit, a firm should pay to its stockholders and how much to retain for investment so that the combined profit and future benefits maximize the wealth of stockholders.

Any change in dividend policy has both favorable and unfavorable effects on the firm's stock price. Higher the dividend means the immediate cash flows to investors, which is good but lower future growth is bad. Thus, the dividend policy should be optimal which balances the opposing forces and maximizes the stock price. The dividend policy affects financial structure, the flow of funds, corporate liquidity and investor's attitude; it is related to overall financing decision as dividend payout reduces the amount of retained earnings that are paid to shareholders in return to their investment. So the purpose of this study is to make comparative analysis of dividend policy of selected banks.

This study is a complementary study to determine the effect of dividend policy on market price of share. Dividend policy is major financial policy of organization which determines not only the sustainability and growth but also reflect the image of organization in the market. Every investor expects handsome earnings on their share

investment. Company paying higher dividend with high earning has good public image and market price is also high in Nepalese stock market but the company with poor earning and poor dividend payment has less interest and expectation of shareholders. Therefore, market price seems also very small in the market.

In Nepal, only few listed companies pay regular dividends however, they do not have stable dividend policy. Numbers of companies is just in growing stage and therefore, pay a small dividend and some companies do not any dividend to their shareholders. In the midst of these firms, researcher picked up NABIL Bank (regular dividend paying company), Siddhartha Bank (growing and just dividend paying company) and NCC Bank (struggling for existence with no dividend payment) for the study and conducted this study. The objective was to examine the impact of dividend policy on market price of share for three banks. For this purpose, various financial and statistical tools were developed to analyze the data from banks. Using the pooled cross section data of three banks from fifteen observations, researcher attempted to determine the impact of different variables in determining the market price of share.

5.2 Conclusions

Dividend decision is one of the major decisions of managerial finance as it directly or indirectly determines the company's profitability. Shareholders wealth can be maximized through dividend or capital gains. When a company pays dividend to the shareholders, then they are benefited directly. If the firm retains the earnings to exploit growth opportunities shareholders can expect to be benefited indirectly through increase in the price of their shares. In other words, it is a right dividend decision, which maintains a balance between shareholders interest with that of corporate growth from internally generated funds. The funds that could not be used due to lack of beneficial investment opportunities should be better paid as dividends.

There is not any consistent dividend policy of the banks. Therefore, result of different analysis accept the theoretical assumptions and sometimes do not. The researcher concludes that major determinant of dividend policy is earning of the banks. Dividend distribution is also depends upon the earning capacity of the banks. Nepalese investors give more priority and importance to the dividend distribution rather than retained earnings. There is not statistically significant relation of EPS and DPS on

market price. It shows that EPS and DPS are not the major determinants of market value. The association of other variables is equally important in determining the market value. Another conclusion of this study is that NABIL Bank is conscious about shareholders expectation, Siddhartha bank is just remembering the shareholders but has not addressed adequately to their expectation and NCC Bank has totally forgotten the shareholders desire towards dividend return.

Thus, it may be concluded that earnings and dividend payment is more important as compared to retained earnings in Nepal. If the company retains more earning, the market price of share may decline. In this connection, it is more interesting to note that market price of the share is the determination of earning, dividend and retained earnings. The earnings and dividend yields positive impact on market price whereas retained earning has negative impact on market price. The results indicate the customary strong dividend and weak retained earnings effect on market price of share. The study shows a predominant influence of dividend and an absence of retained earning effect on share price. Dividends are found relatively more attractive among Nepalese stockholders. They are, therefore, not indifferent towards dividend and retained earnings.

5.3 Recommendations

The recommendation is based on the empirical findings of the study and observation of the MVPS with DPS and other variables of sampled commercial banks and the empirical view of its impact of dividend on share price by the financial performance. The following recommendations are made.

- The DPS analysis shows that there is not any consistency of dividend policy in all the sample banks. Therefore, these banks need to create somehow paying reasonable DPS every year, it is because higher DPS creates positive attitude of shareholders & investors as the psychological value of shareholders is also valued as the assets of banks.
- All the firms must accept one major fact that EPS is to be considered for determining dividend amount. The analysis shows the condition of not being able to say either significant or insignificant relationship between EPS and

DPS in average. It is important to consider earning rather than neglecting it while making dividend decision.

- The sample banks have great fluctuation in DPS, EPS, DPR, Dividend Yield, Share Price and PE Ratio. The fluctuations should be controlled and the consistency in the variables has become most necessary.
- Banks should have long term visions regarding earning and dividend payment that helps to cope with challenging competitive situation of present world. Various integral and external factors should be considered before taking decision.
- Further studies can be conducted by using others organization as sample, by using other sophisticated tools and techniques, by using other aspects as well.
- Although the payout ratio of the sample banks is fluctuating from year to year, there is no rational approach in deciding the pay out. All the firms should analyze the internal rate of return and cost of capital in deciding DPR, which helps to maximize the shareholders wealth.

QUESTIONNAIRE

Name (Optional):-……

Position:-……

Experience:-……..years.

Institution:-……

Address:-……

Year of establishment:-……

Business:-……..

1. Which of the following decisions, do you think, are more important? (*Please rank in order of their importance. Mark 1 to very importance, 2 just below and 3 to least important)*

a. Financial decision ( )
b. Investment decision ( )
c. Dividend decision ( )

2. What do you think is the major motive for paying cash dividend? (*Please make a tick mark)*

a. To convey information to shareholders that the company is doing well ( )
b. To draw attention from the investment companies ( )
c. To increase the market value of the firm's stock ( )
d. To fulfill shareholders' expectation ( )
e. If others (Please specify):-……

3. Do you think that dividend is residual decision?

a. Yes
b. No
c. No Idea

4. Nepalese shareholders are indifferent whether the company pays or does not pay dividend. Do you agree?

a. Yes
b. No
c. No Idea

5. Do you think that company's announcement of earnings will help to increase market price of a share?

a. Yes
b. No
c. No idea

6. Should stocks of listed companies have popular and affordable price range?

a. Yes
b. No
c. No Idea

7. Do you suggest these companies to go for stock split so that shares can be placed within a more popular trading range?

a. Yes
b. No
c. No idea

8. Do you think that the own share purchase decision of commercial bank has favorable influence on shareholder wealth?

a. Yes
b. No
c. No Idea

9. What would you like to suggest with regard to dividend policy in Nepalese enterprises? (*Please make a tick mark)*

a. Treatment of dividend as an obligation ( )

b. Stability of dividend and un-haphazard payout ratio ( )

c. Cash balance for dividend be adequately planned and maintained ( )

d. Legislation regarding minimum dividend be enacted ( )

e. If others please specify……

10. What do you suggest if the company has no cash to pay dividends? (*Please make a tick mark)*

a. Stock split decision. ( )

b. Pay stock dividends. ( )

c. Do not pay cash or stock dividends at all. ( )

d. If others, please specify……..

Appendix A

Priority for Dividend Decision

Factors	1st rank (weight =3)	2nd rank (weight =2)	3rd rank (weight =1)	Sum of Ranks	Average
Financial decision	28	17	23	141	2.07
Investment decision	18	25	20	124	1.97
Dividend decision	2	6	5	23	1.77

Source: Field Survey

Sum of Ranks = Weight × Value

For Financial Decision = 28×3 + 17×2 + 23×1 = 141

For Investment Decision = 18×3 + 25×2 + 20×1 = 124

For Dividend Decision = 2×3 + 6×2 + 5×1 = 23

Average = $\frac{Sum\ of\ Financial\ Ranks}{Sum\ of\ Each\ Row}$

Financial Decision = $\frac{141}{28+17+23}$ = 2.07

Investment Decision = $\frac{124}{18+25+20}$ = 2.60

Dividend Decision = $\frac{23}{2+6+5}$ = 2.23

Appendix B

Ranking different factors affecting corporate dividend policy

Factors	**1st rank (weight =3)**	**2nd rank (weight =2)**	**3rd rank (weight =1)**	**Sum of ranks**
Earnings	18	12	8	86
Past dividend	12	16	13	81
Availability of cash	1	2	3	10
Concern about maintaining or increasing stock price	4	1	2	16
Ability to borrow of the company	3	3	4	19
Investment opportunity in the company	8	10	17	35
Restrictions in bond indenture of loan agreement	2	4	1	15

Median value of sum of rank:

Arranging in ascending order to sum of ranks: 10, 15, 16, 19, 35, 81 and 86

Median value = value of (n+1)/2 item.

= value of (7+ 1)/2 item.

= value of 4rt item.

= value of sum of ranks 19

Appendix C

Ranking the following motives of stock dividend

Factors	**1st rank (weight =3)**	**2nd rank (weight =2)**	**3rd rank (weight =1)**	**Sum of ranks**
To conserve cash	22	10	7	93
To indicate higher future profits	2	3	4	16
To raise future dividends for shareholders	7	13	18	65
To provide high psychological value to shareholders	14	20	16	98
To lower the firm's stock price	3	2	3	16

Median value of sum of rank:

Arranging in ascending order to sum of ranks: 16, 16, 65, 93, and 98

Median value = value of (n+1)/2 item.

= value of (5+ 1)/2 item.

= value of 3rt item.

= value of sum of ranks 65

Appendix I

Calculations of Dividend Payout Ratio of Sample Banks

Fiscal Year	DPS			EPS			DPR		
	NABIL	SBL	NCC	NABIL	SBL	NCC	NABIL	SBL	NCC
2065/066	35	0.79	0	113.44	22.89	35.63	30.85	3.45	0.00
2066/067	30	10.03	0	83.81	21.99	29.35	35.80	45.61	0.00
2067/068	30	12.79	0	70.67	19.82	30.28	42.45	64.53	0.00
2068/069	40	8.42	0	83.23	20.14	15.78	48.06	41.81	0.00
2069/070	40	10.11	0.26	95.14	29.80	12.69	42.04	33.93	2.05
Mean							39.84	37.87	0.41
SD							6.64	22.28	0.92
CV							16.67	58.85	223.61

Appendix II

Calculations of Dividend Yield Ratio of Sample Banks

Fiscal Year	DPS			MVPS			DY		
	NABIL	SBL	NCC	NABIL	SBL	NCC	NABIL	SBL	NCC
2065/066	35	0.79	0	4899	1000	457	0.71	0.08	0.00
2066/067	30	10.03	0	2384	444	335	1.26	2.26	0.00

2067/068	30	12.79	0	1252	270	275	2.40	4.74	0.00
2068/069	40	8.42	0	1355	345	167	2.95	2.44	0.00
2069/070	40	10.11	0.26	1815	300	126	2.20	3.37	0.21
Mean							1.90	2.58	0.04
SD							0.90	1.71	0.09
CV							47.41	66.23	223.61

Appendix III

Calculations of Earning Yield Ratio of Sample Banks

Fiscal Year	**EPS**			**MVPS**			**EY**		
	NABIL	**SBL**	**NCC**	**NABIL**	**SBL**	**NCC**	**NABIL**	**SBL**	**NCC**
2065/066	113.44	22.89	35.63	4899	1000	457	2.32	2.29	7.80
2066/067	83.81	21.99	29.35	2384	444	335	3.52	4.95	8.76
2067/068	70.67	19.82	30.28	1252	270	275	5.64	7.34	11.01
2068/069	83.23	20.14	15.78	1355	345	167	6.14	5.84	9.45
2069/070	95.14	29.80	12.69	1815	300	126	5.24	9.93	10.07
Mean							4.57	6.07	9.42

SD	1.60	2.83	1.23
CV	35.05	46.69	13.03

Appendix IV

Calculations of Market Value per Share to Book Value per Share Ratio of Sample Banks

Fiscal Year	**BVPS**			**MVPS**					
	NABIL	**SBL**	**NCC**	**NABIL**	**SBL**	**NCC**	**NABIL**	**SBL**	**NCC**
2065/066	100	100	100	4899	1000	457	48.99	10.00	4.57
2066/067	100	100	100	2384	444	335	23.84	4.44	3.35
2067/068	100	100	100	1252	270	275	12.52	2.70	2.75
2068/069	100	100	100	1355	345	167	13.55	3.45	1.67
2069/070	100	100	100	1815	300	126	18.15	3.00	1.26
Mean							23.41	4.72	2.72
SD							14.98	3.03	1.33
CV							64.00	64.12	48.82

Appendix V

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & EPS of NABIL

Year	DPS (X)	EPS (Y)	X^2	Y^2	XY
2065/066	35.00	113.44	1225.00	12868.63	3970.40
2066/067	30.00	83.81	900.00	7024.12	2514.30
2067/068	30.00	70.67	900.00	4994.25	2120.10
2068/069	40.00	83.23	1600.00	6927.23	3329.20
2069/070	40.00	95.14	1600.00	9051.62	3805.60
N = 5	**$\sum X = 175$**	**$\sum Y =$ 446.29**	**$\sum X^2 = 6225$**	**$\sum Y^2 =$ 40865.85**	**$\sum XY =$ 15739.6**

Dividend per Share,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 35

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 5

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 14.29

Earnings per Share,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 89.26

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 16.05

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 17.99

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = 0.3720

PE = $0.6745 \times \frac{1-r^2}{\sqrt{N}} = 0.6745 \times \frac{1-0.3720^2}{\sqrt{5}}$ = 0.2599 0r 25.99%

6PE = 6 × 0.2599 = 1.5594

Appendix VI

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & EPS of SBL

Year	DPS (X)	EPS (Y)	X^2	Y^2	XY

2065/066	0.79	22.89	0.62	523.95	18.08
2066/067	10.03	21.99	100.60	483.56	220.56
2067/068	12.79	19.82	163.58	392.83	253.50
2068/069	8.42	20.14	70.90	405.62	169.58
2069/070	10.11	29.80	102.21	888.04	301.28
N = 5	**$\sum X$ = 42.14**	**$\sum Y$ = 114.64**	**$\sum X^2$ = 437.92**	**$\sum Y^2$ = 2694**	**$\sum XY$ = 963**

Dividend per Share,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 8.43

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 4.55

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 53.97

Earnings per Share,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 22.93

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 4.05

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 17.65

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.0433

PE = $0.6745 \times \frac{1-r^2}{\sqrt{N}}$ = $0.6745 \times \frac{1-0.0433^2}{\sqrt{5}}$ = 0.3011 0r 30.11%

6PE = 6 × 0.3011 = 1.8065

Appendix VII

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & EPS of NCC

Year	DPS (X)	EPS (Y)	X^2	Y^2	XY

2065/066	0.00	35.63	0.00	1269.50	0.00
2066/067	0.00	29.35	0.00	861.42	0.00
2067/068	0.00	30.28	0.00	916.88	0.00
2068/069	0.00	15.78	0.00	249.01	0.00
2069/070	0.26	12.69	0.07	161.04	3.30
N = 5	**$\sum$X = 0.26**	**$\sum$Y = 123.73**	**$\sum X^2$ = 0.07**	**$\sum Y^2$ = 3457.84**	**$\sum$XY = 3.30**

Dividend per Share,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 0.05

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 0.12

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 223.61

Earnings per Share,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 24.75

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 9.95

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 40.21

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.6773

PE = $0.6745 \times \frac{1-r^2}{\sqrt{N}} = 0.6745 \times \frac{1-0.6773^2}{\sqrt{5}}$ = 0.1633 0r 16.33%

6PE = 6 × 0.1633 = 0.9796

Appendix VIII

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPR & PER of NABIL

Year	DPS (X)	EPS (Y)	X^2	Y^2	XY
2065/066	30.85	43.19	951.72	1865.38	1332.41

2066/067	35.80	28.45	1281.64	809.40	1018.51
2067/068	42.45	17.72	1802.00	314.00	752.21
2068/069	48.06	16.21	2309.76	262.76	779.05
2069/070	42.04	19.08	1767.36	364.05	802.12
N = 5	**$\sum$X = 199.20**	**$\sum$Y = 124.65**	**$\sum X^2$ = 8112.49**	**$\sum Y^2$ = 3615.59**	**$\sum$XY = 4684.31**

Dividend payout Ratio,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 39.84

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 6.64

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 16.67

Price Earnings Ratio,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 24.93

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 11.27

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 45.21

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.9412

PE = $0.6745 \times \frac{1 - r^2}{\sqrt{N}} = 0.6745 \times \frac{1 - 0.9412^2}{\sqrt{5}}$ = 0.0344 0r 3.44%

6PE = 6 × 0.0344 = 0.2066

Appendix IX

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPR & PER of SBL

Year	DPS (X)	EPS (Y)	X^2	Y^2	XY
2065/066	3.45	43.70	11.90	1909.69	150.77
2066/067	45.61	20.19	2080.27	407.64	920.87

2067/068	64.53	13.62	4164.12	185.50	878.90
2068/069	41.81	16.91	1748.08	285.95	707.01
2069/070	33.93	10.07	1151.24	101.40	341.68
N = 5	**$\sum X$ = 189.33**	**$\sum Y$ = 104.49**	**$\sum X^2$ = 9155.62**	**$\sum Y^2$ = 2890.18**	**$\sum XY$ = 2999.21**

Dividend payout Ratio,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 37.87

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 22.28

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 58.85

Price Earnings Ratio,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 20.90

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 13.29

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 63.60

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.8081

PE = $0.6745 \times \frac{1-r^2}{\sqrt{N}} = 0.6745 \times \frac{1-0.8081^2}{\sqrt{5}}$ = 0.1047 0r 10.47%

6PE = 6 × 0.1047 = 0.6280

Appendix X

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPR & PER of NCC

Year	DPS (X)	EPS (Y)	X^2	Y^2	XY
2065/066	0.00	9.93	0.00	98.60	0.00
2066/067	0.00	10.58	0.00	111.94	0.00
2067/068	0.00	9.08	0.00	82.45	0.00
2068/069	0.00	11.41	0.00	130.19	0.00

2069/070	2.05	12.83	4.20	164.61	26.30
N = 5	**$\sum$X = 2.05**	**$\sum$Y = 53.83**	**$\sum X^2$ = 4.20**	**$\sum Y^2$ = 587.78**	**$\sum$XY = 26.30**

Dividend payout Ratio,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 0.41

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 0.92

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 223.61

Price Earnings Ratio,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 10.77

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 1.44

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 13.34

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = 0.0834

PE = 0.6745×$\frac{1-r^2}{\sqrt{N}}$ = 0.6745×$\frac{1-0.0834^2}{\sqrt{5}}$ = 0.2995 0r 29.95%

6PE = 6 × 0.2995 = 1.7973

Appendix XI

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & MVPS of NABIL

Year	DPS (X)	MVPS (Y)	X^2	Y^2	XY
2065/066	35.00	4899.00	1225.00	24000201.00	171465.00
2066/067	30.00	2384	900.00	5683456.00	71520.00
2067/068	30.00	1252.00	900.00	1567504.00	37560.00
2068/069	40.00	1355.00	1600.00	1836025.00	54200.00
2069/070	40.00	1815.00	1600.00	3294225.00	72600.00

N = 5	**$\sum$X =175**	**$\sum$Y = 11705**	**$\sum X^2$ = 6225**	**$\sum Y^2$ = 36381411**	**$\sum$XY = 407345**

Dividend payout Ratio,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ =35

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 5

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 14.29

Price Earnings Ratio,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 2341

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 1498.33

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 64

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.0778

PE = 0.6745×$\frac{1-r^2}{\sqrt{N}}$ = 0.6745×$\frac{1-0.0778^2}{\sqrt{5}}$ = 0.2998 0r 29.98%

6PE = 6 × 0.2998 = 1.7989

Appendix XII

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & MVPS of SBL

Year	DPS (X)	MVPS (Y)	X^2	Y^2	XY
2065/066	0.79	1000.00	0.62	1000000.00	790.00
2066/067	10.03	444	100.60	197136.00	4453.32
2067/068	12.79	270.00	163.58	72900.00	3453.30
2068/069	8.42	345.00	70.90	119025.00	2904.90
2069/070	10.11	300.00	102.21	90000.00	3033.00
N = 5	**$\sum$X =**	**$\sum$Y = 2359**	**$\sum X^2$ =**	**$\sum Y^2$ =**	**$\sum$XY**

	42.14		**437.92**	**1479061**	**=14634.52**

Dividend payout Ratio,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 8.43

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 4.55

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 53.97

Price Earnings Ratio,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 471.80

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 302.52

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 64.12

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.9533

For Probable Error,

PE = $0.6745 \times \frac{1 - r^2}{\sqrt{N}}$ = $0.6745 \times \frac{1 - 0.9533^2}{\sqrt{5}}$ = 0.0275 0r 2.75%

6PE = 6 × 0.0275 = 0.1651

Appendix – XIII

Calculation of Total Dividend of NABIL

Year	**MVPS (Rs.)**	**Cash Dividend (Rs.)**	**Stock Dividend**		**Total Dividend (Rs.)**
			%	**Amount (Rs.)**	
2065/066	4899	35	50	1192	1227
2066/067	2384	30	40	501	531
2067/068	1252	30	0	0	30
2068/069	1355	40	20	363	403
2069/070	1815	40	25	490	530
2070/071	1960				

Stock Dividend (In Rs.) = $\frac{Next\ Year\ MVPS \times Current\ Year\ Stock\ Dividend\ In\ \%}{100}$

Appendix – XIV

Calculation of Total Dividend of SBL

Year	MVPS (Rs.)	Cash Dividend (Rs.)	Stock Dividend		Total Dividend (Rs.)
			%	Amount (Rs.)	
2065/066	1000	0.79	15	67	67
2066/067	444	10.03	0	0	10
2067/068	270	12.79	3	10	23
2068/069	345	8.42	0	0	8
2069/070	300	10.11	12	66	76
2070/071	550				

Stock Dividend (In Rs.) = $\frac{Next\ Year\ MVPS \times Current\ Year\ Stock\ Dividend\ In\ \%}{100}$

Appendix – XV

Calculation of Total Dividend of NCC

Year	MVPS (Rs.)	Cash Dividend (Rs.)	Stock Dividend		Total Dividend (Rs.)
			%	Amount (Rs.)	
2065/066	457	0	0	0	0
2066/067	335	0	0	0	0
2067/068	275	0	0	0	0
2068/069	167	0	0	0	0
2069/070	126	00.26	4.74	19	20
2070/071	411				

$$\text{Stock Dividend (In Rs.)} = \frac{Next\ Year\ MVPS \times Current\ Year\ Stock\ Dividend\ In\ \%}{100}$$