# **CHAPTER - I**

## INTRODUCTION

## 1.1 General Background

Dividend payout decisions are one of the fundamental components of corporate policy and have been viewed as an issue of interest in the financial literature. Dividend, reward to stockholder for their investment and risk bearing, depends on various factors. Foremost of these determinants are level of profits, financing constraints, investment opportunities, size of the firm, and pressure from shareholders and regulatory authorities. The relationship between dividend policy and agency costs has been a recent development in the corporate finance theory focusing on the problem of how dividend policy can be used in reducing the agency cost. This association is based on the idea that monitoring of the firm and its management is helpful in reducing agency conflicts and in convincing the market that the managers are not in a position to abuse their position. The basic motivation for the agency models of dividends is that unless a firm's profits are paid out as dividends, corporate managers may divert the cash flow for personal use or pursue unprofitable investment projects.

The third major decision area in financial management relates to dividend policy. The dividend policy involves the choice between distributing the profit belongings to the shareholder and their by their firm. The selection would be influence by the effect on the objectives of financial management of maximizing shareholders wealth.

Since dividends are distributed out of profits the alternative to the payment of dividends is the retention of earnings\ profits. The retained earnings constitute an easily accessible important source of financing the investment requirements of firm.

A major decision of financial management is the dividend decision in the sense that the firm has to choose between distributing the profits to the shareholder and plugging them back to the business. The choice would obviously hinge on the effect of the decision on the maximization of shareholder's wealth. Given the objectives of the financial management of maximizing present value of the firm would be guided by the consideration as to which alternative use consists with the goal of wealth maximization.

That is the firm would be well advises to use the net profit for paying dividends to the shareholders if the payment will lead to the maximization of wealth of the owners. If not the firm should rather retained them to finalize investment programmers.

There are however, conflicting opinion regarding the impact of dividends on the valuation of a firm. Dividends are irrelevant so that the amount of dividends paid has not effected on the valuation of a firm. On the other hand certain theories consider the dividend decision as relevant to the value of the firm measured in terms of market price of the share.

The dividends are irrelevant or are a passive resident, are based on the assumption that the investors are indifferent between dividends and the capital gain, so long as the firm is able to earn more than the equity. Capitalization (k) the investors would be content with the firm retaining the earning. In contrast, if the return is less than the investor would prepare to receive the earnings (i.e. dividends).

Commercial banks are legally formed financial institution, which accept deposits and makes loan for Commercial and non Commercial purpose. The history of Commercial bank is not very long. The growth of Commercial banks for last two decades remained phenomenal particularly financial sector reformation in 1990s. The concept of banking as formally executed after the

establishment of Nepal Bank Ltd. in 1994 B.S. In 2014 B.S the Nepal Rastra Bank was established with the objective of supervising, guiding and protecting the functions of banking sectors. As a result, the growth of Commercial banks in Nepal has been mushroomed. The number of banks has been increased as per requirement under different acts like Agricultural Development Bank under Agricultural Development Bank Acts in 2024 B.S, Commercial banks under the Commercial Acts in 2031 B.S. Nepal Arab Bank Ltd. (NABIL) is the first Joint venture bank in Nepal which was established in 2041 B.S. In the same manner, the details of commercial Bank Nepal are:

S. No.	Name	<b>Operation Date (B.S.)</b>
1	Nepal Bank Ltd.	1994
2	Rastriya Banijya Bank Ltd.	2022
3	NABIL Bank Ltd.	2041
4	Nepal Investment Bank Ltd.	2042
5	Standard Chartered Bank Nepal Ltd.	2043
6	Himalayan Bank Ltd.	2049
7	Nepal SBI Bank Ltd.	2050
8	Nepal Bangladesh Bank Ltd.	2051
9	Everest Bank Ltd.	2051
10	Bank of Kathmandu Ltd.	2051
11	Nepal Credit & Commerce Bank Ltd.	2053
12	Nepal Industrial & Commercial Bank Ltd.	2055
13	Lumbini Bank Ltd.	2055
14	Machhapuchhre Bank Ltd.	2057
15	Kumari Bank Ltd.	2057
16	Laxmi Bank Ltd.	2058
17	Siddhartha Bank Ltd.	2059
18	Agriculture Development Bank Ltd.	2024
19	Global Bank Ltd.	2063
20	Citizens Bank International Ltd.	2064

21	Prime Commercial Bank Ltd.	2064
22	Bank of Asia Nepal Ltd.	2064
23	Sunrise Bank Ltd.	2064
24	DCBL Bank Ltd.	2065
25	NMB Bank Ltd.	2065
26	Kist Bank Ltd.	2066
27	Janata Bank Ltd.	2066
28	Mega Bank Nepal Ltd.	2067
29	Commerz & Trust Bank Nepal Ltd.	2067
30	Civil Bank Ltd.	2067
31	Century Commercial Bank Ltd.	2067

(Source NRB website)

The importance of Bank is highly appreciated because it needs proper attention to run successfully.

A Bank is an organization where the principal operation is concerned with the accumulation of temporarily idle money of the general public for the purpose of advancing to other for expenditure (*Sayers*, 1967: 3).

Common stocks represent ownership in a company. The holders of common stock are called shareholder or stockholder. They are the legal owners of the company. "People buy common stock of the banks or any other institution expecting to earn dividend plus capital gain when they sell their shares at the end of some holding period" (*Thapa, 2003: 147*).

Therefore one of the major reasons for which public is interested to invest money on shares of banks or other intuition is for 'dividend'. Dividend is paid by business or organization when it is running at profit. Dividend refers to that portion of earning of the firm that is distributed to the shareholders in return to their investment in the share.

The expected level of cash dividend is the key variable from which owners and investors in the market place determine share value. The establishment of effective dividend policy is therefore key importance to the firm's overall objectives of the owner's wealth maximization (*Gitman*, 1982: 507).

According to Miller and Modigliani, The value of firm depends solely on its earning power and is not influenced by the manner in which its earning are split between dividend and retained earnings" (*Chandra*, 1990: 602).

Dividend is the income that the shareholders receive physically. Dividend refers to the portion of net earning which is paid out to shareholders. As dividend is direct return of the earning. Such action is beneficial to the shareholders through future increase in share price. In short, Capital gain means increase in the price of stock. Dividend policy determines the dividend of earning between payment to stock holders earning and investment of the firm.

Dividend policy is one of the major decisions of financial management because it affects the financial structure, the flow of funds corporate liquidity and investor's attitude. The successful completion of fiscal year having sufficient profit, management decides to declare dividend to shareholders. The important aspect of amount of earning to be distributed to the shareholders and the amount to be retained in the firm. It also determines the forms of dividend (*Katwal*, 2001: 3).

## 1.2 Brief Profile of Sample Bank

This research is concerned with dividend policy of some commercial banks of Nepal. So the sampled banks are briefly introduced below.

## A.) NABIL Bank Limited

NABIL Bank Limited, the first foreign bank of Nepal, started operation in July 1984 with paid up 20297.69 million. NABIL was incorporated with the objective of extending international standard modern banking services to various sector of the society. Pursuing its objectives, NABIL provides a full range of commercial banking services through its, 47 points of representation across the kingdom and over 170 reputed correspondent Banks across the globe. The bank was listed in NEPSE in the year 1985 A.D. The paid up to the capital of the bank in fiscal year 1996\97 was only Rs. 261.64 million. It has 50 branches all over Nepal. The banks earning per share is Rs. 129.21, Rs. 137.08, Rs. 115.86 Rs. 113.44 Rs. 83.81 and Rs. 70.67 in fiscal year, 2006, 2007, 2008, 2009, 2010 and 2011 respectively. Cash dividend of 85%, 100%, 60%, 35%, 30% and 30% paid in the year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. (Source Annual report)

#### **B) Everest Bank Limited**

Everest Bank Limited started its operation in 1994 with a view and objectives of extending professional and efficient banking services to various segment of the society. The bank is providing customer friendly services through a network of 45 branches. The bank has conferred with "Bank of the year 2006, Nepal" by the banker, a publication of financial times, London.

EBL is one of the first Bank to introduce 'Any Branch Banking System (ABBS)' in Nepal. The banks earning per share are Rs. 62.78, Rs. 78.42 Rs. 91.82, Rs. 99.99, Rs. 100.16 and Rs. 83.18 in fiscal year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. Cash dividend of 25%, 10%, 20%, 30%, 30% and 50% are paid in the year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. (*Source Annual report*)

## C) Nepal Investment Bank Limited

Nepal Investment bank is the third joint venture bank of Nepal established in 1985 A.D. It was Joint ventured with credit Argicole Indosuez, France but the share was transferred to group of Nepalese business house in 2001 A.D since it on more belonged to Indosuez, the name also changed to Nepal Investment Bank Limited. It was listed in NEPSE in 1987 A.D. Its paid up capital is Rs 587.74 million in fiscal year 2004/2005. Nepal Investment banks have more than 41 branches all over Nepal. The bank's earning per share are Rs. 59.35, Rs. 62.57, Rs. 57.87, Rs. 37.42, Rs. 52.55 and Rs. 48.84 in the fiscal year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. Cash dividend of 20%, 5%, 7.50%, 20%, 25% and 25% is paid in the year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. (*Source Annual report*)

## D) Himalayan Bank Limited

Himalayan Bank Limited was established in 1993 in collaboration with Habib Bank Limited, Pakistan. It is fourth Joint venture bank in Nepal and it was listed in NEPE in 1993. The paid up capital of the bank in the fiscal year 1995\96 was only Rs 120 million, which gradually reached up to Rs 634.50 million in the year 2005/06. Himalayan Bank has more then 38 branches all over Nepal. The bank's earning per share are Rs. 59.24, Rs. 60.66, Rs. 62.74, Rs. 61.90, Rs. 31.80 and Rs. 44.66 in the fiscal year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. The dividend pay out ratio is 30%, 15%, 25%, 12%, 11.84% and 16.84% in the year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. (*Source Annual report*)

## E) Standard Chartered Bank Limited

Standard Chartered Bank was established in 1987 as Nepal Grindlays Bank. This was the second Joint ventured Bank after Nabil. Later after 2001, Grindlays left this bank and Standard Chartered group took this bank by purchasing 75% shares in the company with 25% owned by the Nepalese Public. The profit of previous year i.e. 2064 was 81 crores. Standard Chartered

Bank has more than 15 branches all over Nepal. The bank's earning per share are Rs. 175.84, Rs. 167.37, Rs. 131.92, Rs. 109.99, Rs. 77.65 and Rs. 69.51 in the fiscal year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. The dividend payout ratio is 130%, 80%, 80%, 50%, 55% and 50% in the year 2006, 2007, 2008, 2009, 2010 and 2011 respectively. (*Source Annual report*)

# 1.3 Focus of the Study

In each and every firm, dividend policy is taken as a financial decision that affects the firm. Investor should invent in stock of any company knowing the dividend policy of the firm. The main focus of this research will be valuable to the shareholders to view dividend policy of joint venture commercial banks comparatively. So this research may be helpful for those who want to know the productivity of the commercial bank for their better investment. This study also helps to the management for corrective action.

Stability or regularity of dividends is considered as a desirable policy by management of companies. Most of the shareholders also prefer stable dividends have a positive impact on the market price of share. By stability we mean maintaining its positions in relation to a trend live preferably one that is upward slopping (*Koirala and Thapa*, 2062: 8).

Investors are interested in investing their funds in the shares of public Limited companies. This trend plays a significant role for the development and expansion of the capital market. And it will continue only when dividend pattern is directed to the interest of shareholders. There is no uniformity in dividend pattern of Nepalese Corporation. This research focus a new trend of paying dividend to shareholders shown by different joint venture Banks and some public Limited companies.

By dividend we mean some kind of consistent approach to the distribution versus retention decision, rather than making the decision on the purely adhoc basis from period to period (*Pearson*, et.al, 1972:405).

#### 1.4 Statement of the Problem

In the context of Nepalese capital market, the commercial bank provide low rate of interest on deposits. So the people are attracted to invest money in shares for greater benefits. In Nepalese context only a few companies have adopted dividend policies. There are different such as cash dividend, stock dividend forms and Bonus share etc. Among different forms a dividend policy stock dividend is most popular one. But also dividend is not clearly understood by a large segment of financial community.

Different research has been made in this area seeking to establish the irrelevance of dividend on shareholders. Miller and Modigliani's work the following questions: How can investors benefit from a dividend when it is in effect, paid rupee for rupee out of the value of the share?

Beside the number of studies research has been made to lead the development of the behavior models associated with the name of linter (1965), Darling (1957), and Britain (1966) and other attempting to categories explain and measure the different types of observed different practice. The study seems to provide useful guidance in handling the complicated decision problem.

Every firm follows different forms of dividend policy based on their strategy for the company. It is assumed that there is direct relationship between dividend and stock price. But while considering the firms of underdeveloped country like Nepal, it is very different of match the relationship between dividend and stock price. There is no uniformity in the distribution of dividend of commercial banks. Similarly, there is no relationship between dividend distribution and share price. Due to the political instability and many other

factors almost of the firms are not able to pay the dividend to their shareholder. The joint venture banks are distributing low dividend while earning is high and some time they pay high when earning is low. So, especially joint venture banks are distributing dividend in regular basis but there is no uniformity.

For example:- Everest bank Limited, in year 2006, paid cash dividend 25% when earning per share was Rs. 62.78 but in the year 2011 EBL paid dividend of 50% when earning per share was Rs. 83.18.

Himalayan bank Limited, in year paid 30% dividend when earning per share was Rs. 59.24 in the year 2006 but in the year 2011 HBL paid dividend of 16.84% when earning per share was Rs. 44.66.

Therefore we concluded that all banks have sufficient earning but they are not distributing the dividend in equal proportion. They have not followed the consistency in dividend policy and we could not get uniformity of dividend payout ratios in these sample banks.

## Therefore this research raises some following question:-

- Are share price affected by dividend per share in sample banks?
- Is the sample banks guided by specific dividend policy.
- Do the sample banks have uniformity in dividend distribution?
- Is there any consistency in dividend per share and dividend payout ratio in sample banks?
- Does the dividend policy affect DPS, EPS, DPR, PE ratio and MVPS within stated sample banks?
- This study will try to answer the above mentioned issues on the basis of major finding.

## 1.5 Objectives of the Study

The main Objectives of the study is analyzing the impact of dividend policy on its market price of the share and also may be helpful for valuable suggestions and important guidelines to the bank to formulate optimal dividend policy and maximize share price on the basis of findings.

- To study the current practice of dividend policy in joint venture Commercial Banks.
- To examine the relationship among DPS, EPS, and D/P ratio of sample banks.
- To find out the impact of dividend on share price of sample Commercial Banks.
- To identify the uniformity of dividend distribution of different commercial banks.

# 1.6 Significance of the Study

Nepalese financial institutes have already experienced the practice of dividend distribution. As such it is felt significant to study the policy regarding dividend concerned with financial Institutes. Dividend policy decision is one of the most important decisions in every organization. This study is expected to fill the research gap and add to the inputs to financial literature relating to dividend. The findings may be valuable to following groups.

**To the Management: -** Dividend policy is the controversial topic of financial management. In may affect value of the firm. Moreover, most common objective of the firm is to maximize shareholders wealth. So management may adopt appropriate dividend policy.

**To Shareholders:** - Shareholders are more concerned with the amount of dividend paid by the firm. So they have more curiosity on the dividend policy,

adopted by their concerned banks. With this study they can make their mind more comparable in terms of dividend pattern and value of the firm.

**To the Investors:** - Generally, most of the investors prefer to invest in profitable firm and expect high return. Corporate sector is expanding but there is information gap between the management of Nepalese companies and Nepalese investors who are eager to invest in shares they are just investing in the shares in trial and error methods. So, the dividend behavior should be effective to attract new investors keeping the previous investors satisfied and should maintain the reputation of the firm.

**To the Researcher:** - It can be used by researcher as guideline to fulfill the partial requirement of Master of Business Studies. It may help others who want to study in similar topic.

Besides these, it will also be beneficial for the policy makers from the comparative study of dividend policy. They can get important findings, which are useful in policy making about dividend policy formation. Dividend policy of banks helps the customers, financial agencies, stock brokers, interested person and scholars to find out appropriate dividend policy. It is believed that other banks will also benefit with this study.

## **1.7** Limitation of the Study

- The research should be done in very short period. We cannot analyze freely which restricts from minimizing error to full extend.
- Only five Banks are taken as sample due to lack of time.
- Data is not available easily.
- It covers the study period of only five years from 2006 to 2011.
- The study is based on secondary data might be not so much reliable.
- Lack of research experience and reliability of statistical tools.

## 1.8 Research Methodology

Research Methodology is the research Method used to test the hypothesis. In designing Methodology for a thesis project the following element should be taken into account. They are research design, population and sample, sources of data, data collection techniques and presentation and analysis of data. Research Methodology is the way to solve the research problem systematically.

Research design is the main part of thesis or any Research works. By Research design mean overall frame work or plan for the collection and analysis of data. (Wolf & Pant, 2005:74-65) Research design presents a series of guide posts to enable the Researcher to progress in right direction in order to achieve the goals. The study tries to evaluate the dividend policy of some selected joint ventured banks.

The Financial and statistical tools and techniques used to analyze the available data are as follows:-

- Financial indicators and variables.
- Test of hypothesis.
- Mean, standard deviation, coefficient of variation, correlation coefficient, coefficient of determination, standard error of estimate, probable error and regression analysis.
- Dividend per share, earnings per share, market price per share, dividend yield, earning ratio, retention ratio, dividend payout ratio, price earring ratio.

## 1.9 Organization of the Study

The study has been organized into five different chapters; each Chapter deals important factors of dividend policy. The titles of each of these Chapters are listed below.

## **Chapter I: - Introduction**

This Chapter includes statement of problems, objectives of study, focus of the study, important of the study and limitation of the study.

# **Chapter II: - Review of Literature**

This chapter deals with the theoretical analysis and brief review of literature. It also includes discussion on the conceptual frame work and review on the major studies in general.

## **Chapter III: - Research Methodology**

It includes Research design, population and sample sources of data, Data collection procedure, and Methodology of Analysis and definition of statistical tools.

## **Chapter IV: - Presentation and Analysis of Data**

This deals with the Presentation and Analysis of data to indicate quantitative factors in dividend policy using both financial and statistical tools and techniques.

# Chapter V: - Summary, Conclusion and Recommendation

This deals with the summary, conclusion and recommendation. Also at the end of this research Bibliography and Appendices are attached.

## **CHAPTER - II**

## REVIEW OF LITERATURE

In this Chapter relevant literature which is related to the dividend policy is reviewed. Topics from different books and different studies published in magazines, theses of seniors and journals related to the study are reviewed below.

## 2.1 Conceptual Frame Work

Dividend refers to the portion of earning made by the firm that is distributed to shareholders as return of their Investment in share. It can be defined as reward to the shareholders for bearing risk of uncertainty. Dividend policy is the most important and major decisions of financial management. After the successful completion of the fiscal year, the company has sufficient profit and management decides to declare dividend to the shareholders. The important aspect of dividend policy is to determine the amount of earning to be distributed to the shareholder and the amount to be kept as retained earnings to reinvest in profitable sector or in the expansion of business.

Thus, the policy of a company is the dividend of its profit between distributions to shareholder as dividend and retention for profitable investment. When a portion of profit is paid out to the shareholders the payment is known as dividend. Dividend policy involves the decision to pay out earning versus retaining them for investment in the firm. Any change in dividend policy has both favorable and unfavorable effects on the firm's stock price. Higher the dividend means higher the immediate cash flows to investors, which is good, but lower further growth, which is bad. The dividend policy should be optimal which balances the opposite forces and maximizes the stock price. Higher the dividend means higher the immediate cash flows to investors, which is good, but lower further growth, which is bad. The dividend policy should be optimal which balances the opposite forces and maximizes stock price.

The objective of the firm plays crucial role to decide how much of the earning to retain and how much to pay as dividend to the shareholders.

People buy common stock of the company expecting to earn dividend and also they want to earn capital gain which they sell their share at the end of holding period. Capital gain is amount received as capital by issuing share from the owner and as loan from outsider. Capital gain consists of additional payment made to the business by shareholders of the company. Capital gain result from the passage of time because the retained earnings are employed with best opportunity to yield more profit, so that the value of the firm is maximized and the value of the share rises too. If the stock is actually sold at price above its purchase price, the investors will receive a capital gain. As such, the shareholders expect an increase in market value of common stock over time. Mostly, the investors expect dividend to be continued in each year as well as to receive better price when they sell the stock.

The important aspect of dividend policy is to determine the amount of earning to be retained in the firm. Retained earnings are the most significant internal sources of financing. On the other hand, dividend may be considered desirable from shareholder point of view as they tend to increase their current wealth (*Pandey*, 1997: 672).

Generally a firm which has easy access to external sources of finance may feel less constrained in its dividend decision. For such a firm, its dividend decision as somewhat independent of it investment decision as well as liquidity position.

Enjoying greater degree of flexibility, such firm is inclined to be more generous in its dividend payout policy. On the other hand, a firm that has difficulty in raising finances externally is likely to lean heavily an internally generated fund. Given its investment and other commitment and a lesser degree

of financing attitude, such a firm is likely to peruse a somewhat conservative dividend policy (*Chandra*, 1972:612).

Generally dividends are paid in cash. Thus, it reduces the cash balances of corporation, which affect both internal financing and liquidity position of firm. The investment and financing decision, the dividend decision has both theoretical and managerial facts. The dividend is one of the central decision area related to policies seeking to maximize the value of firm's common stock.

#### 2.1.1 Forms of Dividend

Generally dividends are paid in cash but when the company is unable to pay cash dividend. They use different forms of dividend payment for satisfying stockholders. Such forms of dividend are stock dividend, script dividend, property dividend, Bond dividend and stock repurchase.

#### (a) Cash dividend

Cash dividend may be termed as portion of earning paid in cash to owner of the firm as return on their equity investment. If company does not have enough cash at the time of dividends payment, company seeks to arrange funds, which will be managed by borrowing. 'When the company follows stable dividend policy, they uses to prepare cash budget to indicate the necessary funds which would be needed to meet regular dividend payment of the company' (*Pandey*, 1995: 309).

The cash account and the reserve account of the company will be reduced when cash dividend is paid. Thus, both total assets and net worth of the company are reduced when cash dividend is distributed. Market price of share drops in most cases by the amount of cash dividend distributed (*Hastings*, 1966: 370).

#### (b) Stock Dividends

A stock dividend occurs when the board of directors authorizes a distribution of common stock to existing shareholders. Stock dividend increases the number of outstanding shares of the firm's stock. Although stock dividend does not have a real value, firms pay stock dividend as a replacement for a supplement to cash dividend. Under stock dividend, shareholders receive additional shares of the company in lieu of cash dividends. Stock dividend requires an accounting entry transfer from the retained earnings account to the common stock and paid in capital accounts.

Rupees transferred from retained earnings = Number of shares outstanding \* Percentage of stock dividend \* Market price of the stock.

## (c) Script Dividend

A scrip dividend is a distribution of surplus to the stockholders in the form of notes or promises to pay the amount of dividend at a certain time. The notes are called dividend certificates or scrip. Sometime companies need cash generated by business earning to meet business requirements or with-hold the payment of cash dividend because of temporary shortage of cash. In such circumstance the company may issue scrip dividend payable at future dates.

## (d) Property Dividend

If payments are made in the form of property or assets rather than cash, it is called property dividend. This form of dividend may be followed when there are assets that are no longer necessary in operation of the business or in extra ordinary circumstances. Companies own products and subsidiaries are examples that have been paid as property dividend.

This has the effect of increasing the number of outstanding shares of the company as a result the decrease in EPS which effect the reduction in the

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

## (e) Bond Dividend

When the company generates more profit for a long time, it is better to issue bonds, which carries certain interest rates. But there should be other constraints to issue bonds. It is issued in the form of bond dividend for the existing shareholder.

# (f) Stock Repurchase

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

- Open market repurchase
- Tender (Offer) repurchase

Stock is repurchased specially when the firm has abnormally high profits and is not in a position to effectively utilize surpluses.

The repurchase effects are as follows:

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

#### 2.1.2 Theories of Dividend

- i) Residual Theory of Dividend.
- ii) Stability of Dividend.

# i) Residual Theory of Dividend

Residual theory of dividend suggests that only residual earning should be distributed as dividend, which is left after accepting all profitable investment opportunities, which depend upon the investment policy of the firm. According to this theory, the dividend is distributed if there exists a balance of earning after paying fixed obligations and investment opportunities (Ibid, 1967; 537). If the firms have investment opportunity with higher return than required, the firm will invest the earning to that project, and if there is only earning left after accepting all the investment opportunities then it will be distributed to stock holders as cash dividend.

When the firm has opportunity of investment in profitable sector at first they prefer the internally generated fund (Residual earnings) rather than externally generated fund which is comparatively expensive due to the floatation cost and other. So, the amount of dividends fluctuates time to time in keeping with availability of acceptable investment opportunity of the firm. "Although the residual theory of dividend appears to make further analysis of dividend policy unnecessary. It is not clear that dividends are solely a means of distributing excess funds (*Rao*, 1992: 458).

#### ii) Stability of Dividend

Stability of dividend refers to the regularity in paying dividend even though the amount of dividend may fluctuate from period to period. 'Stability or regularity dividend is considered as desired policy by the management of most companies. Most of the shareholders also prefer stable dividends because all other things being the same, stable dividends have a positive impact on the market price of the share (*Pandey*, 1995:302).

By stability we mean maintaining its position in relation to a trend lives preferably one that is up ward sloping.

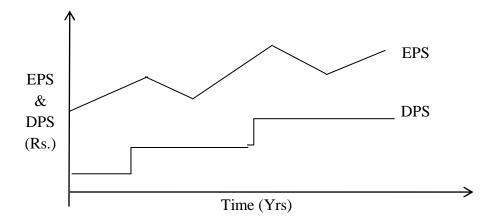
There are three major types of dividend polices developed (established) under dividend Stability. Which are as follows:

# a) Constant Dividend per Share

The company which follows this policy pays a fixed amount per share as dividend every year, irrespective of the fluctuations in the earning. It is easy to follow this policy when earnings are stable but if it fluctuates, the company faces difficulties to maintain such polices.

This policy does not imply that the dividend per share will never be increased. When the company reaches new level of earnings and expects to maintain it the annual dividend per share may be increased.

Figure 2.1
Constant Dividend per Share Policy



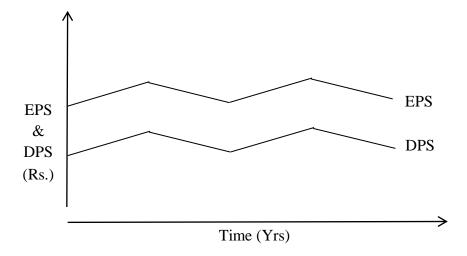
The dividend policy of paying a constant amount of dividend per year treats common share holders without giving any consideration to investment opportunities within the firm and opportunities available to shareholders' (*Brandit*, 1972: 7).

This policy is generally preferred by those persons and institutions that depend upon dividend income to meet their living and operating expenses because of the constant amount of dividend they receive'.

## (b) Constant Payout Ratio

Constant payout ratio refers to the paying a fixed percentage of net earnings every year as dividend. Under this policy, the amount of dividend fluctuates with direct proportion of earning. If the company incurs losses no dividend shall be paid regardless of the desire of shareholders. Internal financing with Retained earnings is automatic when this policy is followed. At any payout ratio the amount of dividend and the additions to retained earnings increase with increasing earnings and vice versa.

Figure 2.2
Dividend Policy of Constant Payout Ratio



# (c) Small Constant dividend per share plus extra dividend (Low Regular Dividend per share plus Extra)

The policy of paying a low regular dividend plus extra is a compromise between a stable dividend or stable growth rate and a constant payout ratio rate. Such policy gives the firm flexibility, yet investors can count on receiving at least a minimum dividend. It is often followed by firms with relatively volatile earnings from year to year. The low regular dividend can usually be maintained

even when earnings decline and extra dividends can be paid when excess funds are available.

## **2.1.3 Factor Affecting Dividend Policy**

Many considerations may affect a firm's decision about its dividend. Some of them are unique to that company, and some of the more general considerations are given subsequently.

## a. Legal Rules

In deciding on the dividend, the directors take the legal requirements too into consideration. In order to protect the interests of creditors an outsider, the companies Act 2063 prescribes certain guidelines in respect of the distribution and payment of dividend. Moreover, a company is required to provide for depreciation on its fixed and tangible assets before declaring dividend on shares.

Certain legal rules may limit the amount of dividend a firm may pay. These legal constraints fall into two categories. First, statutory restrictions may prevent a company from paying dividend. While specific limitations vary by state. It proposes that Dividend should not be distributed out of capita, in any case. Likewise, contractual obligation should also be fulfilled, for example, payment of dividend on preference shares in priority over ordinary dividend.. The second type of the legal restrictions is unique to the firm end result from restrictions in debt and preferred stock contracts. The objective of legal restrictions is to see that the paid up capital of the company is not reduced and the interest of creditors and shareholders is not adversely affected

#### b. Desire of Shareholders

Shareholders may be increased either in dividend income or capital gains. Wealthy Shareholders in a high income tax bracket may be increased in capital gains as against current dividends. A retired and old person, whose source of income is dividend would like to get regular dividend.

In a closely held company, management usually knows the desires of Shareholders. So they can easily adopt a dividend policy that satisfies all Shareholders. But in a widely held company, number of Shareholders is very large and they have diverse desires regarding dividends and capital gains. Some Shareholders want a cash dividend, while other prefers bonus Share.

# c. Age of the Company

The dividend policy is affected by the fact whether a company is an old and established one or is a new one. A new company cannot afford to declare a high rate of dividend from the beginning, as it has to fall back on retained earnings for its requirements of funds for expansion. However, an established company would have built up enough reserves and can afford to be liberal in dividend distribution.

#### d. Liquidity Position

Liquidity position (Availability of cash) of the firm is an important consideration for dividend payment. Although a firm may have adequate earning to declare dividend, it may not have sufficient cash to pay. The dividend payment means cash out flows. Thus greater cash position and overall liquidity of a company, the greater ability to pay dividend. Generally growing firm faces the problem of liquidity even though it makes a good profit but it needs funds for its expansion. So they cannot declare dividend.

## e. Investment Opportunities

The dividend policy is also influenced by the financial needs of the company. If any profitable project found, company invests its earning to that project rather than paying dividend. 'Growing firm gives precedence to the retention of earning over the payment of dividend in order to finance its expanding activates. But the firm having stable earning trend will prefer to pay large portion of its earnings as dividend' (Ibid). When the investment opportunities arise frequently, company follows a policy of paying dividend and raises external funds when the investment opportunity occurs.

# f. Access to Capital Market

A company having insufficient cash can pay dividends, if it is able to raise fund in capital market because they can generate fund from the capital market whenever it is required. 'Easy accessibility to the capital market provides flexibility to the management in paying dividends as well in meeting corporate obligation. Thus, greater the ability of the firm to raise funds in the capital market, the greater will be its ability to pay dividend even it is not liquid'.

## g. Control

Another important variable is the effect of alternative sources of financing on the control situation of the firm. As a matter of policy, some corporations expand only to the extent of their internal earnings. This policy is defended on the ground that raising funds by selling additional common stock dilutes the control of the dominant group in that company. At the same time, selling debt increases the risks of fluctuating earnings to the present owners of the company. Reliance on internal financing in order to maintain control reduces the dividend payout

## h. Stability of Earning

A firm that has relatively stable earnings is often able to predict approximately what its earnings will be. Such a firm is therefore more likely to pay out a higher percentage of its earnings than a firm with fluctuating earnings. The unstable firm is not certain that in subsequent years earning will be realized, so it is likely to retain a high proportion of current earnings. A lower dividend will be easier to maintain if earning fall off in the future.

#### i. Restriction in debt Contracts

Restriction in debt contracts may specify that dividend may be paid only out of earnings generated after signing the loan agreement and only when net working capital is above the specified amount, also preferred dividends take precedence over common stock dividends.

# j. Past Dividends

To a lesser extent the dividends declared during previous years must also be considered. Shareholders do expect that the company would pay not less than dividend paid in the past. Of course, if circumstances change, departure has to be made from the past trend of dividends. But generally directors are reluctant to reduce the previous year's rate of dividend and if need be, they would try to maintain the rate of dividend, withdrawing from the past accumulated profit. The firm has to maintain its past dividend payout rate. If current dividend payout ratio is less than past year rate, the market price of stock will decline.

#### k. Inflation

This is also important constraint for dividend payment. Cost of replacing assets increases substantially due to inflation and the funds generated by depreciation would be in adequate to replace the assets. So, greater profit retention may be required for the companies in order to make replacement or to maintain the capital intact which will reduce dividend payment.

## 1. Future Needs of Capital

The current profit is divided into retained earnings and dividend. When the company is in need of additional capital for future expansion of business, has to restrict its rate of dividend and keep a major part of its current earnings for meeting working capital needs and fixed capital requirements of expansion of business. Particularly small companies and newly established companies have no other source of raising finance and would therefore depend mainly on this source.

## m. Need to Repay Debt

The need to repay debt also influences the availability of cash flow to pay dividend.

## n. Rate of Asset Expansion

A high rate of asset expansion creates a need to retain funds rather than to pay dividends.

#### o. Profit Rate

A company has to determine the amount of dividend keeping in view the actual earnings of the current year only. Of course, the whole of earnings is not distributed by the company every year, but it is the base of dividend policy. Even the companies following stable dividend policy makes some changes within a certain limit on the basis of current year's profit. There is no definite proportion between dividend and profit but dividend is raised, if the current year's profit has increased considerably. As one author states, "The starting point of dividend policy is the earnings of the firm. The upper limit on dividends, practically speaking, is fixed by the earnings of the current period."

## p. Tax Position of Shareholders

The Tax position of stockholder also affects dividend policy. Due to high rates of taxes, the company's profits are reduced, leading to a lower rate of dividend. In case of closely-held companies the shareholders who are mostly in the highest tax brackets would like to receive fewer dividends and opt for capital gains. Many companies would like to issue bonus shares frequently instead of paying high rates of dividend where as corporations owned by small investors tend toward higher dividend payout.

## 2.1.4 Legal Provision Regarding Dividend Practice in Nepal

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

Dividends and subsections of this section are as follows:

#### **Section 2**

States that bonus shares (stock dividend) means share issued in the form of additional shares to the stockholders by capitalizing the surplus from the profit or the reserve fund of a company. The term also denotes as increase in the paid up values of the shares after capitalizing surplus or reserves.

#### Section 47

Has prohibited company from purchasing its own share. The Section states that no company shall purchase its own shares or supply loans against the security of its own shares.

#### **Section 137**

Bonus shares and sub Section (1) states that the company must inform the office before issuing bonus shares under sub Section (1). This may be done only according to special resolution passed by the general meeting.

#### Section 140

Dividends and sub Sections of this Section are as follows:

#### **Sub Sections (1)**

Except in the following circumstances dividend shall be distributed among the shareholders within 45 days from its dare of decision to distribute them:

- (a) In case any law forbids the distribution of dividends.
- (b) In case the right to dividend is disputed.
- (c) Incase dividends cannot be distributed within the time limit.

Mentioned above owning to circumstances beyond anyone's control and without any fault on the part of the company.

#### **Sub Sections (2)**

Incase dividend are not distributed within the time limit mentioned in Sub Sections (1), this shall be done by adding interest at the prescribed rate.

## **Sub Sections (3)**

Explains that only the person whose name stands registered in the registrar of existing Shareholders at the time of declaring the dividend shall be entitled to it.

## 2.2 Review of Major Studies on Dividend Policies

In this part the major studies on dividend stock prices, management views on dividend policy, and management view on stock dividends have been reviewed.

## **Linter's Study**

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

$$DIV*_{t} = pEPS_{t}$$
 ......(i)  
And  $DIV_{t}$  - $DIV_{t-1} = a+b$  ( $DIV*_{t}$  -  $DIV_{t-1}$ ) +e

Where,

 $DIV*_t = Firm desired payment$ 

 $EPS_t = Earning per share$ 

P = Targeted payout ratio

a = Constant relating to dividend growth

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

Major findings of this research are as follows:

- Firms generally think in terms of proportion to be paid as dividend.
- Investment requirement are not considered for modifying the pattern of dividend behavior.
- Firms generally have target payout ratio in view while determining change in dividend per share.

## E. Modigliani and M.H. Miller's Study

Modigliani and Miller (Miller & Modigliani, 1991:411-433) advocated that dividend policy did not affect the value of the firm. It implies that dividend policy has no effect on the share price of the firm. They argued that the value of the firm depend on the firm earnings, which depend on its investment policy. Therefore as per MM theory, a Firm's Value is independent of dividend policy.

Their study of irrelevance of dividend is based on the following critical assumptions:

The firm operates in perfect capital markets where investors behave rationally, information is freely available to all and transaction and floatation cost do not exist. Perfect capital markets also imply that no investor is large enough to affect the market price of share.

- Taxes do not exist or there is no difference in the tax rate applicable to the capital gains and dividends.
- This means that investors value a rupee of dividend as much as a rupee of capital gains.
- The firm has a fixed investment policy
- Risk of uncertainty does not exist i.e. investors are able to forecast future prices and dividend with certainty and one discount rate is appropriate for all securities and all time periods. Thus,  $r=k=k_t$  for all t.

Modigliani and Miller's Model provide fooling model to prove their theory Modigliani and Miller provided the proof in support to their agreement in the following manner.

## Step I

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

Symbolically:

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

Where,

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

 $D_1$  = Dividend per share to be received at the end of the period.

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

K<sub>e</sub>= Cost of equity capital (Assume Constant)

## Step II

Assuming that the firm does not resort to any external financing the market value of the firm can be computed as follow;

$$NP_0 = \frac{n(D_1 {+} P_1)}{1 {+} K_e}$$

Where,

n = Number of equity shares at zero period.

# **Step III**

If the firm's Internal sources of financing on its investment opportunities fall short of the funds required and this the number of new shares issued at the end of year 1 at price  $P_1$ .

Then,

$$NP_0 = \frac{nD_1 + P_1(n + \Delta n) - \Delta np1}{1 + k_e}$$

# **Step IV**

If the forms were to finance all investment proposals, the total amount of new share issued would be given the following equation:

$$\Delta np_1 = I - (E - nD_1)$$

$$\Delta np1=I - E + nD_1$$

Where,

 $\Delta nP_1$  = The amount obtained from the sale of new shares to finance capital budget.

I = The total amount of required budget.

E = Earning of the firm during the period.

E- $nD_1$  = Retained Earnings.

## Step V

By substituting the value of  $\Delta nP_1$  from equation of step IV to equation of step II, we find,

$$NP_0 = \frac{nD_1 + p(n + \Delta n) - I + E - nD_1}{1 + k_e}$$

Or,

$$NP_0 = \frac{p(n+n\Delta)-I}{1+k_e}$$

## Step VI

The above equation gives the value of the firm; there is no role of dividend in the equation. So Modigliani and Miller concluded that dividend policy has no effect on the shares price.

In the way according to Modigliani and Miller study, it seems that under condition of perfect capital market, rational investors, absence of tax discrimination between dividend income and capital appreciation, given the firm's investment policy, its investment policy may have no influence in the market price of the share.

# Myron Gordon's Study

Myron Gordon in his study concluded that dividend policy of a firm affect its value. In this model, he plead that investor were not indifferent between current dividend and retention of earnings. The conclusion of this study is that investors value the present dividend more than the future capital gains. His

argument insisted that an increase in dividend payout leads to increase in the stock price (Myron, 1962 Vo l. 3).

Hence investors required rate of return increase as the amount a dividend decrease. This means there is a positive relationship existing between the amounts of dividend and the stock prices.

His model is based on the following assumptions:

- The firm is an all equity firm. No external financing is available. Consequently retain earning would be used to financial expansion.
- The internal rate of return (r) of the firm is constant. This ignores the diminishing marginal efficiency of the investment.
- The firm and its stream of earning are perpetual.
- The corporate taxes do not exist.
- Retention ratio (b), once decided upon is constant. Thus the growth rate g=br, each constant forever.
- The appropriate discount rate (k) for the firm remains constant.

Thus, growth rate (g) = br, is constant forever.

The discount rate is greater than growth rate, K>br=g.

Based on the above, Gordon had provided the following formula (which is simplified version of original formula) to determine the market value of share.

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

Where,

P = price of share.

E = Earnings per share.

b = Retention ratio.

1-b = percentage of the earning distributed as dividend.

K = Capitalization rate or cost of capital

br = Growth rate r i.e. rate of return on investment of all equity firm. E(a-b) = Dividend per share.

This model shows the following facts:

In a growth firm, share price tends to decline in correspondence with an increase in payout ratio or decrease in retention ratio, i.e. high dividend corresponding to earning leads to decrease in share price. Therefore dividend and stock prices are negatively correlated in growth firm. In normal firm share value remains constant regardless of changes in dividend policy. It means dividend and stock price are free from each other in a normal firm i.e. r = k. In a declining firm share price tends to rise in correspondence with a rise in dividend payout ratio. It means dividend and stock price are positively correlated with each other in declining firm.

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

Their study based on the following assumption

Dividends react with year-to-year fluctuation in earnings.

- Price doesn't contain speculative components.
- Earnings fluctuation may not sum zero over the sample.

The regression results based on the equation of:

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

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

Where,

 $P_t$  = Per share price at time t

 $D_t$  = Dividends at time t

 $R_t$  = Retain earning at time t

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

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

Where,

 $E_t$ = Earning per share at time t

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

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

They also calculate the dividend supply equation  $(D_t = e + fE_t + gD_{t-1} + d(E/P)t-$ 1) and derived price equation for four-industry group in 1958. The derived price equation showed that there were no significant changes' from those obtained in the single equation approach as explained above. They argued that the stock price or more accurately the price-earning ratio does not seem to have a significant effect on dividend payout. On the other hand they noted that the retained earnings effect increased relatively in the three of the four cases tested. Further their result suggested, price effects on dividend supply are probably not a serious source of bias on the customary deviation of dividend and retained earnings effects of short-term income movement are sufficiently great. Further they used lagged price as a variable instead of lagged earning price ratio and showed that more than 90 percent of variation in stock prices can be explained by three independent variables and retained earnings received greater relative weight than dividends in most of the cases. The only exception was steels and food in 1958. They considered chemicals, electronics, and utilities as growth industries in these groups and the retained earnings effect was larger than the dividends effect for both the years covered. For the other two industries, namely food and steels, there was no significant systematic difference between the retained earnings and dividends coefficient.

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

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

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

### Walter's Study

Professor James E. Walter conducted a research in 1966 regarding dividend policy, in which he argues that value of the firm always affected by the dividend policy adopted by the firm. In this approach, investment policy of the firm is directly affected by the dividend policy adopted by the firm. In this approach, investment policy of the firm is directly affected by the dividend policy which is opposite to Modigliani and Miller approach.

His study is mainly focused to find out the relationship between internal rate of return and firm's cost of capital. By analyzing these two factors firm can allocate the total earning to dividend and retained earnings.

His model is based on the following assumptions.

A close study of the formula would indicate that Professor Walter emphasizes two factors which influence the market price of a share. The first is the dividend per share and the second is the relationship between internal return on retained earnings and the market expectation from that company as reflected in the capitalization rate. In other words, if the internal return of retained earnings is higher than the market capitalization rate, the value of the ordinary shares would be high even if the dividends are low. However, if the internal return within the business is lower than what the market expects, the value of the share would be low. In such a case, the share holders would prefer that a higher dividend is declared so that they can utilize the funds so obtained elsewhere in

more profitable opportunities. The firm finances all investment through retained earning i.e. Debt or new equity not issued. All earning are either distributed as dividend or reinvested immediately, i.e. no earning should be retained in the form of cash. The firm's internal rate of return and cost of capital are constant. Beginning earning per share and dividend never change. Firm has very long or infinite life (Walter & March, 1966:29-41).

Based on this assumption, Walter formulated the related factors to determine the Market price of share.

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

Where,

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 IRR and its cost of capital. His view on the optimum dividend payout ratio can be summarized as follows:

#### (I) Growth Firm

If the internal rate of return is higher than the firm's cost of capital these firms are said to be growth firm. These firms assumed to have sufficient profitable investment opportunities. Such firms can maximize the value of the share by retaining all earnings for internal investment. Thus, the optimum payout ratio for a growth firm is zero.

#### (II) Normal Firm

The firm having equal internal rate of return and cost of capital is known as normal firm. For these firms dividend policy does not affect the market value of the share. There is no unique optimum payout ratio for a normal firm. One

dividend policy is as good as other. Market value per share is not affected by the payout ratio' (*Ibid*, 1997:280).

#### (III) Declining Firm

Declining firms have lower IRR than firms cost of capital. Generally this firm's don't have any profitable investment opportunities. So, for these firms it is better to distribute all the earnings as dividend. Thus optimum payout ratio for declining firm is 100%. The market value per share increases as payout ratio increases.

## Van Horne and Mc Donald's Study

Van Horne and Mc Donald conducted more comprehensive study on dividend policy and new equity financing. The purpose of this study was to investigate the combined effect of dividend policy and new equity financing decision on the market value of the firm's common stocks. They explored some basic aspect of conceptual framework and empirical tests were performed during year 1968 for two industries, using a well known valuation model, i.e. across section regression model. The required data were collected from 86 electric utility firms on the COMPUSTAT utility data tape and 39 firms in the electronic and electronic component industries as listed on the COMPUSTAT industrial data tape (*Van Horne & Donald, 1971:507-519*).

They tested two regressions for the utility industrial. By using these models, they compared the result obtained for the firms that 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, shares value was no adversely, except for those in the equity financing in the presence of cash dividends, except for those on the highest new issue group and it made new equity a more costly form of financing than the recantation of earning. They also indicate that the payment of dividend through excessive equity financing reduce share price. For electronics, electronic components industry, a significant relationship between new equity financing and the value was no demonstrated.

### Mark E. Holder, Frederick W. Langreher and J. Lawrence Hexter's Study

Mark E. Holder, Frederick W. Langreher and J. Lawrence Hexter's investigated the influence of stakeholders on firm's dividend policy by examining the interaction between the dividend and investment policies. They proposed that both non- investor stakeholder and capital suppliers had an impact on firm are dividend policy. To test the preposition, they used more direct measures of free cash flow as way to relate dividend and agency costs and an objective smoothing procedure on the dividend payout ratio. Their results indicate that an interaction between the dividend and investment policies of a firm does exist.

They describe their econometric model and the variable used in the study. They used the regression equation below as the basis for testing their hypothesis of relationship between the Net Organization Capital (NOC) of a firm and its dividend payout. To specify the model more fully, they included other variables based on previous research.

$$DP_{it} = \beta + \beta_{\Box}FS_{it} + \beta_{2}LSALES_{it} + \beta_{3}INS_{it} + \beta_{4}LCSHR_{it} + \beta_{5}FCF_{it} + \beta_{6}GROW_{it} + \beta_{7}SID_{it} + E_{it}$$

Where,

DP<sub>it</sub> = Smooth dividend payout ratio for firm i in fiscal year t.

 $FS_{it}$  = Measure of the focus of firm i in yare t.

 $LSALES_{it} = Natural log of sales of firm i in year t.$ 

 $INS_{it}$  = Residual of insider ownership for firm i in year t regressed on LSALES.

 $LCSHR_{it} = Residual of natural log number of common shareholder for firm I in Year t regressed on LSALES.$ 

 $FCF_{it}$  = Free cash flow for firm i in year t.

 $GROW_{it}$  = sales growth of firm i for year t using the prior five year.

STD<sub>it</sub> = Standard deviation of monthly returns of firm i in year t.

Finding of the study are as follows:

- The corporate focus is negatively related to dividend payout ratios.
- More focused firms (with fewer lines of business) tend to have lower dividend payout ratios
- The larger firms tend to have higher payout ratios than the smaller firms.
- When considering the influences of agency cost on payouts, they find that the greater the degree of inside ownership the Lower the payout; the larger the number of share holder, the higher the dividend payout ratio; and greater the free cash flow the higher the payout ratio.
- When Looking at transaction cost payout ratios are lower for firm that have higher standard deviation of returns and for the higher sales growth firms.

## Deepak Chawla and G. Srinivasan's Study

This study is also focused on the impact of dividend and retention market price of stock. They estimated cross sectional relationship of 18 chemical and 13 sugar industries for the year 1963 to 1973. The basic objectives of the study are (*Chawla & Srinivasan*, 1987:137-140).

- To set a model this explains the relationship between share price, dividend and retained earning.
- To test the dividend and retained earning hypothesis
- To examine the structural changes in the estimated relations overtime.

To achieve the about objectives they used simultaneous equation model as developed by Friend and Puckeet in 1964.

The unspecified form of model is as follows:

Price function

$$P_t = F(D_t, R_t, P/E_{t-1})$$

**Dividend Supply Function:** 

$$D_t = F(E_t, D_{t-1}, P/E_{t-1})$$

Identity,  $E_t = D_t + R_t$ 

Where,

P = Market Price of Share

D = Dividend per Share

R = Retained Earnings per Share

E = Earnings per Share

P/E = Deviation from the Sample, average of price earnings ratio

t = Subscript for time.

They used two stage least square techniques for estimation. They found that the estimated coefficient had a correct sign and coefficient of determination of all equation was higher in case of chemical industry. Which implies that the stock price and dividend paid variation can be explained by their independent variables. But in case of sugar industry the sign for retained earnings is negative.

From their study they concluded that both dividend and retained earnings significantly explain the variations in share price of the industry.

#### Friend and Puckett's Study

Friend and Puckett (1964) conducted a study on the relationship between dividends and stock prices, by running regression analysis on the data of 110 firms from five industries in the year 1956 to 1958. These five industries were chemicals, electric utilities, electronics, food and steels. These industries were selected to permit a distinction made between the result for growth and non growth industries and to prove a basis for comparison with result by other authors for earlier years. They also considered cyclical and non-cyclical industries which they covered. The study periods covered a boom year for the economy when stock prices leveled off after rise (1956) and somewhat depressed year for the economy when stock prices however rose strongly (*Fried and Puckett, 1964: 656-682*).

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

Symbolically, their price function and dividend function are,

Price function:  $P_t = a + bD_t + cR_t + d(E/P)_{t-1}$ 

Where,

 $P_t$  = Share price at time t.

 $D_t = Dividend$  at time t.

 $R_t$  = Retained earnings at time t.

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

Dividend Supply functions:

$$D_t = e + fE_t + gD_{t-1} + h(E/P)_{t-1}$$

Where,

 $E_t$  = Earnings per Share at time t

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

This study was based on the following assumptions:

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

Their regression results based on the equation of  $P_t = a + bD_t + CR_t$  showed the customary strong dividend and relatively weak retained earnings effects in three of the five industries, i.e., chemicals, foods and steel. Again they tested other regression equations by adding lagged earning price ratio to the above equation and added the following equation.

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

In this equation, they found the following result; they found that more than 80% of the variation in stock prices can be explained by three independent variables. Dividends have a predominant influence on stock prices in the same three out of five industries but they found the differences between the dividends and retained earnings coefficient are not quite so marked as in the first set of regressions. They also found that the dividends and retained earnings coefficient are closer to each other for all industries in both years except for steels in 1956, and the correlation are higher, again except for steels.

They also calculated dividends supply equation i.e.

 $D_t = e + fE_t + gD_{t-1} + h(E/P)_{t-1}$  and the dividend price equation for four industry groups in 1958. In their derived price equation it seems that there was no significant changes from those obtained from the single equation approach as explained above. They argued that the stock prices or more accurately the price earnings ratio does not have a a significant effect on dividend payout. On the other hand, they noted that the retained earnings effect is increased relatively in three of the four cases tested. Further, they argued that their result suggests price effect on dividend supply are not a serious source of bias in the customary derivation of dividend and retained earning effects on stock prices, though such a bias might be marked if the disturbing effect of short run income movements are sufficiently great.

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

Similarly, they tested the regression equation of  $P_t = a + bD_t + cR_t$  by using normalized earning again. They obtained normalized retained earnings by subtracting dividends from normalized earnings. That normalized procedure was based on the period 1950-1961. Again they added prior year's normalized earning price variable and they compared the result. Comparing the result, they found that there was significant role of normalized earnings and retained earnings but an effect of normalized price earnings ratio was constant. When they examined the later equation, they found that the difference between dividend and retained earnings coefficient disappeared. Finally they concluded that management might be able to increase prices somewhat by raising dividends in food and steel industries.

They conducted more detailed examination of chemical samples. That examination disclosed that the result obtained largely reflected the under regression weighting given the three firms with price deviating most from the average price in the sample of 20 firms and retained earnings as a price determinant.

Finally, Friend and Puckett concluded that, it is possible that management might be able, at least in some measure, to increase stock prices in non growth industries by raising dividends and in growth industries by greater retention. i.e. low dividends.

### H.K. Baker, G.E. Farrelly and Richard B. Edelman's Study

H.K. Baker, Gail E. Farrelly and Richard B. Edelman Surveyed management view on dividend policy (H. Kent Baker, Gail E. Farrelly, Richard B. Edelman, 1985, p. 78-84). They asked corporate financial mangers what they considered most important in determining their firm's dividend policy. The objectives of their survey were as follows:

- 1. To compare the determinants of dividend policy today with Linter's behavioral model of corporate dividend policy and to access managements agreements with Linter's findings.
- 2. To examine managements perception of signaling and client effect.
- 3. To determine whether manager in different industries share similar views about the determinants of dividend policy.

The firms they surveyed were listed on the New York stock exchange and classified four digest standard industrial classification codes. Total of 562 NYSE firms were selected from three industrial groups, Utility (150), Manufacturing (309) and wholesale/retail (103).

They mailed questionnaire to obtain information about corporate dividend policy. The questionnaire consisted of three parts.

- 15 closed end statements about the importance of various factors that each firm used in determining its dividend policy.
- 18 closed end statements about theoretical issues involving corporate dividend policy, and
- A respondent's profile including such items as the firm's dividend and earnings per share.

They send the final survey instrument to the chief financial officer of 562 firms, followed by the second complete mailing to improve the response rate and reduce potential non-response bias. Their survey yielded 318 usable responses (56.6% response rate), which were divided among the three industry groups as follow: 114 utilities (76%), 147 manufacturing firms (47.6%) and 57% wholesale/retail (5.3%). Based on dividend and earnings per share data provided by the respondents, the average dividend payout ratios were computed. They found that payout ratio of the responding utility (70.3%) was considerably higher than for manufacturing (36.6%) and wholesale/retail (36.1%).

The results for this survey on the aspect of determinants of dividend policy were as follows:

The first highly ranked determinants are the anticipated level of firm's future earnings and the second factor is the pattern of the past dividends. They found the high ranking of these two factors is consistent with Linter's findings.

A third factor cited as important in determining dividend policy is the availability of cash.

A fourth determinant is concerned about maintaining or increasing stock price. They found this factor is particularly strong among utilities that ranked this second in importance.

Similarly, the results of their survey on the aspect of attitudes on theoretical issues were as follows:

- Respondents from all three industry groups agreed relatively strongly the dividend payout affects common stock prices.
- The respondents from all three industry groups agreed, on average, that dividend payout provide a signaling device of future company prospects and that the market uses dividend announcements as information for assessing security value.
- The respondents also demonstrated a high level of agreement that the reason for dividend policy changes should be adequately disclosed to investors.
- Respondents from all three industry groups thought that investors have different perceptions of the relative risks of dividends and retained earnings and hence are not indifferent between dividend and capital gain returns.

#### 2.3 Review of Journal & Articles

A study done by Pradhan an outstanding study "Related to Stock Market Behavior" (Pradhan, 1993;23-49). In this study he collected the data of 17 enterprises from the year 1986 to 1990. The objectives of the study are:

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

The conclusion of the study related to dividend behavior is as follows.

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

A study done by Shrestha 'Shareholder's democracy and annual general meeting feedback" deals with the policies and financial performance of some financial institution of Nepal, which contains. Shrestha's view expressed in annual general meeting of financial institutions. The paper presented by him on fifth annual general meeting of Nepal Arab Bank has been presented here.

In his view the common problems and constraints of the shareholders are as follows:

• The cost plus inflation at exorbitant rate has made the shareholders to expect higher return from their investment.

- Multiple decrease in the purchasing power of the Nepalese currency to the extent that higher return by way of dividend is just a natural economic consequence of it.
- Erosion in purchasing power of the income has made it clear that dividend
  payment must be directed to enhance shareholder's purchasing power by
  raising dividend payment ratio on the basis of both earnings and cost
  theory.
- Indo-Nepal trade and transit deadlock has become a sort economic welfare putting rise in the cost of living index to a considerable extent.
- This is a reason which made shareholders to expect higher demand for satisfactory dividend.
- The waiting of 5 years with payment dividend in previous years is equally
  a strong enforceable reason of bank's shareholder to expect handsome
  dividend already assumed and committed in various reports of the earlier
  annual general meeting.
- One way to encourage risk taking ability and preference is to have proper risk return trade off by bank's management board is a way that higher return must be the investment rule. For higher risk takers that compromise bank's shareholders.

At the end of the paper, Shrestha states that the banks are trying its best to satisfy shareholders and employees as well.

Another article published by K.D. Manandhar describes about the relationship of dividend payout to other financial factors based on the data of 7 commercial banks, 5 finance and insurance companies, 2 trading companies, 2 service oriented companies and 1 manufacturing company for the year 1987 to 1998. (*Manandhar*, 2000:5-12).

Following are the major findings of the study.

- Significant relationship is found between change in dividend policy in terms of dividend per share and change in lagged earnings.
- There is relationship between distributed lagged profit and dividend.
- The difference is found significant between overall proportion of change dividend and due to increase and decrease in EPS during the study period.
- In overall increase in EPS has resulted to increase in the dividend payment in 66.6% of the case while decrease in EPS resulted decrease in dividend payments, which come to equal to 33.3% of the cases.
- It is found that Nepalese corporate firms have followed the practice of maintaining constant dividend payments per share in EPS as reflected by the total percentage of constant and increase dividend payment of 78.33% of the cases. In other words firms are reluctant to decrease dividend payment.
- In overall Nepalese corporate firms are found reluctant to decrease dividend either keeping dividend payment constant or higher to take the advantages of information contents and signaling effects of dividend relating to the firm's continued progress and performance sound financial strength favorable investment environment, lower risk, ability to maintain sustained dividend rate and finally to increase the market price of the stocks in the stock market.

#### 2.4 Review of Previous Research

There are few theses available which have looked into corporate dividend behavior. The available thesis reviewed as follows:

"A Comparative Study of Dividend Policy in Commercial Banks" conducted by **Rishi Raj Gautam** (1998) was carried out by using the secondary data of three commercial banks.

Objectives of the study are as follows:

• To identify what type of dividend policy is being followed and find out whether the policy followed is appropriate or not.

- To examine the impact of dividend on share prices.
- To identity the relationship between DPS and other financial indicators.
- To know if there is any uniformity among DPS, EPS and DPR of the three sample commercial banks.

### Major findings of the research are as follows:

- Average earnings per share and dividend per share of all concerned banks are satisfactory.
- Analysis indicates that there is the largest fluctuation in EPS and DPS, on the other hand have relatively more consistency dividend per share in all the sample banks.
- No commercial banks seen to be guided by cleanly defined dividend strategy in spite of the good earnings and potentials.
- Share of financial institution are actively traded and market prices are increasing.
- Commercial banks represent a robust body of profit earnings organization in comparisons to the other sectors such as manufacturing, trading etc.
- The most striking findings of this study have clearly defined dividend strategy on the other hand there is significant relationship perceives between earnings and dividend of expansion program.
- It is necessary to research about the dividend policy in joint venture commercial banks take large number of sample and do wide spread analysis in above variables.

**Prerana Laxmi Rajbhandari** (2001) has conducted "A Study on Dividend Policy". A comparative study between banks and insurance companies through data collected from 1994/95 to 1998/99 with 3 joint venture commercial banks and 3 insurance companies in May, 2001.

#### The main objectives of the research were:

 To examine the relationship between dividend and market price of the stock.

- To identify the appropriate dividend policy followed by the banks and insurance companies.
- To analyze the relationship between dividend policy decision of banks and insurance companies.

### Major Findings are as follows:

- The average DPS and all concerned institution except NABIL and EPS of all sample institution seem satisfactory.
- The analysis of coefficient of variation shows that there is the largest fluctuation in EPS and DPS. Other companies have seemed to be relatively more consistent.
- The analysis of dividend payout ratio shows, none of the banks or insurance companies has constant payout ratio each year.

A study done by **Navaraj Adhikari** (2007) "Corporate Dividend Practices in Nepal". using primary as well as secondary data.

### The objectives of the study are:

- To analyze the properties of portfolios formed on dividend.
- To examine the relationship between dividend and stock prices.
- To survey the opinions of financial executives on corporate dividend practices.

## Major findings of the study are as follows:

- There are differences in financial position of high dividend paying and low dividend paying companies.
- The stocks with longer ratio of dividend per share to book value per share have higher liquidity. It has more variable as compared to stock paying lower dividends. Other thing remaining the same, other thing remaining the same, financial position of high dividend paying companies are comparatively better than that of low dividend paying companies.
- Another interesting conclusion is that market price of stock is affected by dividend for finance and non finance sectors differently.

- There is positive relationship between dividend and stock price.
- There is negative relationship between dividend payout and earnings before tan to net worth.
- Stocks with larger ratio of DPS to book value per share have higher profit ability. These profitability ratios of stocks paying large dividends are also some variable as compared to stocks paying smaller dividends.
- The companies paying higher dividend are reluctant to employ high degree of leverage is their capital structures.
- The stocks with larger ratio of dividend per share to book value per share have also higher turnover ratio and higher interest coverage.

#### Some findings through primary data:

- With respect to factors affecting corporate dividend policy, the majority of the respondents give the first priority to "earnings", the second to availability of cash and the third to past dividend and fourth to concern about maintaining or increasing stock price.
- Dividend payout affects the price of common stock.
- As regards dividend as a residual decision, the majority of the respondents feel that it is not a real residual decision.
- With respect to major motives for paying cash dividend, the majority of the respondent feels that it is to convey information to shareholders that the company is doing good.
- Nepalese shareholders are not really indifferent towards payout or nonpayment of dividend.
- One of the major findings is that earning announcement helps to increase the market price of share.

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

His main objectives of the work are as follows.

- To highlight dividend practice of the bank, insurance and financial companies.
- To analyze the relationship of dividend with various important variables.

## Major findings to the study are:

- Nepalese government NRB, SEBON, NEPSE should be conscious to discourage market imperfection.
- Companies should have long term policy regarding the adoption of suitable dividend policy.
- Even if not earning has been increasing, the dividend per share has widely fluctuated. Distribution of bonus share should be pre-evaluated.
- There needs a proper information discloser to the investor.

**Surendra Bista's Study** (2008) presented his dissertation "*Dividend Policy and Practices in Nepal*". A comparative study of listed joint ventures commercial banks and manufacturing companies. Through data collected from 1999 to 2005 with three joint venture banks out of the three manufacturing companies in 2006.

### The major objectives of the study were:

- To examine the relationship between dividend and market price of the stock.
- To identify the appropriate dividend policy followed by the banks and manufacturing companies.
- To analyze the relationship between dividend policy decision of bank and manufacturing companies.

### Major Findings are follows:

The banks and manufacturing companies do not follow any specific dividend policy. DPR are fluctuating over the periods of those selected companies.

- MPS do not follow any specific trend, it fluctuates the future price.
- There is not any specific trend of EPS in the companies.
- There is great difference between market price per share and book value per share.

### 2.5. Research Gap

The purpose of this study is to draw some ideas concerning to the dividend policy and to see what new contribution can be made and to receive some ideas, knowledge and suggestions in relation. In this context, the previous studies can't be ignored because they provide the foundation to the present study. In other words, there has to be continuity in research. This continuity in research is ensured by linking the present study with the past research studies. It is clear that the reference of new research can't be found on the exact topics, i.e. "A comparative study of Dividend policy of Nepalese Commercial Banks" therefore to complete this research work, many books, journals articles and various published and unpublished dissertations and field opinion are followed as guideline to make the research easier and smooth through these reference materials. The researcher can find out the gaping from the past research that has to be fulfilled by the present research work.

This is a new topic for the research work. It is expected that the uncovered areas of this research work will be studied. The gapping between old and new research work will be focused and filled up based on the given objectives and limitation in this research.

## **CHAPTER - III**

## RESEARCH METHODOLOGY

#### 3.1 Introduction

Research methodology is the research method used to test the hypothesis. In designing methodology for a thesis project the following element should be taken into account. They are research design, population and sample, sources of data, data collection technique and presentation and analysis of data. Research methodology is the way to solve the research problem systematically.

"Research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objective in view"

"Research methodology is a vital and absolutely indispensable part of social scientific and educational research. Without research methodology modern social scientific and educational research would still be in the dark age."

### 3.2 Research Design

Research design is the main part of thesis or any research work. "By research design we mean an overall frame work or plan for the collection and analysis of data". Research design presents a series of guide posts to enable the researcher to progress in right direction in order to achieve the goals. The study tries to evaluate the dividend policy of some selected joint venture banks.

"Research design is the plan, structure and strategy of investigation concerned so as to obtain answers to research questions and to control variances". Research design is conceptual structure within which a research is conducted. It is a purposeful scheme of action proposed to be carried out in sequence during the process of research. This study is descriptive, analytical and comparative employing various historical secondary data for the analysis of dividend pattern of Nepalese commercial banks.

#### 3.3 Population and Sample

The term "Population" or "Universe" for research means all the members of any well defined class of people, events or objects, organization or firms. The population means aggregate or the entire group. Population consists of large group. Due to its large size it is difficult to collect detailed information. So a sub-group is chosen that is believed to be representative of the Population. The sub- group is called a sample. The sample allows the researchers more time to make an intensive study of a research problem. Good sampling techniques can save the researchers time and money. There are twenty five commercial banks in Nepal, since it is very difficult to study of them, only five sample banks has been taken for research.

### The sample bank selected for analysis is as follows:

- Standard Chartered Bank Nepal Limited
- NABIL Bank Limited
- Himalayan Bank Limited
- Nepal Investment Bank Limited
- Everest Bank Limited

#### 3.4 Source of Data

#### **Secondary Data**

This study on dividend policy "A Comparative study of Dividend policy of commercial banks of Nepal" is based on Secondary source of data. The required data have been collected from Nepal stock exchange i.e. from the web page www.nepalstock.com. Other information is collected from different books, Annual reports, and web pages of concerned Banks, Library and newspapers as required.

#### 3.5 Data Collection Procedure

Data required for this research is collected through published statistical report, available books, journals, newspapers and WebPages. Similarly, the relevant

data and the important information have been collected from the library and references of Patan Multiple campus, Patan Dhoka, Lalitpur. Other necessary information has been taken from the individual investors, related organizational officials, NEPSE staffs and other related personalities as well. Beside this, related websites like www.nepalstock.com, www.fncci.com and www.nrb.org are also used for data collection.

## 3.6 Method of Analysis

Specific financial and statistical tools are used in this research. The analysis of data is done according to pattern of data available. The relationship between different variables related to study topic would be drawn out by financial and statistical tools. The calculated results are tabulated under different heading for ease of reading and then they are compared with each other to interpret results. In this study simple regression analysis has been used to analyze the effect of independent variable on dependent variable. It helps in studying the effect and magnitude of the single independent variable in one dependent variable to determine whether the variable of DPS is related to dividend decision.

### 3.7 Data Analysis Tools

### 3.7.1 Financial tools used for Analysis

#### a. Earnings per share (EPS)

EPS is calculated to know the earning capacity and to make comparison between concerned companies.

It is defined as the result received by dividing net profit after taxes by number of common stock outstanding.

## b. Dividend per share (DPS)

The part of earnings distributed to the shareholders as per share basis is known as DPS. It is the amount calculated by dividing the total dividend with total numbers of share outstanding.

$$DPS = \frac{Total\ Dividend}{Number\ of\ common\ share\ outstanding} = \dots Rs.$$

## c. Dividend Pay-out Ratio (DPR)

The percentage of the profit on share that is distributed as dividend is called dividend payout ratio (DPR). It is the result received by dividend DPS by EPS.

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

#### d. Price Earnings Ratio (P\E Ratio)

P/E Ratio expresses the amount currently paid to each rupee of currently reported by the balance sheet of company's earnings per share by the market. It is calculated using the following formula.

$$P\setminus E \text{ Ratio} = \frac{\text{Market price per share (MPS)}}{\text{Earning per share (EPS)}} = \dots$$
 Times

#### e. Dividend Yield

Dividend yield may define as the ratio of dividend per share to the market price per share. It is also expressed in terms of the market price per share. It is the result obtained by dividing DPS by the MPS.

Dividend Yield = 
$$\frac{\text{Dividend per share (DPS)}}{\text{Market price per Share(MPS)}} = \dots$$
%

#### f. Market Price per Share to Book value per share Ratio

This ratio reflects the price of the market or outsiders are paying for each rupee of currently or reported by the company. It is calculated by the dividing the market price per share by book value per share.

Market price per Share to Book value per share Ratio =

$$= \frac{\text{Market price per Share (MPS)}}{\text{Book value per share (BVPS)}} = \dots$$
Times

#### g. Profitability Ratio

Profitability ratio shows the combined effects of liquidity asset management and debt management on operating result. It measures the earning of the company for a certain period. Profitability ratio is calculated by dividing net asset to capital employed.

Profitability ratio = 
$$\frac{\text{Net Income}}{\text{Operating income}} = \dots \%$$

### 3.7.2 Test of Hypothesis

A hypothesis is supposition made as a basic for reasoning in testing of hypothesis; an assumption is about the population parameter.

To test whether the assumption of hypothesis is tight or not; a sample is selected from the population, sample statistic is obtained, observed the difference between the sample mean and the population hypothesized value, and test whether the difference is significant or in significant. Smaller difference, the sample mean is close to the hypothesized value, and larger the difference, the hypothesized value has low chance to be correct. The hypothesis of this research work as follows:

## **Hypothesis First**

Null Hypothesis (H<sub>0</sub>): There is no significant difference in DPS on Sample joint venture banks.

Alternative Hypothesis (H<sub>1</sub>): There is significant difference in DPS on Sample joint venture banks.

## **Hypothesis Second**

Null Hypothesis (H<sub>0</sub>): There is no significant difference in EPS on Sample joint venture banks.

Alternative Hypothesis (H<sub>1</sub>): There is significant difference in EPS on Sample joint venture banks.

## **Hypothesis Third**

Null hypothesis (H<sub>0</sub>): There is no significant difference in DPR on Sample joint venture banks.

Alternative Hypothesis (H<sub>1</sub>): There is significant difference in DPR on Sample joint venture banks.

#### 3.7.3 Statistical Tools Used

The research holds many Statistical Tools which are as follows:

# (i) Mean or Average $(\bar{x})$

Mean or Average value is a single value within the range of the data that is used to represent all of the value in the series. Since the average is somewhere within the range of the data, it is also called a measure of central tendency. In this study, the data related to dividend are tabulated and drawn out average over different year.

Mean 
$$(\overline{x}) = \frac{\text{Sum of the values of Observation } (\sum X)}{\text{Total number of Observation } (N)}$$

#### (ii) Standard Deviation ( $\sigma$ )

Standard Deviation ( $\sigma$ ) is the most important and widely used measure of study dispersion. It measures the absolute dispersion. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series, and vice-versa. The data related to dividend of sample joint venture banks are tabulated and observed the uniformity and homogeneity of the series after obtaining their respective standard deviation.

Standard Deviation 
$$(\sigma) = \sqrt{\frac{\sum (x - \overline{x})^2}{N}}$$

Where,

 $\sigma$  = Standard Deviation

 $\sum (x - \overline{x})^2$  = Sum of Mean Deviation Square

N = Total Number of Observation

 $\sum$  = Summation off

### (iii) Coefficient of Variation (CV)

Coefficient of Variation is the most commonly used measure of relative Variation. It is used in such problems where we want to compare the Variability of the two or more than two series. The series for which the coefficient of Variation is greater is said to be more variable or conversely less consistent, less uniform, less stable or less homogeneous. On the other hand, the series for which coefficient of Variation is less is said to be less variable or more consistent, more homogeneous. Coefficient of Variation is denoted by C.V. and is obtained as follows.

$$C.V. = \frac{\sigma}{x} \times 100\%$$

Where,

C.V. = Coefficient of Variation

 $\sigma$  = Standard Deviation

x = Arithmetic Mean

Less the C.V. more will be the uniformity; consistency and more the C.V. less will be the uniformity, consistency.

#### (iv) Correlation Coefficient (r)

The correlation analysis refers to the techniques used in measuring the closeness of the relationship between the variable. "Correlation Analysis is the statistical tools that we can use to describe the degree to which one variable is linearly related to another". It is the measurement of the degree of relationship between two casually related sets of figures whether positive or negative. Its value lies somewhere ranging between -1 to +1. If both variables are constantly changing in similar direction, the value of correlation coefficient will be +1 indicative of perfect positive correlation. When the coefficient will be -1 two variable takes place in opposite direction. The correlation is said be perfectly negative.

In this study, simple correlation coefficient in used to examine the relationship of different factors with dividend and other variable. The data regarding dividend over different years are tabulated and their relationship with each others are drawn out. In practical life, the possibility of obtaining either perfect positive or perfect negative correlation is very remote.

It is calculated as follows:

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

Where,

r = correlation coefficient

X = independent variable

Y = dependent variable

N = number of periods

 $\sum$  = Summation off

## (v) Coefficient of Multiple Determinations (r<sup>2</sup>)

The coefficient of Determinations is a measure of the degree of linear association or correlation between two or more independent variable. If  $r^2$  has a zero value then, it indicates that there is no correlations which means all the data points in scattered diagram fall exactly on regression line. If it has a value equal to 1 then it indicates that there is perfect correlation and as such the regression line is a perfect estimator. But in most of the cases the value of  $r^2$  will lie somewhere between these two extremes of 1 and 0. One should remember that  $r^2$  close to 1 indicates a strong correlation between two variables and  $r^2$  near to zero means there is a little Correlation. It is symbolically indicated as  $r^2$ . Though some would prefer to put it as  $R^2$  the coefficient of determination value can have ranging between zeros to one. A value of one can occur only if the unexplained variation is zero which means that all the data points in the scatter diagram fall exactly on the regression line. If  $r^2$  is 70%, it indicates that the independent variable explain 70% of the total variation in the dependent variable.

$$R^{2} = \frac{1 - unexplained \ variation}{total \ variation}$$

## (vi) Regression Analysis

Regression Analysis is widely used statistical tools. Simply, using the relationship between a known variable (independent) and an unknown (Dependent variable to estimated the unknown one is termed as regression analysis. But in real life, so many independent variables do affect the dependent variable and any study of correlation must take all variables into consideration. Such relationship between a single dependent variable and number of independent variable in combinations is known as multiple regressions. The regression line describes the average relationship existing between x and y variables, i.e. it display mean values of x for given value of y, the equation of this line, as the regression equation provides estimates of the

dependent variables when values of the independent variable are inserted into the equation.

The regression equation y on x is expressed as;

Y= 
$$(a + bx)$$
  
Slope  $(b) = \frac{(N\Sigma XY - (\Sigma X)(\Sigma Y))}{(N\Sigma X^2 - (\Sigma X)^2)}$   
Intercept  $(a) = \frac{(\Sigma Y - b(\Sigma X))}{N}$ 

Where,

Y =Dependent variable

X = independent variable

a = y-intercept or regression constant

b = Slope of line or regression coefficient

Both 'a' and 'b' in the equation are called numerical constant because for any given straight line, their value does not change: the value of 'a' and 'b' are obtained by solving the following simultaneous equation.

$$\sum Y = Na + b\sum x \qquad .....(I)$$
  
$$\sum XY = a\sum x + b\sum x^2 \qquad ....(II)$$

### (vii) Regression Constant (a)

Regression constant (a) is also called the intercept because its value is the point at which the regression line crosses the axis. It indicates the average. The Regression constant (a) which is the intercept of the model, represents the average level of dependent variable which independent variable has a value of zero. In other words, it can be termed as an indicator which specifies average effect on dependent variable if all the variables are omitted from the model. This term has practical meaning only if a zero value for the independent variable is possible.

### (viii) Regression Coefficient (b)

The regression coefficient (b) is a parameter which indicates the marginal relationship between independent variable and the value of dependent variable holding constant the effect of all other independent variable in the regression model. The coefficient specifies a part of change in the dependent variable regarding part of change in the independent variable.

**T-Test:** In case of small sample where 'n' is less than 30, we make use of 't' distribution. It is used for finding more appropriately the two limits where in the estimate would probably lie. For applying t- test first of all 't' value should be calculated and compared with the table value of 't'. At a certain level of significance for given degree of freedom, if the calculated value of 't' exceeds the table value, (say 0.5), we know that the difference is significant at 5% level, but if 't' is less than the concerning table value of the 't' the difference is not treated as significant.

**F-Test:** F-Test is a technique which is generally known as the variance ratio and is mostly used in context of analysis of variance. F-test is used to identify the significance of difference between more than two sample means from same normal population with equal variance. In case of F-test, there is no assumption of equality of variances as it was in case of t-test. So one way ANOVA is used to examine the equality between sample variances.

### (ix) Standard Error of Estimate (SEE)

Standard Error of Estimate measures the line variability or scatter of the observed values around the regression line. It also measures the reliability after finding the regression. If the Standard Error of Estimate happens to be zero, then there is cent percent estimator. In other words, the estimating equation of the dependent variable is a perfect estimator. It is possible for us to ascertain how good and representative the regression line is as description of the average relationship between two series. It is worked out as under. The square root of

the Se is also known as the variance of the error term, which is the basic measure of the reliability.

$$S_e = \sqrt{\frac{se^2}{n-2}}$$

Where,

e = the error term

 $S_{\text{e}} = Standard \; Error$ 

N = Number of observation

## (x) Probable Error (PE)

Probable Error of the correlation coefficient is denoted by PE is the measure of testing the reliability of the calculated value of 'r'.

$$PE = 0.6745 \times \frac{1\text{-}r^2}{\sqrt{n}}$$

- (i) if r < PE, it is insignificant. So perhaps there is no evidence of correlation.
- (ii) if r > PE, it is significant. The PE of correlation coefficient may be used to determine the limits within which the population correlation lies. Limit for the population correlation coefficient are  $r \pm PE$ .

## 3.7.4 Limitations of Methodology

- The analysis is based on secondary data.
- Only five Commercial Banks are taken as sample companies.

#### CHAPTER - IV

#### PRESENTATION AND ANALYSIS OF DATA

The presentation and analysis of data is the major part of the research study. The analysis of data has been done according to the data available. The analysis includes several tools and techniques such as financial and statistical tools plus the attitudes of management towards dividend decision. The basic objectives of the study have been already mentioned in Chapter-I, Introduction. In the same way in Chapter-II, Review of Literature, past studies are reviewed and conceptual framework based on this study has been already done. In order to achieve those objectives several tools and techniques are implied that are defined in chapter - III, Research Methodology. The presentation and analysis of data is a core of the research which leads to the major findings and helps to fill up the existing gaps. The main focus of the study on dividend policy of joint venture commercial banks in Nepal. Here, related data had been taken for description analysis, comparative analysis and inferential analysis.

This chapter begins with the analysis of Dividend per Share (DPS), Earning per Share (EPS), Price Earnings Ratio (P/E Ratio), Dividend Payout Ratio (D/P Ratio), Market Price per Share (MPS), Dividend Yield (D/Y). The statistical tools i.e. Mean, Standard Deviation and coefficient of variation are calculated and interpreted with the help of which financial indicators of concerned banks are compared. The tests of hypothesis on significance of DPS, EPS and D/P Ratio on sample commercial banks are done. At the end of this chapter correlation and regression analysis of some specific components have been made.

# 4.1 Analysis of Financial Indicators and Variables

# 4.1.1 Earning Per Share (EPS) and Dividend per Share (DPS) Analysis

# (a) EPS of Respective Banks

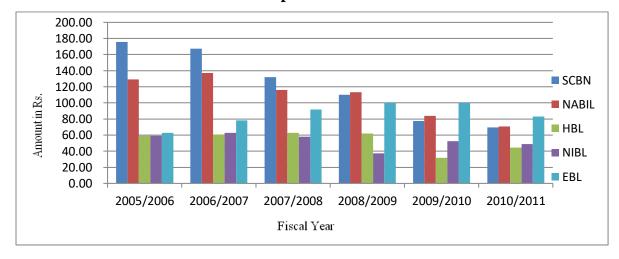
Table 4.1
EPS of Respective Banks

Fiscal	SCBNL	NABIL	HBL	NIBL	EBL	Pooled
Year	SCEIVE		IIDE	TIDE		Average
2005/06	175.84	129.21	59.24	59.35	62.78	97.28
2006/07	167.37	137.08	60.66	62.57	78.42	101.22
2007/08	131.92	115.86	62.74	57.87	91.82	92.04
2008/09	109.99	113.44	61.90	34.42	99.99	84.55
2009/10	77.65	83.81	31.80	52.55	100.16	69.19
2010/11	69.51	70.67	44.66	48.84	83.18	63.37
Average	122.05	108.35	53.50	53.10	86.06	84.61
St. Dev.	44.55	25.94	12.56	9.12	14.39	21.31
C.V. %	36.50	23.94	23.48	17.17	16.72	23.56

Source: Annual report 2005/06-2010/11 & Appendix-I

# (a) EPS of Respective Banks

Figure 4.1 EPS of Respective Banks



# (b) DPS of Respective Banks

Table 4.2

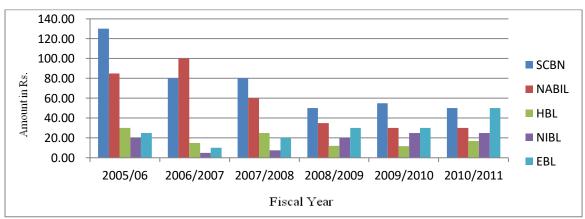
DPS of Respective Banks

Fiscal	SCBNL	NABIL	HBL	NIBL	EBL	Pooled
Year	SCBNL	NADIL	IIDL	NIDL	EDL	Average
2005/06	130	85	30	20	25	58
2006/07	80	100	15	5	10	42.00
2007/08	80	60	25	7.50	20	38.50
2008/09	50	35	12	20	30	29.40
2009/10	55	30	11.84	25	30	30.37
2010/11	50	30	16.84	25	50	34.37
Average	74.17	56.67	18.45	17.08	27.50	38.77
St. Dev.	30.73	30.28	7.43	8.72	13.32	18.10
C.V. %	41.43	53.43	40.28	51.04	48.45	46.93

Source: Annual report 2005/06-2010/11 & Appendix-I

## (b) DPS of Respective Banks

Figure 4.2



Above table shows the amount of earning per share and dividend per share paid by the banks from the year 2005/06 to 2010/11 respectively.

Starting from the year 2005/06 SCBNL has the highest EPS than other banks, which paid higher dividend also in comparison with other banks. NIBL has lowest paid dividend in this year.

In 2006/07 the EPS of NABIL, HBL, NIBL and EBL has increased as a result DPS of NABIL also increased but in case of SCBNL, HBL NIBL and EBL slightly decreased and increasing trend. But NABIL paid higher DPS in comparison with previous year. Although the EPS of NIBL is increased in this year it paid lower dividend. The DPS of SCBNL is decreased as decrease in EPS.

It can be observed the remarkable increase in EPS of HBL & EBL in the year 2007/08 as a result DPS is also increase. But in the year 2008/09 the EPS of EBL is increased but in case of other four Banks it is increased as a result of this DPS of NIBL & EBL has also increased. In this year 2009/10 EPS of NIBL & EBL increased in this year it paid higher Dividend in case of other two Bank NABIL and HBL respectively.

It can be observed that EPS of all four banks except NIBL decreased. EBL has highest EPS in this year and paid constant dividend. HBL paid lowest dividend in this year while SCBNL paid the highest dividend.

The data related in 2010/11 showed that decrease in EPS of SCBLN, NABIL, NIBL and EBL as a result DPS also reduced but increase in EPS of HBL shows increase in DPS. In the year 2010/11 EPS of SCBNL, NABIL, NIBL and HBL has decrease which also shows decrease in DPS of SCBNL and constant of NABIL & NIBL.

On the average, SCBNL has the highest EPS and NABIL, EBL, HBL and NIBL com after SCBNL respectively. The pooled average is 84.61, which is quite satisfactory.

Since the average of EPS of SCBNL is highest among all five banks it has been able to pay considerably higher amount of dividend to its shareholder in comparison with other four banks. NIBL has the lowest EPS in average among all five banks.

Without considering the rate of fluctuation the analysis of EPS and DPS cannot be completed, for this we can observe the coefficient of variation. It can be observed that the C.V. of the EBL is the least among the sample commercial banks with 16.72%, show the cash dividend payment of the bank is most consistent than other commercial banks. The most inconsistent in paying cash dividend is SCBNL with C.V. 36.50%. The situation of NABIL is also not good, it's C.V, is also seen high.

## 4.1.2 Market Price per Share (MPS) Analysis

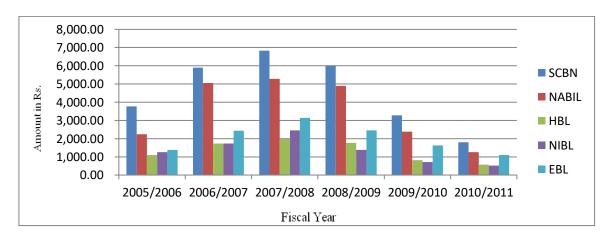
Table 4.3

Market Price per Share (MPS) of Respective Banks

Fiscal	SCBNL	NABIL	HBL	NIBL	EBL	Pooled
Year						Average
2005/06	3,775	2,240	1,100	1,260	1,379	1,950.80
2006/07	5900	5050	1740	1729	2430	3369.80
2007/08	6830	5275	1980	2450	3132	3933.40
2008/09	6010	4899	1760	1388	2455	3302.40
2009/10	3279	2384	816	705	1630	1762.80
2010/11	1800	1252	575	515	1094	1047.20
Average	4,599	3,516.67	1,328.50	1,341.17	2,020	2,561.07
St. Dev.	1,945.08	1,754.72	576.65	703.70	776.44	1,151.32
C.V. %	42.29	49.90	43.41	52.47	38.44	45.30

Source: Annual report 2005/06-2010/11 & Appendix-I

Figure 4.3
Market Price per Share (MPS) of Respective Banks



Above table shows the amount of market price per share of the banks from the year 2005/06 to 2010/11.

Starting from the year 2005/06 SCBNL has the highest MPS than other banks. HBL has the lowest MPS in 2005/06, the MPS of all sample banks increased except HBL.

The data related to the year 2006/07 shows the increase in MPS of all sample banks. It can be observed from the remarkable increase in MPS of all five banks in the year 2006/07 and 2008/09.

In 2009/10 it can be observed that the MPS of all the sample banks has been decreased whereas in the year 2010/11 it can be remarkably noticed that MPS of all the five banks has been decreased.

On the average, SCBNL has the highest MPS. NABIL, EBL, NIBL and HBL come after SCBNL respectively. The average of pooled average is 2561.07, which is quite satisfactory.

Without considering the rate of fluctuation, the analysis of MPS cannot be completed, for this we can observe the coefficient of variation. If the can be observed that the CV of EBL is lowest (38.44%) in comparison with others banks and the CV of NIBL is 52.47% higher than other bank. This shows the great fluctuation in MPS of NIBL while HBL and NIBL have the lower degree of fluctuation in MPS in comparison with other banks.

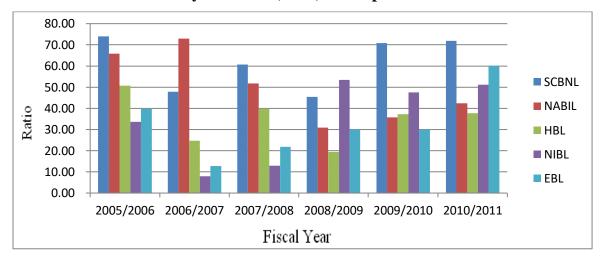
# 4.1.3 Dividend Payout Ratio (DPR) Analysis

Table 4.4
Dividend Payout Ratio (DPR) of Respective Banks

Fiscal	SCBNL	NABIL	HBL	NIBL	EBL	Pooled
Year	SCBNL	NADIL	HDL	NIDL	EDL	Average
2005/06	73.93	65.78	50.64	33.70	39.82	52.78
2006/07	47.80	72.95	24.73	7.99	12.75	33.24
2007/08	60.64	51.79	39.85	12.96	21.78	37.40
2008/09	45.46	30.85	19.39	53.45	30	35.83
2009/10	70.83	35.80	37.23	47.57	29.95	44.28
2010/11	71.93	42.45	37.71	51.19	60.11	52.68
Average	61.77	49.94	34.92	34.48	32.40	42.70
St. Dev.	12.62	16.76	11.22	19.88	16.33	15.36
C.V. %	20.43	33.56	32.13	57.66	50.40	38.84

Source: Appendix-IV

Figure 4.4
Dividend Payout Ratio (DPR) of Respective Banks



The DPR (it usually doesn't even warrant a capitalized abbreviation) measures what a company's pays out to investors in the form of dividends.

The above table 4.4 shows the dividend payout ratio of five sample banks, which is the percentage of dividend paid out of the total earning made. Before analyzing the DPR we can segregate the DPR of these companies into three differently categorize policy.

Policy DPR

Conservative dividend less than 20%

Moderate dividend policy 20% to 50%

Aggressive dividend policy More than 50%

In the Fiscal Year 2005/06 SCBNL, NABIL and HBL applied aggressive dividend policy. They have 73.93%, 65.78% and 50.64% respectively. But NIBL has 33.70% which shows that NIBL falls in Moderate dividend policy. The pooled average was 52.78%, which shows aggressive dividend policy according to assumption.

In the Fiscal Year 2006/07, dividend payout ratios of NABIL increased while SCBNL has decreased its dividend payout ratio but conservative dividend policy. The pooled average 33.24% shows the moderate policy. This year HBL has 24.73% that shows it is adopting moderate policy.

In the Fiscal Year 2007/08, the highest payout was 60.64% of SCBNL under aggressive policy. NABIL also applied aggressive policy with DPR 51.79%. HBL and EBL have adopted moderate policy. The pooled average is 37.40% showed moderate policy.

In Fiscal Year 2008/09 NIBL has increased their payout ratio to 53.45%, which showed aggressive policy. On the other hand, other banks decreased its ratios and followed moderate policy. The pooled average 35.83% showed moderate policy.

The data related to 2009/10 shows that SCBNL is still following Aggressive policy which is 70.83%. The data of SCBNL shows that it was more aggressive in this year and other four banks shows moderate dividend policy. The pooled average 44.28% showed moderate policy.

It can be remarkably observed that in the year 2010/11 SCBNL, NIBL and EBL has aggressive policy which is 71.93%, 51.19% and 60.11where as other

remaining four banks have moderate policy. The pooled average 52.68% showed aggressive dividend policy.

The average DPR of SCBNL shows that it follows aggressive policy. While average DPR of other banks shows that they are adopting moderate policy. The coefficient of variation of the DPR suggests that the DPR of NIBL is more fluctuating than other four banks. The C.V. of SCBNL and HBL shows less fluctuating indifferent years. The average of CV i.e. 38.84% shows the fluctuating condition is in average.

# 4.1.4 Analysis of P/E Ratio

Table 4.5
P/E Ratio of Respective Banks

Fiscal Year	SCBNL	NABIL	HBL	NIBL	EBL	Pooled Average
2005/06	21.47	17.34	18.57	21.23	21.97	20.11
2006/07	35.25	36.84	28.68	27.63	30.99	31.88
2007/08	51.77	45.53	31.56	42.34	34.11	41.06
2008/09	54.64	43.19	28.43	37.09	24.55	37.58
2009/10	42.33	28.45	25.66	13.42	16.27	25.20
2010/11	25.90	17.72	12.88	10.54	13.15	16.04
Average	38.54	31.51	24.30	25.38	23.51	28.65
St. Dev.	13.49	12.34	7.13	12.73	8.14	10.77
C.V. %	35.00	39.18	29.35	50.17	34.63	37.67

Source: Appendix-III

Figure 4.5
P/E Ratio of Respective Banks

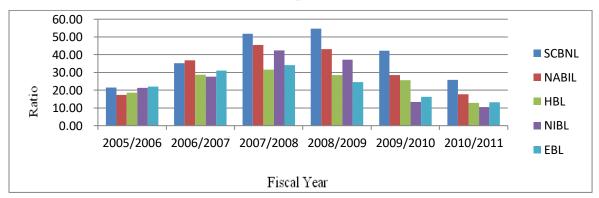


Table 4.5 shows the P/E Ratio of sample banks. This ratio describes the relationship between EPS and MPS.

The P/E looks at the relationship between the stock price and the company's earnings. The P/E is the most popular metric of stock analysis, although it is far from the only one you should consider.

In the Fiscal Year 2005/06, the P/E Ratio of SCBNL, NABIL, HBL, NIBL and EBL is 21.47, 17.34, 18.57, 21.23 and 21.97 respectively, where EBL has the highest P/E Ratio among, these five banks and NABIL has the lowest P/E Ratio. The pooled average is 20.11.

In 2006/07, the P/E Ratio of has increased. The pooled average is increased to 31.88.

In 2007/08, the P/E ratios of all five banks are increased. SCBNL has the highest P/E Ratio (51.77). The pooled average is 41.06.

In the Fiscal Year 2008/09, the increasing pattern follows again only SCBNL but other banks are decreased. In this year SCBNL stands first with 54.64. The pooled average is 37.58.

In the Fiscal Year 2009/10, the P/E ratios of all five banks are decreased in comparison of previous year. In this year SCBNL stands first with 42.33. The pooled average is 25.20.

The Fiscal Year 2010/11 follows decreasing trend in P/E Ratio, which is the lowest of all five banks in comparison with previous five years. The pooled average in this year is 16.04 which lowest of all five previous years.

The CV analysis shows that NIBL is more consistent than others and P/E ratio of HBL is highly fluctuating in these five years.

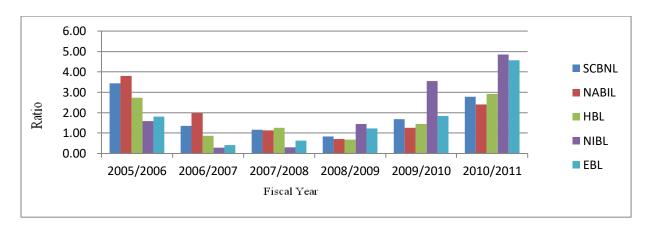
# 4.1.5 Dividend Yield Analysis

Table 4.6
Dividend Yield of Respective Banks

Fiscal	SCBNL	NABIL	HBL	NIBL	EBL	Pooled
Year	SCBNL	NADIL	IIDL	NIDL	EDL	Average
2005/06	3.44	3.79	2.73	1.59	1.81	2.67
2006/07	1.36	1.98	0.86	0.29	0.41	0.98
2007/08	1.17	1.14	1.26	0.31	0.64	0.90
2008/09	0.83	0.71	0.68	1.44	1.22	0.98
2009/10	1.68	1.26	1.45	3.55	1.84	1.95
2010/11	2.78	2.40	2.93	4.85	4.57	3.51
Average	1.88	1.88	1.65	2.00	1.75	1.83
St. Dev.	1.02	1.12	0.95	1.83	1.50	1.28
C.V. %	54.18	59.41	57.69	91.51	85.83	69.73

Source: Appendix-V

Figure 4.6
Dividend Yield of Respective Banks



Above table 4.6 shows the dividend yield analysis of five sample banks for the years 2005/06 to 2010/11.

This measurement tells what percentage return a company pays out to shareholders in the form of dividends. Older, well-established companies tend to payout a higher.

In the Fiscal Year 2005/06, NABIL has the highest dividend yield (3.79). The pooled average in this year is 2.67. In the year 2006/07 also dividend yield of

NABIL again has highest dividend yield (1.98). The pooled average is 0.98 in this year. In the year 2007/08, the dividend yield of SCBNL and NABIL has decreased where as other three banks has increased the dividend yield. The pooled average is 0.90.

In the Fiscal Year 2008/09, the dividend yields all bank have decreased its dividend yield. The pooled average is 0.98. While that of NIBL and EBL bank increased. In the year 2009/10, the dividend yield of all banks increased as a result the pooled average is also increased to 1.95%. In the year 2010/11, the dividend yield of all banks increased as a result the pooled average is also increased to 3.52 which has greatest of all previous year.

On average, NIBL has the highest dividend yield (2.00) and the dividend yield of HBL is lowest.

On observing the coefficient of variation the dividend yield of NIBIL is more consistent than others.

#### **4.2 Correlation Analysis**

Correlation Analysis helps to determine the strength of the linear relationship between two variables. In other words, as to how strongly are these two variables correlated. It helps to determine whether a positive or negative relationship exists between two variables and the relationship exists between two variables and the relationship is significant or not.

In this study, the correlation analysis is referred to identify the relationship between DPS and other variables like MPS, EPS, Last year Dividend ( $D_{t-1}$ ) and the relationship is significant or not.

#### 4.2.1Correlation between EPS and DPS

Table 4.7
Correlation between EPS and DPS

Bank	r	Relationship	$\mathbf{r}^2$	<b>Probable Error</b>	Sig/Insig.
SCBNL	0.84	Positive	0.70	0.08	Significant
NABIL	0.87	Positive	0.75	0.07	Significant
HBL	0.44	Positive	0.19	0.22	Insignificant
NIBL	-0.57	Negative	0.32	0.19	Insignificant
EBL	0.16	Positive	0.03	0.27	Insignificant

Source: Appendix-II

Above table 4.7 shows the relationship between EPS and DPS of five sample banks. It is observed that the correlation coefficient of all four Banks is positive except NIBL, so it is concluded that there is a positive relationship between EPS and DPS but in the case of NIBL there is negative correlation coefficient. Since the correlation coefficient of these banks are higher than PE. But in the case NIBL there is lowest correlation coefficient than PE. It means the market price of the market is affected by dividend.

The relationship between EPS and DPS whether they are significant or not can be measured by calculating the probable error of the correlation coefficient. Through the correlation coefficient of HBL is positive, DPS of this bank is negligibly affected by the earning and the correlation coefficient is higher than PE. But in case of NABIL it is greater than PE. For NABIL, EPS is the key factor to determine DPS due to significant relationship between EPS and DPS.

The coefficient of determination is more precise measure of strength of the relationship between two variables and trends itself to more precise interpretation because it can be presented as a proportion or as a percentage. The coefficient of determination between EPS and DPS of NABIL is 0.87, which means that the dependent variable (EPS) explains 75% of the variation in DPS. It shows that the change in EPS has a significant effect on the variable of DPS.

In case of HBL, the variation of EPS determines the 44% variation in DPS, which is highly remarkable. In case of SCBNL, NIBL and EBL, it is just 8%, 7% and 27% respectively.

#### 4.2.2 Correlation between EPS and MPS

Table 4.8
Correlation between EPS and MPS

Bank	r	Relationship	$\mathbf{r}^2$	<b>Probable Error</b>	Sig/Insig.
SCBNL	0.52	Positive	0.27	0.20	Insignificant
NABIL	0.66	Positive	0.44	0.15	Insignificant
HBL	0.80	Positive	0.64	0.10	Significant
NIBL	0.36	Positive	0.13	0.24	Insignificant
EBL	0.38	Positive	0.15	0.23	Insignificant

Source: Appendix-II

Above table 4.8 shows the relationship between EPS and MPS of five sample banks. It is observed that the correlation coefficient of all banks is positive. So it is concluded that there is positive relationship between EPS and DPS of SCBNL, NABIL, HBL, NIBL and EBL and since correlation coefficient of these banks are higher than PE, there is significant relationship EPS and MPS of HBL and other banks are insignificance relationship. It means that the market price of stock of these banks is affected by dividend.

4.2.3 Correlation between MPS and last year's Dividend ( $D_{t-1}$ ) of Banks Table 4.9 Correlation between MPS and last year's Dividend ( $D_{t-1}$ ) of Banks

Bank	r	Relationship	$\mathbf{r}^2$	Probable Error	Sig/Insig.
SCBNL	0.65	Positive	0.42	0.16	insignificant
NABIL	0.90	Positive	0.82	0.05	Significant
HBL	0.65	Positive	0.42	0.16	insignificant
NIBL	-0.76	Negative	0.58	0.11	insignificant
EBL	-0.91	Negative	0.83	0.05	insignificant

Source: Appendix-II

In above table 4.9 shows all five sample banks have the positive correlation coefficient. But correlation coefficient of NIBL and EBL is less than PE. So on

conclusion can be drawn from this analysis. But in case of SCBNL, NABIL

and HBL it is greater than PE. It means the market price of stock of these two

banks is depended to its last year dividend.

4.3 Regression Analysis

Regression Analysis is a very powerful tool in the field of statistical analysis in

predicting the value of one variable, give in the value of another variable, when

these two variables are related to each other. It describes about the effect to the

dependent variable due to change in independent variable. The regression

analysis either be simple regression or multiple regressions. In simple

regression analysis only one independent variable is taken for the prediction of

the value of dependent variable. But multiple regression analysis involves two

or more independent variables forming the basis for estimating the values of

dependent variables. In this research, simple regression analysis is used to

establish relationship between the dependent variable and single independent

variable on dividend sample Banks Where the multiple regression analysis is

used to show the combined relationship of dependent variable to independent

variable of all sample banks.

4.3.1 Simple Regression Analysis

In this analysis, it is tried to show the relationship of dependent variable to the

independent variable.

(i) Dependent variable market Price Per Share (P<sub>t</sub>) and independent variable

last year's dividend (D<sub>t-1</sub>),

Regression Equation:  $P_t = a+b D_{(t-1)}$ 

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Table 4.10
Simple Regression Analysis between MPS and Last Year's Dividend

Bank	Constant 'a'	Reg. Coefficient	Standard Error	$\mathbf{r}^2$	SEE	't' value
SCBNL	7.35	1.27	39.25	0.33	44.49	5.78
NABIL	-12.64	1.83	21.13	0.74	20.81	4.93
HBL	1.39	1.07	9.69	0.34	10.73	5.64
NIBL	23.60	-0.80	9.33	0.31	10.73	4.59
EBL	25.47	-0.31	13.15	0.04	16.21	6.29

Source: Appendix-VII

The above table 4.10 describes the output of simple regression analysis between the market price of stock and last year's dividend of SCBNL, NABIL, HBL, NIBL and EBL.

The regression coefficient of SCBNL, NABIL and HBL sample banks are positive, which indicate that positive correlation exists between MPS and D<sub>t-1</sub>. The regression coefficient of NIBL and EBL sample banks are negative, which indicate that negative correlation exists between MPS and D<sub>t-1</sub>. One rupees increase in dividend causes 1.27, 1.83, 1.07, -0.80 and -0.31 increase or decrease in the price of stock of SCBNL, NABIL, HBL, NIBL and EBL respectively. The coefficient of determination of NABIL (0.74) is quite high. It indicates that 74% stock price variation is explained by the variation in dividend. In case of SCBNL, HBL, NIBL and EBL it is 33%, 34%, 31% and 4% respectively. The coefficient of determination of EBL is quite low (0.04). It means only 4% stock variation can be explained by variation in dividend.

Since the 't' value of SCBNL, NABIL, HBL, NIBL and EBL (5.78, 4.93, 5.64, 4.59 and 6.29) is higher than the tabulated 't' value (2.571), the results are statistically significant at 5% level of significance.

ii. Dependent variable Market Price per Share (MPS) and independent variable earning per Share (EPS)

Regression Equation:  $P_t = a + b E_t$ 

Table 4.11
Simple Regression Analysis between MPS and EPS

Bank	Constant	Reg.	Standard	$\mathbf{r}^2$	SEE	't'
Dank	'a'	Coefficient	Error	ľ	SEE	value
SCBNL	67.27	1.19	42.54	0.27	48.22	5.70
NABIL	73.90	0.98	21.73	0.44	21.40	4.80
HBL	30.28	1.75	8.38	0.64	9.29	5.51
NIBL	46.82	0.47	9.51	0.13	8.99	4.50
EBL	71.70	0.71	14.85	0.15	18.31	6.14

Source: Appendix-VII & IX

Above table 4.11 shows the output of simple regression analysis between MPS dependent variable and EPS independent variable of five banks. As far the regression of EPS and MPS is concerned the regression coefficient of all banks are positive. In a positive relationship, high values on one variable are associated with high values on the other and low values on one are associated with low values on the other. The positive regression coefficient shows that one rupees increase in EPS leads the average about 1.19, 0.98, 1.75, 0.47 and 0.71 rupee increase in MPS of SCBNL, NABIL, HBL, NIBL, and EBL respectively.

The highest coefficient of determination of HBL (0.64) indicates that 64% variation on MPS due to change in EPS. In case of SCBNL, NABIL, NIBL and EBL it is 27%, 44%, 13% and 15% respectively.

Since the 't' value of SCBNL (5.70), NABIL (4.80), HBL (5.51), NIBL (4.50) and EBL (6.14) is higher than the tabulated 't' value (2.571), the results are statistically significant at 5% level of significance.

iii. Dependent Variable Dividend Per Share (DPS) and independent variable Earning Per Share (EPS)

Regression Equation:  $D_t = a + bE_t$ 

Table 4.12
Simple Regression Analysis between DPS and EPS

Bank	Constant 'a'	Reg. Coefficient	Standard Error	r <sup>2</sup>	SEE	't' value
SCBNL	31.91	121.53	27.15	0.70	31.34	-4.66
NABIL	66.19	74.40	14.39	0.75	13.40	-8.43
HBL	39.76	74.47	8.39	0.19	14.92	-7.52
NIBL	63.24	-59.37	8.39	0.32	8.11	-5.59
EBL	81.29	17.35	15.87	0.03	16.02	-7.99

Source: Appendix-VI & VIII

Above table 4.12 describes the output of simple regression analysis between the dividend per share and earnings per share of SCBNL, NABIL, HBL, NIBL and EBL respectively. As far the regression of DPS and EPS is concerned the regression coefficient of all banks are positive except NIBL. The negative correlation shows the inverse relationship between DPS and EPS. One rupees increase in EPS causes 121.53, 74.40, 74.47 and 17.35 respectively increase in DPS of SCBNL, NABIL, HBL and EBL respectively.

The coefficient of determination of EBL is low (0. 03). It means only 3% DPS can be explained by variation in EPS. But in case of NABIL it is very high (0.75) so, 75% of variation of dividend is affected by change in earning. The result is statistically significant at 5% level of significance. The calculated 't' value of SCBNL, NABIL, HBL, NIBL and EBL is less than the tabulated 't' value (2.571), the results are not statistically significant at 5% level of significance.

Table 4.13
Regression Analysis between MPS, EPS, DPS and Retention Ratio

Fiscal Year	MPS	EPS	DPS	Retn. Ratio
2005/06	1,950.80	97.28	58.00	47.22
2006/07	3,369.80	101.22	42.00	66.76
2007/08	3,933.40	92.04	38.50	62.60
2008/09	3,302.40	84.55	29.40	64.17
2009/10	1,762.80	69.19	30.37	55.72
2010/11	1,047.20	63.37	34.37	47.32

Source: Annex

# **Summary Output**

Regression Statistics					
Multiple R	0.949931				
R Square	0.902370				
Adjusted R					
Square	0.755926				
Standard					
Error	558.4320				
Observations	6				

Force Constant to Zero
FALSE
Goodness of Fit >= 0.80

# **ANOVA**

	df	SS	MS	F	P-value
Regression	3	576468	192156	6.1619	0.143
Residual	2	623693	311846		
Total	5	638837			

Confidence Level 0.95 0.99%

Standard P-Lower Upper Lower Upper Coefficients t Stat Error value 95% 95% 99% 99% Intercept 954.1673 8268.58 0.1154 0.9187 -34623 36531 -81110 83018.6 **EPS** 136.8577 148.357 0.9225 0.4537 -501.47 775.19 -1335.6 1609.28 **DPS** -154.2226 206.813 -0.7457 0.5336 -1044.1 735.62 -2206.8 1898.37 -69.6823 220.68 -0.3158 0.7821 -1019.2 879.83 -2259.9 2120.53 Reten. Ratio

Where,

EPS = Dependent variable

DPS = Dependent variable

Retention ratio = Dependent variable

MPS  $(Y) = 954.167 + 136.858 \times EPS - 154.223 \times DPS - 69.682 \times Retention Ratio$ 

This analysis reveals that MPS depends on the retention ratio i.e. dependent variable. The t-ratio for retention ratio is highly significant. The conclusion to be drawn is that retention ratio increases MPS.

The F ratio (in the Analysis of Variance Table) is 6.16 and significant at p = 0.143. This does not provides evidence of existence of a linear relationship between the response (MPS) and the two explanatory variables (EPS, DPS and retention ratio). We may wish to know whether there is a relationship between the response variable MPS (Y) and (EPS, DPS & retention ratio). We can test for this by looking at the t-ratio in the output. The t-ratio for EPS (0.92259) is significant value p = 0.45366.

These two values viz. F ratio and t-ratio tell us respectively whether there is a linear relationship between the response and explanatory variables taken together and whether any given explanatory variable has an influence on the response variable over and above that of the other explanatory variables.

# **4.4** Test of Hypothesis

The null and alternative hypothesis have been formulated to test whether the difference between mean value of DPS, EPS and DPR of sample banks are statistically significant or not.

## **4.4.1 First Hypothesis**

**Dividend per share (DPS)** 

Table 4.14

Dividend per share (DPS) of Respective Banks

Fiscal Year	SCBNL	NABIL	HBL	NIBL	EBL
2005/06	130	85	30	20	25
2006/07	80	100	15	5	10
2007/08	80	60	25	7.50	20
2008/09	50	35	12	20	30
2009/10	55	30	11.84	25	30
2010/11	50	30	16.84	25	50

Source: Annex

Null Hypothesis (H<sub>0</sub>): There is no significant difference between DPS of SCBNL, NABIL, HBL, NIBL and EBL.

i.e. 
$$\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$$

Alternative Hypothesis (H<sub>1</sub>): There is significant difference between DPS of SCBNL, NABIL, HBL, NIBL and EBL.

i.e. 
$$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$$

# Computation of test statistics 'F'

Correction Factor (C.F.) = 45099.59

Sum of square between Sample (SSB) = 15501.46

Sum of square within Sample (SSW) = 10847.97 (TSS=SSB+SSW)

Total sum of square (TSS) = 26349.43

Table 4.15
ANOVA Table

Sources of	Degree of	Sum of	Mean Sum of	F - Ratio
Variation	Freedom (d.f)	Squares (S.S)	Squares (M.S)	
Between Banks	5-1 = 4	15501.46	3875.37	8.93
Within Banks	30-5 = 25	10847.97	433.92	
Total	30-1 = 29	26349.43		

Source: Annex

**Level of Significance** ( $\alpha$ ) = 0.05 or 5%

**Degree of freedom (df)** = (k-1, n-k) = (4,25)

**Critical Value:** The tabulated value of the test statistic F at 5% level of significance for (4,25) degree of freedom is 2.76 i.e.  $F_{0.05,(4,25)} = 2.76$ 

**Decision:** Since the calculated value of F = 8.93 is greater than tabulated value of  $F_{0.05,(4,25)} = 2.76$ ,  $H_0$  is rejected and  $H_1$  is accepted. Hence we conclude that there is significant difference between the DPS of SCBNL, NABIL, HBL, NIBL and EBL.

# **4.4.2 Second Hypothesis**

# **Earning per Share (EPS)**

Table 4.16
Earning per share (EPS) of Respective Banks

<b>Fiscal Year</b>	SCBNL	NABIL	HBL	NIBL	EBL
2005/06	175.84	129.21	59.24	59.35	62.78
2006/07	167.37	137.08	60.66	62.57	78.42
2007/08	131.92	115.86	62.74	57.87	91.82
2008/09	109.99	113.44	61.90	37.42	99.99
2009/10	77.65	83.81	31.80	52.55	100.16
2010/11	69.51	70.67	44.66	48.84	83.18

Source: Annex

Null Hypothesis ( $H_0$ ): There is no significant difference between EPS of SCBNL, NABIL, HBL, NIBL and EBL.

i.e. 
$$\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$$

Alternative Hypothesis (H<sub>1</sub>): There is significant difference between EPS of SCBNL, NABIL, HBL, NIBL and EBL.

i.e. 
$$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$$

## Computation of test statistics 'F'

Correction Factor (C.F.) = 214765.563

Sum of square between Sample (SSB) = 23565.98

Sum of square within Sample (SSW) = 15526.44 (TSS=SSB+SSW)

Total sum of square (TSS) = 39092.43

Table 4.17 ANOVA Table

Sources of	Degree of	Sum of	Mean Sum of	F - Ratio
Variation	Freedom (d.f)	Squares (S.S)	Squares (M.S)	
Between Banks	5-1 = 4	23565.98	5891.496	9.4862
Within Banks	30-5 = 25	15526.44	621.058	
Total	30-1 = 29	39092.43		

Source: Annex

**Level of Significance** ( $\alpha$ ) = 0.05 or 5%

**Degree of freedom (df)** = (k-1, n-k) = (4,25)

**Critical Value:** The tabulated value of the test statistic F at 5% level of significance for (4,25) degree of freedom is 2.76 i.e.  $F_{0.05,(4,25)} = 2.76$ 

**Decision:** Since the calculated value of F = 9.49 is greater than tabulated value of  $F_{0.05,(4,25)} = 2.76$ ,  $H_0$  is rejected and  $H_1$  is accepted. Hence we conclude that there is significant difference between the EPS of SCBNL, NABIL, HBL, NIBL and EBL.

# 4.4.3 Third Hypothesis

# **Dividend Payout Ratio (DPR)**

This analysis is based on the pooled data of five sample Banks.

Table 4.18

Dividend Payout Ratio (DPR) of Respective Banks

Fiscal Year	SCBNL	NABIL	HBL	NIBL	EBL
2005/06	73.93	65.78	50.64	33.70	39.82
2006/07	47.80	72.95	24.73	7.99	12.75
2007/08	60.64	51.79	39.85	12.96	21.78
2008/09	45.46	30.85	19.39	53.45	30
2009/10	70.83	35.80	37.23	47.57	29.95
2010/11	71.93	42.45	37.71	51.19	60.11

Source: Annex

Null Hypothesis (H<sub>0</sub>): There is no significant difference between DPR of SCBNL, NABIL, HBL, NIBL and EBL.

i.e. 
$$\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$$

Alternative Hypothesis (H<sub>1</sub>): There is significant difference between DPR of SCBNL, NABIL, HBL, NIBL and EBL.

i.e. 
$$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$$

# Computation of test statistics 'F'

Correction Factor (C.F.) = 54701.26

Sum of square between Sample (SSB) = 3899.84

Sum of square within Sample (SSW) = 6138.89 (TSS=SSB+SSW)

Total sum of square (TSS) = 10038.73

Table 4.19 ANOVA Table

Sources of	Degree of	Sum of	Mean Sum of	F - Ratio
Variation	Freedom (d.f)	Squares (S.S)	Squares (M.S)	
Between Banks	5-1 = 4	3899.84	974.96	3.97
Within Banks	30-5 = 25	6138.89	245.56	
Total	30-1 = 29	10038.73		

Source: Annex

**Level of Significance** ( $\alpha$ ) = 0.05 or 5%

**Degree of freedom** (**df**) = (k-1,n-k) = (4,25)

**Critical Value:** The tabulated value of the test statistic F at 5% level of significance for (4,25) degree of freedom is 2.76 i.e.  $F_{0.05,(4,25)} = 2.76$ 

**Decision:** Since the calculated value of F = 3.97 is greater than tabulated value of  $F_{0.05,(4,25)} = 2.76$ ,  $H_0$  is rejected and  $H_1$  is accepted. Hence we conclude that there is significant difference between the DPR of SCBNL, NABIL, HBL, NIBL and EBL.

## 4.5 Major Findings

Major findings from the secondary data analysis are stated as follows:

- 1. The average of earnings per share (EPS) of banks is satisfactory. SCBNL lies in top position and it is followed by NABIL, EBL, HBL and NIBL respectively. Among the sample banks, the C.V. of SCBNL is greater than other sample banks and C.V. of EBL is lowest. It means common stock of SCBNL is riskier as compared to other sample banks. The common stock of EBL is less risky because it has lowest C.V. than others. The common stock of NABIL, HBL and NIBL has lower risk than SCBNL but higher than EBL.
- 2. The average of dividend per share (DPS) analysis shows that the DPS of SCBNL is greater and NIBL is lower among sample banks. Higher dividend per share creates positive attitude of shareholders towards the company, which consequently helps to increase the market value of shares. It shows that C.V. of DPS of NABIL greater and HBL is lowest. It indicates that among the sample banks, HBL has the highest consistency in paying dividend whereas the DPS of NIBL, EBL and SCBNL respectively followed HBL interns of fluctuation of DPS.
- 3. The analysis of market price per share (MPS) shows that MPS of all five sample banks are in increasing trend in Fiscal year 2008/09. It shows that the average MPS of SCBNL is highest and average MPS of HBL is lowest. NIBL has the highest C.V. and EBL has lowest C.V. among the sample banks. It indicates that NIBL has greater variability in MPS and its capital increasing rate is higher than others. But SCBNL and EBL has less variability in MPS.
- 4. The dividend payout ratio (DPR) of SCBNL has higher and EBL has lowest among all, which indicates that SCBNL is following aggressive dividend policy and it has the ability to pay the dividend is strong than others and EBL has weak ability to pay dividend. The C.V. of DPR is highest of NIBL and Lowest C.V. of DPR of SCBNL indicates that the

- SCBNL's DPR to common share holders are much better than other sample banks.
- 5. The P/E ratio of SCBNL has the highest P/E ratio and EBL has the lowest P/E ratio. The highest C.V. of P/E ratio indicates that P/E ratio is more fluctuating. NABIL has the highest C.V. among the other sample banks. So, NABIL is more fluctuating than other banks. The lowest C.V. of HBL indicates that it has the highest consistency in P/E ratio.
- 6. Dividend Yield of NIBL has highest and HBL has lowest among all sample banks. It indicates that the share of NIBL has worth buying. The C.V. of D/Y is also highest of NIBL and lowest of SCBNL. This indicates that NIBL has the highest consistence followed by EBL, NABIL and HBL where as DY of NIBL is highly fluctuating followed by HBL.
- 7. The correlation between EPS and DPS is highly positive for SCBNL and NABIL and low degree of correlation for HBL and EBL but for NIBL there is negative correlation. In positive correlation when EPS increase then DPS also increase and vice versa. In low degree correlation when EPS increase then DPS also slowly increase and vice versa. In negative correlation when EPS increase then DPS decrease and vice versa.
- 8. The correlation between EPS and MPS is positive of all five sample banks. Only NABIL and HBL have highly positive correlation and SCBNL, NIBL and EBL has low degree of correlation. It means the EPS and MPs of these banks are strongly and slowly correlated with each other.
- 9. The correlation coefficient between market price of stock and last year's dividend of positive for SCBNL, NABIL and HBL. NIBL and EBL have negative correlation. It means MPS and last year's dividend of these banks are positive and negative correlation with each other.

- 10. Simple regression analysis of MPS and last year's dividend concludes that SCBNL, NABIL and HBL sample banks have positive relationship between MPS and last year's dividend. NIBL and EBL banks have negative relationship. SCBNL, NABIL and HBL have the negative relationship between MPS and last year's dividend.
- 11. Simple regression analysis of MPS and EPS concludes that all five sample banks have positive relationship between MPS and EPS.
- 12. The regression analysis of DPS and EPS shows SCBNL, NABIL, HBL and EBL have positive relationship and NIBL has negative relationship between DPS and EPS.
- 13. Since 'F' statistics for the regression of MPS, EPS, DPS and Retention ratio shows higher than it table value at 5% level of significance. It means there is significance difference between MPS, EPS, DPS and Retention Ratio.
- 14. Test of hypothesis of DPS shows that there is a significant difference between DPS of sample banks at 5% level of significance.
- 15. Test of hypothesis of EPS shows that there is a significance difference between EPS of sample banks at 5% level of significance.
- 16. Test of hypothesis of DPR also implies about the significant difference between sample banks at 5% level of significance.

# CHAPTER - V

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter focuses on summarizing the study held with the researcher's analysis. Also, this chapter includes conclusion of the study based on major findings. The next attempt in this chapter will be made for the recommendations on the basis of findings and conclusions. For this purpose, the chapter is subdivided into summary and conclusion of the research, which will be followed by some recommendation.

#### **5.1 Summary**

Dividend refers to distributed earnings to the shareholders of the company in return to their investment. Dividend decision is a major financial management decision because the firm has to choose between distributing the profit to the shareholders and reinvesting it to finance the business.

The dividend may be affected by different factors such as earning of the firm, liquidity position of the firm, net worth etc. These factors indicate the financial position of the company. If a firm has good performance in terms of these factors, it will be able to provide return in the form of dividend.

This study is mainly focused to access the dividend practices of different banks. It covers some specific objectives mainly to find out relationship between other financial indicators and also to find out the appropriate dividend policies of different banks.

This study is mainly based on the secondary data of five commercial banks which are listed in NEPSE. This study covers a five years period from 2005/2006 to 2010/11.

To make the research reliable, many more analysis are conducted to find out the appropriate relationship between dividend and other variables, which affects the dividend. The consistency of dividend distribution of different companies is also analyzed by using statistical tools. The relationship is also statistically tested at 5% level of significance.

#### 5.2 Conclusion

From the analysis of various financial indicators and statistical tools of all the sample banks, following conclusions are drawn:

- Above mentioned major findings led this study concludes that the earnings of banks are satisfactory in Nepalese context. Among sample banks SCBNL is in leading position in terms of earning followed by NABIL, HBL, NIBL and EBL respectively.
- It is found from the study that there is no consistency found in dividend distribution in all sample companies. The research shows that none of these companies have well defined and appropriate policy regarding dividend payments. SCBNL is paying higher dividend than other sample banks.
- It has been found from the study that there is positive and significant relationship between market price of share and earnings per share for all sample banks. It means that there is positive effect of earning to the market price of stock in Nepalese commercial banks.
- Though there is positive relationship between market price of share and last year's dividend for all sample banks. There is negligible effect on market price of stock due to dividend.
- The insignificant relationship between DPS and other financial indicators like EPS and CR indicates that the dividend policy of all these companies is unscientific.
- From the analysis it has been found that the market price of stock is affected by other variables which indicate about the rational behavior of investors.

- Most of the companies don't seem to follow the optimum dividend policy of paying regular dividend per shareholder's expectation. It might cause uncertainty among stockholders.
- The major findings have also led to conclude that the companies are neglecting the major factors like earning position of the firm, liquidity position while paying dividend.
- The study deals with only examining and analyzing the dividend practices of 5 sample banks for a period covering 5 years from 2005/06 to 2010/11 due to limited time period.

#### 5.3 Recommendation

- From the analysis it is found that HBL NIBL and EBL haven't followed a
  relevant and appropriate dividend policy. The DPS of these companies are
  highly fluctuating. These companies are neither following fixed dividend
  policy nor constant payout ratio policy. This fluctuation in dividend
  distribute
- On may cause uncertainty among stockholders. So, all sample companies to satisfy investors and to create goodwill of the company should follow the constant dividend payout ratio policy.
- Most of the investors are expecting a quick return on their investment rather
  than long term return due to declining economic condition of Nepal. They
  prefer dividend in form of cash rather than stock. So, the cash dividend
  should be distributed to satisfy the stockholders of the company.
- All companies must accept one major fact that EPS is to be considered for determining dividend amount. The EPS should be taken in account for declaration of dividend. So, it is important for the companies to consider earning rather than neglecting it while making dividend decision.
- There are different dividend policies i.e. stable dividends, constant payout, low regular plus extra policies etc. The companies are not applying any dividend policy. They use the conservative or ad-hoc policy to distribute dividend. The companies must apply a certain dividend policy for a long run from which investors can take decisions on buying the share of a company.

The appropriate dividend policy helps to increase the prestige of the companies in the market and investors. On taking the decision regarding to dividend, management must be acted rationally and convince the shareholder on time of declaring the dividend 'about policy adopted in annual general meeting.

- There are challenges and threats in front of the companies because of internal and external environment. The companies must have long-term vision towards earnings, dividend payment and financing through retained earnings for profitable opportunities. Therefore, there must be balance in between the benefits for investors and companies management. The competition between companies in good, service and share market is higher due to membership of Nepal in World Trade Organization and preparation to open capital market for foreign investors. The profitable opportunities are also created because of these circumstances So, company should apply appropriate dividend policy to overcome the threats and challenges and grab the opportunities.
- The market price is seen higher than dividend payment. The companies can solve the problem by raising the funds from market. The companies can expand the activities and utilize the capital in profitable opportunities which help to build faith from public and increase the capacity and performance of the companies. It profitable opportunities and chance of expansion is not seen, dividend must be increased significantly to win faith of companies from public and investors.
- Regular, simplified and adequate information must be provided by the companies to their financial and operational performance which not only make easier to take buy and sell decision of share, but also help to direct the random capital market towards perfect capital market. The Nepal Stock Exchange Ltd. (NEPSE), Security Board of Nepal, Nepal Rastra Bank, other libraries and organization flow the information widely. But information need to. Provide timely by concerned companies and simplified and updated by concerned bodies. A separate information centre must be established with enough resource, rights and obligation, to collect, analyze, simplify, supply, update the information and to collect feedback of the information in those

- concerned bodies. A separate supervisory unit must be made to monitor, supervise evaluate their performance. Internet websites can be used to provide information about stock market and Concern Company with update it time by time which helps the public to get required information timely.
- There are only two form of dividend used in practice i.e., stock dividend & cash dividend. They don't give choice to the shareholder of other form of dividend like bond dividend, property dividend, script dividend etc. Whether to distribute the stock dividend or cash dividend should be decided on the desire and behalf of the shareholders;, not only from the side of the management. Other forms of dividend 'can be also proposed to the shareholders by the management in the annual general meeting for approval, if possible,
- The legal rules are not enough regarding to dividend. Binding legal rules with enough flexibility is needed regarding dividend payment. Most of the companies pays less dividend however, theirs earning are higher. The dividend payment is found less than interest rate on deposit provided by banks. To bind companies to pay dividend, the present laws must be amended by initial works done jointly by concerned parties.
- MPS, DPS, EPS, fluctuates widely of the companies. To remove this problem companies need to make appropriate plan to achieve target earning, distribute target dividend, invest target amount by selecting profitable activities and increase target net wealth which help to maintain planned MPS. To achieve these balance activities need to be performed with long term plan concerning external and internal environment. Dividend must be paid by concerning the economic status and desire of future prosperity of the shareholders.
- Time value of money of shareholders need to increase net worth and
  presence of the liquidity is also other factors which must be considered while
  proposing the dividend. The internal information and survey for shareholders
  economic conditions with their desires need to perform to take accurate
  dividend decisions.

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# **APPENDICES**

Calculation of Mean ( $\overline{Y}$ ), Standard Deviation ( $\sigma$ ), Coefficient of Variance (CV) is presented below:

Appendix - I Calculation of Mean  $(\overline{Y})$ , Standard Deviation  $(\sigma)$  and C.V of EPS of Standard Chartered Bank Nepal Ltd.

Fiscal Year	SCBNL	$\mathbf{y} = (\mathbf{Y} - \overline{\mathbf{Y}})$	$y^2$
2005/06	175.84	53.79	2,893.36
2006/07	167.37	45.32	2,053.90
2007/08	131.92	9.87	97.42
2008/09	109.99	-12.06	145.44
2009/10	77.65	-44.40	1,971.36
2010/11	69.51	-52.54	2,760.45
	$\Sigma Y = 732.28$		$\sum y^2 = 9921.94$

Here,

n = Number of Year

 $\overline{Y}$  = Mean of Mean

Where,

Mean 
$$(\overline{Y}) = \frac{\sum Y}{n} = \frac{732.28}{6} = 122.05$$

Standard Deviation 
$$(\sigma) = \sqrt{\frac{\sum y^2}{n-1}} = \sqrt{\frac{9921.94}{6-1}} = \sqrt{1984.39} = 44.55$$

Coefficient of Variance (C.V) = 
$$\frac{\sigma}{\bar{Y}} \times 100 = \frac{44.55}{122.05} \times 100 = 36.50\%$$

Note: i) Same Process has been adopted to calculate the mean, standard deviation and coefficient of variation of DPS and MPS of other banks.

ii) Data have extracted from the annual reports of concern banks.

Appendix - II

Calculation of Correlation of Coefficient between EPS and DPS OF SCBNL

Fiscal	TOTAL EPS	TOTAL	$(X_1)^2$	$(\mathbf{X}_2)^2$	$(\mathbf{Y}_{\bullet}) \vee (\mathbf{Y}_{\bullet})$
Year	$(\mathbf{X}_1)$	DPS $(X_2)$	(A1)	$(\mathbf{A}_2)$	$(\mathbf{X}_1) \times (\mathbf{X}_2)$
2005/06	175.84	130.00	30,919.71	16,900.00	22,859.20
2006/07	167.37	80.00	28,012.72	6,400.00	13,389.60
2007/08	131.92	80.00	17,402.89	6,400.00	10,553.60
2008/09	109.99	50.00	12,097.80	2,500.00	5,499.50
2009/10	77.65	55.00	6,029.52	3,025.00	4,270.75
2010/11	69.51	50.00	4,831.64	2,500.00	3,475.50
	$\sum X_1 = 732.28$	$\sum X_2 = 445$	$\sum (X_1)^2 =$	$\sum (X_2)^2 =$	$\sum X_1 X_2 =$
			99294.27	37725	60048.15

Here,

n = Number of year

 $\bar{X}_1$  = mean of the EPS

 $\overline{X}_2$  = Mean of DPS

$$\overline{X}_1 = \frac{\sum X_1}{n} = \frac{732.28}{6} = 122.05$$

$$\overline{X}_{2=}\frac{\sum X_2}{n} = \frac{445}{6} = 74.17$$

$$r = \frac{n \sum X_{1.} X_{2} - \sum X_{1.} \sum X_{2.}}{\sqrt{n \sum {X_{1}}^{2} - (\sum X_{1})^{2}} \times \sqrt{n \sum {X_{2}}^{2} - (\sum X_{2})^{2}}}$$

$$=\frac{34424.30}{\sqrt{59531.62}\sqrt{28325}}$$

$$=\frac{34424.30}{243.99 \times 168.30}$$

$$=\frac{34424.30}{41063.52}$$

=0.84 (Positive Correlated)

Calculation of P.E. to find the reliability of the value of Pearson Coefficient of Correlation.

$$n = 6$$

$$r = 0.84$$

P.E = 
$$0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{0.30}{\sqrt{6}}$$
$$= 0.08$$

Now,

 $6 \times P.E.$  (r) =0.49

Since, r=0.84<6×P.E. (r), r is insignificant, hence this conclusion is incorrect. In the case  $r > 6 \times P.E.$  (r), r is significant and the conclusion is correct.

- Note: i) Same Process has been adopted to calculate the correlation coefficient,
  P.E. and 6P.E. between different variables of other banks and same
  calculation in EPS and MPS, MPS and Last years Dividend
  - ii) Data have extracted from the excel sheets.

Appendix - III

Calculation of P/E Ratio for SCBNL

Fiscal Year	MPS	EPS	P/E Ratio
2005/06	3,775.00	175.84	21.47
2006/07	5,900.00	167.37	35.25
2007/08	6,830.00	131.92	51.77
2008/09	6,010.00	109.99	54.64
2009/10	3,279.00	77.65	42.23
2010/11	1,800.00	69.51	25.90

P/E ratio = MPS/EPS

$$=\frac{27594}{732.28}$$

=37.68

Note: i) Same Process has been adopted to calculate the correlation coefficient, PE and 6PE between different variables of other banks.

ii) ii) Calculation has been done through excel

Appendix - IV

Calculation of DPR for SCBNL

Fiscal Year	DPS	EPS	DPR (%)
2005/06	130.00	175.84	73.93
2006/07	80.00	167.37	47.80
2007/08	80.00	131.92	60.64
2008/09	50.00	109.99	45.46
2009/10	55.00	77.65	70.83
2010/11	50.00	69.51	71.93

$$DPR = \frac{DPS}{EPS} x 100\%$$

$$=\frac{445}{732.28} \times 100\%$$

Note: i) Same Process has been adopted to calculate DPR of other banks.

ii) Calculation has been done through excel

Appendix - V
Calculation of D/Y for SCBNL

Fiscal Year	DPS	MPS	D/Y (%)
2005/06	130.00	3,775.00	3.44
2006/07	80.00	5,900.00	1.36
2007/08	80.00	6,830.00	1.17
2008/09	50.00	6,010.00	0.83
2009/10	55.00	3,279.00	1.68
2010/11	50.00	1,800.00	2.78

$$D/Y = \frac{DPS}{MPS} x 100\%$$

$$=\frac{445}{27594} \times 100\%$$

= 1.61%

Note: i) Same Process has been adopted to calculate D/Y of other banks.

ii) Calculation has been done through excel

# Appendix - VI

# Calculation of Simple Regression between DPS and EPS

# DPS

Fiscal Year	SCBNL	NABIL	HBL	NIBL	EBL	Pooled Average
2005/06	130.00	85.00	30.00	20.00	25.00	58.00
2006/07	80.00	100.00	15.00	5.00	10.00	42.00
2007/08	80.00	60.00	25.00	7.50	20.00	38.50
2008/09	50.00	35.00	12.00	20.00	30.00	29.40
2009/10	55.00	30.00	11.84	25.00	30.00	30.37
2010/11	50.00	30.00	16.84	25.00	50.00	34.37

# EPS

Fiscal Year	SCBNL	NABIL	HBL	NIBL	EBL	Pooled Average
2005/06	175.84	129.21	59.24	59.35	62.78	97.28
2006/07	167.37	137.08	60.66	62.57	78.42	101.22
2007/08	131.92	115.86	62.74	57.87	91.82	92.04
2008/09	109.99	113.44	61.90	37.42	99.99	84.55
2009/10	77.65	83.81	31.80	52.55	100.16	69.19
2010/11	69.51	70.67	44.66	48.84	83.18	63.37

# Summary Output OF SCBNL

		i
Regression Statistics		
Multiple R	0.83831312	
R Square	0.70276890	Goo
Adjusted R		
Square	0.6284611	
Standard		
Error	27.15284	
Observations	6	

Force Constant to Zero
FALSE
Goodness of Fit < 0.80

# **ANOVA**

	df	SS	MS	F	P-value
Regression	1	6972.82	6972.83	9.4575	0.0371
Residual	4	2949.11	737.28		
Total	5	9921.94			

Confidence Level

0.95 0.99%

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 99%	Upper 99%
Intercept	31.9094	31.3361	1.0182	0.3661	-55.093	118.912	-112.37	176.18
SCBNL	1.2153	0.3951	3.0753	0.0371	0.1181	2.3125	-0.6041	3.035

$$y = 31.909 + 1.215*SCBNL$$

# Note:

- i) Same Process has been adopted to calculate simple regression between DPS and EPS of other banks.
- ii) Calculation has been done through excel

Appendix- VII

Calculation of Simple Regression between MPS and EPS

# MPS

Fiscal Year	SCBNL	NABIL	HBL	NIBL	EBL	Pooled Average
2005/06	3,775.00	2,240.00	1,100.00	1,260.00	1,379.00	1,950.80
2006/07	5,900.00	5,050.00	1,740.00	1,729.00	2,430.00	3,369.80
2007/08	6,830.00	5,275.00	1,980.00	2,450.00	3,132.00	3,933.40
2008/09	6,010.00	4,899.00	1,760.00	1,388.00	2,455.00	3,302.40
2009/10	3,279.00	2,384.00	816.00	705.00	1,630.00	1,762.80
2010/11	1,800.00	1,252.00	575.00	515.00	1,094.00	1,047.20

# EPS

Fiscal Year	SCBNL	NABIL	HBL	NIBL	EBL	Pooled Average
2005/06	175.84	129.21	59.24	59.35	62.78	97.28
2006/07	167.37	137.08	60.66	62.57	78.42	101.22
2007/08	131.92	115.86	62.74	57.87	91.82	92.04
2008/09	109.99	113.44	61.90	37.42	99.99	84.55
2009/10	77.65	83.81	31.80	52.55	100.16	69.19
2010/11	69.51	70.67	44.66	48.84	83.18	63.37

# Summary Output OF SCBNL

Regressio	on Statistics	Force Constant to Zero
Multiple R	0.520065800	FALSE
R Square Adjusted R	0.27046844	Goodness of Fit < 0.80
Square Standard	0.08808555	
Error	42.539298	
Observations	6	

## **ANOVA**

	df	SS	MS	F	P-value
Regression	1	2683.57	2683.57	1.483	0.2902
Residual	4	7238.37	1809.59		
Total	5	9921.939			

Confidence Level

0.95 0.99% Upper Lower Upper Standard Lower Coefficients t Stat P-value 95% 99% 99% Error 95% 67.26973 1.3951 0.2355 -154.73 289.27 48.2173 201.14 Intercept -66.603 SCBNL 0.01191 0.00978 0.2902 1.2178 -0.0152 0.0391 -0.0331 0.0569

Note i) Same Process has been adopted to calculate simple regression between MPS and EPS of other banks.

ii) Calculation has been done through excel

Appendix –VIII

Calculation of T-test of DPS and EPS for SCBNL

SCBNL	SCBNL
130	175.84
80	167.37
80	131.92
50	109.99
55	77.65
50	69.51

T-Test: Paired Two Sample for Means

 $\alpha = 0.05$ 

Diff		SCBNL	SCBNL
-45.84	Mean	74.16667	122.0467
-87.37	Variance	944.1667	1984.388
-51.92	Observations	6	6
-59.99	Pearson Correlation	0.838313	
-22.65	Hypothesized Mean Difference	0.05	
-19.51	df	5	
	t Stat	-4.66418	
	P(T<=t) one-tail	0.002756	
	T Critical one-tail	2.015048	
	P(T<=t) two-tail	0.005511	
	T Critical Two-tail	2.570582	·

Reject Null Hypothesis because p < 0.05 (Means are Different)

Note i) Same Process has been adopted to calculate t-test to other banks.

ii) Calculation of t-test has been done through excel

 ${\bf Appendix - IX}$  Calculation of T-test of MPS and EPS for SCBNL

SCBNL	SCBNL
3775	175.84
5900	167.37
6830	131.92
6010	109.99
3279	77.65
1800	69.51

T-Test: Paired Two Sample for Means

 $\alpha = 0.05$ 

Diff		SCBN	SCBN
3599.16	Mean	4599	122.047
5732.63	Variance	3783332	1984.39
6698.08	Observations	6	6
5900.01	Pearson Correlation	0.5200658	
3201.35	Hypothesized Mean Difference	0.05	
1730.49	df	5	
	t Stat	5.7047261	
	P(T<=t) one-tail	0.0011556	
	T Critical one-tail	2.0150484	
	P(T<=t) two-tail	0.0023111	
	T Critical Two-tail	2.5705818	

Reject Null Hypothesis because p < 0.05 (Means are Different)

Note i) Same Process has been adopted to calculate t-test to other banks.

ii) Calculation of t-test has been done through excel