

**INCOME DISTRIBUTION AND ITS EFFECTS ON MARKET POSITION:  
A CASE STUDY OF SCBNL & NABIL BANK LIMITED**

**A THESIS**

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## **RECOMMENDATION**

This is to certify that the Thesis

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Entitled:

**INCOME DISTRIBUTION AND ITS EFFECTS ON MARKET POSITION:  
A CASE STUDY OF SCBNL & NABIL BANK LIMITED**

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# VIVA-VOCE SHEET

We have conducted the viva-voce of the thesis presented

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And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for the

**Degree of Master's in Business studies (M.B.S.)**

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## DECLARATION

I, hereby, declare that the work reported in this thesis entitled **“Income Distribution And Its Effects On Market Position: A Case Study Of SCBNL & Nabil Bank Limited”** submitted to office of the Dean, Faculty of Management, Tribhuvan University, is my original work done for the partial fulfillment of the requirement for the Masters of Business Studies (MBS) under the supervision of **Mr. Joginder Goet**, Global College of Management.

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**Raj Kumar Rawal**  
**Global College of Management**

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## **ABBREVIATIONS**

%	Percentage
&	And
A.D	Anno Domini
ABBS	Any Branch Banking System
ADB	Agriculture Development Bank
ATM	Automated Teller Machine
B. S.	Bikram Sambat
BVPS	Book Value Per Share
C. V.	Coefficient of Variation
CA	Current Assets
CAR	Capital Adequacy Ratio
CBS	Central Bureau of Statistics
CL	Current Liabilities
CPI	Consumer Price Index
CRR	Cash Reserve Ratio
DPR	Dividend Payout Ratio
DPS	Dividend Per Share
Ed.	Edition
EPS	Earning Per Share
FY	Fiscal Year
GDP	Gross Domestic Product
i .e	That is
JVB	Joint Venture Bank
LC	Letter of Credit
LTD	Limited
MBA	Masters' of Business Administration
MBS	Masters' of Business Studies
Misc.	Miscellaneous
MVPS	Market Value Per Share
NBL	Nepal Bank Limited
NCC	Nepal Credit & Commerce
NEPSE	Nepal Stock Exchange

No.	Number
NRB	Nepal Rastra Bank
P.E	Probable Error
PE	Price Earning
PEs	Public Enterprises
S.D	Standard Deviation
SCBNL	Standard Chartered Bank Nepal Limited
SEBON	Securities Board of Nepal
T. U.	Tribhuwan University

# **CHAPTER-I**

## **INTRODUCTION**

### **1.1 Background of the Study**

The liberalization policy of Nepal Government, foreign investors and internal investors were attracted to invest in Nepal in joint venture especially in banking business. This initiated the establishment of NABIL Bank Ltd. in 1984; Standard Chartered Bank Ltd. 1985 establishment of commercial banks contributes significantly in the formation and mobilization internal capital and development efforts. They furnish necessary capital needed for trade and commerce of mobilization the dispersed saving of the individuals and institutions. The increase in the opening of the joint venture Bank (JVBs) caught a dramatic way after the liberalization and market oriented economic policy. Thought, JVBs are enjoying liberalization, Nepal Rastra Bank (NRB) has been managing them through its directives and guidelines. One of the major reasons for which public are interested to invest money on the shares of banks or other institutions is for dividend. Normally, business running at profit is capable to pay it. The amount which is distributed as dividend should be adequate to meet the normal expectation of shareholders. Dividend refers to that portion of earnings of a firm that is distributed to the shareholders in return to their investment in the shares. It is important decision of financial management. By a dividend we mean some kind of consistent approach to the distribution versus retention decision, rather than making the decision on the purely ad hoc basis from period to period. It is thus rewarding to have clear understanding on the specifics income distribution policy by the participants of the capital market.

There is no any uniformity in the income distribution practiced in Nepal among the different corporations. The government is unable to received dividends from the public enterprises as documented in past several years budget speeches and economic surveys published by Nepal government, Ministry of

Finance. Recently joint venture banks and some other public limited companies have shown new trend of paying dividend to shareholders there is also growing practice of paying bonus shares among some corporation of Nepal. Stock split is another aspect of income distribution policy which is popular in the developed capital market but this aspect is almost neglected in the capital market of Nepal. An alternative form of dividend is share repurchase. If a firm has excess cash and insufficient profitable investment opportunities to justify the use of these funds, it is in the shareholder's interests to distribute the funds. The distributions can be accomplished either by the repurchase of share or by paying the funds out in increased dividends. It is thus share repurchase is often viewed as an alternative to paying dividends. However, Nepal Company Act, 2053(1996), section 47 has prohibited company from purchasing its own shares.

Some companies may pay whole earnings as dividend at the beginning to create good image in financial sector but later they may change their policy and announce a certain percentage of dividend payout term. The decision to keep some portion of earnings and to pay some portion of earnings as dividend is known as dividend policy. The dividend payout ratio may be different but the common dividend payout ratio in 40% different studies reveal. It seems that the actual owners of the corporation are not treated rightly by not giving sufficient dividend. Although the actual owners of the company are shareholders, they are paid low dividends in some companies whereas in some companies the dividend is not announced. But recently the trend of payment of dividend is increasing.

Income distribution policy is one of the major decisions of financial management because it affects the financial structure, the flow of funds, corporate liquidity and investors attitudes. After the successful completion of fiscal year having sufficient profit management decide to declare dividend to shareholders. The important aspect of income distribution policy is to

determine the amount of earning to be distributed to shareholders and the amount to be retained in the firm. It also determines the forms of dividend.

The research work will look into all relevant factors of dividend and income distribution policy of commercial banks of NABIL and SCBNL. These banks are selected for thesis writing as the size of profit and dividends are comparatively high. They are running smoothly and cover sufficient period of the study.

### **1.2 Profile of NABIL Bank Ltd.**

Nabil Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil provides a full range of commercial banking services through its 19 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business. Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Bangalore, India, Internet banking system and Tele banking system.

### **1.3 Profile of Standard Chartered Bank Nepal Limited**

Standard Chartered Bank Nepal Limited (earlier known as Nepal Grindlays Bank Ltd.) came into existence in 2043(1987) as a joint venture between ANZ Grindlays and Nepal Bank Ltd. After acquiring of the Grindlays operation in the region by standard chartered in July 2001, it has become a subsidiary of

Standard Chartered London, which holds 75% of shareholdings in the company with remaining 25% held by the public shareholders.

The bank has successfully completed 25 years of its operation in Nepal in 2011. The global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking in Nepal.

The Bank believes- “A satisfied customer is our most valuable Award”. The Bank has been the pioneer in introducing customer focused products and services in the country and aspires to continue to be a leader in introducing new products in delivering superior services. It is the first Bank in Nepal that has implemented the Anti- Money Laundering policy and applied the Know Your Customer' procedure on all customer accounts.

#### **1.4 Statement of the Problems**

Income distribution policy is not clearly understood by a large segment of the financial community. It is not a straight forward and simple aspect of corporate finance. During the past 45 year's period research efforts in this area have led to the development of valuation models, seeking to establish the irrelevance of dividend payout on shareholders (Miller and Modigliani, 1961). Miller and Modigliani's work raises the following question that how can investors benefit from a dividend when it is , in effect, paid rupee for rupee out of the value of their shares”, “Asqith Paul and David W. Mullins Jr.,” Signaling with Dividends, Stock Purchases and Equity Issues”, Financial Management, (Autumn, 1980,) P-28.”. Moreover a number of behavioral models have also come out in course of time, attempting to categorize, explain and measure the different types of observed dividend practice. In this context, the dividend model is associated with the names of Linter (1956). Darling (1957) and Brittain (1966), among, other seem to provide useful guidance in handing this complicated decision problem. In practice, every firm some kinds of dividend policy, Different dividend policies are suitable for different firms. In general, it is assumed that there is relationship between dividend and stock price but the

relation is not known, in an underdeveloped capital market like Nepal. Income distribution policy is not matching with the earnings of the commercial bank. Similarly, no proper relationship between dividend and market price of share exist. Returns of the listed companies lack the appropriate relationship with price. Companies with lower return record rigid price where as companies making sound return do not rigid in price of share. Thus returns of the company are not reflecting the market price of share.

In Nepal, there are only a few companies that pay dividend to shareholders. Commercial banks, especially joint venture banks, have sufficient earnings and are able to pay dividends. But they are not following the prevailing dividend policies. While earning is low they pay high dividend and something when earning is high they pay low dividend. For example, all three sample banks have sufficient earnings (EPS) and profitability in each year. Finally, we cannot see the uniformity of dividend pay-out ratio in the sample banks. Now, we know that all banks have sufficient earnings but they are not distributing the dividend in equal proportion. They have not followed the consistency in dividend distribution policy and we could not get uniformity of dividend pay-out ratio in these sample banks.

The followings are the research questions that have been examined for the purpose of this study.

- Are share prices affected by Income distributoion in the sample banks?
- Should the sample banks have uniformity in income distribution policy?
- Are the sample banks guided by the specific income distribution policy?
- Is the consistency in dividend per share and dividend payout ratio in the sample three banks?
- Does the income distribution Policy affect DPS, EPS, DPR, PE Ratio Liquidity Ratio and MVPS in stated commercial banks?

## **1.5 Objectives of the Study**

The basic objective of the study is to make comparative analysis of Income Distribution Policy of selected banks. But the specific objective are as follows.

- To analyze the relationship of financial indicators such DPS, EPS and DPR, PE Ratio, Liquidity Ratio and Profitability Ratio on Market Value Per Share(MVPS) Per Share.
- To explore if there is any uniformity among DPS, EPS and DPR on the two sample commercial banks.
- To find out the impact of income distribution policy on market price per share.
- To provide appropriate suggestions

## **1.6 Significance of the Study**

The finding of this research will be of worth to the shareholders to see the Distribution Policy of the two banks in comparison. So, this may be helpful for them in identifying the productivity of their investment and justify the rationale of their investment decision. Then it will also benefited by the management to point out the loopholes and suggest the remedies about the appropriate income distribution policy.

Similarly, this research will also be beneficial to the policy makers from the comparative study of income distribution policy. They can get important findings which are useful in policy making about income distribution policy formulation.

Finally, the income distribution policy of the joint venture banks are of great interest to the several outsider they are customers, financial agencies, stock brokers, interested person and scholars. I believe that except above, those JVBs will be benefited more since the study is conduct on their dividend policy.

## **1.7 Limitations of the Study**

This study tries to evaluate the income distribution policy of joints venture of the banks. This research explain and analysis the subject matter with the help of well known or already established analytical methods and technique therefore as conclusion oriented research it doesn't much concern with fundamental and decision oriented research.

- This study covers the study period of 5 years from 2065/066 to 2069/070
- Only two commercial banks listed in Nepal stock Exchange are taken as Sample.
- The main focus is given to the quantitative aspects, qualitative factors are not studies.
- Data related to cash dividend are analyzed and interpreted.
- There may be reporting error in the secondary data.

## **1.8 Organization of the Study**

The study has been organized into five chapters; the titles of each of these chapters are as follows.

### **Chapter –One: Introduction**

This chapter contains the introductory part of the study. As already mentioned, this chapter describes the major issues to be investigated along with the general background, brief profiles of the sample banks statement of problem, objectives, significance of the study and finally limitation of the study.

### **Chapter –Two: Conceptual Framework and Review of Literature**

This chapter is devoted to theoretical analysis and brief review of related and pertinent literature available. It includes a discussion on the conceptual framework and review of the major studies in general.

### **Chapter –Three: Research Methodology**

This chapter describes the research methodology employed in the study. This chapter deals with the research design, source of data, methods of analysis,

analysis of financial indicators and variables, test of hypothesis, definition of statistical tools etc.

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

This Chapter deals with the presentation and analysis of data to indicated quantitative factors of Distribution Policy using statistical tools and techniques. This chapter also includes the major findings of the study.

#### **Chapter- Five: Summary, Conclusions and Recommendations**

This Chapter states summary, conclusions and recommendations, compares them with other empirical evidence to the extent possible and provides some suggestions.

Similarly, at the front part of the study table of contents, recommendation sheet, viva voice sheet, acknowledgement, list of table and figure and abbreviation are presented and bibliography and appendices are presented at the end of the study.

## **CHAPTER-II**

### **CONCEPTUAL FRAMEWORK AND REVIEW OF LITERATURE**

This chapter reviews the literature related with the research topic, with more focus on the Comparative study of dividend of policy of Nabil Bank and Standard Chartered Bank. In this regard, an insight would be put on the theories, then on the researches conducted outside and inside the country. Furthermore, the theoretical undeplinning of the concepts used during the analysis and the theories behind the share pricing would also be explained. While preparing this thesis, the researcher reviewed various magazines, journals, books, reports, etc and collected materials from different sources. The review of literature has been divided into three categories namely conceptual framework, theories related to the topic and review of articles, books and masters' level thesis.

#### **2.1 Conceptual Framework**

##### **2.1.1 Meaning & Definition of Bank**

The word bank is used in the sense of a commercial bank. A Bank is an institution which deals with money and credit generally, bank accepts deposits from business institutions and individuals, which is mobilized into productive sectors mainly business and consumer lending. At present context, bank is not only confined to accepting deposits and disbursing loan. Nowadays, most of the bank may be engaged in different types of functions such as remittance, exchange currency, joint venture, underwriting, bank guarantee and discounting bills etc.

Bank is a financial intermediary because of accepting deposits and granting loans. Banks are the most important sources of short- term working capital for business. In modern banking system, when businesses and consumers must make payments for purchases of goods and services, more often they use bank provided cheques, credit or debit cards, or electronic accounts connected to a

computer network. In fact, a modern bank performs such a variety of functions that it is difficult to give a precise and general definition of a bank. Some important definitions for the bank given by different personalities are as follows.

A bank means financial institution established for the transaction of money. It deals with public and lends money to the borrowers as a loan. It also creates credit and exchanges the foreign currency. It is established to fulfill certain objectives such as to facilitate public economic interest, to advance loans for the development of agriculture, industries and trade and to provide banking services to the public.

Banking means the accepting for the purpose of lending or investment of deposit of money from the public repayable on demand or otherwise and withdrawable by cheque, draft or otherwise.

A bank's main purpose is to support the economic growth, agriculture growth, commercial growth of the country. So we can say a bank is a financial institution offering deposits subject to withdrawal on demand and making loans of a commercial or business nature.

### **2.1.2 Commercial Banks in Nepal**

Commercial banks are very important for the development of national economy. They accept public saving as deposits and advance them as loans to the persons, business organizations and government when they are required. The development of commercial banks is in an increasing trend after the restoration of democracy in 1990 A.D. The first commercial bank is Nepal Bank Limited that was established in 30 Kartik 1994 B.S (1937 A.D.). And the second is RBB established in 10/10/2022 B.S.

After a long period of establishment of these two banks, NABIL Bank is the first commercial bank from the private sector. This is the first joint venture bank of Nepal also. Thereafter many other joint venture and non joint venture

banks were set up under the Commercial Bank Act, 2031 and Company Act, 2053.

Now, Thirty-Two Commercial banks are operating in the country. The door is opened now for the establishment of commercial banks with new policy relating to commercial bank issued by Nepal Rastra Bank considering that banking of entrance is not favorable in the liberal and market oriented economic environment and to create the competitive environment. Thus, it is expected that the numbers of commercial banks will be increased in future. According to new policy issued by NRB, the paid up capital of new opening commercial bank at national level must be Rs. 2000 million.

If the newly opened bank is joint venture with foreign bank or financial institution, it is permitted to open new commercial banks with head office at Kathmandu valley contracting three years management with 67% investment of foreign such institution, the ratio of ownership of share will be 7:3 between founder and public respectively.

There are many functions of commercial banks and the principal functions are as follows:

- To accept deposit
- To provide loans and advances
- To create credits
- To perform agency function
- To carry out utility functions.

The commercial bank and banker has its own right and duties. The rights are mentioned point-wise as follows:

- Banker enjoys a general lien over customer's securities in his possession.
- He has an implied right to charge a reasonable commission for his service and interest upon loans.
- He has the right of set-off like any other debtors.

- He has the right to appropriate payment as per the rules laid down in Clayton's case.
- Banker need not seek out the creditor to make the payment. It is the creditor who should demand payment.

Similarly, the duties of banker are as follows:

- To receive his customer's money and cheques and other instruments for collection.
- To repay the customer's deposit on the presentation of customer's mandate known as the cheque.
- To maintain secrecy in respect of customer's account and affairs.
- To give a reasonable notice before closing a customer's account.

### **2.1.3 Concept of Dividend**

The term Dividend is defined as a return from investment in equity shares. The profit made but the firm which is distributed to the shareholders termed as dividend. Every firm after making profit either retain the money for further investment or distribute it among the shareholders. The firm should decide whether to keep the money as retained earnings or pay the dividend. It may be in cash, share and combination of both. The dividend policy is the policy followed by the firm regarding the dividend versus retention decision. Dividend policy of different organization may same or different, but the policy followed by the firm should be suitable for both the shareholders as well as the firm itself.

Infact, dividend is the portion of the net earnings, which is distributed to the shareholders by a company. After successfully completing the business activities of a company, if the financial statement shows the net profit, the board of directors decides to declare dividend to the shareholders. Therefore, the payment of corporate dividend is at the discretion of BOD. The policy of a company in the division of its profit between to shareholders as dividend retention for its investment is known as dividend policy. Dividend

policy determines the decision of earning between payment to shareholders and re-investment in the firm. one of the most. Dividend policy refers to the issue of how much of the total profit a firm should pay to its stockholders and how much to retain for investment so that the combine present and future benefits maximize the wealth of stock holders. There is a reciprocal relationship between retained earnings and cash dividends. If retained earnings are kept more by the company less will be dividend and vice versa. Dividend decision is one of the major decisions of managerial finance. It is in the sense that the firm has to choose between distributing profits to shareholder and return back in to the business. The decision depends up on the objective of the management for wealth maximization and profit maximization. The firm will use the net profit for paying dividends to the shareholders if the payment will lead to maximization of the wealth of the owners it not, it is better to retain them to finance investment programs. The relationship between dividend and value of the firm should therefore, be the criterion for decision making.

Most shareholders accept two forms of return from the purchase of common stock. These are capital gains and dividends. Capital gain may be defined as the market value of the common stock over time. The shareholders expect, at some point, a distribution of the firm's earning in the form of a dividend. Form mature and stable corporations, most investors expect regular dividends to be declared and paid on the common stock. This expectation takes priority over the desire to retain earnings to finance expansion and growth. So, shareholders expectation can be fulfilled through either capital gains or dividends. "Financial management is therefore concerned with the activities of corporation that affect the well being of stockholders that well being can be partially measured by dividends received but a more accurate measure is the market value of stock." Since dividends would be more attractive to stockholder, one might think that there would be tendency for corporations to increase distribution of dividends. But one might equally pressure that gross dividend would be reduced somewhat, with an increase in net after tax

dividends still available to stockholders and increase in retained earnings for the corporation.

Basically in the planned economy, commercial bank not only provides economic resource but also provides and assists with technical know-how. They in other hands also do not discriminate the investment areas and organization whether the organization is public, joint venture, private sector or government. All these sectors are equally subsumed into the production plans which bank finance.

Not only in the highly developed industrial an non-industrial economics of the world where in a way the commercial and industrial activities are paralyzed in the absence of banks keeping their doors open , even in the developing countries most economic activities, particularly in the economy,s organized sector, are bank based( Sinkey, 1988: 12).

#### **2.1.4 Types of Dividends**

Cash dividend is the most popular form of dividend. Bank and corporation need to follow various types of dividend in view of the objective and policies which they implement. The type of dividend that bank and corporation follow is partly a matter of attitude of directors and partly a matter of a various circumstances and financial constraints that bound corporation dividend is being distributed in several forms, e.g. cash dividend, stock dividend, script dividend, property dividend and bond dividend.

Dividend is the periodic payment made to stockholders to compensate them for their wealth and investment funds. Dividends are pro-rata distributions to shareholders retained earnings. They can be in the form of cash, stock or property. Generally, corporation can only declare dividends out of earnings, although some states laws and corporate agreements permit to declaration of dividends from sources other than earnings (Hawkins,1997:650).

- **Cash Dividend:** The portion of net earnings, which are distributed to the shareholder as cash in proportion to their shares of the company is called cash dividend. If the company does not have sufficient cash at the time of dividend payment, company seeks to arrange funds, which will be managed by borrowing. Cash dividend is major form of dividend, which is distributed to shareholders in cash out of the company's profit. Generally, stockholders have strong preference for cash dividend.

When cash dividend is paid then the total assets of the company is automatically reduced. So, the company needs to have enough cash and sufficient balance for the payment of cash dividend. If it does not have enough balance, arrangement should be made to borrow funds, which is difficult for the company. When the company follows stable dividend policy, they use to prepare cash budget to indicate the necessary funds which would be needed to meet regular dividend payment of the company.

Most Companies pay dividend in cash. Cash dividend is that which is distributed to the shareholders in cash out of the earnings of the company. "Both total assets and net worth of company are reduced when cash dividend is distributed. The market price of share drops in most cases by amount of cash dividend distributed" (Gupta, 2009:405)

- **Stock Dividend:** A stock dividend is the payment of existing owners of a dividend in the form of stock although stock dividends don't have a real value, firms pay stock dividend as a replacement for a supplement to cash dividend. If the declared dividend is provided in the form of share instead of paying in cash, the dividend is said to be stock dividend. From the provision of stock dividend and the dividend the current market price of shares decrease but it doesn't have any impact in the wealth of shareholders. "A stock dividend simply is the payment of additional stock to stockholders nothing more than a recapitalization of the company a stockholders proportional ownership remains

unchanged.” Stock Dividend: A payment of additional shares of stock to share holders often used in place of or in addition to cash dividend (Van Horne, 2000: 328). Stock dividend is known as bonus shares too. An issue of bonus share represents a distribution of shares in addition to the cash dividend (known as stock dividend in U.S.A.) the existing shareholders (Pandey,1995: 705).

The effects of the issue of the stock dividends are summarized below.

- Increase in number of outstanding shares
- Transfers retained earning balance to capital
- Does any changes in net worth and par value of the company
- Does not affect the shareholders proportional ownership and
- Theoretically it is not a thing of value to shareholders

Stock split is the increment of the number of shares outstanding through a proportional reduction in the par value of the stock. When stock splits occur, shareholders receive large number of shares for the old shares they have. The effects of stock split are given below;

- It increases the number of outstanding shares
- Reduces the par value and price of the shares
- Does not change the proportional ownership of the stock holders
- It neither changes the capital account nor the net worth and
- Theoretically, it is not a thing of value to stockholders

Stock dividend and stock split do not change the assets of the firm. In both cases, proportional increases in shares, no changes in net worth, not a thing of value to stockholders are the same features.

#### **Difference between stock dividend and stock split**

- Use of retain earning
- Change in capital account, but if company declares more than twenty percent of stock dividend then there is no differences between stock dividend and stock splits because only paid up

value of stock dividend is transferred from retain earning to capital account

- **Property Dividend:** If the declare dividend is provide in the form of property (assets) instead of cash, the dividend is said to be 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 circumstance. Company's own products and securities of subsidiaries are the examples that have been paid as property dividend (Shah, 2009:403).
- **Scrip Dividend:** When company has been suffering from the cash problem but has earned profit, scrip dividend is paid (issued). Scrip is a form of promissory note promising to pay then holder at specified later date. Under this type of dividend company issues and distributes to shareholders transferable promissory notes which may be interest bearing or not. Scrip dividend means payment of dividend in scrip or promissory notes. Because of temporary cash shortage, sometimes the firm needs cash generated by business earnings to meet the different requirements. For those requisites, scrip dividend is issued promising the payment will be made in future.

This type of dividend does not change the total numbers of the stock but issued promissory note in the proportion of share held by the stockholders. Scrip dividend has relatively low psychological value in the stockholder's perception than other forms of the dividends.

- **Bond Dividend:** Bond dividend by its name is a dividend that is distributed to shareholders in forms of a bond. In other words, company declares dividend in forms of as own bond with a view to avoid cash outflows. Bond dividend helps to postpone the payment of cash. Though there are different forms of dividends, in general, the form of dividend popular in Nepal are cash and stock dividend. The form of dividend chosen for this study is cash dividend. Bonds used to pay carry interest

and it means that the company assumes the fixed obligation of interest payment annually and principal amount of bond at maturity date. Bond dividend possesses the following characteristics:

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

## **2.2 Dividend Policies or Theories of Dividends**

### **2.2.1 Residual Theory of Dividend**

Residual dividend policy assumes that external sources of finance are not available or even if it is available, the same cannot be used due to its excessive cost. Under the residual theory of dividend, company make their investment decision then payout any remaining funds as cash dividend, residual theory of dividend suggest that only residual earnings should be distributed as dividend, which is left accepting all the profitable investment opportunities, when depends upon the investment policy of the firm. According to this theory, if there exists a balance of earning after paying fixed obligation and investment opportunities and if the firm has investment opportunities with higher return than required, then the firm will invest the earnings to the project, and if there are only earning left accepting on the investment opportunities then it will be distributed to stockholders as cash dividend.

When the firm has opportunity of investment in profitable sector at first, they prefer the internally generated funds (retained earnings) rather than the externally generated funds, which is comparatively expensive due to the flotation cost and others. So the amount of dividend fluctuates time to time in keeping with availability of acceptable dividend opportunities of the firm. “Although, the residual theory of dividend appears to make further analysis the

dividend policy unnecessary, it is not clear that dividends are solely a means of disbursing excess funds”

If the earning is more than financing needed by equity then the funds more than needed is distributed as dividend, if equity is less than financing needed by equity or equal to it, then distribute no dividend. So this theory assumes dividend policy is totally passive in nature. The amount of dividend is calculated as follows;

$$D_t = \text{Max. } (E_t - I_t \text{ or } 0)$$

Where,

$D_t$  = dividend paid in year t

$E_t$  = earning in year t

$I_t$  = portion of investment in year t to be financed by equity

In calculation, we can say the residual theory of dividend prefers use of internal funds in investment and increased value of shareholders assets through capital gain of equity.

### 2.2.2 Stability of Dividend

Stability or regularity of dividends is considered as desirable 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 share. The term dividend stability refers to the consistency or lack of variability in the stream of dividend. “By stability, we mean maintaining a position in relation to a dividend trend line, preferably one that is upward sloping.” More precisely, stability of dividends refers to the amounts paid out regularly. Three distinct forms of such stability may be distinguished (Koirala, 2006: 304-306).

- **Constant Dividend Per Share:** Constant dividend policy is based on the payment of a fixed rupees dividend in each year (period). A number

of companies follow the policy of paying a fixed amount per share as dividend every year, irrespective of fluctuations in earnings. This policy imply when the dividend per share will be increased. When company reaches new levels of earnings and expects to maintain it, the annual dividend per share may be increased. It is easy to follow this policy when earnings are stable. If earnings pattern of a company shows wide fluctuations, it is difficult to maintain such policy. The dividend policy of paying a constant amount of dividend per year treats common shareholders somewhat like preference shareholders without giving any consideration to investment opportunities within the firm and the opportunities are available to shareholders. This policy is generally preferred by those persons and institutions that depend up on the dividend income to meet their living and operating expenses. This policy is believed to be the one that affects stock piece favorably (Sapkota, 2007: 306).

- **Constant Pay-out Ratio:** The ratio of divided to earnings is known as pay-out ratio. The policy to distribute a certain percentage of profit in every period is called constant pay-out ratio. With this policy the amount of dividend will fluctuate indirect proportion to earnings. It is related to the company's ability to pay dividends. If company incurs losses no dividend shall be paid regardless of shareholders.
- **Low Regular Plus Extra Dividend:** The low regular plus extra dividend policy extra dividend policy is compromise between the first two. Under this policy, a firm usually pays a constant dividend to shareholders and when small, additional or extra dividend is paid over and above the regular dividend. "This type of dividend policy enables a company to pay constant amount of dividend regularly without a default and allows a great of flexibility for supplementing the income of shareholders only when company's earnings are higher than the usual, without committing itself to make larger payments as a part of the future dividend." Generally this type of policy is mostly followed by those

companies whose stockholder prefers at least a certain amount of regular dividends.

- **The Residual Theory of Dividend:** Dividend policy can be viewed as one of a firm's investment decisions. A firm that behaves in this manner is said to believe in the residual theory of dividends. According to this theory, Dividend policy is a residual from investment policy. Whether or not a company pays dividends depends on its investment policy. It assumes that the internally generated funds are comparatively cheaper than the funds obtained from external sources. The theory is based on the premise that investors prefer to have the firm retain and reinvested earnings exceeds the rate of return the investor could, himself, obtain on other investments of comparable risk. The dividend under a residual dividend policy equals the amount left over from earnings, no dividends are paid. If there is no any investment opportunity, then cent percent earnings are distributed to shareholders. Dividend is therefore merely a residual remaining after all equity investment needs are fulfilled.”

“Although the residual theory of dividends appears to make future analysis of dividend policy unnecessary, it is indeed clear that dividends are solely a means of disbursing excess funds.” It would therefore be imprudent to conclude that there are no other implications of dividend policy and so this study shall take a closer look at the relationship between dividends and value (Van Horne, 2000: 305).

### **2.3 Factors Influencing Dividend Policy**

Firm's dividend decision is affecting by various factors. Therefore while making a dividend decision; many factors are to be considered. In this subsection, an attempt has been made to discuss the factors, which generally

influence the dividend policy of the firm. Some of these factors are trying to mention below.

- **Legal Restriction:** All the companies are bounded by certain legal restriction for dividend payment. These constraints are:
  - Company can pay dividend from the earning of current year or past year.
  - Company cannot pay dividend by the liabilities of the company exceed assets.
  - Dividend cannot be paid if the amount of dividend to be distributed exceeds net profit.
  - Dividend cannot be paid from the capital invested in the firm.
- **Liquidity Position:** Liquidity position (availability of cash) of the firm is an important consideration for dividend payment. Although a firm can have adequate earning to declare dividend but it may not have sufficient cash to pay. The dividend payment means cash outflow. Generally, growing firm faces the problem of liquidity even though it makes good profit but it needs funds for its expansion, so they cannot declare dividend.
- **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. “A growing firm gives precedence to the retention of earnings over the payment of dividend in order to finance its expanding objectives. But the firm having stable earnings trends will prefer to pay larger portion of its earnings as dividend.” When the investment opportunities arise in frequently, company follows a policy of paying dividend and raises external funds, when the investment opportunities occur.
- **Access to Capital Market:** Although a company has insufficient cash, it will able to pay dividend if it raise fund in capital market. They can generate fund from the capital provides flexibility to the

management in paying dividend as well in meeting corporate obligation. Thus, greater the ability of the fund to raise funds in the capital market, the greater will be its ability to pay dividends even it is not liquid.

- **Control:** If the company pay access cash dividend, there will be the shortage of fund to finance investment opportunities, which affects the control position of existing stockholders. So they are not desirable to distribute the earning as dividend, which prevents them to lose the control position to the company.
- **Inflation:** During the period of inflation, the company should retain high percentage of earnings because of inadequate funds generation from depreciation to replace absolute equipment.
- **Earning Stability:** A company with stable earning pays more dividends in prospects of continuity of the earnings in the future. But a company having fluctuating earnings pays fewer dividends to face its future financial difficulties.
- **Growth Prospects:** A rapidly growing firm usually has a substantial need funds to finance the abundance of attractive investment opportunities. Instead of paying large dividends and then attempting to sell new shares to raise the equity investment capital it needs. This type of firm usually retains larger portions of its earnings and avoids the expense and inconvenience of public stock offering.
- **Stockholders Preference:** In a closely held corporation with relatively few stockholders, management may be able to set dividend according to the preferences of its stockholders. For example, assume that the majority of a firm's stockholders are in high marginal tax brackets. They probably favor a policy of high earnings retention, resulting in eventual price appreciation, over a high payout policy.
- **Restrictive Covenants:** Restrictive covenants contained in bond indenture, term loans, short-term borrowing agreements, lease

contracts and preferred stock agreements affect the dividend decision. These restrictions limit the total amount of dividends a firm can pay.

## **2.4 Legal Provisions Regarding Dividend Practice**

In Nepal, the act “Nepal Company Act-2063” makes some legal provisions for dividend payments. These provisions may be seen as under:

**Section 2 (m):** states that a bonus share (stock dividends) means share issued in the form of additional shares to stockholders by capitalizing the surplus from the profits or the reserve fund of a company. The term also denotes an increase in the paid up values of the shares after capitalizing surplus or reserve.

**Section 47:** has prohibited company from purchasing its own shares. This 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 subsection (1) states that the company must inform the before issuing bonus shares under subsection (1), this may be done only according to a special resolution passed by the general meeting.

**Section 140:** Dividend and subsection of this section are as follows.

**Subsection (1):** Except in the following circumstances, dividend shall be distributed among the shareholders within 45 days from the days 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. In case dividends cannot be distributed within the time limit mentioned above owing to circumstances beyond anyone’s control and without any fault on the part of the company.

**Subsection (2):** In case dividends are not distributed within the time-limit mentioned in subsection (1), this shall be done by adding interest at the prescribed rate.

**Subsection (3):** Only the person whose name stands registered in the register of existing shareholders at the time of declaring the dividend shall be entitled to it.

The above indicates that Nepalese law prohibits repurchase of stock which is against the theory of finance. The reason for this kind of provision is not known.

## 2.5 Review of Related studies

### 2.5.1 Review of Articles

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

They tested two regression models for utilities industries.

First Model was,

$$P_0/E_0 = a_0 + a_1 (g) + a_2 (D_0/E_0) + a_3(lev) + u^{18}$$

Where,

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

The Second Model was,

$$P_0/E_0 = a_0 + a_1$$

$$(g) + a_2(D_0/E_0) + a_3(lev) + a_4(Fa) + a_5(Fb) + a_6(Fc) + a_7(Fd) + u^{19}$$

Where,

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

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

Where,

$$P_0/E_0 = a_0 + a_1(g) + a_2(D_0/E_0) + a_3(\text{lev}) + a_4(\text{OR}) + u^{20}$$

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

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

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

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

firm's value is independent of dividend policy. MM's Hypothesis of irrelevance is based on following critical assumptions.

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

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

**Step 1:** The market price of a share in the beginning of the period is equal to the present value of dividend paid at the end of the period plus the market price of the share at the end of the period.

Symbolically,

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

Where,

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

$K_e$  = Cost of equity capital (assume constant).

$D_1$  = Dividend per share.

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

**Step 2:** Assuming that the firm doesn't resort to any external financing the market value of the firm can be computed as follows.

$$nP_0 = n(D_1 + P_1)$$

$$nP_0 = \frac{n(D_1 + P_1)}{1 + K_e}$$

Where,

$n$  = Number of equity shares at zero period.

**Step 3:** If the firm's internal sources of financing its investment opportunities fall short of the funds required, and  $D_n$  is the number of new shares issued at the end of year 1 at price  $P_1$ , then,

$$nP_0 = \frac{nD_1 + P_1(n + D_n) - D_n P_1}{1 + K_e}$$

Where,

$n$  = No. of shares at the beginning

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

**Step 4:** If the firm were to finance all investment proposals, the total amount of new shares issued would be given by the following equation,

$$D_n P_1 = I - (E - nD_1)$$

$$\text{Or, } D_n P_1 = I - E + nD_1$$

Where,

$D_n P_1$  = the amount obtained from the sale of new shares to finance capital budget.

$I$  = The total amount requirement of capital budget,

$E$  = Earning of the firm during the period.

$(E - nD_1)$  = Retained earnings.

**Step 5:** By substituting the value of  $D_n P_1$  from equation of step 4 to equation of

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

$$nP_0 = \frac{P_1(n + D_n) - I + E}{1 + K_e}$$

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

**Gordon (1962)** carried out study and concluded that stock price is affected by dividend payout. He developed a model and states that investors are indifferent between retained earnings and current dividend. In his study, supported and concluded that dividend policy affects the value of shares even in a situation in which the return on investment is equal to the capitalization rate that is ( $r = K_e$ ). It is assumed that investors have a preference for present dividends more than the future capital gain under the condition of uncertainty. This argument stresses that an increase in dividend pay-out ratio leads to increase in stock price for the reason that investors consider the dividend yield is less risky than the expected capital gain. Hence, investors required rate of return increases as the amount of decreases. It is clear that positive relationship between the amount of dividend and stock prices.

Basic assumptions of this model are as follows.

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

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

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

Where,

$P$  = Price of a share

$EPS$  = Earnings per share

$b$  = Retention ratio.

$(1-b)$  = Dividend pay-out ratio.

$K_e$  = Capitalization rate or cost of capital.

b.r. = Growth rate

According to this model following facts are revealed.

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

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

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

**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 chemical industry, electric utilities, electronics, food and steel industry. 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 result by other authors for earlier years. They also considered cyclical and no cyclical industries which they covered. The study periods covered a boom year for the economy when stock prices leveled off after rise (1956) and a somewhat depressed year for the economy when stock prices however rose strongly (1958).

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. supply function also. In their dividend function,

earnings last year's dividend and price earnings ratio is 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 supply function are,

$$\text{Price function: } P_t = a + b D_t + C R_t + d (E/P)_{t-1}$$

Where,

$$P_t = \text{Share price at time } t$$

$$D_t = \text{Dividends at time } t$$

$$R_t = \text{Retained earnings at time } t$$

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

$$\text{Dividend Supply functions: } D_t = e + f E_t + g D_{t-1} + h (E/P)_{t-1}$$

Where,

$$E_t = \text{Earnings per share at time } t$$

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

Their study is based on the following assumption,

- Dividends do react to year to year fluctuations in earnings.
- Price does not contain speculative components.
- Earning fluctuations may not sum zero over the sample.

Their regression results based on the equation of  $P_t = a + b D_t + c R_t$  showed the company's strong dividend and relatively weak retained earnings effect in three of the five industries, i.e. chemical, foods, and steel etc. Again, they tested other regression equations by adding lagged earnings price ratio to the above equations and found the following equation:

$$P_t = a + b D_t + C R_t + d (E/P)_{t-1}$$

They found the following results: 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 time out of five industries but they found between the dividends and retained earnings

coefficient are not quite so marked as in the first set of regression coefficient are closer to each other for all industries in both year 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 significant effect on dividend payout. On the other hand, they noted that the retained earning 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 earnings 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 earnings price ratio and showed more than 90% of variation in stock prices can be explained by the three independent variables and retained earnings receive greater relative weight than 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 the retained earnings effect was larger than the dividend effect for both years covered. For the other two industries namely foods and steels, 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 earnings by subtracting dividends from normalized earnings. That normalized

procedures was based on the period 1950 to 1961. Again they added prior year's normalized earning price variable and they compared the results. Comparing the result, they found that there was significant role of normalized price earnings ratio was constant. When they examined the later equation, they found that the difference between dividend and retained earnings coefficient might be able to increase prices somewhat by raising dividends in foods and steels 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 twenty firms and retained earnings as a price determinants.

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.

**Pradhan (1992)** study on stock market behavior in a small capital market "*A Study of Dividend Policies and Practices of Nepalese Enterprises*" has been conducted based on views of 135 managers on dividend policy of large Nepalese enterprises. A questionnaire was provided to the financial executives of 50 large Nepalese enterprises as identified in the publication of securities boards, Nepal and Nepal Stock Exchange Ltd. out of 50 enterprises. They research on 36 financial sectors and on 14 non finance sectors

The main objective of that study is to examine managements' view on various aspects of dividend policy and practices in Nepal. The major findings on the study are as follows.

- In their ranks for the importance of major decision of finance, respondents give third priority to dividend decision.
- With respect to major motives for paying cash dividend that it is to convey information to shareholders that the company is doing well and is to draw attention from the investment community.
- Dividend decision is not a residual decision.
- Nepalese shareholders are not really indifferent to whether the company pays or does not pay dividend.
- The earnings announcement by the company would help to increase market price of share.
- In Nepal most of the companies do not want to pay dividend.
- Dividend policy is affected by earning availability stock price.

**Walter (1996)** had carried out a study on “*Dividend policy: its Influence on the Value of the Enterprise*” and argues that the choice of dividend policies usually affect the value of firm. Walter argues that dividend policies almost always affect the value of the enterprise. The investment policy of a firm van not is separated from its dividend policy which is just opposite of what MM said. The key argument in support of the relevance proposition of this model is the relationship between the return of firm’s investment or its internal rate of return( $r$ ) and its cost of capital ( $k$ ). As long as the internal rate of return ( $r$ ) is greater than the Cast of capital ( $k$ ), the stock price will be enhanced by retention and will very inversely with dividend payout.

Basic assumptions of this model are;

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

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

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

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

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 the firm's internal rate of return and its cost of capital (k). Walter suggested different dividend policy for different types of firm, they are;

**Growth Firm (r > k):** Growth firms are those firms which he expends rapidly because of ample investment opportunity; cost of capital or expected rate of return of shareholders. This firm will maximize the value per share if they follow a policy of retaining all earning for investment. Thus, the correlation between dividend and stock price is negative such firm optimal dividend pay-out is zero.

**Normal Firm (r = k):** The firms whose internal rates of return and cost of capital being equal are called normal firms. In such firms whether retains the profit or distributes dividend is matter of indifference. Means, Firm,s dividend pay-out ratio don,t affect share price.

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

**Ojha (2000)** had published an article "*Financial Performance and Common Stock Pricing.*" His objectives of this study were to study and examine the difference of financial performance and stock prices, to examine the relationship of dividends and stock price and to explore the signaling effects in stock price and his major findings of his study were Nepalese stock market is in infancy stage. In general it is very new and just started to develop. Dominance of banking sector is prevalent in the market due to other industries including finance companies, insurance and manufacturing is not encouraging. Corporate firms with long history have relatively stable profitability parameters that the firm established after the economic liberalization of 1990. Older firms have been issuing bonus shares more times than the new one. Dividend per share is relatively more stable than the dividend payout ratio. That's why payout ratio and dividend yields have been highly fluctuating. Due to lack of proper investment opportunity most of the investors have directed their savings towards the secondary stock market. There is significant positive correlation between the dividends paid and stock prices of banking and manufacturing industries. All others have not a perfect correlation between the net worth per share and common stock price.

**Timilsina (2001)** had conducted a research on "*Capital Market Development and Stock Price Behaviors in Nepal.*" He published an article with a heading Capital Market. Major Findings of the Study are the coefficient of correlation between earnings per share (EPS) and observed

market value of share and also between the dividend per share (DPS) and observed market value of share were computed. Also regressions were run to see the influence of the explanatory variables, EPS and DPS on equity prices. A positive correlation was found to exist between EPS and the market price of the share. The coefficient of correlation between dividend per share and the market price was also computed taking DPS as independent variable and market price as dependent variable. A high degree of positive relationship ( $r= 0.83$ ) was observed between the two variables. Timilsina concluded that the market price of shares depends on EPS as well as on DPS, but DPS is more prices sensitive and it will have direct and immediate response in the market.

**Charles and Christopher (2002)** in his article *“Do Banks Provide Financial Slack?”* their main hypothesis is that the banks have the ability to accurately price financial claims thus including a preference for undervalued firms to choose bank debts as their marginal financial source. They refer to this escapes that this information benefit will be weighed against the verity of contracting costs in a firms ultimate financing choice since they expect that these firms are the most likely to be undervalued, these financing are consist dent with the presence of and information. Benefit to bank debt finance. For identify whether the firms weighted these information benefits of bank finance against other contracting costs they examine the variation. In the sensitivity of the bank loan likelihood to their variables measuring potential under valuation they the find that firms with public debt outstanding tend to exhibit a relatively low sensitivity of bank loan likelihood to these variables. .since they accept that the contracting cost of bank debt information benefits of bank debt against the contracting costs.

The result suggest that for firms with public securities market for the firms to cross the threshold where the information benefits of bank debt finance outweigh the relatives contracting costs. Agricultural projects

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

## **2.6 Review of Previous Research Works**

Previous studies relating to Nepalese banking sector have been most important and relevant for my study. Some of the earlier studies about the dividend policy have been reviewed. Reference of these studies has become very useful for me to complete this dissertation.

**Gautam (2009)** had carried out a research on "*Dividend Policy in Commercial Banks*" which focuses on the objectives to identify the type of dividend policy that is being adopted and to find out whether the policy. The Main objectives of the study are;

### **The main objectives were:**

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

**The Major findings were:**

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

**Budhathoki (2010)** had carried on a research on *"The Study of Dividend Policy of the Commercial Banks in Nepal"* on May 2006.

**The Main objectives were :**

- To highlight the dividend practices of Commercial Banks,
- To compare the dividend policy followed by different commercial banks chosen,
- To provide the sample banks with some fruitful suggestion that can be implemented easily and possible guideline to overcome various issues and gaps based on the findings of the analysis.

**The Major findings were:**

- The average earning per share (EPS) of the banks under study shows a positive result. But the coefficient of variation indicates that there is no consistency of EPS.
- The average dividend per share (DPS) shows that there is no regularity in dividend payment.
- The analysis of DPR shows that the Dividend Payout Ratio (DPR) of the banks is not stable.
- The average market price shows that there is quite high level of fluctuation.

**Shah (2011)** had carried out a research on “*Cash Dividend Practice and its Impact on Share Price in Nepal*”. It covered 5years period (2004-2008) including commercial banks, manufacturing companies, development banks, insurance companies, and financial institutions and hotels sectors.

**The Main objectives were:**

- Its basic objectives were to evaluate the trend of cash dividend forecasting and payment by the Nepalese financial institution and to see and examine the impact of cash dividend on market price per share.
- To achieve these objectives, the information are interpreted and analyzed by using regression model and hypothesis test.

**The Major findings were:**

- Commercial banks of Nepal are seen the regular dividend paying financial institution.
- In average 90% companies pay less than 50% cash dividend. The company having good earning only have been paying regular cash dividend.
- The lack of financial knowledge and the market inefficiency has affected the market price of the share in all the firms. But it is theoretically argued.

**Timsina (2012)** had carried out a research on “*A Study on Dividend Policy and Its Impact on Stock Price of Selected Commercial Banks*”

**The Main objectives were:**

- There is high degree positive relationship between DPS and EPS in most of the bank.
- There is normal positive relationship between DPS and EPS in most of the banks.

**The Major findings were:**

- While comparing the impact of EPS and lagged DPS on DPS, It is found that there is normal positive role of change in EPS to change the DPS but there is nominal or very less role of lagged DPS. CBL is highest of the firms.
- While observing the effect of dependent variable, i.e. DPS and MPS, on its independent variable, i.e. DPS, EPS and lagged DPS it is not sufficient information and meaning that there is a notable role of others, managerial and environmental factors.
- Higher dividend payout ratio (D/P ratio) indicates that the firm is paying higher dividend to its shareholders and lower D/P ratio implies that the firm is retaining its profit to profitable investment opportunities.

**2.7 Research Gap**

The above studies subject's matters are carried out by different researchers. Since, the weakness and drawbacks are also mentioned there with. The study has covered two commercial banks. Latest five years have been analyzed with due consideration of EPS, DPS, DPR, YEILD RATIO & MVPS. Taking in mind for more elaborate and extensive analysis, company wise analysis has also been made. All the above studies are conducted with the research title "Comparative study of Dividend policy of Nabil, standard Chartered Bank LTD. As to research gap is concerned, there are many changes taken place in the Cash Management of manufacturing Companies process as compared to the last few years. The most of the studies has been considered many more objectives which made their study more complicated but in this research report only four objectives are taken into study. Primary and secondary data are considered in this research. Both financial as well as statistical tools like EPS, DPS, DPR, YEILD RATIO & MVPS mean, standard deviation, coefficient of variance, correlation and probable error are used in this research. Almost

all the ratios have been applied to cover the analytical part and fulfill the objective of this study. It involves more recent data of commercial banks for five years (2065/066 to 2069/070).

## **CHAPTER-III**

### **RESEARCH METHODOLOGY**

The major objective of the study is to find out model of good fit to explain the dividend policy on the sample commercial banks. To accomplish these objectives, the research methodology described in this chapter ‘Research Methodology’ refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view.” In other words, research methodology is a way to systematically solve the research problem. A focus is given to the research design, sources of data, population and sample, method of analysis, tools defined about certain financial indicators, test of hypothesis and statistical tools used.

Research in common parlance refers to a search for knowledge is composed by means repeatedly or again and again and “search” means to investigate or find. Research methodology is a way to systematically solve the research problem. Research methodology may be defined as “a systematic process that is adopted by the researcher in studying problem with certain objective and view”. In other word, research methodology describes the methods and process applied in the entire aspect of the study focus of data, data gathering instrument and procedure, data tabulating and processing and methods of analysis. It is really a method of critical thinking by defined and redefining the problems, formulating hypothesis or suggested solution and collecting and organizing and evaluating data, making deduction and making conclusions. Research methodology is a path from which we can solve research dilemma systematically to accomplish the basic objective of the study. It consists of a brief explanation of research design, nature and sources of data, method of data collection and methods of tools used for analyzing data.

### **3.1 Research Design**

A research design is the arrangement of conditions for collection and analysis of data that aim to combine relevance to the research purpose with economy in procedure. Research design in the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to objective of this study. To achieve the objective of this study, descriptive and analytical research design has been used. It is the process which gives us an appropriate way to reach research goal. It includes definite procedures and techniques which guide in sufficient way for analyzing and evaluating the study. This study is carried out by using both quantitative and qualitative analysis methods. Mostly, secondary data has been used for analysis, but the discussion and personal interview with the concerned employees of the selected banks are also used for qualitative analysis. Hence, research design of this study is based on descriptive and analytical method.

### **3.2 Nature and Sources of Data**

Mainly the study is conducted on the basis of secondary data. The data relating to the dividend policy are obtained from Nepal Stock Exchange. The supplementary data and information are obtained from annual reports of concerned banks. Other information sources have been taken from Central Library Tribhuvan University, Shanker Dev Campus library, Ministry of Finance and Nepal Rastra Bank e.t.c.

### **3.3 Population and Sample**

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

- NABIL Bank Ltd.
- Standard Chartered Bank Ltd. (SCBNL)

### 3.4 Data Analysis Tools

Various financial and statistical tools have been used in this study. The analysis of data will be done according to pattern of data available. Mainly the analysis will be done by using financial tools and simple regression analysis.

The relationship between different variables related to study topic will be drawn out using financial and statistical tools. The various calculated results obtained through financial and statistical tools are tabulated under different headings. Then, they are compared with each other to interpret the results. In this study simple regression analysis has been used to study the influences of independent variables on a dependent variable. It helps in studying the effect and the magnitude of the effect of a single independent variable on one dependent variable.

This model has been applied to examine the relationship between the DPS and MVPS of the companies in the current fiscal year 2065/066 to 2069/070. Similarly the following regression model has been applied to determine whether the variable of EPS, DPS, PE Ratio, Dividend Yield, Liquidity Ratio, profitability Ratio on MVPS.

**3.4.1 Financial Tools:** Financial analysis is the process of identifying the financial strengths and weaknesses of the organization by properly establishing relationships between the items of the balance sheet and the profit and loss account.

- a. **Earnings Per Share (EPS):** EPS is calculated to know the earning capacity and to make comparison between concerned banks. EPS is defined as the result received by dividend net profit after taxes by no of common stock outstanding.

$$\text{EPS} = \frac{\text{Net Profit After Tax}}{\text{No. of Common Stock Outstanding}}$$

- b. **Dividend per Share (DPS):** DPS indicates the part of earning distributed to the shareholders on per share basis and calculated by dividing the total dividend to equity shareholders by the total no. of equity shares.

$$\text{DPS} = \frac{\text{Total Dividend}}{\text{No. of Common Stock Outstanding}}$$

- c. **Dividend Pay-out Ratio (DPR):** DPR is calculated to indicate percentage of the profit on share that is distributed as dividend. Using following DPR can calculate;

$$\text{DPR} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

And, Retention Ratio = 1 - DPR

- d. **Price Earnings Ratio (P/E Ratio):** PE Ratio reflects the price currently paid by the market for each rupee of currently reported earnings per share. It is calculated dividing the market value per share by earning per share.

$$\text{PE Ratio} = \frac{\text{Market Value Per Share}}{\text{Earning Per Share}}$$

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

$$\text{Earning Yield} = \frac{\text{Earning Per Share}}{\text{Market Value Per Share}}$$

- f. **Dividend Yield:** The dividend yield reflects percentage relationship between dividend per share and market value per share. It is calculated through dividing the cash dividend per share by the market value per share.

$$\text{Dividend Yield} = \frac{\text{Dividend Per Share}}{\text{Market Value Per Share}}$$

- g. **Market Value per Share to Book Value per Share Ratio:** This ratio indicates the price the market is paying for the price that is reported from the net worth of the banks or other words it is the price of the outsiders are paying for each rupee reported by the balance sheet of the banks. It is calculated by the dividing the market value per share.

$$\text{MVPS to BVPS} = \frac{\text{Market Value Per Share}}{\text{Book Value Per Share}}$$

- h. **Liquidity Ratio:** Liquidity ratio, expresses a company's ability to repay short-term creditors out of its total cash. The denominator of a liquidity ratio is the company's current liabilities, i.e., obligations that the company must meet soon, usually within one year. The numerator of a liquidity ratio is part or all of current assets. Perhaps the most common liquidity ratio is the current ratio, or current assets/current liabilities. Because current assets are expected to be converted to cash within one year, this liquidity ratio includes assets and liabilities of equal longevity. The liquidity ratio is the result of dividing the total cash by short-term borrowings. It shows the number of times short-term liabilities are covered by cash. If the value is greater than 1.00, it means fully covered. This ratio is calculated through dividing Total Assets by Total Liability.

$$\text{Liquidity Ratio} = \frac{\text{Current Assets}}{\text{Current Lianilities}}$$

- i. **Growth Ratio:** Growth Ratio is calculated to find out how would the bank is maintaining economic and financial condition. The following formula has been used to calculate growth ratio.

$$D_n = D_0 (1+g)^{n-1}$$

Where,

$D_n$  = Total amount in nth year.

$D_0$  = Total amount in beginning year

G = Growth rate of amount

n=Total no. of years during the study period.

To examine and analysis following growth ratio are calculated in this study.

- Growth ratio of DPS.
- Growth ratio of total MVPS.

**3.4.2 Statistical Tools:** Statistical tools are used to analyzed the relationship between two or more variables and to find how these variables are related. In this study, following statistical tools are used.

- a. **Arithmetic Mean or Average:** The mean or average value is a single value within the range of the data that is used to represent all the values in the series. Since an average is somewhere within the range of the data, it is also called a measure of central value. It is calculated by;

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N}$$

Where,

$$\bar{X} = \text{Arithmetic Mean}$$

$$\sum X = \text{Sum of values of all items, and,}$$

$$N = \text{Number of items}$$

- b. **Standard Deviation:** The standard deviation is the measure that is most often used to describe variability in data distributions. It can be thought of as a rough measure of the average amount by which observations deviate on either side of the mean. Denoted by Greek letter's (read as sigma), standard deviation is extremely useful for judging the representatives of the mean. Standard deviation is calculated as;

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

Where,

$$\sigma = \text{Standard deviation}$$

$$\sum (X - \bar{x})^2 = \text{Sum of squares of the deviations measured from arithmetic average.}$$

$$N = \text{Number of items}$$

c. **Coefficient of Variation(cv):-** The coefficient of variation is the ratio of standard deviation to the mean for a given sample used to measure spread. It can also be thought of as the measure of relative risk. The larger the coefficient of variation, the greater the risk relative to the average. Mathematically,

$$Cv = \frac{\sigma}{\bar{X}}$$

Where,

Cv = Coefficient of Variation

$\sigma$  = Standard Deviation

$\bar{X}$  = Arithmetic Mean

d. **Coefficient of Correlation:-** Correlation is a statistical tool design to measure the degree of association between two or more variables. In other words if the changes in one variable affects the changes in other variable, then the variables are said to be co-related when it is used to measure the relationship between two variables, then it is called simple correlation. The coefficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the study. The result of coefficient of correlation is always lie between +1 and -1. The formula for the calculation of coefficient of correlation between X and Y is given below.

$$r = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}}$$

Where,

r = Correlation coefficient

$\sum x_1$  =  $X_1 - \bar{X}_1$

$\sum x_2$  =  $X_2 - \bar{X}_2$

Under this topic, Karl Pearson's correlation coefficient is used to measure the degree of relationship between the following variables.

1. Coefficient of correlation between DPS & EPS.
2. Coefficient of correlation between dividend yield & earning yield.

The interpretation of calculated value of correlation coefficient by following way.

- If  $r = 0$ , then there is no correlation between variables.
- If  $r > 0$ , then there is positive correlation between variables.
- If  $r < 0$ , then there is negative relation between variables.
- If  $r = +1$ , then there is perfect positive correlation.
- If  $r = -1$ , then there is perfect negative correlation.

**e. Probable Error (P.E):** The probable error of the coefficient of correlation denoted by P.E is the measure of testing the reliability of the calculated value of  $r$ . If be the calculated value of  $r$  from a sample of  $n$  pair of observations, then P.E is defined by ,Symbolically it can be calculated by using following formula.

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

It is used in interpretation whether calculated value of  $r$  his significant or not.

- If  $r < P.E.$ , it is insignificant. So, perhaps there is no evidence of correlation.
- If  $r > 6P.E$ , it is significant.

In other cases, nothing can be concluded. The probable error of correlation coefficient may be used to determine the limits within the population correlation coefficient are  $r \pm P.E$ .

Where,

P.E. = Probable Error

$r$  = Coefficient of correlation

$n$  = number of pairs observation

**f. Time Series Analysis:** Time series analysis is one of the quantitative methods we use it to determine the pattern in data collected over the time. Time series analysis is used to detect the pattern of change in statistical information aver the regular interval of time. Time series analysis helps us cope with uncertainty about the future. It is a very

useful to analyze the financial performance as well as to forecast future trend. There are four kinds of change or variation involve in time series analysis they are secular, cyclical, fluctuation, seasonal in time series and irregular trend. Trend analysis is very useful tool. The study of trend allows to describe a historical pattern and to project past pattern or trends into the future. Knowledge of past can tell great about future. This method is most widely used in practice. Trend analysis describes the average Relationship between two series where the one series relates to time and other Series the value of a variable. It generally shows that the line of best-fit or straight line is obtained or not. The line of best fit describes the change in a given series accompanying a unit change in time.

So, researcher is going to analyze the trend of Dividend Per Share, Earning Per Share, Dividend Pay-out Ratio, PE-Ratio, Dividend Yield and Liquidity Ratio with the help of this Trend Value Analysis using Least Square Method. On the basis of past five years and also future value of next 5 year is being forecasted.

For the calculation of the “Line of the best fit” following equations should be used

$$Y = a + bx$$

Where,

‘Y’ is used to designate the trend values to distinguish them from the actual y values.

‘A’ =is the y intercept or the computed trend figure of the Y variable when  $x = 0$ .

‘B’ = represents the slope of the trend line or the amount Y variable that is associated with a change of one unit in X variable.

‘X’ = variable trend analysis represents the time.

## **CHAPTER-IV**

### **PRESENTATION AND ANALYSIS OF DATA**

The basic objective of the study has already been mentioned in the first chapter 'Introduction'. The researcher already reviewed many important articles in the topic of 'Review of Literature'. In order to achieved these objective, several analytical tools and techniques are employed which are defined in the 'Research Methodology Chapter'. Now, in this chapter, the effort has been made to analyze the comparative dividend policy of sample banks and the attitude of management towards the optimum dividend decision in Nepal. The researcher analysis highly supported by the practices of dividend distribution by sample banks. That is why; the researcher have taken the data of sample banks for elaboration, explanation and to come to conclusion.

This chapter of data presentation and analysis on dividend policy of joint venture banks begins with analysis of dividend per share, earning per share, dividend yield, price earnings ratio, dividend payout ratio and market value per share analysis. These financial indicators of concerned banks are compared with the help of statistical tools viz. Mean standard deviation and coefficient of variables which are calculated and interpreted. At last, regression analysis of some specific component has been made. The data are also presented in graph.

#### **4.1 Analysis of Financial Indicators and Variables**

##### **4.1.1 Dividend per share Analysis**

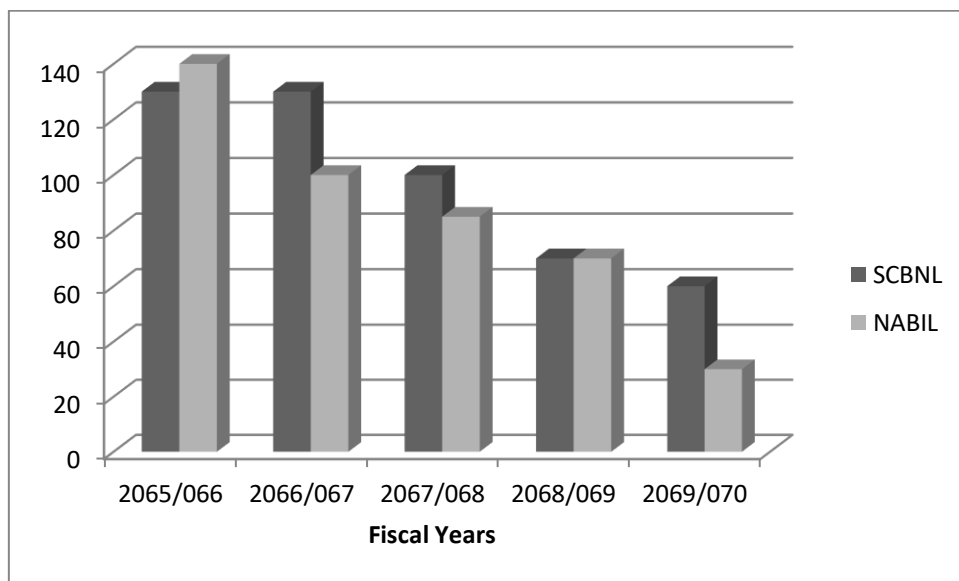
Dividend per share indicates the proportion of earning distributed to owner (shareholders) on per share basics. Generally, the higher DPS creates positive attitude among the shareholders towards bank, which accordingly helps to increase the market value of share. The following table shows the details relating to dividend per share.

**Table: 4.1**  
**Dividend per Share of Sample Banks (In Rs.)**

<b>Year</b>	<b>SCBNL</b>	<b>NABIL</b>
<b>2065/066</b>	130	140
<b>2066/067</b>	130	100
<b>2067/068</b>	100	85
<b>2068/069</b>	70	70
<b>2069/070</b>	60	30
<b>Mean</b>	<b>98</b>	<b>85</b>
<b>S.D</b>	<b>32.71</b>	<b>40.31</b>
<b>C.V</b>	<b>33.38%</b>	<b>47.43%</b>

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

**Figure: 4.1**  
**Position of Dividend per Share of Sample Banks**



The above table and figure show the impact on dividend on share price of the concerned banks from the year 2065/066 to 2069/070. In the year 2065/066, NABIL has paid the highest cash dividend Rs. 140 per share. On the other hand, SCBNL has paid Rs.130 dividend per share.

In the year 2066/067, SCBNL has paid Rs.130 dividend per share, which is the highest cash dividend, NABIL has paid Rs.100 per share dividend. The data related to the year 2067/068, illustrate that the DPS of the banks is comparatively lower to their shareholders than the previous year. NABIL has Paid Rs.85 and SCBNL has paid Rs. 100 per share dividend, which is the highest cash dividend for this year. SCBNL has paid Rs.130 and NIBL has paid Rs.30 per share cash dividend. SCBNL and NABIL has paid Rs.70 dividend per share for the year 2068/069. NABIL has paid Rs.30 and SCBNL has paid Rs.60 per share dividend in the year 2069/070.

Dividend per share of sample Banks are in decreasing trend over the study period. Comparing to NABIL with the average value of Rs. 85 the SCBNL is better with the average value of Rs. 98. The Standard Deviations of NABIL, and SCBNL are 40.31 and 32.71 respectively, it means SCBNL have low variability in compare to NABIL. The CV of DPS of SCBNL and NABIL is 33.38% and 47.43% respectively which indicate that NABIL is more variable than SCBNL. SCBNL is more consistent or less variable than NABIL.

#### **4.1.2 Earning Per Share Analysis**

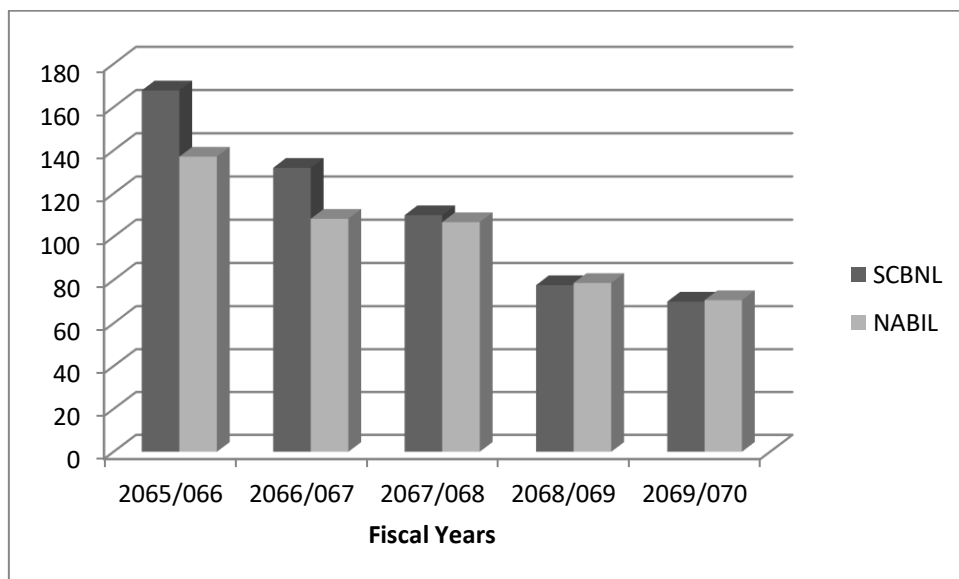
Normally the performance and achievement of business organization are measured in terms of earning capacity to generate earning. Higher earning shows the higher strength while lower earning shows weaker strength of business organization. EPS is the amount of earning of the share invested in the company. So higher the EPS better the position is seen in stock market. The earning per share of the bank under study is tabulated as follows:

**Table: 4.2**  
**Earnings per Share (EPS In Rs.)**

<b>Year</b>	<b>SCBNL</b>	<b>NABIL</b>
<b>2065/066</b>	167.73	137.08
<b>2066/067</b>	131.92	108.31
<b>2067/068</b>	109.99	106.76
<b>2068/069</b>	77.65	78.61
<b>2069/070</b>	70	70.67
<b>Mean</b>	<b>111.46</b>	<b>100.286</b>
<b>S.D</b>	<b>40.15</b>	<b>26.49</b>
<b>C.V</b>	<b>36.03%</b>	<b>26.42%</b>

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

**Figure: 4.2**  
**Position of Earnings per Share (EPS) of Sample Banks**



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

In the fiscal year 2065/066, the table shows that the EPS of SCBNL and NABIL are highest over the five year study period, which amount to Rs. 167.73 and Rs. 137.08 respectively and lowest in the 2069/70. The EPS of SCBNL has decrease considerably and it reached to Rs.70 In this way, EPS of NABIL is also decrease. In comparisons to NABIL, SCBNL has higher EPS except the fiscal year 2068/069 and 2069/070.

Earnings per share of sample Banks are in decreasing trend over the study period. Comparing to NABIL with the average value of Rs. 100.286 the SCBNL is better with the average value of Rs. 111.46. The Standard Deviations of NABIL, and SCBNL are 26.49 and 40.15 respectively, it means SCBNL have high variability in compare to NABIL. The CV of EPS of SCBNL and NABIL is 36.03% and 26.42% respectively which indicate that NABIL is less variable than SCBNL. SCBNL is less consistent or more variable than NABIL.

By the observation of the above data, we know that SCBNL has the highest EPS. It is apparent that the general analysis of EPS cannot give true picture of a bank dividend policy. Therefore, it is necessary to measure the other necessary dividend tools as well.

#### **4.1.3 Dividend Pay-out Ratio**

The ratio shows the amount of dividend as a percentage of earning available for equity share. The dividend payout ratio obviously depends on earning, greater the earning more ability of company to pay dividend. The comparison of payout ratio reflects the management attitude towards treatment of profit in respect to distribution of dividend and retained earnings. The following table shows the details relating to dividend payout ratio of sample banks.

**Table: 4.3**

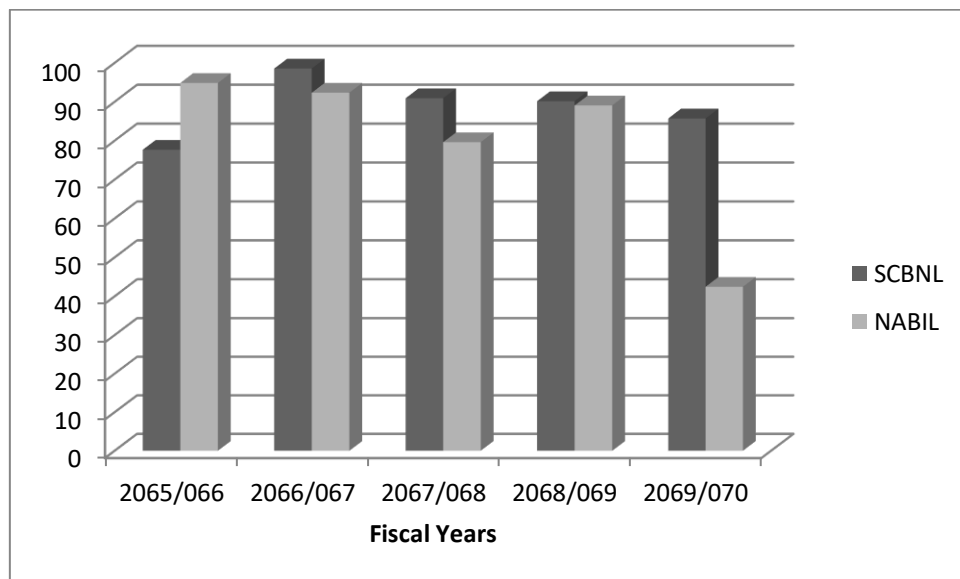
**Dividend Pay Out Ratio (DPR In Percentage)**

<b>Year</b>	<b>SCBNL</b>	<b>NABIL</b>
<b>2065/066</b>	77.67	94.84
<b>2066/067</b>	98.54	92.33
<b>2067/068</b>	90.92	79.62
<b>2068/069</b>	90.15	89.05
<b>2069/070</b>	85.71	42.45
<b>Mean</b>	<b>88.60</b>	<b>79.66</b>
<b>S.D</b>	<b>7.77</b>	<b>21.59</b>
<b>C.V</b>	<b>8.64%</b>	<b>27.10%</b>

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

**Figure: 4.3**

**Trend of Dividend Payout Ratio (DPR)**



The above table and figure show the dividend payout of the concerned banks from the year 2065/066 to 2069/070. In the year 2065/066, NABIL applied aggressive dividend policy and paid dividend is 94.84%, SCBNL is followed under moderate dividend policy i.e. 77.67%. In the year 2066/067, both the banks are under aggressive dividend policy i.e. NABIL 92.33% and SCBNL 98.54%. In the year 2067/068, SCBNL applied aggressive dividend policy i.e.

90.92.67% and NABIL applied moderate dividend policy i.e. 79.62%. In the year 2068/069, both the banks followed under aggressive dividend policy which are 90.59% and 89.05% respectively. In the year 2069/070, NABIL applied moderate dividend policy i.e. 42.45%. whereas, SCBNL followed aggressive dividend policy of 85.71%. Dividend pay out ratio is higher in the fiscal years 2065/066 and lowest in the fiscal years 2069/070 of NABIL.

Dividend Pay Out Ratio of sample Banks are in fluctuating trend over the study period. Comparing to NABIL with the average value of 79.66% the SCBNL is better with the average value of 88.60%. In average both the banks are adopted the aggressive dividend policy. The Standard Deviations of NABIL, and SCBNL are 21.57% and 7.77% respectively, it means SCBNL has less variability in compare to NABIL. The CV of DPR of SCBNL and NABIL is 8.64% and 27.10% respectively which indicate that NABIL is more variable than SCBNL. SCBNL is more consistent or less variable than NABIL.

#### **4.1.4 Price Earnings Ratio (PE Ratio)**

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

**Table: 4.4**

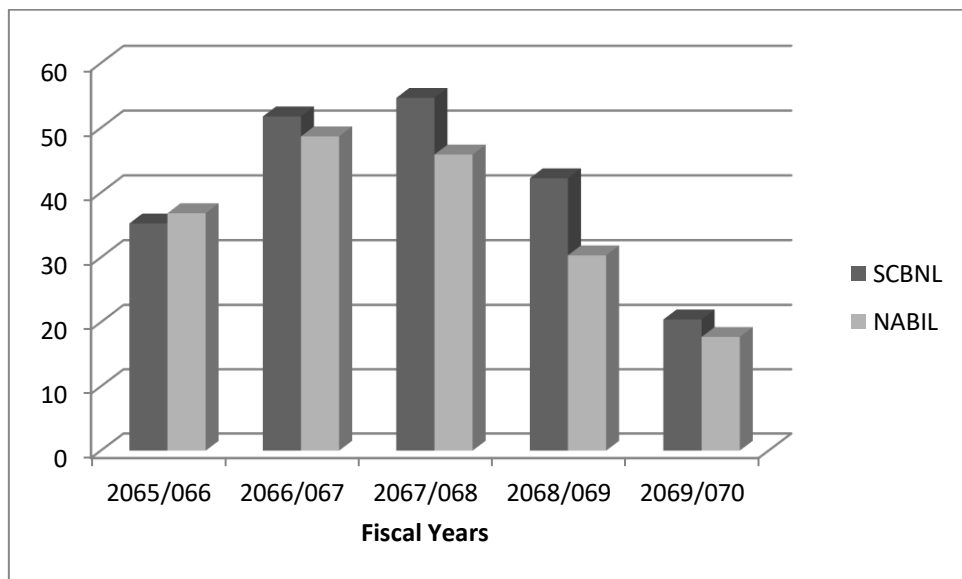
**Price Earnings Ratio (P/E Ratio in Percentage)**

<b>Year</b>	<b>SCBNL</b>	<b>NABIL</b>
<b>2065/066</b>	35.25	36.84
<b>2066/067</b>	51.77	48.70
<b>2067/068</b>	54.64	45.89
<b>2068/069</b>	42.23	30.33
<b>2069/070</b>	20.43	17.72
<b>Mean</b>	<b>40.86</b>	<b>35.90</b>
<b>S.D</b>	<b>13.78</b>	<b>12.51</b>
<b>C.V</b>	<b>33.72</b>	<b>34.85</b>

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

**Figure: 4.4**

**Trend of Price Earnings Ratio**



The above table and figure depicts the price earnings ratio of the sample banks. This study helps us by classifying the relationship between earning per share and market price per share. In the year 2065/066 both banks PE Ratio are normal, NABIL has the highest PE Ratio of 36.84 than, SCBNL of 35.25. After that, in all fiscal year price earnings ratio of SCBNL is higher than NABIL.

Price Earnings Ratio of sample Banks are in decreasing trend except the fiscal year 2060/065. Comparing to NABIL with the average value of 35.90% the SCBNL is better with the average value of 40.86%. The Standard Deviations of NABIL, and SCBNL are 12.51% and 13.78% respectively, it means SCBNL has more variability in compare to NABIL. The CV of PE ratio of SCBNL and NABIL is 33.72% and 34.85% respectively which indicate that NABIL is more variable than SCBNL. SCBNL is more consistent or less variable than NABIL.

#### 4.1.5 Dividend Yield Analysis

Dividend yield ratio is the percentage of dividend per share to market value per share. It is highly influenced by the market value per share and dividend per share because a small change in dividend per share can bring a small change in market value of the share. Therefore, before allocation of fund market scenario and price fluctuation is to be studied and evaluated for the long run survival of company. The dividend yields of the banks under study are presented in the table & bar diagram given below:

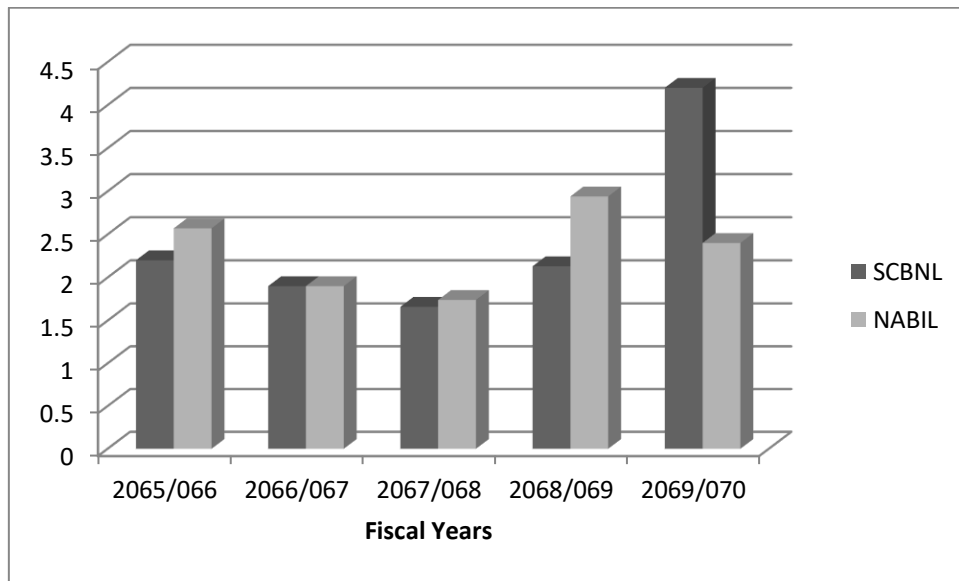
**Table:4.5**  
**Dividend Yield Ratio (In Percentage)**

<b>Year</b>	<b>SCBNL</b>	<b>NABIL</b>
<b>2065/066</b>	2.20	2.57
<b>2066/067</b>	1.90	1.90
<b>2067/068</b>	1.66	1.74
<b>2068/069</b>	2.13	2.94
<b>2069/070</b>	4.20	2.40
<b>Mean</b>	<b>2.42</b>	<b>2.31</b>
<b>S.D</b>	<b>1.01</b>	<b>0.49</b>
<b>C.V</b>	<b>41.93%</b>	<b>21.36%</b>

*Source: Annual Reports of Sample Banks from 2065/066 to 2069/070 & Appendix XI*

**Figure: 4.5**

**Trend of Dividend Yield Ratio**



The above table and figure show the dividend yield analysis for the year 2065/066 to 2069/070. Dividend yield highly influences the market value per share because a change in dividend per share can bring effective change in the market value of the share. Therefore, before allocation of dividend to share holders the impact on market scenario and price fluctuation is to be studied and evaluated for the long run survival of the bank.

In the year 2065/066, the data related to dividend yield of NABIL 2.57% and SCBNL 2.20% acquire the shareholders. The highest dividend yield ratio of SCBNL is 4.20% and NABIL is 2.94% in the fiscal year 2067/08 and 2068/069 respectively. The dividend yield ratio of NABIL is greater than SCBNL in each fiscal year except the year 2065/066.

Dividend Yield Ratio of sample Banks are in fluctuating trend over the five year study period. Comparing to NABIL with the average value of 2.31% the SCBNL is better with the average value of 2.42%. The Standard Deviations of NABIL, and SCBNL are 1.01% and 0.49% respectively, it means SCBNL has more variability in compare to NABIL. The CV of DY ratio of SCBNL and NABIL is 41.93% and 21.36% respectively which indicate that SCBNL is

more variable than NABIL. SCBNL is less consistent or more variable than NABIL.

#### 4.1.6 Earning Yield Analysis

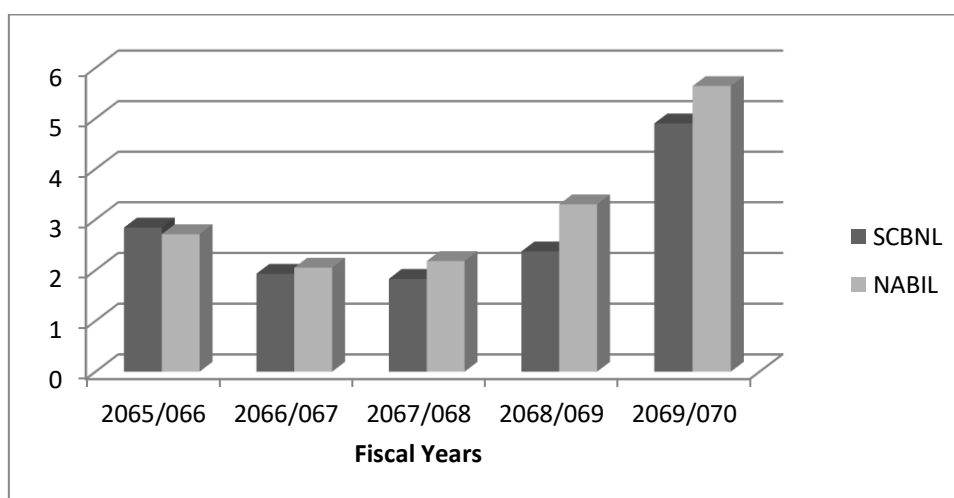
Earning Yield analysis is the expressed in terms of the market value per share. Earning Yield is important profitability ratios from the point of view of the ordinary shareholders. The earning yield may define as the ratio of earning per share to the market value per ordinary share.

**Table: 4.6**  
**Earning Yield Ratio (In Percentage)**

<b>Year</b>	<b>SCBNL</b>	<b>NABIL</b>
<b>2065/066</b>	2.84	2.71
<b>2066/067</b>	1.93	2.05
<b>2067/068</b>	1.83	2.18
<b>2068/069</b>	2.37	3.30
<b>2069/070</b>	4.90	5.64
<b>Mean</b>	<b>2.77</b>	<b>3.18</b>
<b>S.D</b>	<b>1.25</b>	<b>1.46</b>
<b>C.V</b>	<b>45.16%</b>	<b>46.08%</b>

*Source: Annual Reports of Sample Banks from 2065/066 to 2069/070 & Appendix XII*

**Figure: 4.6**  
**Trend of Earning Yield Ratio**



In above table and figure show the earning yield ratio of NABIL and SCBNL from 2065/066 to 2069/070. Both the banks have fluctuating rate of earning

yield ratio. The highest earning yield ratio of SCBNL is 4.90% and NABIL is 5.64% in the fiscal year 2067/08. The earning yield ratio of NABIL is greater than SCBNL in each fiscal year except the year 2065/066.

Comparing to SCBNL with the average value of 2.77% the NABIL is better with the average value of 3.18%. The Standard Deviations of NABIL, and SCBNL are 1.46% and 1.25% respectively, it means NABIL has more variability in compare to SCBNL. The CV of EY ratio of SCBNL and NABIL is 45.16% and 46.08% respectively which indicate that SCBNL is less variable than NABIL. SCBNL is more consistent or less variable than NABIL.

#### **4.1.7 Share Price Analysis (MVPS)**

MVPS is that value of stock, which can be obtained by a firm from the market. Market values share is one of the variables, which is affected by the dividend per Share and earning per share of the firm. If the earnings per share and dividend per share is high, the market value of share will also be high. Market value of share may be lower or higher than the book value. If the firm is growing its earning power will be greater than cost of capital. For such firms market value of share will be higher than the book value. If the firm's earning capacity is lower than the cost of capital the MVPS will be lower than the book value.

**Table: 4.7**

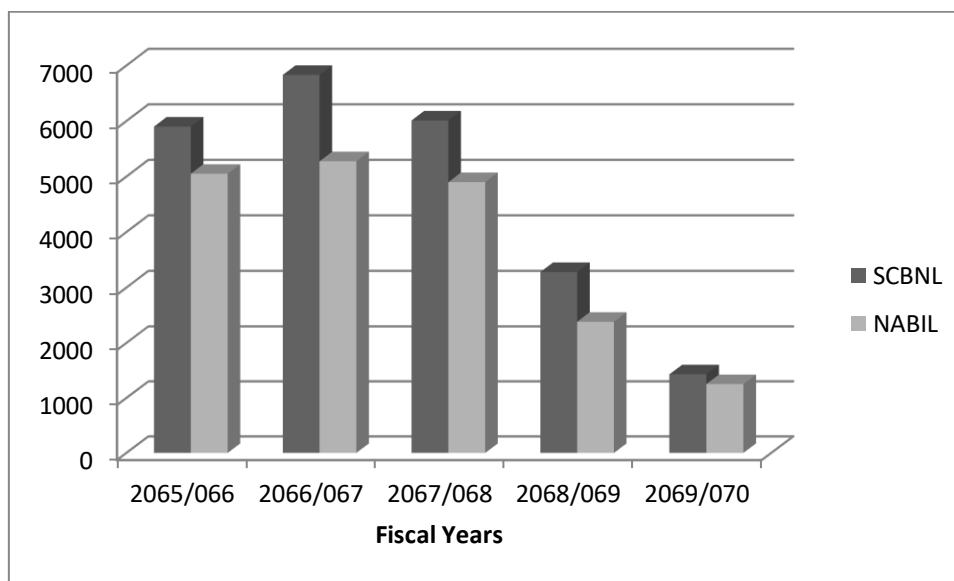
#### **Share Price Analysis (MVPS In Rs.)**

<b>Year</b>	<b>SCBNL</b>	<b>NABIL</b>
<b>2065/066</b>	5900	5050
<b>2066/067</b>	6830	5275
<b>2067/068</b>	6010	4899
<b>2068/069</b>	3279	2384
<b>2069/070</b>	1430	1252
<b>Mean</b>	<b>4689.8</b>	<b>3772</b>
<b>S.D</b>	<b>2258.57</b>	<b>1832.99</b>
<b>C.V</b>	<b>48.16</b>	<b>48.59</b>

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

**Figure: 4.7**

**Position of MVPS of Sample Banks**



The above table & figure show the market price per share of the concerned banks from the year 2065/066 to 2067/067. Market value per share means to evaluate value of shares in the market. In all the fiscal year, MPS of SCBNL is the highest than NABIL. The trend of MVPS of each bank is increasing up to fiscal year 2066/067 after that the value of share is decreasing.

Comparing to NABIL with the average value of Rs. 3772 the SCBNL is better with the average value of 4689.8. The Standard Deviations of NABIL, and SCBNL are Rs. 1832.99 and Rs. 2258.57 respectively, it means SCBNL has more variability in compare to NABIL. The CV of MVPS of SCBNL and NABIL is 48.16% and 48.59% respectively which indicate that SCBNL is less variable than NABIL. SCBNL is more consistent or less variable than NABIL.

**4.1.8 Liquidity Ratio Analysis**

Liquidity ratio, expresses a company's ability to repay short-term creditors out of its total cash. The denominator of a liquidity ratio is the company's current liabilities, i.e., obligations that the company must meet soon, usually within one year. The numerator of a liquidity ratio is part or all of current assets. Perhaps the most common liquidity ratio is the current ratio, or current assets/current liabilities. Because current assets are expected to be converted to cash within

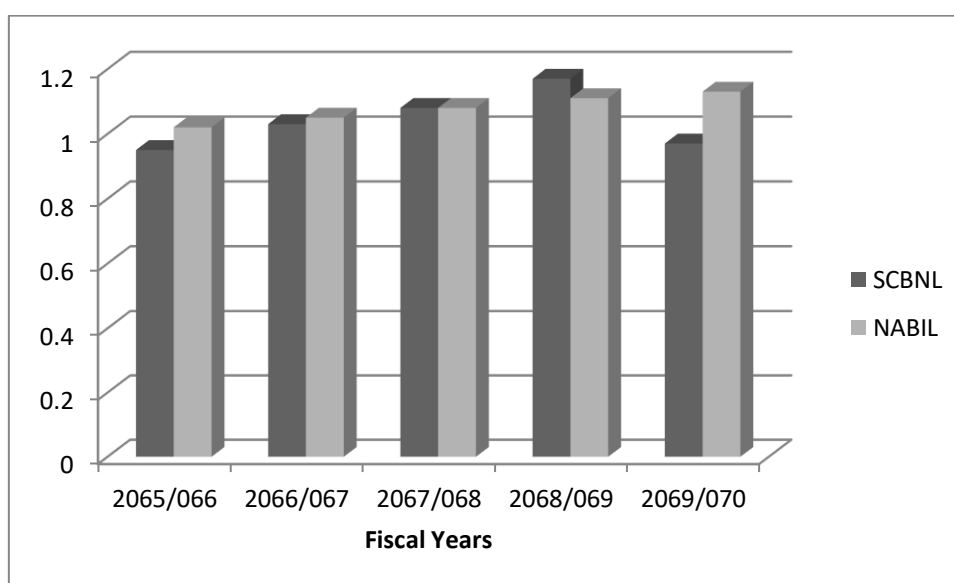
one year, this liquidity ratio includes assets and liabilities of equal longevity. The liquidity ratio is the result of dividing the total cash by short-term borrowings. It shows the number of times short-term liabilities are covered by cash.

**Table: 4.8**  
**Liquidity Ratios (In Times)**

<b>Year</b>	<b>SCBNL</b>	<b>NABIL</b>
<b>2065/066</b>	0.95	1.02
<b>2066/067</b>	1.03	1.05
<b>2067/068</b>	1.08	1.08
<b>2068/069</b>	1.17	1.11
<b>2069/070</b>	0.97	1.13
<b>Mean</b>	<b>1.04</b>	<b>1.07</b>
<b>S.D</b>	<b>0.09</b>	<b>0.04</b>
<b>C.V</b>	<b>8.55%</b>	<b>4.12</b>

*Source: Annual Reports of Sample Banks from 2065/066 to 2069/070 & Appendix I & II*

**Figure: 4.8**  
**Trend of Liquidity Ratios**



The above table and figure show the liquidity ratio of the concerned banks from the year 2065/066 to 2067/067. The trend of liquidity ratio of each bank is in fluctuating trend over the study period. Comparing to SCBNL with the average value of Rs. 1.04 the NABIL is better with the average value of 1.07. The Standard Deviations of NABIL, and SCBNL are 0.04 and 0.09 times respectively, it means SCBNL has more variability in compare to NABIL. The CV of liquidity ratio of SCBNL and NABIL is 8.55% and 4.12% respectively which indicate that SCBNL is vamore riabile than NABIL. SCBNL is less consistent or more variable than NABIL.

## 4.2 Growth Ratio Analysis

The maintenance of economic and financial condition of a bank is shown by its growth ratio. If the calculated growth ratio of a bank is higher, it indicates the better performance and lower growth ratio indicates the worse performance. The growth ratio is calculated by using following formula:

$$D_n = D_0 (1+g)^{n-1}$$

Where,

$D_n$  = Total amount in the  $n^{\text{th}}$  year

$D_0$  = Total amount in the beginning year

$g$  = Growth rate

$n$  = Total number of year in the period of study.

Growth Ratio may be calculated for two components in the context of dividend policy of a bank viz. Growth Ration of DPS and Growth Ration of MVPS.

### 4.2.1 Growth Ratio of DPS of SCBNL

$$D_n = \text{Rs. } 60$$

$$D_0 = \text{Rs. } 130$$

$$n = 5 \text{ years}$$

$$g = ?$$

According to formula,

$$D_n = D_0 (1+g)^{n-1}$$

$$\text{Or, } 60 = 130 (1+g)^{5-1}$$

$$\text{Or, } (60/130) = (1+g)^4$$

$$\text{Or, } (0.4615)^{1/4} = 1 + g$$

$$\text{Or, } 0.8242 = 1 + g$$

$$\text{Or, } g = -0.1758 = -17.58\%$$

#### 4.2.2 Growth Ratio of DPS of NABIL

$$D_n = \text{Rs. } 30$$

$$D_0 = \text{Rs. } 130$$

$$n = 5 \text{ years}$$

$$g = ?$$

According to formula,

$$D_n = D_0 (1+g)^{n-1}$$

$$\text{Or, } 30 = 130 (1+g)^{5-1}$$

$$\text{Or, } (30 / 130) = (1+g)^4$$

$$\text{Or, } (0.2308)^{1/4} = 1 + g$$

$$\text{Or, } 0.6931 = 1 + g$$

$$\text{Or, } g = -0.3069 = -30.69\%$$

From the above analysis, it is found that the growth ratio of DPS of SCBNL and NABIL during the period of study is -17.58% & -30.69. So, it can be said that SCBNL and NABIL cannot be maintained the constant dividend payout each year. According to the above calculation the dividend per share of both banks are decreasing each year.

#### 4.2.3 Growth Ratio of MVPS of SCBNL

$$D_n = \text{Rs. } 1430$$

$$D_0 = \text{Rs. } 5900$$

$$n = 5 \text{ years}$$

$$g = ?$$

According to formula,

$$D_n = D_0 (1+g)^{n-1}$$

$$\text{Or, } 1430 = 5900 (1+g)^{5-1}$$

$$\text{Or, } (1430/5900) = (1+g)^4$$

$$\text{Or, } (0.2424)^{1/4} = 1 + g$$

$$\text{Or, } 0.7017 = 1 + g$$

$$\text{Or, } g = -0.2983 = -29.83\%$$

#### 4.2.4 Growth Ratio of MVPS of NABIL

$$D_n = \text{Rs. } 1252$$

$$D_0 = \text{Rs. } 5050$$

$$n = 5 \text{ years}$$

$$g = ?$$

According to formula,

$$D_n = D_0 (1+g)^{n-1}$$

$$\text{Or, } 1252 = 5050 (1+g)^{5-1}$$

$$\text{Or, } (30 / 130) = (1+g)^4$$

$$\text{Or, } (0.2479)^{1/4} = 1 + g$$

$$\text{Or. } 0.7056 = 1 + g$$

$$\text{Or, } g = -0.2944 = -29.44\%$$

From the above analysis, it is found that the growth ratio of MVPS of SCBNL and NABIL during the period of study is -29.83% & -29.44. So, it can be said that SCBNL and NABIL cannot be maintained the constant value of share in the market. According to the above calculation the market value per share of both banks are decreasing each year.

#### 4.3 Coefficient of Correlation Analysis

To find out the correlation between two variables, Karl Pearson's co-efficient of correlation is determined. Karl Pearson's co-efficient of correlation is the most commonly used measure of the relationship between two or more two variable. The value of co-efficient of correlation denoted by  $r$  and it always lies between +1 and -1. +1 indicate that there is perfectly positively correlated and -1 indicate perfectly negative correlated.

One of the very convenient and useful way of interpreting the value of coefficient of correlation( $r$ ) between the two variables is coefficient of

determination, which is denoted by  $r^2$ . It explains the total variation in dependent variable is explained by independent variable.

The significant of coefficient of correlation ( $r$ ) is tested with the help of probable error of  $r$  (i.e. P.E). If coefficient of correlation  $r$  is less than probable error P.E., it is insignificant. So, perhaps there is no evidence of correlation. If coefficient of correlation  $r$  is greater than six times of probable error P.E.( $r$ ), it is significant and the other cases, nothing can be concluded.

#### 4.3.1 Relationship between DPS & MVPS

Coefficient of correlation measures the degree of relationship between two variables, DPS & MVPS. DPS is independent variable ( $X$ ) and total MVPS is dependent variable ( $X_1$ ). The purpose of computing is to find out the relationship between DPS and EPS is going to same direction or opposite direction.

**Table: 4.9**  
**Correlation between DPS and MVPS**

Factors	Banks	
	SCBNL	NABIL
<b>r</b>	0.925	0.853
<b>r<sup>2</sup></b>	0.855	0.728
<b>P.E.</b>	0.0435	0.082
<b>6 P.E.</b>	0.2608	0.4921
<b>Remarks</b>	Significant	Significant
<b>Relationship</b>	High Degree of Positive Correlation	High Degree of Positive Correlation

*Source: Appendix III & IV*

From the Table-4.9, the values of coefficient of correlation ( $r$ ) of SCBNL and NABIL are 0.925 and 0.853 respectively which shows that there is a closer positive correlation between DPS and MVPS, therefore the value of coefficient of determination ( $r^2$ ) is 0.855 and 0.728 which shows that 85.5% and 72.8% of

the total variation in dependent variable (MVPS) is explained by independent variable (DPS). The coefficient of correlation  $r^2$  of SCBNL and NABIL is greater than six times of probable error P.E.(r) i.e.  $0.855 > 0.268$  and  $0.728 > 0.4921$  respectively, therefore it also reveals that the relationship between DPS and MVPS is significant.

There is positive relationship between total DPS and MVPS. It shows that by increasing the DPS, the market value of share can be increased. Therefore both the DPS and MVPS are very much interrelated. Thus it can be concluded that if the DPS is increase, it increases the MVPS accordingly.

#### 4.3.2 Relationship between DPR & EPR

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

**Table: 4.10**  
**Correlation between DPR and EPR**

Factors	Banks	
	SCBNL	NABIL
<b>r</b>	0.623	0.741
<b>r<sup>2</sup></b>	0.388	0.549
<b>P.E.</b>	0.1842	0.1358
<b>6 P.E.</b>	1.1055	0.8147
<b>Remarks</b>	Insignificant	Insignificant
<b>Relationship</b>	High Degree of Positive Correlation	High Degree of Positive Correlation

*Source: Appendix V & VI*

From the Table-4.10, the values of coefficient of correlation (r) of SCBNL and NABIL are 0.623 and 0.741 respectively which shows that there is a moderate

degree of positive correlation between DPR and PER, therefore the value of coefficient of determination ( $r^2$ ) is 0.388 and 0.549 which shows that 38.8% and 54.9% of the total variation in dependent variable (EPR) is explained by independent variable (DPR). The coefficient of correlation  $r^2$  of SCBNL and NABIL is less than six times of probable error P.E.(r) i.e.  $0.388 < 1.1055$  and  $0.549 < 0.8147$  respectively, therefore it also reveals that the relationship between DPR and EPR is insignificant.

#### 4.3.3 Relationship between DPS & EPS

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

**Table: 4.11**  
**Correlation between DPS and EPS**

Factors	Banks	
	SCBNL	NABIL
<b>r</b>	0.947	0.959
<b>r<sup>2</sup></b>	0.897	0.920
<b>P.E.</b>	0.0311	0.0242
<b>6 P.E.</b>	0.1864	0.1451
<b>Remarks</b>	Significant	Significant
<b>Relationship</b>	High Degree of Positive Correlation	High Degree of Positive Correlation

*Source: Appendix VII & VIII*

The above table 4.11 describes the relationship between DPS and EPS during the period of study. The coefficient of correlation (r) DPS and EPS are 0.947 and 0.959. This figure shows the positive association between DPS and EPS of both banks. It means DPS and EPS both move towards same direction.

The coefficient of determination ( $r^2$ ) is 0.897 and 0.920 it shows that 89.7% and 92.0% of the variation in the dependent variable (i.e. EPS) has been explained by the independent variable (i.e. DPS).

The values of P.E. are 0.0311 & 0.0242 and 6.P.E is 0.1864 & 0.1451. The value of correlation coefficient ( $r$ ) is greater than six times of probable error of both banks therefore true value of 'r' is significant. It reveals that there is significant relationship between the DPS and EPS.

#### **4.4 Least Square Linear Trend Analysis**

Trend analysis has been a very useful and commonly applied statistical tool to forecast the future events in quantitative terms. On the basis of tendencies in the dependent variables in the past periods, the future trend is predicted. This analysis takes the historical data as the basis of forecasting. This method of forecasting the future trend is based on the assumptions that the past tendencies of the variable are repeated in the future or the past events affect the future events significantly. The future trend is forecasted by using the following formula.

$$Y = a + bx$$

where,

Y = the dependent variable

a = the origin i. e. arithmetic mean

b = the slope coefficient i. e. rate of change

X = the independent variable

Under this topic, trend analysis of DPS and MVPS of SCBNL and NABIL are studied during the period of time. The objective of this topic is to forecast the DPS and MVPS for the next five years.

The projections are based on the following assumptions:

- The bank will run in the present style.
- Nepal Rastra Bank and the Government of Nepal will not make any amendments in the guidelines for the operation of commercial banks.

- Other all the things also remain constant.

#### 4.4.1 Trend Analysis of DPS: -

Under this topic, an effort has been made to calculate the trend value of DPS of SCBNL, and NABIL with comparatively under five years study period and project the trend for next two years. The following table describes the trend values of MVPS of sampled banks for five years.

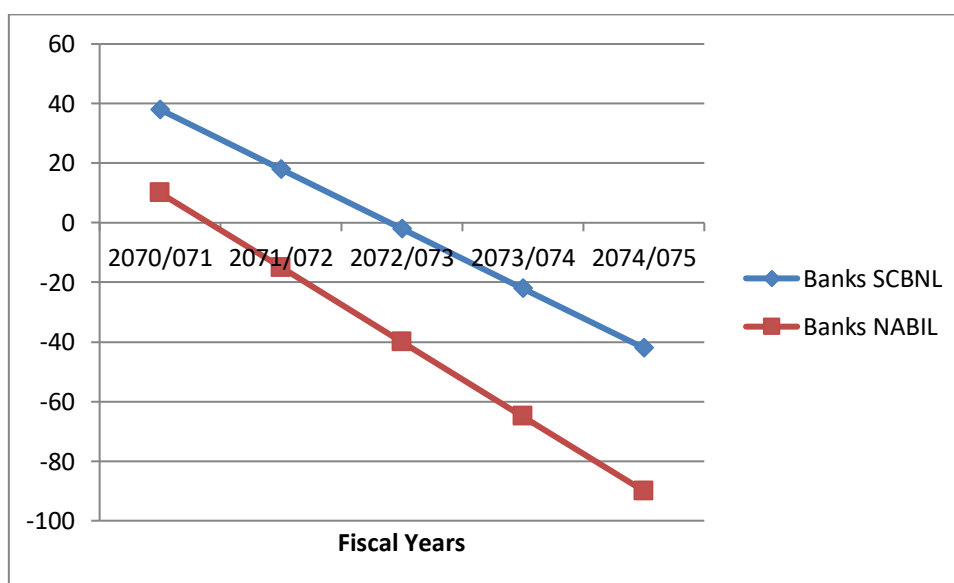
**Table: 4.12**  
**Comparative Trend Analysis of DPS (In Rs.)**

Fiscal Year	Banks	
	SCBNL	NABIL
2070/071	38	10
2071/072	18	-15
2072/073	-2	-40
2073/074	-22	-65
2074/075	-42	-90
Mean (a)	98	85
Rate of Change (b)	-20	-25
Trend Equation(Y)	$Y = 98 - 20X$	$Y = 85 - 25X$

Source: Appendix IX

**Figure: 4.9**

**Trend Line of DPS of SCBNL & NABIL**



The above table and figure show that the trend line of DPS is in decreasing trend in both sampled banks. Y' has shown the trend value of total DPS. Since, the calculated value of 'b' is negative; it is found that the bank's DPS is decreasing with time. Comparatively the slope of equation of NABIL is high and its trend line is sloping downward rapidly and following by SCBNL. If other things remaining the same, it shows that the DPS decreasing by Rs. 20 & 25 every year of SCBNL and NABIL respectively. The negative trend value means the bank cannot be paid dividend.

#### 4.4.2 Trend Analysis of MVPS: -

Under this topic, an effort has been made to calculate the trend value of MVPS of SCBNL, and NABIL with comparatively under five years study period and project the trend for next five years. The following table describes the trend values of MVPS of sampled banks for five years.

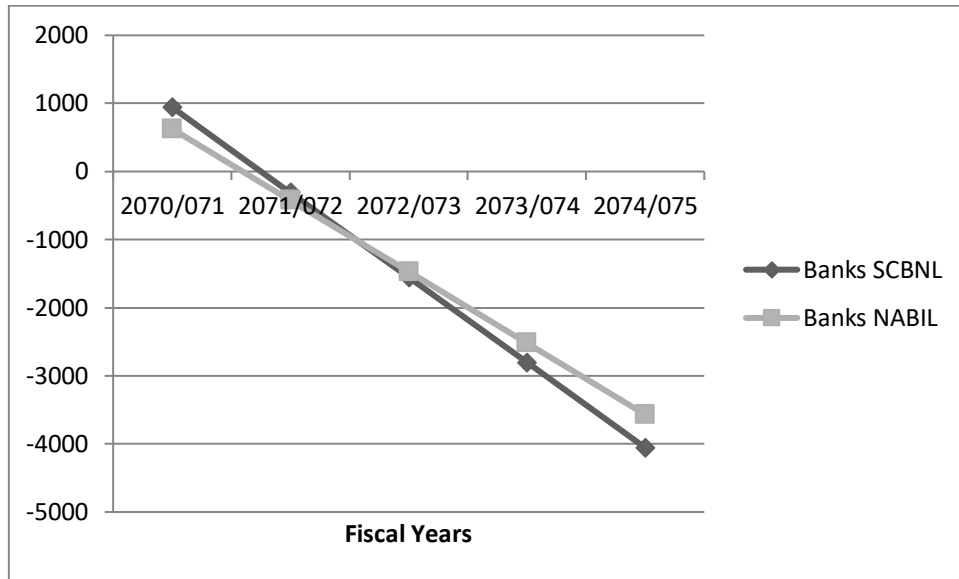
**Table: 4.13**  
**Comparative Trend Analysis of MVPS (In Rs.)**

Fiscal Year	Banks	
	SCBNL	NABIL
2070/071	941.7	625.9
2071/072	-307.4	-422.8
2072/073	-1556.5	-1471.5
2073/074	-2805.6	-2520.2
2074/075	-4054.7	-3568.9
Mean (a)	4689	3773
Rate of Change (b)	-1249.1	1048.7
Trend Equation(Y)	$Y = 4689 - 1249.1X$	$Y = 3772 - 1048.7X$

Source: Appendix X

**Figure: 4.10**

**Trend Line of MVPS of SCBNL & NABIL**



The above table and figure show that the trend line of MVPS is in decreasing trend in both sampled banks. 'Y' has shown the trend value of total MVPS. Since, the calculated value of 'b' is negative; it is found that the bank's MVPS is decreasing with time. Comparatively the slope of equation of NABIL is high and its trend line is sloping downward rapidly and following by SCBNL. If other things remaining the same, it shows that the DPS decreasing by Rs. 1249.1 & 1048.7 every year of SCBNL and NABIL respectively. The negative trend value means the bank's MVPS is less than par value. It is shown in the following figure.

**4.5 Major Findings of the Study**

- In the year 2065/066, NABIL has paid the highest cash dividend Rs. 140 per share and lowest in the fiscal year Rs. 30. On the other hand, SCBNL has paid Rs.130 dividend per share in the same year. Dividend per share of sample Banks are in decreasing trend over the study period.
- Comparing to NABIL with the average value of Rs. 85 the SCBNL is better with the average value of Rs. 98. The Standard Deviations of NABIL, and SCBNL are 40.31 and 32.71 respectively.

- In the fiscal year 2065/066, shows that the EPS of SCBNL and NABIL are highest over the five year study period, which amount to Rs. 167.73 and Rs. 137.08 respectively. The EPS of SCBNL has decrease considerably and it reached to Rs.70 In this way, EPS of NABIL is also decrease. In comparisons to NABIL, SCBNL has higher EPS except the fiscal year 2068/069 and 2069/070.
- Dividend Pay Out Ratio of sample Banks are in fluctuating trend over the study period. Comparing to NABIL with the average value of 79.66% the SCBNL is better with the average value of 88.60%.In average both the banks are adopted the aggressive dividend policy.
- In the year 2065/066 both banks PE Ratio are normal, NABIL has the highest PE Ratio of 36.84 than, SCBNL of 35.25. After that, in all fiscal year price earnings ratio of SCBNL is higher than NABIL. Comparing to NABIL with the average value of 35.90% the SCBNL is better with the average value of 40.86%. The Standard Deviations of NABIL, and SCBNL are 12.51% and 13.78% respectively.
- The highest dividend yield ratio of SCBNL is 4.20% and NABIL is 2.94% in the fiscal year 2067/08 and 2068/069 respectively. The dividend yield ratio of NABIL is greater than SCBNL in each fiscal year except the year 2065/066. Comparing to NABIL with the average value of 2.31% the SCBNL is better with the average value of 2.42%.
- Both the banks have fluctuating rate of earning yield ratio. The highest earning yield ratio of SCBNL is 4.90% and NABIL is 5.64% in the fiscal year 2067/08. Comparing to SCBNL with the average value of 2.77% the NABIL is better with the average value of 3.18%.
- The trend of MVPS of each bank is increasing up to fiscal year 2066/067 after that the value of share is decreasing. Comparing to NABIL with the average value of Rs. 3772 the SCBNL is better with the average value of 4689.8. The Standard Deviations of NABIL, and SCBNL are Rs. 1832.99 and Rs. 2258.57 respectively, it means SCBNL has more variability in compare to NABIL.

- The growth ratio of DPS of SCBNL and NABIL during the period of study is -17.58% & -30.69 and growth ratio of MVPS of SCBNL and NABIL during the period of study is -29.83% & -29.44.
- The values of coefficient of correlation (r) of SCBNL and NABIL are 0.925 and 0.853 respectively which shows that there is a closer positive correlation between DPS and MVPS. the value of coefficient of determination ( $r^2$ ) is 0.855 and 0.728 which shows that 85.5% and 72.8% of the total variation in dependent variable (MVPS) is explained by independent variable (DPS).
- The values of coefficient of correlation (r) of SCBNL and NABIL are 0.623 and 0.741 respectively which shows that there is a moderate degree of positive correlation between DPR and PER, the value of coefficient of determination ( $r^2$ ) is 0.388 and 0.549 which shows that 38.8% and 54.9% of the total variation in dependent variable (PER) is explained by independent variable (DPR).
- The coefficient of correlation (r) between DPS and EPS are 0.947 and 0.959. This figure shows the positive association between DPS and EPS of both banks. The coefficient of determination ( $r^2$ ) is 0.897 and 0.920 it shows that 89.7% and 92.0% of the variation in the dependent variable (i.e. EPS) has been explained by the independent variable (i.e. DPS).

## **CHAPTER-V**

### **SUMMARY, CONCLUSIONS & RECOMMENDATIONS**

#### **5.1 Summary**

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

Dividends are generally paid in cash because it is easy to pay to shareholders. What and how much it is desirable to pay dividend is always a controversial concern. Thus, in order to strike a balance between paying dividend and retained earnings, it is necessary for the firm to adopt an effective and relevant dividend policy. The firm's directors periodically meet in order to decide whether to pay dividend and to determine the amount and form of dividend payment. Dividend policy means some kind of consistent approach to the distribution versus retention decision. Dividend policy determines the amount of earnings to be retained and payout by the firm. Various questions related to the payment of dividend or retain the earnings are contained in the dividend policy. The dividend policy adopted by the firm should be such that it strikes the proper balance between the financing decision and wealth maximization decision. There is an inverse relationship between the retained earnings and cash dividends. When the firm retains earnings, providing necessary equity, the amount of dividend decreases which may affect the market price of the stock adversely. This leads to the increase in future earnings per share.

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

- To analyze the relationship of financial indicators such DPS, EPS and DPR, PE Ratio, Liquidity Ratio and Profitability Ratio on Market Value Per Share(MVPS) Per Share.
- To explore if there is any uniformity among DPS, EPS and DPR on the two sample commercial banks.
- Find out the impact of dividend on share prices.

To fulfill the research objectives the study is divided into five chapters. In the first chapter, describes the major issues to be investigated along with the general background, brief profiles of the sample banks statement of problem, objectives, significance of the study, limitation of the study and organization of the study. Second chapter is devoted to theoretical analysis and brief review of related and pertinent literature available. It includes a discussion on the conceptual framework and review of the major studies in general. The third chapter describes the research methodology employed in the study. This chapter deals with the research design, source of data, methods of analysis, analysis of financial indicators and variables, test of hypothesis, definition of statistical tools etc. The Fourth Chapter deals with the presentation and analysis of data to indicated quantitative factors on dividend policy using statistical tools and techniques. This chapter also includes the major findings. The Fifth Chapter states summary, conclusion and recommendations, compares them

with other empirical evidence to the extent possible and provides some suggestions.

## **5.2 Conclusions**

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

The above mentioned major findings led this study conclude that the sample banks have got sufficient earnings but some of the banks are paying high dividend and others are paying low dividend. Other things remaining the same, dividend per share is not more stable than the dividend payout ratio. That,s why dividend per share and other variable have been highly fluctuated. Another interesting conclusion is that market price of share is attracted by dividend. Lastly, the sample banks have not clearly defined dividend policy.

## **5.3 Recommendations**

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

- The DPS analysis shows that there should not any consistency of dividend policy in all the sample banks. Therefore, these banks need to create somehow paying reasonable DPS every year, it is because higher

DPS creates positive attitude of shareholders & investors as the psychological value of shareholders is also valued as the assets of banks.

- The sample banks should great fluctuation in DPS, EPS, DPR, Dividend Yield, Share Price and PE Ratio. The fluctuations should be controlled and the consistency in the variables has become most necessary.
- The practices of dividend payment adopted by the banks should not stable. In many cases a small amount of dividend are paid without considering the risk free rate of return. Further the price of share on which the dividend is not paid on upward trend, this creates the problem to judge the true value of share in the market. Therefore, the clear policy on payments of DPS should be developed and dividend should be control and stable as to pay and judge properly.
- Payment of dividend should neither static nor constantly growing. It is highly decreasing. Such way of paying dividend could not impress the market positively. So, these banks are advised to follow either static or constantly growing dividend payment policy. It would be better to fix and declare the amount of dividend in general meeting. This is not important only from the point of view of adequate return to shareholders but also to generate stable and increasing market value per share, long run survival of bank, efficient management and socially acceptable distribution of income.
- Banks should have long term visions regarding earning and dividend payment that helps to cope with challenging competitive situation of present world. Various integral and external factors should be considered before taking decision.
- Formulation of dividend policy will clearly guide the way on how to follow dividend distribution strategy. The policy should be determine whether the banks is going to adopt stable dividend policy, constant payout ratio or low regular plus extra dividends. When should be the long run dividend payout ratio, either it is pure residual policy, fixed

dividend payout policy or smooth residual dividend policy should have been clearly explained by the dividend policy.

- The legal rule for the treatment of dividend is must for the smooth growth of any enterprises as well as growth of national economy. Some of the companies are in position to pay dividend while considered some case. But some companies are suffering loss and there are efforts to minimize rather than payment of dividend. Therefore, the government should act in favor of investors and bind these companies by distinct rules.
- Liquidity position of both banks should unsatisfactory, so their should consider liquidity position as standard ratios.
- Further studies should be conducted by using others organization as sample, by using other sophisticated tools and techniques, by using other aspects as well.

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**Appendix I**  
**Computation Of Liquidity Ratio of SCBNL**

**(In Times)**

<b>Year</b>	<b>Current Assets (CA, Rs. In Millions</b>	<b>Current Assets (CA, Rs. In Millions</b>	<b>Current Ratio (CR = CA/CL)</b>
2065/066	20037.99	20741.21	0.97
2066/067	20912.96	21957.6	0.95
2067/068	26473.43	25603.93	1.03
2068/069	28744.15	26639.33	1.08
2069/070	28125.83	24105.29	1.17

**Appendix II**  
**Computation Of Liquidity Ratio of NABIL**

**(In Times)**

<b>Year</b>	<b>Current Assets (CA, Rs. In Millions)</b>	<b>Current Liabilities (CL, Rs. In Millions)</b>	<b>Current Ratio (CR = CA/CL)</b>
2065/066	19036.99	18741.21	1.02
2066/067	20012.96	19057.6	1.05
2067/068	25473.43	23603.93	1.08

2068/069	25044.15	22609.33	1.11
2069/070	27105.83	24005.29	1.13

### Appendix III

#### Calculation for Mean value, & Correlation between DPS & MVPS of SCBNL (In Rs.)

Year	DPS (X <sub>1</sub> )	MVPS (X <sub>2</sub> )	x <sub>1</sub> =X <sub>1</sub> - x̄ <sub>1</sub>	x <sub>2</sub> =X <sub>2</sub> - x̄ <sub>2</sub>	x <sub>1</sub> · x <sub>2</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub> <sup>2</sup>
2065/066	130.00	5,900.00	32.00	1,210.20	38,726.40	16,900.00	34,810,000.00
2066/067	130.00	6,830.00	32.00	2,140.20	68,486.40	16,900.00	46,648,900.00
2067/068	100.00	6,010.00	2.00	1,320.20	2,640.40	10,000.00	36,120,100.00
2068/069	70.00	3,279.00	-28.00	1,410.80	39,502.40	4,900.00	10,751,841.00
2069/070	60.00	1,430.00	-38.00	3,259.80	123,872.40	3,600.00	2,044,900.00
<b>N<sub>1</sub> = 5</b> <b>N<sub>2</sub> = 5</b>	<b>∑ X<sub>1</sub> =</b> <b>490</b>	<b>∑ X<sub>2</sub> =</b> <b>23449</b>			<b>∑ x<sub>1</sub>·x<sub>2</sub> =</b> <b>273228</b>	<b>∑ x<sub>1</sub><sup>2</sup>=</b> <b>52300</b>	<b>∑ x<sub>2</sub><sup>2</sup></b> <b>130375741</b>

For DPS,

$$\text{Mean } (\bar{X}) = \frac{\sum X_1}{N_1} = \frac{490}{5} = 98$$

For MVPS,

$$\text{Mean } (\bar{X}) = \frac{\sum X_2}{N_2} = \frac{23449}{5} = 4689.80$$

Correlation between DPS & MVPS,

$$(r_{12}) = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}}$$

$$= \frac{273228}{\sqrt{52300 \times 130375741}} = 0.925$$

$$r^2 = 0.925^2 = 0.855$$

For Probable Error,

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

$$= 0.6745 \times \frac{1-0.925^2}{\sqrt{5}}$$

$$= 0.0435 \text{ Or, } 4.35\%$$

$$6PE = 6 \times 0.0435$$

$$= 0.2608$$

#### Appendix IV

#### Calculation for Mean value, & Correlation between DPS & MVPS of NABIL

(In Rs.)

Year	DPS (X <sub>1</sub> )	MVPS (X <sub>2</sub> )	x <sub>1</sub> =X <sub>1</sub> - x̄ <sub>1</sub>	x <sub>2</sub> =X <sub>2</sub> - x̄ <sub>2</sub>	x <sub>1</sub> · x <sub>2</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub> <sup>2</sup>
2065/066	140.00	5,050.00	55.00	1,278.00	70,290.00	19,600.00	25,502,500.00
2066/067	100.00	5,275.00	15.00	1,503.00	22,545.00	10,000.00	27,825,625.00
2067/068	85.00	4,899.00	0.00	1,127.00	0.00	7,225.00	24,000,201.00
2068/069	70.00	2,384.00	-15.00	1,388.00	20,820.00	4,900.00	5,683,456.00
2069/070	30.00	1,252.00	-55.00	2,520.00	138,600.00	900.00	1,567,504.00
<b>N<sub>1</sub> = 5</b>	<b>∑ X<sub>1</sub> =</b>	<b>∑ X<sub>2</sub> =</b>			<b>∑ x<sub>1</sub> · x<sub>2</sub> =</b>	<b>∑ x<sub>1</sub><sup>2</sup> =</b>	<b>∑ x<sub>2</sub><sup>2</sup></b>

$N_2 = 5$	425	18860			252255	42625	84579286
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For DPS,

$$\text{Mean } (\bar{X}) = \frac{\sum X_1}{N_1} = \frac{425}{5} = 85$$

For MVPS,

$$\text{Mean } (\bar{X}) = \frac{\sum X_2}{N_2} = \frac{18860}{5} = 3772$$

Correlation between DPS & MVPS,

$$\begin{aligned} (r_{12}) &= \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}} \\ &= \frac{252255}{\sqrt{42625 \times 84579286}} = 0.853 \end{aligned}$$

$$r^2 = 0.853^2 = 0.728$$

For Probable Error,

$$\begin{aligned} \text{PE} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.728}{\sqrt{5}} \\ &= 0.0820 \text{ Or, } 8.20\% \\ 6\text{PE} &= 6 \times 0.0435 \\ &= 0.4921 \end{aligned}$$

### Appendix V

#### Calculation for Mean value, & Correlation between DPR & EPR of SCBNL

(In Rs.)

Year	DPR (X <sub>1</sub> )	EPR (X <sub>2</sub> )	x <sub>1</sub> =X <sub>1</sub> - x̄ <sub>1</sub>	x <sub>2</sub> =X <sub>2</sub> - x̄ <sub>2</sub>	x <sub>1</sub> · x <sub>2</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub> <sup>2</sup>
2065/066	77.67	35.25	-10.93	-5.61	61.35	6,032.63	1,242.56
2066/067	98.54	51.77	9.94	10.91	108.43	9,710.13	2,680.13
2067/068	90.92	54.64	2.32	13.78	31.99	8,266.45	2,985.53
2068/069	90.15	42.23	1.55	1.37	2.12	8,127.02	1,783.37
2069/070	85.71	20.43	-2.89	-20.43	59.01	7,346.20	417.38
<b>N<sub>1</sub> = 5</b>	<b>∑ X<sub>1</sub> =</b>	<b>∑ X<sub>2</sub> =</b>			<b>∑ x<sub>1</sub>·x<sub>2</sub> =</b>	<b>∑ x<sub>1</sub><sup>2</sup>=</b>	<b>∑ x<sub>2</sub><sup>2</sup></b>
<b>N<sub>2</sub> = 5</b>	<b>442.99</b>	<b>204.32</b>			<b>262.90</b>	<b>39482.43</b>	<b>9108.98</b>

For DPR,

$$\text{Mean } (\bar{X}) = \frac{\sum X_1}{N_1} = \frac{442.99}{5} = 88.60$$

For EPR,

$$\text{Mean } (\bar{X}) = \frac{\sum X_2}{N_2} = \frac{204.32}{5} = 40.86$$

Correlation between DPR & EPR,

$$(r_{12}) = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}}$$

$$= \frac{262.90}{\sqrt{39482.43 \times 9108.98}} = 0.623$$

$$r^2 = 0.623^2 = 0.388$$

For Probable Error,

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

$$= 0.6745 \times \frac{1-0.623^2}{\sqrt{5}}$$

$$= 0.1842 \text{ Or, } 18.42\%$$

$$6PE = 6 \times 0.1842$$

$$= 1.1055$$

### Appendix VI

#### Calculation for Mean value, & Correlation between DPR & EPR of NABIL(In Rs.)

Year	DPR (X <sub>1</sub> )	EPR (X <sub>2</sub> )	x <sub>1</sub> =X <sub>1</sub> - x̄ <sub>1</sub>	x <sub>2</sub> =X <sub>2</sub> - x̄ <sub>2</sub>	x <sub>1</sub> · x <sub>2</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub> <sup>2</sup>
2065/066	94.84	36.84	15.18	0.94	14.33	8,994.63	1,357.19
2066/067	92.33	48.70	12.67	12.80	162.25	8,524.83	2,371.69
2067/068	79.62	45.89	-0.04	9.99	-0.38	6,339.34	2,105.89
2068/069	89.05	30.33	9.39	-5.57	-52.28	7,929.90	919.91
2069/070	42.45	17.72	-37.21	-18.18	676.29	1,802.00	314.00
<b>N<sub>1</sub> = 5</b> <b>N<sub>2</sub> = 5</b>	<b>∑ X<sub>1</sub> =</b> <b>398.29</b>	<b>∑ X<sub>2</sub> =</b> <b>179.48</b>			<b>∑ x<sub>1</sub>·x<sub>2</sub> =</b> <b>800.22</b>	<b>∑ x<sub>1</sub><sup>2</sup>=</b> <b>33590.70</b>	<b>∑ x<sub>2</sub><sup>2</sup></b> <b>7068.68</b>

For DPR,

$$\text{Mean } (\bar{X}) = \frac{\sum X_1}{N_1} = \frac{398.29}{5} = 79.66$$

For EPR,

$$\text{Mean } (\bar{X}) = \frac{\sum X_2}{N_2} = \frac{179.48}{5} = 35.90$$

Correlation between DPR & EPR,

$$\begin{aligned} (r_{12}) &= \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}} \\ &= \frac{800.22}{\sqrt{33590.70 \times 7068.68}} = 0.741 \end{aligned}$$

$$r^2 = 0.741^2 = 0.549$$

For Probable Error,

$$\begin{aligned} \text{PE} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.741^2}{\sqrt{5}} \\ &= 0.1358 \text{ or, } 13.58\% \\ 6\text{PE} &= 6 \times 0.1358 \\ &= 0.8147 \end{aligned}$$

## Appendix VII

### Calculation for Mean value, & Correlation between DPS & EPS of SCBNL

(In Rs.)

Year	DPS (X <sub>1</sub> )	EPS (X <sub>2</sub> )	x <sub>1</sub> =X <sub>1</sub> - X̄ <sub>1</sub>	x <sub>2</sub> =X <sub>2</sub> - X̄ <sub>2</sub>	x <sub>1</sub> · x <sub>2</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub> <sup>2</sup>
2065/066	130.00	167.73	32.00	56.27	1,800.70	16,900.00	28,133.35
2066/067	130.00	131.92	32.00	20.46	654.78	16,900.00	17,402.89
2067/068	100.00	109.99	2.00	-1.47	-2.94	10,000.00	12,097.80
2068/069	70.00	77.65	-28.00	-33.81	946.62	4,900.00	6,029.52
2069/070	60.00	70.00	-38.00	-41.46	1,575.40	3,600.00	4,900.00
<b>N<sub>1</sub> = 5</b>	<b>∑ X<sub>1</sub> =</b>	<b>∑ X<sub>2</sub> =</b>			<b>∑ x<sub>1</sub>·x<sub>2</sub> =</b>	<b>∑ x<sub>1</sub><sup>2</sup>=</b>	<b>∑ x<sub>2</sub><sup>2</sup></b>
<b>N<sub>2</sub> = 5</b>	<b>490</b>	<b>557.29</b>			<b>4974.58</b>	<b>52300.00</b>	<b>68563.56</b>

For DPS,

$$\text{Mean } (\bar{X}) = \frac{\sum X_1}{N_1} = \frac{490}{5} = 98$$

For EPS,

$$\text{Mean } (\bar{X}) = \frac{\sum X_2}{N_2} = \frac{557.29}{5} = 111.46$$

Correlation between DPS & EPS,

$$(r_{12}) = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}}$$

$$= \frac{4974.58}{\sqrt{52300 \times 68563.56}} = 0.947$$

$$r^2 = 0.947^2 = 0.897$$

For Probable Error,

$$\begin{aligned} \text{PE} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.947^2}{\sqrt{5}} \\ &= 0.0311 \text{ Or, } 3.11\% \\ 6\text{PE} &= 6 \times 0.0311 \\ &= 0.1864 \end{aligned}$$

## Appendix VIII

### Calculation for Mean value, & Correlation between DPS & EPS of NABIL

(In Rs.)

Year	DPS (X <sub>1</sub> )	EPS (X <sub>2</sub> )	x <sub>1</sub> =X <sub>1</sub> - X̄ <sub>1</sub>	x <sub>2</sub> =X <sub>2</sub> - X̄ <sub>2</sub>	x <sub>1</sub> · x <sub>2</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub> <sup>2</sup>
2065/066	130.00	137.08	55.00	36.79	2,023.67	19,600.00	18,790.93
2066/067	100.00	108.31	15.00	8.02	120.36	10,000.00	11,731.06
2067/068	85.00	106.76	0.00	6.47	0.00	7,225.00	11,397.70
2068/069	70.00	78.61	-15.00	-21.68	325.14	4,900.00	6,179.53
2069/070	30.00	70.67	-55.00	-29.62	1,628.88	900.00	4,994.25
<b>N<sub>1</sub> = 5</b>	<b>Σ X<sub>1</sub> =</b>	<b>Σ X<sub>2</sub> =</b>			<b>Σ x<sub>1</sub>·x<sub>2</sub> =</b>	<b>Σ x<sub>1</sub><sup>2</sup>=</b>	<b>Σ x<sub>2</sub><sup>2</sup></b>
<b>N<sub>2</sub> = 5</b>	<b>425</b>	<b>501.43</b>			<b>4098.05</b>	<b>42625.00</b>	<b>53093.46</b>

For DPS,

$$\text{Mean } (\bar{X}) = \frac{\sum X_1}{N_1} = \frac{425}{5} = 85$$

For EPS,

$$\text{Mean } (\bar{X}) = \frac{\sum X_2}{N_2} = \frac{501.43}{5} = 100.29$$

Correlation between DPS & EPS,

$$\begin{aligned} (r_{12}) &= \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}} \\ &= \frac{4098.05}{\sqrt{42625 \times 53093.46}} = 0.959 \end{aligned}$$

$$r^2 = 0.959^2 = 0.920$$

For Probable Error,

$$\begin{aligned} \text{PE} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.959^2}{\sqrt{5}} \\ &= 0.0242 \text{ Or, } 2.42\% \\ 6\text{PE} &= 6 \times 0.0311 \\ &= 0.1451 \end{aligned}$$

## Appendix IX

### Calculation of Trend Value of DPS (In Rs.)

Fiscal Year	x	x <sup>2</sup>	SCBNL		NABIL	
			Y <sub>1</sub>	XY <sub>1</sub>	Y <sub>2</sub>	XY <sub>2</sub>
2065/066	-2	4	130	-260	140	-280
2066/067	-1	1	130	-130	100	-100
2067/068	0	0	100	0	85	0
2068/069	1	1	70	70	70	70
2069/070	2	4	60	120	30	60
Total		10	490	-200	425	-250

#### Calculation of intercept of 'y' when x = 0

$$a_1 = \frac{Y_1}{N_1} = \frac{490}{5} = 98$$

$$a_2 = \frac{Y_2}{N_2} = \frac{425}{5} = 85$$

#### Calculation of Slope of Trend Line

$$b_1 = \frac{XY_1}{X^2} = \frac{-200}{10} = -20$$

$$b_2 = \frac{-250}{X^2} = \frac{-250}{10} = -25$$

Therefore the trend line equations are:

$$Y_1 = a_1 + b_1 x$$

$$Y_2 = a_2 + b_2 x$$

#### Forecasted Value for Next Five Years (In Rs.)

Year	X	SCBNL	NABIL
		Y <sub>1</sub> = 98 – 20 X	Y <sub>2</sub> = 85 – 25 X
2070/071	3	98 – 20 × 3 = 38	85 – 25 × 3 = 10
2071/072	4	98 – 20 × 4 = 18	85 – 25 × 4 = -15
2072/073	5	98 – 20 × 5 = -2	85 – 25 × 5 = -40
2073/074	6	98 – 20 × 6 = -22	85 – 25 × 6 = -65
2074/075	7	98 – 20 × 7 = -42	85 – 25 × 7 = -90

## Appendix X

### Calculation of Trend Value of MVPS (In Rs.)

Fiscal Year	x	x <sup>2</sup>	SCBNL		NABIL	
			Y <sub>1</sub>	XY <sub>1</sub>	Y <sub>2</sub>	XY <sub>2</sub>
2065/066	-2	4	5900	-11800	5050	-10100
2066/067	-1	1	6830	-6830	5275	-5275
2067/068	0	0	6010	0	4899	0
2068/069	1	1	3279	3279	2384	2384
2069/070	2	4	1430	2860	1252	2504
Total		10	23449	-12491	18860	-10487

#### Calculation of intercept of 'y' when x = 0

$$a_1 = \frac{Y_1}{N_1} = \frac{23449}{5} = 4689$$

$$a_2 = \frac{Y_2}{N_2} = \frac{18860}{5} = 3772$$

#### Calculation of Slope of Trend Line

$$b_1 = \frac{XY_1}{X^2} = \frac{-12491}{10} = -1249.1$$

$$b_2 = \frac{-250}{X^2} = \frac{-10487}{10} = -1048.7$$

Therefore the trend line equations are:

$$Y_1 = a_1 + b_1 x$$

$$Y_2 = a_2 + b_2 x$$

#### Forecasted Value for Next Five Years (In Rs.)

Year	X	SCBNL	NABIL
		Y <sub>1</sub> = 4689 – 1249.1 X	Y <sub>2</sub> = 3772 – 1048.7 X
2070/071	3	4689 – 1249.1 × 3 = 941.7	3772 – 1048.7 × 3 = 625.9
2071/072	4	4689 – 1249.1 × 4 = -307.4	3772 – 1048.7 × 4 = -422.8
2072/073	5	4689 – 1249.1 × 5 = -1556.5	3772 – 1048.7 × 5 = -1471.5
2073/074	6	4689 – 1249.1 × 6 = -2805.6	3772 – 1048.7 × 6 = -2520.2
2074/075	7	4689 – 1249.1 × 7 = -4054.7	3772 – 1048.7 × 7 = -3568.9

## Appendix XI

### Calculations of Dividend Yield Ratio in Percentage

Year	SCBNL			NABIL		
	DPS(Rs)	MVPS(Rs)	Ratio(%)	DPS(Rs)	MVPS(Rs)	Ratio(%)
2065/066	130	5900	2.20	130	5050	2.57
2066/067	130	6830	1.90	100	5275	1.90
2067/068	100	6010	1.66	85	4899	1.74
2068/069	70	3279	2.13	70	2384	2.94
2069/070	60	1430	4.20	30	1252	2.40
<b>Mean</b>	98	4689.8	2.42	85	3772	2.31
<b>S.D</b>	32.71	2258.57	1.01	40.31	1832.99	0.49
<b>C.V</b>	33.38%	48.16%	43.93%	47.43%	48.59%	21.36%

## Appendix-XII

### Calculations of Earning Yield Ratio in Percentage

Year	SCBNL			NABIL		
	EPS (Rs)	MVPS(Rs)	Ratio(%)	EPS(Rs)	MVPS(Rs)	Ratio(%)
2065/066	167.37	5900	2.84	137.08	5050	2.71
2066/067	131.92	6830	1.93	108.31	5275	2.05
2067/068	109.99	6010	1.83	106.76	4899	2.18
2068/069	77.65	3279	2.37	78.61	2384	3.30
2069/070	70	1430	4.90	70.67	1252	5.64
<b>Mean</b>	111.46	4689.8	2.77	100.28	3772	3.18
<b>S.D</b>	40.15	2258.57	1.25	26.49	1832.99	1.46
<b>C.V</b>	36.03%	48.16%	45.16%	26.42%	48.59%	46.08%