

# CHAPTER- I

## INTRODUCTION

### 1.1 General Background

Nepal is a landlocked kingdom boarding China to the north, and India to the west south and east .Nepal is developing land-locked country with diverse cultural and ethnic identity. It covers an area of 147181 Sq. Km. with an average width and length of 193 Km. and 885 Km respectively. It lies between two giant nations China and India. Nepal is divided into three diverse ecological zones; the Terai (the plain), the Hills and the Mountain with distinct resources, opportunities and problems. Administratively, the country divided into 5 development region, 14 zones, 75 districts, 3915 village development committees and 58 municipalities. It is a multi caste, multi-religious and multi ethnic country. Nepal's legal system is in flux because of its unstable political landscape and its new constitutions. Nepal ranks among the world's poorest country with a per capita income of around \$562 in 2009/10. Based on national calorie/GNP criteria, an estimated 24.6% of the population is below the poverty line.

As a result of 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 Nepal Ltd. in 1987. 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 dividend policy by the participants of the capital market.

There is no any uniformity in the dividend 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 dividend 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 shareholders' 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, 2063(2006), section 47 has prohibited company from purchasing its own shares.' This provision of Nepal is against the theory of finance.

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.

Dividend policy is one of the major decisions of financial management because it affects the financial structure, the flow of funds, corporate liquidity and investor's attitudes. After the successful completion of fiscal year having sufficient profit management decide to declare dividend to shareholders. 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. It also determines the forms of dividend.

The research work will look into all relevant factors of dividend and dividend 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 Evolution of Banking Sector in Nepal**

The growth of banking in Nepal is not so long. In comparison with other developing or developed country, the institutional development in banking system of Nepal is far behind. Like other countries goldsmiths, merchants and money lenders were the ancient bankers of Nepal. Tejarath Adda established during the tenure of then Prime Minister Ranoddip Singh (B.S. 1933) was the first step towards the institutional development of banking in Nepal. Tejarath Adda did not collect deposits from the public but gave loans to employees and public against the bullion.

Later "Tejartha Adda" was replaced by commercial bank 'Nepal bank Ltd', at the time of Rana Prime Minister "Juddha Shumser". In this way Nepal's banking history began with establishment of Nepal Bank Ltd on November 1937 A.D. Under Nepal bank Act 1937 49 percent ownerships of public and remaining part under the ownership of government. Later with the growing necessity of the commercial banks in the world, the Nepal Bank Limited, the first commercial bank of Nepal in 1937 A.D replacing the older system of

banking. In the present scenario different type of banks are being practiced in Nepal, but among them commercial bank play a vital role in the economic development of the country. Commercial bank called Nepal Bank Limited was established in 1937A.D. it was established under the Nepal Bank Act of 1936 A.D and the late King Tribhuvan Bir Bikram Shah Dev inaugurated this bank. At that time the authorized capital of Nepal Bank Limited (NBL) was 1crore dividend into 100000 shares Rs100 each. Nepal Bank Limited had a responsibility of attracting people towards banking sector from predominant sahu- mahajan's transaction and of introducing other banking services as well. Being a commercial bank, it was natural that Nepal Bank Limited paid more attention to profit generating business. But, it is the duty of the government to look into the neglected sector therefore Nepal Bank Limited was established with 51% ownership of Government of Nepal and 49% of the equity participation from private sector. With the development of banking sector and to help the government formulating monetary policies, Nepal Rastra Bank is established under Nepal Rastra Bank Act 2012 the central bank of the country, Nepal. After it's established it issued the Nepali notes. The first five year plan was introduced in the country. NRB helped to make banking system more systematic and dynamic. However, as the central bank it was not logical for Nepal Bank Limited to go to unprofitable sectors, So to catch up with these Problems, the government established Rastriya Banjaya Bank in 2022 B.S (1965 A.D), under Banijya Bank Act 1965 A.D as a fully state owned commercial bank.

When the government adopted liberal market oriented economic policy since mid – 1980's, Nepal allowed foreign banks on joint Venture basis to operate in the country after getting the approval from Nepal Rastra Bank. These foreign joint venture banks are allowed maximum or 50% foreign equity participation. As a result Nepal Arab Bank was introduced, the first joint venture bank of Nepal was established in 1984 A.D (2041 B.S) The Bank was outcome of joint venture with Dubai Bank Ltd of United Arab Emirates. Then after, Nepal Indosuez Bank, a joint venture bank with a Paris in 1986 A.D (2042 B.S) was established and later Nepal Standard Chartered Bank, a joint venture bank with a bank of United Kingdom was established in 1987 A.D.(2043 B.S). The commercial banks including joint venture banks are all together 28 in number up to now (2010 A.D

).which are Nepal bank Ltd, Rastrya Banijya Bank, Himalayan Bank, Nabil Bank, Nepal Investment Bank, Standard Chartered Bank, SBI Bank, Nepal Credit and Commerce Bank, Everest Bank, Lumbini Bank,, NIC Bank, Bank of Kathmandu, Nepal Bangladesh Bank, Kumari Bank, Laxmi Bank, Siddhartha Bank and Machhapuchhre Bank Ltd. etc.

One of the most important achievements of the growth of commercial banks is domestic saving. JVBs gave a new horizon to the financial Sector of the Country. They were expected to bring the foreign capital, technology, experience, healthy competition, expertise and skills in Nepal.

### **1.3 Brief Profiles of the Sample Banks**

#### **a) 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. The Chairman of Nabil Bank is Satyendra Pyara Shrestha.

#### **b) Standard Chartered Bank Nepal Ltd (SCBNL):-**

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation with the name of Nepal Greenlez Bank Ltd. Today the Bank is an integral part of Standard Chartered Group who has 75%

ownership in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status the largest international bank currently operating in Nepal. An integral part of the only international banking Group currently operating in Nepal, the Bank enjoys an impeccable reputation of a leading financial institution in the country.

Standard Chartered has a history of over 150 years in banking and operates in many of the world's fastest-growing markets with an extensive global network of over 1750 branches (including subsidiaries, associates and joint ventures) in over 70 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. As one of the world's most international banks, Standard Chartered employs almost 75,000 people, representing over 115 nationalities, worldwide. This diversity lies at the heart of the Bank's values and supports the Bank's growth as the world increasingly becomes one market.

With 18 points of representation, 23 ATMs across the country and with more than 350 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking services in Nepal.

Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Consumer banking, Wholesale and SME Banking catering to a wide range of customers encompassing individuals, mid-market local corporate, multinationals, large public sector companies, government corporations, airlines, hotels as well as the DO segment comprising of embassies, aid agencies, NGOs and INGOs.

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 the customer accounts.

Corporate Social Responsibility is an integral part of Standard Chartered's ambition to become the world's best international bank and is the mainstay of the Bank's values. The Bank believes in delivering shareholder value in a socially, ethically and environmentally responsible manner. Standard Chartered throughout its long history has played an active role in supporting those communities in which its customers and staff live. It concentrates on projects that assist children, particularly in the areas of health and education. Environmental projects are also occasionally considered. It supports non-governmental organizations involving charitable community activities. The Group launched two major initiatives in 2003 under its 'Believing in Life' campaign- 'living with HIV/AIDS' and 'Seeing believes'.

Banker magazine has awarded Standard Chartered Bank (SCB) the prestigious 'Bank of the Year 2009' award for Nepal. The award reflects Standard Chartered's growth in Nepal, as a key part of its long-term strategic commitment to Asia.

The award comes on the back of a strong performance that the bank achieved during the fiscal year 2009-10. The bank has rewarded its shareholders by providing a cash dividend of 50 percent and issued bonus share of one for each two shares held

#### **1.4 Statement of Problem**

Dividend 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 years' 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 handling this complicated decision problem.

In practice, every firm have 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. Dividend distribution 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 two 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 two 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:-

1. Are share prices affected by dividend per share in the sample banks?
2. Should the sample banks have uniformity in dividend distribution?

3. Are the sample banks guided by the specific dividend policy?
4. Is the sample any consistency in dividend per share and dividend payout ratio in the sample two banks?
5. Does the Dividend Policy affect DPS, EPS, DPR, PE Ratio Liquidity Ratio and MVPS in Stated joint venture banks?

This study will try to answer the above- mentioned issues.

### **1.5 Objectives of the study**

The basic objective of the study is to make comparative analysis of dividend policy of selected two banks. But the Specific objectives are:

1. To study and highlight the prevailing dividend policy adopted by sample joint venture bank.
2. To Find out the impact of dividend on share prices.
3. To analyze the relationship of financial indicators such as DPS, EPS ,DPR, PE Ratio, Liquidity Ratio, Profitability Ratio and Market Value Per Share (MVPS)
4. To know if there is any uniformity among DPS, EPS and DPR on the two sample joint venture banks.

### **1.6 Significance of the Study**

The finding of this research will be of worth to the shareholders to see the dividend 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 dividend policy.

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

Finally, the dividend policy of the joint venture banks is of great interest to the several

outsiders. 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 dividend 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.

1. It covers the study period of 5 years from 2005/06 to 2009/010.
2. Only two commercial banks listed in Nepal stock Exchange are taken as the Sample Bank
3. The main focus is given to the quantitative aspects, qualitative factors are not considered.
4. Data related to cash dividend only are analyzed and interpreted.
5. There may be reporting error in the secondary data.

### **1.8 Chapter Plan**

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

Chapter One	:	Introduction.
Chapter Two	:	Review of Literature.
Chapter Two	:	Research Methodology.
Chapter Four	:	Presentation and Analysis of Data.
Chapter Five	:	Summary, Findings, Conclusion and Recommendation.

The rationale behind this kind of organization is to follow a simple research methodology approach. The contents of each of the chapters of this study are briefly mentioned here.

**Chapter one:** 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:** 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 Two:** 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:** deals with the presentation and analysis of data to indicated quantitative factors on dividend policy using statistical tools and techniques.

**Chapter Five:** states summary, findings, conclusion and recommendations, this chapter presents the major findings and compares them with other empirical evidence to the extent possible and provides some suggestions. Finally bibliography and appendices are given in a prescribed form.

# **CHAPTER-TWO**

## **REVIEW OF LITERATURE**

### **2) Conceptual Framework**

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. There is a reciprocal relationship between retained earnings and cash dividends. If retained earnings is 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.

## **2.1 Dividends**

Dividends are paid in cash generally. Thus it reduces the cash balances of the corporation. Dividend policy affects the financial structure, the flow of funds, corporation liquidity and investors' attitudes. Thus, it is one of the central decision area related to policies seeking to maximize the value of firm's common stock.

### **2.1.1 Forms of 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.

#### **a) Cash Dividend**

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.

#### **b) Stock Dividend**

A stock dividend is the payment of existing owners of a dividend in is the firm 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 declare dividend is provide in the form of share instead of paying in cash, the dividend is said to be stock dividend. From the providence 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.

**c) 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.

**d) 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.

**e) 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.

**2.1.2 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. Two distinct forms of such stability may be distinguished.

**a) 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 favorably.

**b) 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.

**c) Low Regular Plus Extra Dividend**

The low regular plus 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.

### **2.1.3 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 not clear that dividends are 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.

### **2.1.4 Factors Affecting the Dividend Policy**

- a) External Factors Affecting Dividend Policy
- b) Internal Factors Affecting Dividend policy

External Factors Affecting Dividend Policy

#### **1) General state of economy:-**

- In case of uncertain economic and business condition the management may like to retain whole or large part of earnings to build up reserve to absorb future shocks.
- In the period of depression the management may also retain a large part of its earnings to preserve the firm's liquidity position.
- In period of prosperity the management may not be liberal in dividend payments because of availability of large profitable investment opportunities.

- In periods of inflation, the management may retain large portion of earnings to finance replacement of obsolete machines.

## **2) State of capital market:-**

- Favorable market liberal dividend policy.
- Unfavorable market conservative dividend policy.

## **3) Legal restrictions:-**

- Companies Act has laid down various restriction regarding the declaration of dividend:
- Dividends can only be paid out of:

### **a) Current or past profits of the company ,**

I. Money provided by the State\Central Government in pursuance of the guarantee given by the Government.

- Payment of dividend out of capital is illegal.
- A company cannot declare dividends unless. It has provided for present as well as all arrears of deprecation.

Internal Factors Affecting Dividend policy:-

### **1) Desire of the shareholders:-**

Though the directors decide the rate of dividend, it is always at the interest of the shareholders. Shareholders expect two types of returns:

- Capital Gains: i.e., an increase in the market value of shares.
- Dividends: regular return on their investment.

Cautious investors look for dividend because,

- It reduces uncertainty strength of the economy.
- Need for income: Some invest in share so as to get regular income to meet their living expenses.

## **2) Financial needs of the company:-**

If the company has profitable projects and it is costly to raise funds, it may decide to retain the earnings.

## **3) Nature of earnings:-**

A company which has stable earnings can afford to have an higher dividend payout ratio.

## **4) Desire to retain the control of management:-**

Additional public issue of share will dilute the control of management. Liquidity Position:- Payment of dividend results in cash outflow. A company may have adequate earnings but it may not have sufficient funds to pay dividends.

### **2.1.5 Legal Provisions Regarding Dividend Practice**

In Nepal, the act “Nepal Company Act-2006” 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: 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.

## **2.2 Review of Major Studies in Foreign Perspective:**

### **2.2.1 Van Horne and Mc Donald's Study**

Van Horne & Mc Donald (1971) conducted a more detailed study on 'Dividend Policy and New Equity Financing'. The purpose of this study was to investigate the combined effect of dividend policy and new equity financing decision on the market value of the firm's common stocks. They explored 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 type 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,

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

Where,

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

The Second Model was,

$$P_0/E_0 = a_0 + a_1(g) + a_2(D_0/E_0) + a_3(\text{lev}) + a_4(\text{Fa}) + a_5(\text{Fb}) + a_6(\text{Fc}) + a_7(\text{Fd}) + u^{19}$$

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.

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

Where,

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 operating 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.

### 2.2.2 Walter's Study

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

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

Basic assumptions of this model are:

- The firm has perpetual life.
- The value of EPS and DPS are assumed to remain constant forever in determining a given value.
- The firm's internal rate of return(r) and cost of capital (k) are constant.
- The firm distributes its entire earnings or retains it for reinvestment immediately.
- The firm finances all investment through retained earnings, that is debt or new equity is not issued.

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

Where,

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

P =Market price per share.

DPS =Dividend per share.

EPS =Earnings per share.

r =Internal rate of return.

k =Cost of capital.

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

### 2.2.3 Modigliani and Miller Study

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 irrelevance 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:

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

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

$p_0$  = Market price per share at the beginning or zero period.

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

$P_1$  = Market price per Share at the end of the period.

$D_n P_1$  = The amount obtain from the Sale of New Shares to finance Capital Budget.

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,

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

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 Step 3.

we find,

$$n P_0 = \frac{nD_1 + P_1(n + D_n) - I + E - nD_1}{1 + K_e}$$

or

$$n P_0 = \frac{P_1(n + D_n) - I + E}{1 + K_e}$$

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.

#### 2.2.4 Gordon's Study

Myron Gordon (1962) carried out study and concluded that stock price is affected by dividend payout. He developed a model and states that investors are indifferent between retained earnings and current dividend. In his study, supported and concluded that dividend policy affects the value of shares even in a situation in which the return on investment is equal to the capitalization rate that is ( $r = k_e$ ). 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 ( $D_1/p_0$ ) 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.

Ke = 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.

### **2.3 Review of Major Studies in Nepalese Perspective:**

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.

### **2.3.1 Radhe S. Pradhan's study**

Mr. Radhe S. Pradhan's (1990) has conducted a study on 'Stock Market Behavior in a Small Capital Market: A Case of Nepal, The Neplease Management Review' based on the data collected for 17 enterprises from 1986 to 1990.

The major findings of this study are as follows:

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

### **2.3.2 Monahar Krishna Shrestha's study**

Mr. Shrestha (1999) have carried out study on the topic of 'Bonus Share Issue Practices in Nepalese Corporate Firms: Empirical Study, Findings and Suggestions, Management Dynamics' based on the data collected from 1987 to 1998 for 12 corporate firms.

Major findings and suggestions of this study are as follows:

1. The most popular bonus ratios prevalent in Nepalese corporate are, 1:2, 1:1, 1:0.5 and other than ratios specified above have been found negligible important that accounts for only 39% for remaining 12 bonus ratios.
2. The amount of bonus issued showed increasing trend during the period under study. During the two sub-periods, on an average amount of bonus issue rises per sub-period.

3. There is a trend to raise the additional equity capital by capitalizing the reverse and net profits by issuing bonus shares and stock dividends. The average ratio of bonus shares issue to equity capital is found above 0.5.
4. The overall average of their bonus issue is noticed among Nepalese corporate practice. The no. of bonus issue made five times or more are found two corporate firms in number, NABIL and during the study period.
5. No consistency in bonus ratio is observed. Only 50% of the bonuses issuing corporate firms are found to follow the consistent policy in bonus issue. Among the corporate firms following the consistent policy of bonus issue are found to have made bonus issue is quick succession. Such corporate firms issued 15 times bonus shares out of 25 times in total in the time interval of one year which accounted for 60% of the cases. Bonus shares occurred at irregular in interval and on widely very ratios in 50% of the cases of the bonus issue.
6. Large corporate firms are found to issue bonus shares more times than the small sized corporate firms. The overall average bonus ratios of the corporate firms with equity capital Rs. 50 and less than 100 million is found to as 0.78 which accounted for 10 times out of 36 times bonus issue.
7. Corporate firms over than 20 years are found to have issued bonus shares more times (19) compared to other corporate firms with lesser as which accounted 55% of the cases.
8. Corporate firms are suggested to have their bonus share issued plan towards the accomplishment of corporate goal.
9. Issue of bonus share must be in consistent with the growth and expansion scheme of the corporate firms and justified by increased earning and reduced risk in terms of investment and returns.

### **2.3.3 K.D. Manandhar's Study**

Mr. Manandhar (2000) has carried out latest study on the topic of 'Preliminary Test of Lagged Structure of Dividend: Empirical Test, Case of Corporate Firms in Nepal, Management Dynamics' A Journal based on the data collected from 1987 to 1998 for 7 Commercial Banks, 5 Finance and Insurance Companies, 2 Trading Companies, 2

Service Oriented Companies and 1 manufacturing Company.

Major findings of this study are as followings:

1. Significant relationship is found between change in dividend policy in terms of dividend per share and change in lagged earnings.
2. There is relationship between distribute lagged profit and dividend.
3. The difference is found significant between overall proportions of changed in dividend and due to increase in earnings per share during the study period.
4. In overall, increase in ESP (t) has resulted to increase in the dividend payment in 66.6% of the cases while decrease in EPS resulted decrease in dividend payments which come to equal to 33.3% of the cases.
5. It is found that Nepalese corporate firms have followed the practice of maintaining constant dividend payment per share or increase it irrespective of change in earning per share as reflected by the total percentage of constant and increased dividend payment of 78.335 of the cases. In other wards forms are reluctant to decrease dividend payment.
6. In overall, Nepalese corporate firms are found reluctant to decrease dividend either keeping dividend payment constant or higher to take the advantages of information contents and signaling effects of dividend relating to the firm's continued progress and performance, sound financial strength, favorable investment environment, lower risk, ability to maintain sustained dividend rate and finally to increase the market price of the stocks in the stock market.

#### **2.3.4 Daya Sagar Timsina's Study**

Daya Sagar Timsina (2010) carried out a research on 'A study on dividend policy and its impact on stock price of selected Commercial Banks' concluded that:

This study has covered the period of ten years being from 1999 to 2008. There are 26 commercial banks have been listed in NEPSE to date, however only 5 of them have been selected for analysis while conducting this study secondary data have been applied as well as some necessary information for analysis the data has been collected from some financial and managerial experts. Different financial and statistical tools have been applied for analyzing the data.

The major findings mentioned above led this study to conclude that there is notable dividend Impact on market price of the share in most of the banks. In another words dividend pays an important role to change the market price of the shares. Besides this the following conclusions are made:

- 1) There is high degree positive relationship between DPS and EPS in most of the bank.
- 2) There is normal positive relationship between DPS and EPS in most of the banks.
- 3) While comparing the impact of EPS and lagged DPS on EPS, 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.
- 4) 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.

### **2.3.5 Upat Lal Shah's Study**

Upat Lal Sah (2009) carried out a research on 'Cash dividend practice and its impact on share price in Nepal'. It covered 5 years period (2004-2008) including commercial banks, manufacturing companies, development banks, insurance companies, financial institutions and hotels sectors. 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.

Major finding of the study were as follows;

- 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.

### **2.3.6 Drona Kumar Upadhyaya's Study**

Mr.Drona Kumar Upadhyaya (2002) has written a thesis, 'Dividend Policy with respect to Insurance Company in Nepal' concluded that:-

1. Average earning per share and dividend per share of all concerned Insurance company are satisfactory.
2. Analysis indicates that there is the largest fluctuation in EPS and DPS, on the other hand, have relatively more consistency dividend per share in all the insurance company.
3. In spite of the good earning and earning potentials, insurance companies do not seem to be guided by a clearly defined policy.
4. Share of the financial institution are actively traded and market prices are increasing.
5. Insurance company represents a robust body of profit earning organization in comparison to the other sector such as manufacturing, trading etc.
6. One of the most striking findings of this study is that no Insurance company sample for this stuffy has a clearly defined dividend strategy. On the other hand, there was significant relationship perceives between earning and dividend of expansion program.

## **2.4 Review of the policy Documents**

### **2.4.1 Nepal Rastra Bank Act 2058**

The Nepal Rastra Bank ,established in 1956, is the central bank of Nepal. It has seven offices, located at Biratnagar, Janakpur, Birgunj, Pokhara, Siddharthanagar, Nepalgunj, and Dhangadhi.

It supervises the commercial banks in Nepal and guides monetary policy. Nepal Rastra Bank also oversees foreign exchange rates and the country's foreign exchange reserves. The bank is one of the principal owners of the Nepal Stock Exchange.

The central bank is known as bank of the bank in any economy. Generally, it regulates the financial sector, supervises their activities, manages and produces the national currency, formulates and implements foreign reserves policy and formulates and implements the monetary policy of the nation, but there are different ways by which people define and understand the central bank.

P.H Collin “Dictionary of Banking and Finance, 2003 Peter Collin Publishing, London, at 56” writes:- “The main government controlled bank in a country, which controls that country’s financial affairs by fixing main interest rate, issuing currency, supervising the commercial banks and trying to control the foreign exchange rate.” This is the meaning of central bank written in Dictionary of Banking and Finance. Though, this meaning does not cover all the aspects of central banking as it is in the present days but this covers most of the functions.

The product of central banking is the product of 20<sup>th</sup> century. It does not mean that there were no central banking activities before this time, but central bank as a kind of bank was first recognizing by U.S Congress through the passing of the Glass-Owen Bill, signed by President Woodrow Wilson on December 23, 1913.

In Nepal, the Nepal Rastra Bank was established as central bank in 14<sup>th</sup> Baishak, 2013 BS under the provision of the Nepal Rastra Bank Act, 2012 BS. Before this Nepal Bank Limited was doing both central banking and commercial banking functions. From the period of its established NRB is doing central banking business in the country. Nepal Rastra Bank Act, 2058 BS has substituted the old Act and modified the objectives and functions of NRB as per the change of time. The objectives of the new Act are intended to establish NRB as a policy focused central bank. Section 4 of the Act writes following as objectives of NRB:-

- Formation and management of monetary and foreign exchange policies for the sustainable development of economy and satiability in balance of payment.
- To develop secure, healthy and competent payment system.
- To maintain stability and liquidity of banking and finance sector.
- To develop secure, healthy and competent payment system.
- To Make regulation, inspection and supervision of banking and financial sector.
- To promote the banking and financial system of the country and increase people's faith upon it.

To achieve these objectives the following functions, duties and rights are vested upon NRB by section 5 of the Act:-

- a. Issuing bank notes and coins.
- b. Formation and implementation of monetary policy.
- c. Formation and implementation of foreign exchange policy.
- d. Determining the system of foreign exchange policy.
- e. Management and operation of foreign exchange reserve.
- f. Issuing the license for financial transaction to commercial banks and financial institutions and making regulation, inspection, supervision and follow up for such transaction.
- g. Working as a banker and lender of last resort of banks and financial institutions.
- h. Working as a banker, advisor, and financial agent of the government.
- i. Establishing and maintaining the system for clearing and settlement and its regulation.
- j. Other functions to achieve the objectives of the Act.

This shows that, central banks are entrusted with different policymaking, supervisory/regulatory, banking and advisory functions.

## **2.4.2 Company Act 2063**

### **2.4.2.1 Bank and Financial Institution Act, 2063 (BAFIA)**

BAFIA is expedient to amend and consolidate forthwith the prevailing legislation relating to banks and financial institutions and more it timely in order to promote the trust of the general public in the overall banking and financial system of the country and protect and promote the rights and interests of depositors provide quality and reliable banking and financial in term diary services to the general public through healthy competition among banks and financial institutions minimize risks relating to the banking and financial sector boost and consolidate the economy of the state of Nepal by liberalizing the banking and financial sectors and make necessary legal provision relating to the establishment operation management and regulation of banks and financial institutions.

Broadly commercial banks can be involved in the business like deposit collection, credit creation, guarantee, letter of credit, remittance business, and other services, which come under the jurisdiction. Generally an economy can expect the following benefits firm and banking companies;

- The Intermediation Role.
- The Payments Role
- The Guarantee Role
- The Risk Management Role.
- The Saving /Investment Role.
- The Safekeeping/Certification Role
- The Agency Role.

Under intermediation role, a bank collects saving from the depositors who have surplus income and mobilizes it loan or advance to the needy person. Banks are also involved in the payment of different bills and negotiable instruments of their customers. Operation of payment system is another role played by banking companies. Likewise, banks provide different types of guarantee on behalf of their customer performing the role of guarantor. The management of risk associated with their business is another role expected from the banking companies. Perfect risk management by a bank in its business not only helps to

individual bank but the whole financial sector also gets benefited. Likewise, management of collected deposit and its investment is another role of banking companies. Banks are also doing safekeeping of valuables of their customers. As an agent of its customer banking companies perform different roles on behalf of customer.

Considering the different roles of banking companies BFI Act, 2063 which is popularly known as Umbrella Act for banking sector has put commercial banks in 'A' class licensed institutions and has allowed performing all the business which as a banker can do. This Act determines the business for these category institutions that are same as internationally recognized business of commercial banks. Institutions in this category are also allowed to keep word 'Bank' in their name. Article 47(1) of BFI Act determines the activities for the class A licensed banking companies. These writes;

Subject to this memorandum and article of association, a class A licensed institution may conduct the following types of financial transaction:

- a. Accept deposit with or without interest, and refund such deposit.
- b. Supply credit as prescribed by the Rastra Bank.
- c. Deal in foreign exchange subject to current law.
- d. Supply credit for hire-purchase, hypothecation, leasing housing and service enterprises.
- e. Engage in merchant banking business subject to the directives of the Rastra Bank.
- f. Arrange for jointly supplying credits on the basis of co-financing by joining hands with other licensed institution according to the agreement concluded for the purpose so as to divide the collateral pari passu.
- g. Issuing guarantees on behalf of its customers, have such customers execute necessary bonds in consideration thereof, obtain security, and acquire their movable of immovable assets as collateral or on mortgage or the assets of third individuals ad collateral.
- h. Supply credit against the guarantee provided by any local or foreign bank or financial institution.
- i. Issue, accept, pay, discount or deal in letters of credit , bills of exchange, promissory notes, cheques, travelers cheque,s drafts or other financial instruments.

- j. Accepts deposits, make payments and transfer funds through telephones, telex, fax, computers, magnetic tapes or similar other electronic means or equipments, subject to the directive issued by the Rastra Bank.
- k. Issue and accept credit cards, debit cards, charge cards, other financial instruments, and appoint agents to discharge functions relating there to, subject to the directives issued by the Rastra Bank.
- l. Accept; make payments and supply credit through automated teller machines and cash dispensing machines.
- m. Grant overdraft to persons trusted by it.
- n. Work as an agent of the Rastra Bank on conditions prescribed by it, and conduct governmental and other transactions on behalf of Government of Nepal.
- o. Remit or transmit funds to different places within or outside the Kingdom of Nepal through bills of exchange, cheques or other financial instruments, deal in gold and silver bullion, shares debentures, bonds etc. and collect dividends accruing on shares, and interest on promissory notes, debentures, bonds etc.
- p. Arrange for safe deposit vaults.
- q. Supply funds received from Government of Nepal or other local or foreign agencies as credit for the promotion of projects or manage such credit.
- r. Obtain refinance credit from the Rastra Bank according to need or obtain or supply credit to or from other licensed institutions.
- s. Mobilize capital through shares, debentures, bonds, loan-bonds, saving-bonds or other financial instruments subject to the limit prescribed by the Rastra Bank.

This list of the Act includes all the functions of the banking companies and Nepalese Commercial banks are allowed to do all such function. Though this Act allowed the commercial banks to do above mentioned functions, presently no any bank is performing all these functions.

Not only the list of function that banks and financial institutions having different class of license can do is included in the BFI Act. Section 48 makes a negative list for the bank and financial institution. According to this section commercial banks are not allowed to involve in following functions.

- A licensed institution must not perform or arrange for performing the following functions.
  - a. Purchase or sell goods with commercial motives, or purchase and immovable asset except when it is required to do so for its own use.  
 Provided that this clause shall not be deemed to have prejudiced the powers of licensed institutions of class B and D to purchase or sell, distribute and manage lands and buildings in connection with carrying on their business subject to section 47.
  - b. Advance loans against security of its own shares.
  - c. Advance loans or provide any facility to promoters, Directors, persons who have subscribed to one percent or more (of its) shares, the Executive Chief or any member of the family of any such persons is working as a Director or managing agent, or entitled to nominate a Director or has any financial interest.
  - d. Supply loans to any individual, firms ,company or institution against the guarantee provided by the promoter, any director or the Executive chief.
  - e. Perform such other functions as are prescribed by the Rastra Bank as those which a licensed institution must not performed.
  - f. Invest in share capital of any other institution in an amount exceeding the limit prescribed by the Nepal Rastra Bank.
  - g. Perform any function that creates an artificial obstruction in the competitive atmosphere of the financial sector with the intention of deriving an unfair advantage.
  - h. A licensed intuition must not provide any help to any person who has deposited in a deposit account funds earned by him/her through illegal means to hide, convert, pay or transfer such funds or to hide or lie about the origin or source thereof or to do anything for that purpose, in order to protect him/her from legal actions.

This provision of the Act prohibits commercial banks to be involved in the non banking business. This is necessary for the health of individual company and financial system as a whole.

## **CHAPTER-TWO**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

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.

#### **3.2 Research Design**

The research design is less descriptive but more prescriptive because the historical secondary data have been employed to analyses the using variables which is related to dividend policies of JVBs. For the analytical purpose , the annual reports published by the relative banks and financial statements of the banks published by Nepal Stock Exchange Ltd. were collected for the year 2005/06 to 2009/010. More about this will be elaborate and explain in following pages.

#### **3.3 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, Nepal commerce campus, Saraswati Multiple Campus Library, Shanker Dev Campus library, American Library, Ministry of Finance and National Commission e.t.c.

#### **3.4 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 firm population. The populations are as follows.

**Table-3.1**

S.N	Name of the Banks	Operation Date(A.D.)	Head Office
1	Nepal Bank Limited	1937/11/15	Dharmapath, Kathmandu
2	Rastriya Baniya Bank	1966/01/23	SinghDarbar, Kathmandu
3	Nabil Bank Limited	1984/07/16	Kantipath, Kathmandu
4	Nepal Investment Bank Limited	1986/02/07	Durbarmarg, Kathmandu
5	Standard Chartered Bank Nepal Limited	1987/01/30	NayaBaneshwor, Kathmandu
6	Himalayan Bank Limited	1993/01/18	Thamel, Kathmandu
7	Nepal SBI Bank Limited	1993/07/07	Hattishar, Kathmandu
8	Nepal Bangladesh Bank Limited	1993/06/05	NayaBaneshwor, Kathmandu
9	Everest Bank Limited	1994/10/18	Lazimpat, Kathmandu
10	Bank Of Kathmandu Limited	1995/03/12	Kamaladi, Kathmandu
11	Nepal Credit and Commerce Bank limited	1996/10/14	Siddhartha nagar, Rupandehi
12	Lumbini Bank Limited	1998/07/17	Narayangadh, Chitwan
13	Nepal Industrial & Commercial Bank limited	1998/07/21	Biratnagar, Morang
14	Machhapuchhre Bank Limited	2000/10/03	Prithivichowk, Pokhara
15	Kumari Bank limited	2001/04/03	Putalisadak, Kathmandu
16	Laxmi Bank limited	2002/04/03	Adarshanagar, Birgung
17	Siddhartha Bank limited	2002/12/24	Kamaladi, Kathmandu
18	Agriculture Development Bank limited	2006/03/16	Ramshapath, Kathmandu
19	Global Bank limited	2007/01/02	Birgung, Parsa
20	Citizens Bank International Limited	2007/06/21	Kamaladi, Kathmandu
21	Prime Commercial Bank Limited	2007/09/24	New road, Kathmandu
22	Sunrise Bank Limited	2007/10/12	Gairidhara crossing, Kathmandu
23	Bank Of Asia Nepal Limited	2007/10/12	Tripureswor, Kathmandu
24	Development Credit Bank Limited	2001/01/23	Kamaladi, Kathmandu
25	NMB Bank Limited	1996/11/26	Babarmahal, Kathmandu
26	Kist Bank Limited	2003/02/21	Anamnagar, Kathmandu
27	Janata Bank Nepal limited	2010	New Baneshwor, Kathmandu
28	Mega Bank Limited	2010	Kantipath, Kathmandu
29	Commerz and Trust Bank Limited.	2010	Kamaladi, Kathmandu
30	Civil Bank Limited	2010	Kamaladi, Kathmandu
31	Century Commercial Bank Limited	2011	Putalisadak, Kathmandu

## **Licensed Commercial Banks**

(Source: [www.nrb.org.np](http://www.nrb.org.np) 2011 )

The Sample to be selected is as follows

1. NABIL Bank Ltd.
2. Standard Chartered Bank Nepal Ltd. (SCBNL)

### **3.5 Method of Analysis**

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. To determine whether the variable of DPS is related to dividend decision, the following regression model has been applied.

$$Y = a + bX_1$$

Where,

Y = Market Value per Share. (MVPS)

a = Intercept.

b = Reference of change.

X<sub>1</sub> = Dividend per Share. (DPS)

This model has been applied to examine the relationship between the DPS and MVPS of the companies in the current fiscal year 2005/06 to 2009/010. Similarly the following models have been applied to determine whether the variable of EPS, DPS, PE Ratio, Dividend Yield, Liquidity Ratio, profitability Ratio on MVPS

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

#### **I) 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 net profit after taxes by no of common stock outstanding.

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

#### **II) 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.

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

#### **III) Dividend in Percent:**

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

$$\text{Dividend in Percent} = \frac{\text{Dividend Per Share}}{\text{Paid Up Per Share}}$$

#### **IV) 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

### **V) Price Earning Ratio (PE 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.

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

### **VI) Earning Yield and Dividend 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. Earning yield is calculated as:

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

Similarly 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. That is:

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

### **VII) 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 dividing the market value per share by Book value per share

$$\text{MVPS} = \frac{\text{Market Value Share(MVPS)}}{\text{Book Value Per Share}}$$

### **VIII) Liquidity Ratio:**

Liquidity ratio, expresses a company's ability to repay short-term creditors out of its total cash. It reflects the short term financial strength of the Organization .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 . 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 used to know the capacity of the institution to repay its short term liability generally there are two types of liquidity ratio

- a) Current Ratio =  $\frac{\text{current Assets}}{\text{Current Liabilities}}$
- b) Quick Ratio =  $\frac{\text{Current Assets other than stock and prepaid}}{\text{Current Liabilities}}$

### **IX) Profitability Ratio:**

The profitability ratios are the basic bank financial ratios. Profitability ratios are the financial statement ratios which are used to measure on how well a business is performing in terms of profit. In other words, the profitability ratios give the various scales to measure the success of the firm. The profitability ratios can also be defined as the financial measurement that evaluates the capacity of a business to produce yield against the expenses and costs of business over a particular time period. If a company having a higher profitability ratio compared to its competitor, it can be inferred that the company is doing better than that particular competitor. The higher or same profitability ratio of a company compared to its previous period also indicates that the company is doing well. The return on assets, profit margin and return on equity are the examples of profitability ratios. Overall these are known as Profitability Ratios. These Ratios are Calculated :

- a) Return on Assets =  $\frac{NPAT \text{ with interest}}{Total Assets} \times 100\%$
- b) Net Profit Margin =  $\frac{NPAT \text{ with interest}}{Net Sells} \times 100\%$
- c) Return On Equity (ROSE) =  $\frac{NPAT}{Shareholders Fund} \times 100\%$
- d) Return on Capital Employed (ROCE) =  $\frac{NPAT \text{ with Interest}}{Capital employed} \times 100\%$

Where,

Capital Employed = Shareholders fond + Long term debt

### 3.7 Statistical Tools Used:

#### a) Standard Deviation ( $\sigma$ ):

The measurement of the scatterings of the mass of figures in a series about an average is known as dispersion. The standard deviation measures the absolute dispersion. The greater the amount of dispersion greater the standard deviation. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity if a series, a large standard deviation means just opposite. In this way standard deviation is calculated for selected dependent and independent variables specified in the models presented above.

Standard Deviation denoted by  $\sigma$  is given by:

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2}$$

Where ,

n = No of observation in Series X

$\sum X^2$ = Summation square of X series

**b) Coefficient of Variation(C.V):**

C.V is the qualitative measure of the dispersion to compare more than two assets; coefficient of frequency variation is used. It is relative measurement of dispersion based on standard deviation coefficient of variation is given by following formula,

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

Where,  $\sigma$  = Standard Deviation

$\bar{X}$ = Arithmetic Mean

It represent the ratio of the standard deviation to the mean and it is a useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from each other.

**c) Coefficient of Correlation (r):**

Correlation analysis is the statistical tools that we can use to describe the degree to which one variable is linearly related to another. The sufficient of correlation measures the degree of relationship between two sets of figures. In this study, simple coefficient of correlation is used to determine the relationship of different factors with dividend and other variables. The data related to dividend over different years are tabulated and their relationships with each others are drawn out. Karl Pearson's coefficient is used to study the extend or degree of correlation between the variables. If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, the correlation is said to be negative, but the correlation coefficient always remains within the limit of +1 to -1. The formula for the calculation of coefficient is given below.

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

Where,

r = Coefficient of correlation

$\sum xy$  = Sum of the product of the observation in series x and y

$\sum x$  = Sum of the observation in series x

$\sum y$  = Sum of the observation in series y

$\sum x^2$  = Sum of the squares observation of x

$\sum y^2$  = Sum of the squares observation of y

N = Number of observation of x and y

'r' lies always between +1 and -1

When 'r' = +1, there is perfect positive correlation.

When 'r' = -1, there is perfect negative correlation.

When 'r' = 0, there is no correlation.

When 'r' lies between 0.7 to 0.999 (or -0.7 to -0.999) there is high degree of positive or negative correlation.

When 'r' lies between 0.5 and 0.699, there is a moderate degree of correlation.

When 'r' is less than 0.5, there is low degree of correlation.

**d) Mean or Average ( $\mu$ ):**

Simply mean or average is the set of observation that represents the entire data; its value lies somewhere in between the two extremes observation of the data. For this reason an average is frequently referred to as a measure of central tendency. The data related to dividend are tabulated and drawn out average (X) over different years. It is an envoy of the mass of homogeneous data.

The value of the AM is obtained by adding together all the items and by dividing this total by the number of items.

Mathematically,

Arithmetic mean (AM) is given by,  $X = \frac{\sum x}{n}$

Where,

$\bar{X}$  = Arithmetic Mean

$\sum X$  = Sum of all the values of the variable X

n = Number of observations

**e) Coefficient of Multiple Determinations ( $r^2$ ):**

The coefficient of determination is a measure of the degree linear association or correlation between two variable one of which happens to be independent and other being dependent variable. In other words,  $r^2$  measures the percentage total variation in dependent variable explained by independent variables. The coefficient of determination value can have ranging from zero to one. A value of one can occur only if the unexplained variation is zero which simply means that all the data points in the scatter diagram fall exactly on the regression line. It is more appropriate while verifying the results than the correlation coefficient and computed by square of the correlations coefficient as mentioned above.

$$r^2 = r \times r$$

**f) 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 calculated

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

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

- i) If  $r < P.E.$ , it is not significant. So, perhaps there is no evidence of correlation.
- ii) 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

**g) 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 over 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

$$Y_c = a+bx$$

Where,

$Y_c$  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. The X variable  
Trend analysis represents the time.

### **3.8 Cash Flow Analysis**

Cash flow analysis is one most vital element for measuring the comparative study of dividend policy. A cash flows statement is done through statement of cash flows. A cash flows statement is a statement of company's ability to generate cash from various activities such as operating, investing and financing activities and their need of cash.

To determine operating cash flow, you start with net income and add back expenses which did not result in inflows or outflows of cash. The most common non-cash expense is depreciation. When working with historical figures, adjusting net income with depreciation and other non-cash expenses is much than determining all the revenues and expenses which require or provide funds. Next, you identify all the balance sheet accounts that are associated with operations and determine the change in the account from the end of the last period to the end of purchasing inventory or paying salaries is an obvious use of cash. In accounts receivables when you collect from your customers, you will receive cash, so a decrease is a source of cash. The opposite is true when you increase accounts receivable; it is a decrease in cash. Growing businesses need to closely watch their inventory and receivables so they don't find themselves in a cash crunch at a time when business is booming. Operating cash flow will include all the balance sheet accounts that are a part of normal operations. Trade receivables and payables as well as accrued expenses, prepaid expenses and other current assets that are a part of day-to-day operations are included in operating cash flow.

The remaining balance sheet accounts will either be investing activities or financing activities. You need to determine the change in each balance sheet account from the beginning of the period to the end of the period, and tally them up. That completes all the information that is needed to put together the cash flow statement.

It is statement which shows the inflows and outflows of Cash and cash equivalents during the year. There are two types of methods for preparation of cash flow statement:

- 1) Direct Method
- 2) Indirect Method

To complete my data analysis direct method is applied. In this method cash flow statement, does not begin with net income rather, it shows cash collection from customer and deducted cash used for various expenses. Following Steps involve under direct approach of cash flow statement.

### **3.8.1 Cash from Operating Activities**

Operating activities include only transaction that returns to the calculation of net income. It involves the production or purchase and the sales of goods and services to customer. Cash flow from operating activities includes cash receipt and cash payment.

#### **a) Cash Receipt**

- i. Collection from customers for sales of goods and services
- ii. Interest and dividend received
- iii. Other receipt from operations as for examples, proceeds from settlement of litigation

#### **b) Cash Payment**

- 1) Payment to suppliers of merchants and services
- 2) Payment to employees
- 3) Payment of interest and income tax
- 4) Other expenditure relating to operating as for example, payment in settlement of litigation

### **3.8.2 Cash from Investing Activity**

Determination of cash flows investing activities require to analyze the non- current items of comparatives balance sheet, additional information and non- cash expenses, non operating incomes and expenses in income statement relating to

- i. Investment in share and debenture
- ii. Intangible assets

- iii. Short-term investment other than cash equivalents.
- iv. Purchase and sale of fixed assets

### 3.8.3 Cash from Financing Activity

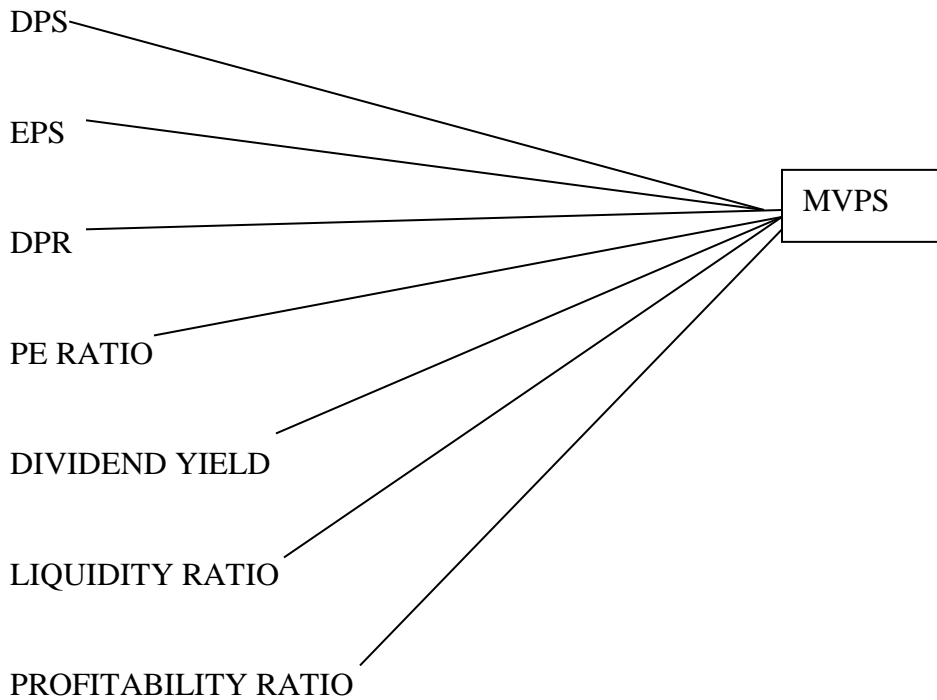
A company's transactions with its owners and long-term creditors are typically called financing activities. Also, financing activities include borrowing cash on short-term basis. For determination of cash flows from financing activities an item relating to:

- i. Borrowing
- ii. Deposits
- iii. Other non current liabilities
- iv. Issue of Shares
- v. Issue / Redemption of Bonds / Debentures

### 3.9 Comparative Study of Dividend Policy in Commercial Banks

**Independent Variable(X)**  
**(Predictors or constant)**

**Dependent Variable(Y)**



## **CHAPTER-IV**

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

#### **4.1 Introduction**

The basic objective of the study has already been mentioned in the first chapter 'Introduction'. I 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 JVBs and the attitude of management towards the optimum dividend decision in Nepal. My analysis is highly supported by the practices of dividend distribution by JVBs. That is why; I have taken the data of JVBs 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.

## 4.2. Analysis of Financial Indicators and Variables

### 4.2.1 Dividend per share Analysis

Table no. 4.1

#### Dividend per Share (DPS) (Rs in Millions)

Year	NABIL	SCBNL
2005/06	70	120
2006/07	85	140
2007/08	140	130
2008/09	100	130
2009/010	85	100
Average( )	96	124
S.D( $\sigma$ )	23.96	13.56
C.V	24.97	10.93

(Source: Annual Report of related Bank 20/10)

The above (Table No. 4.1) shows the impact on dividend on share price of the concerned JVBs from the year 2005/06 to 2009/010. In the year 2005/06, SCBNL paid the highest cash dividend Rs. 120 per share at all. On the other hand, NABIL paid Rs.70 Rs.12.50 cash dividend per share.

In the year 2006/07, SCBNL paid Rs.140 dividend per share, which was the highest cash dividend, NABIL paid Rs.85 per share cash dividend. The data related to the year 2007/08, illustrate that the DPS of the banks is comparatively more to their shareholders than the previous year. This was comparatively higher than previous year. NABIL paid Rs. Paid Rs.140 which was the highest cash dividend for this year. SCBNL paid Rs.130 per share cash dividend.

SCBNL paid Rs.130 dividend per share which was the highest cash dividend for the year 2008/09.NABIL paid Rs.100 per share cash dividend in this year. In the year 2009/010 SCBNL paid Rs.100 which was the highest cash dividend. NABIL paid Rs. 85 cash dividend per share.

We can observe considerable fluctuations in the DPS of the two banks in the year 2007/08. NABIL bank paid Rs.140 in the year 2007/08, which is the highest DPS. Same in the year 2006/07 which is highest than other.

Here, S.D of NABIL bank is Rs.23.96, SCBNL is Rs.13.56. A small S.D measures a high degree of uniformity of observation as small as homogeneity of a series and vice versa. It is preferable to state the rate of fluctuation with the help of coefficient of variation (C.V) of above data, NABIL is 24.97%, SCBNL C.V is 10.93% paid cash dividend. This shows that these JVBs have not followed the consisted dividend policy.

#### 4.2.2 Earning Per Share Analysis

**Table No 4.2**  
**Earnings Per Share (EPS)**

Year	NABIL	SCBNL
2005/06	105.49	143.14
2006/07	129.21	175.84
2007/08	137.08	167.37
2008/09	108.31	131.92
2009/010	106.76	109.99
Average(X)	117.37	145.65
S.D( $\sigma$ )	13.45	19.75
C.V	11.20	13.56

*(Source: Annual Report of related Bank 20/10)*

The above (Table No. 4.2) shows the EPS of the concerned banks from 2005/06. Normally, the performance and the achievement of business organization are measured in terms of its capacity to generate earning. Higher earnings show higher strength while lower earnings show weaker strength of business organization.

To start from the year 2005/06, the table shows that the EPS of SCBNL was the highest, which amount to Rs. 143.14. While the EPS of NABIL is comparatively low. In the year 2006/07, the EPS of SCBNL has increased considerably and it reached Rs.175.84. In this

way, EPS of NABIL have increased.

The data related to the year 2007/08 illustrate that the EPS of all two banks have been increased in a slow steady rate except SCBNL. In the year 2008/09, we found that the EPS of NABIL, SCBNL have been decreased i.e. Rs.108.31, Rs.131.92. In the year 2009/010, the EPS of two banks are in decreasing rate. There is fluctuating in comparison to previous year.

Here, S.D of NABIL is Rs. 13.45, SCBNL is Rs. 19.75. A small S.D measures a high degree of uniformity of the observation as well as homogeneity of a series and vice versa. It is preferable to state the rate of fluctuations with the help of coefficient of variation of above data. The C.V of EPS of NABIL bank is 11.20%, SCBNL is 13.56%.

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.

#### 4.2.3 Dividend Pay-out Ratio

**Table No. 4.3**  
**Dividend Pay Out Ratio (DPR)**

<b>Year</b>	<b>NABIL</b>	<b>SCBNL</b>
2005/06	66.36	83.83
2006/07	65.78	79.62
2007/08	102.13	77.67
2008/09	92.33	98.54
2009/010	79. 62	90.92
Average(X )	81.24	86.12
S.D( $\sigma$ )	14.30	7.70
CV	17.60	8.94

*(Source: Annual Report of related Bank 20/10)*

The above (Table No. 4.3) shows the dividend payout of the concerned banks from the year 2005/06 to 2009/010.

ASSUMPTION:

Conservative dividend policy	less than 30%
Moderate dividend policy	30% - 60%
Aggressive dividend policy	More than 60%

In the year 2005/06, NABIL applied aggressive dividend policy and paid dividend 66.36%, SCBNL followed aggressive dividend policy i.e. 83.83%. In the year 2006/07, all two banks were under aggressive dividend policy i.e. SCBNL 79.62% and NABIL 65.78%. NABIL bank applied aggressive dividend policy i.e. 102.13% in the 2007/08 year; whereas SCBNL applied aggressive dividend policy i.e. 77.67% applied moderate dividend policy. In the year 2008/09, all the banks followed under aggressive dividend policy which was 92.33%, 98.54% respectively. In the year 2009/010, NABIL aggressive dividend policy i.e. 79.62%, SCBNL 90.92% respectively

The average of NABIL and SCBNL banks are aggressive i.e. 81.24% and 86.12% respectively. The calculation of coefficient of variation of the DPR of two banks suggest that the DPR of SCBNL is more consistent i.e. 8.94%. The C.V of NABIL is 17.60% respectively. This analysis helps us to assume that the DPR of SCBNL is soundest among the NABIL Bank.

#### 4.2.4 Price Earnings Ratio (PE Ratio)

Table No 4.4

##### Price Earnings Ratio (PE)

Year	NABIL	SCBNL
2005/06	14.27	16.38
2006/07	17.34	21.47
2007/08	36.84	35.25
2008/09	48.70	51.77
2009/010	45.89	54.64
Average(X )	32.608	35.902
S.D( $\sigma$ )	14.51	15.44
C.V	44.50	43.02

(Source: Annual Report of related Bank 20/10)

The above (Table No 4.4) depicts the price earnings ratio of the two banks. This study helps us by classifying the relationship between earning per share and market price per share. In the year 2005/06 two banks PE Ratio were normal,

In the year 2006/07 NABIL's PE Ratio is 17.34 time, SCBNL is 21.47 times PE Ratio of 2007/08 NABIL and SCBNL were in increasing trend then previous year. is highest than other two banks i.e. 36.84 times. In the year 2008/09, PE Ratio of all bank were increased frequently. In the year 2009/010, PE Ratio of NABIL times and 37.10 times. The SCBNL is in increasing trend i.e. 54.64 times.

On average, PE Ratio of NABIL, and SCBNL were 32.608, and 29.708 respectively. It shows that the SCBNL has the highest PE Ratio as compared to the sample banks. ,it indicates that overall C.V. of these banks is also not so good.

#### 4.2.5 Dividend Yield Analysis

**Table No. 4.5**

**Price Earnings Ratio(PE)**

Year	NABIL	SCBNL
2005/06	4.65	5.12
2006/07	3.79	3.71
2007/08	2.77	2.20
2008/09	1.90	1.90
2009/010	1.74	1.66
Average(X )	2.97	2.92
S.D( $\sigma$ )	1.112	1.31
C.V	37.45	44.94

*(Source: Annual Report of related Bank 20/10)*

The above Table shows dividend yield analysis for the year 2005/06 to 2009/010.

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 2005/06, the data related to dividend yield of NABIL 4.65%, SCBNL 5.12% acquire the shareholders. NABIL, SCBNL decreased dividend yield in the year 2006/07. In the year 2008/09, NABIL's, SCBNL'S DY decreased i.e. 1.90%, 1.90%, respectively. In the year 2009/010, NABIL, SCBNL were decreased.

In average NABIL dividend yield 2.97% is the highest at all SCBNL 2.92% .The coefficient of variation analysis shows that the NABIL's DY is the most consistent (37.45%) while SCBNL (44.94%) seem consistent. in the way, seem flexible. In aggregate NABIL bank is efficient for distribution of dividend on the basis of market price of share.

#### 4.2.6 Earning Yield Analysis

**Table No 4.6**  
**Earning Yield Ratio**

<b>Year</b>	<b>NABIL</b>	<b>SCBNL</b>
2005/06	7.01	6.10
2006/07	5.77	4.66
2007/08	2.71	2.84
2008/09	2.05	1.93
2009/010	2.18	1.83
Average(X )	3.94	3.47
S.D( $\sigma$ )	2.05	1.66
C.V	51.94	47.87

*(Source: Annual Report of related Bank20 /10)*

In above table-4.6, it shows earning yield ratio of NABIL, and SCBNL from 2005/06 to 2009/010. All two banks had decreasing rate of earning yield ratio. But Nabil had fast decreasing rate whereas had slow decreasing rate. In FY 2009/010 NABIL had 2.18 earning yield ratio whereas SCBNL has 1.83 and 2.70 respectively. The average earning yield of NABIL, SCBNL, are 3.94, 3.47, respectively and standard deviations are 2.05, 1.66, and 1.03 respectively. The small standard deviations measures high degree of uniformity and homogeneity. So, SCBNL SD (1.66) shows the high degree of uniformity and homogeneity.

#### 4.2.7 Share Price Analysis (MVPS):

**Table No 4.7**

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

Year	NABIL	SCBNL
2005/06	1505	2345
2006/07	2240	3775
2007/08	5050	5900
2008/09	5275	6830
2009/010	4899	6010
Average(X )	3794	4972
S.D( $\sigma$ )	1590.37	1656.78
C.V	41.92	33.32

*(Source: Annual Report of related Bank 20/10)*

The above table no.4.7 shows the market price per share of the concerned banks from the year 2005/06 to 2009/010. Market value per share means to evaluate value of shares in the market. In the year 2005/06, MPS of SCBNL was the highest at all Rs. 2345. In the FY year 2006/07, SCBNL's MPS is Rs. 3775, which was greater than NABIL i.e. Rs. 2240 respectively.

In the year 2007/08, all two banks MPS were increasing then previous year i.e. NABIL's Rs. 5050, SCBNL's Rs. 5900. In 2008/09, SCBNL's MPS was the highest Rs.6830, among all the banks. Which was highest in all years? SCBNL's MPS price decrease in the year 2009/010, other two banks are also decrease than previous year. SCBNL's MPS is highest than two all banks.

In average, SCBNL has the highest share price Rs.4972, The coefficient of variation analysis shows that SCBNL share price is the most consistent (33.32) % while that other NABIL (41.92%) consistent.

### 4.3 Statistical Tools

#### 4.3.1 Coefficient of Correlation, Coefficient of Determination and Probable Error

**Table-4.8**  
**Coefficient correlation, coefficient of Determination & Probable Error**  
**Of NABIL Bank**

Variable	r	r <sup>2</sup>	Probable Error(PE)	6 Probable Error(PE)	Remark
DPS	0.6595	0.4349	0.1704	1.0224	Insignificant
EPS	0.0804	0.0065	0.2997	1.7982	Insignificant
PE-RATIO	0.9631	0.9276	0.207	1.242	Insignificant
DPR	0.8702	0.7572	0.0219	0.1314	Significant
DIV.YIELD	0.9398	0.8832	0.0352	0.2112	Significant
LIQ.RATIO	0.8709	0.7585	0.0729	0.4374	Significant

**Table-4.9**  
**Coefficient correlation, coefficient of Determination & Probable Error**  
**Of SCBNL Bank**

Variable	r	r <sup>2</sup>	Probable Error(PE)	6 Probable Error(PE)	Remark
DPS	-0.1499	0.2949	0.0225	0.135	Insignificant
EPS	-0.3636	0.2618	0.1322	0.7932	Insignificant
PE-RATIO	0.9136	0.0499	0.8347	5.0082	Insignificant
DPR	0.5334	0.2158	0.2845	1.707	Insignificant
DIV.YIELD	-0.9743	0.0151	0.95	5.7	Insignificant
LIQ.RATIO	-0.6426	0.0729	0.4129	2.4774	Insignificant

The above table no.4.8, 4.9 depicts the relationship among DPS, EPS, DPR, PE.RATIO, DIVIDEND Yield and Liquidity Ratio on MVPS. Coefficient of correlation (r) between DPS and MVPS of NABIL Bank is positive, SCBNL Bank is negative. In the same way

correlation ( $r$ ) between DPS of MVPS of NABIL Bank is positive. NABIL explains 65.95% of variation is independent variable DPS on MVPS. On the other hand, NABIL Bank explains -14.99% of variation is independent variable EPS on MVPS. In the other word, they are highly correlated. Although these figures alone are sufficient to depict the significance of the relationship, it is somewhat safe to say that the relationship between DPS and EPS on MVPS of the concerned banks are remarkable. But the figure indicate low degree of correlation on DPS of (-0.1499) which tends to zero.

To measure the significant of the relationships between DPS and EPS if MVPS of the two concerned bank, it would be more preferable to calculate probable error (PE) of correlation coefficient. The same table depicts that the coefficient of correlation ( $r$ ) of two bank are not in same manner than the probable error of corresponding bank. I have mentioned in the above paragraph that the relationship between DPS and MVPS if NABIL Bank are obviously insignificant and remaining SCBNL Bank is significant. The relationship between EPS and MVPS of NABIL Bank are insignificant and SCBNL Bank is significant.

Coefficient of determination is measured of the degree of linear association or correlation between two variables. Coefficient of determination between DPR and MVPS of two banks are as follows: DPR of NABIL Bank is 0.8702, SCBNL is 0.5334. All two banks show that the variations in the independent variable (DPR) are positive variations in MVPS. Since, NABIL Bank coefficient is greater than (PE) probable error therefore, the relationship between DPR and MVPS are insignificant.

Coefficient of correlation between PE Ratio and MVPS of NABIL, SCBNL were positive i.e.0.9631, 0.9136 degree of correlation is high. the relationship between PE Ratio and MVPS is significant. Whereas, NABIL and SCBNL's correlation coefficient is lesser than probable error (PE), the relationship between PE Ratio and MVPS is insignificant.

The coefficient determination between Dividend Yield and MVPS of NABIL, SCBNL are 0.9398, -0.9743. The coefficient of correlation of these two banks SCBNL indicates the low degree of negative correlation. And in the case of NABIL is high degree of

positive correlation. As far as significant of relationship is concerned, the coefficient of correlation ( $r$ ) of NABIL Bank is high than the probable error (PE), Thus the relationship between dividend Yield and MVPS is obviously significant, whereas SCBNL Bank's coefficient of correlation is low than the probable error, So the relationship between Dividend Yield and MVPS is insignificant.

The coefficient of correlation ( $r$ ) between Liquidity Ratio and MVPS of NABIL is 0.8709, SCBNL is -0.6426 respectively along with SCBNL explains -64.26% of variation in the Liquidity Ratio. The coefficient to SCBNL is negative and hence low degree of correlation of coefficient. In other hand, NABIL has relatively high degree of correlation of coefficient 87.09%. It shows that the variation in Liquidity Ratio explain 87.09% of variation in MVPS in the case of NABIL. As far as significant of relationship is concerned, it is difficult to say anything about it. Since coefficient is greater than PE in two cases, it is less than 6.

## 4.4 Cash Flow Statement

Table 4.10

Cash Flow Statement of NABIL Bank Ltd from 2005/06 to 2009/010

Rs. in million

Particulars	2005/06	2006/07	2007/08	2008/09	2009/10
<b>A. Cash flow from Operating Activities</b>	<b>1512</b>	<b>1031</b>	<b>544</b>	<b>1504</b>	<b>1726</b>
<b>1. Cash Receipt</b>	<b>1069</b>	<b>1572</b>	<b>2010</b>	<b>2445</b>	<b>3200</b>
1.1 Interest Income	129	1093	1518	1944	2578
1.2 Commission & Discount Income	185	138	151	156	180
1.3 Income from Foreign Exchange Transaction	–	–	210	196	252
1.4 Recovery of Loan Written off	–	–	44	51	–
1.5 Non- Operating Income	57	74	–	–	–
1.6 Exchange & Discount	72	–	–	–	–
1.7 Other Income	1336	83	88	97	144
<b>2. Cash Payment</b>	<b>–</b>	<b>–</b>	<b>(1383)</b>	<b>(1574)</b>	<b>(2125)</b>
2.1 Interest Expense	244	1015	(555)	(747)	(1162)
2.2 Staffs Expenses	200	357	(240)	(257)	(334)
2.3 Office Operating Expenses	190	220	(131)	(157)	–
2.4 Exchange fluctuation Loss	–	120	–	–	–
2.5 Non Operating Expense	–	228	–	–	–
2.6 Income tax Paid	703	89	(100)	(109)	(198)
2.7 Other Expenses	–	–	(356)	(304)	(430)
<b>Cash flow from before change in Working Capital</b>	<b>–</b>	<b>–</b>	<b>628</b>	<b>871</b>	<b>1076</b>
<b>(Increase)/Decrease of Current Assets</b>	<b>–</b>	<b>–</b>	<b>(4374)</b>	<b>(1831)</b>	<b>4819</b>
1.(Increase)/Decrease in Bank Balance	271	–	–	–	–
2.(Increase)/Decrease Money at Call	50	–	(1171)	(1389)	1399
3.(Increase)/Decrease Other short term Investment	1569	–	(2949)	(838)	133
4. (Increase)/Decrease Loan, advance & bill purchase	(2396)	–	(2627)	(5867)	(6251)
5.(Increase)/Decrease other assets	(51)	–	31	(37)	(100)
<b>Increase/(Decrease) of Current Liabilities</b>	<b>–</b>	<b>–</b>	<b>4290</b>	<b>8764</b>	<b>5468</b>
1.Increase/(Decrease) in Deposit	467	–	3995	8573	5433
2.Increase/(Decrease) in Certificates of Deposit	–	–	–	–	–
3.Increase/(Decrease) in short Term Borrowings	–	–	709	477	321
4.Increase/(Decrease) in Other Liabilities	118	–	(414)	(286)	287
<b>B. Cash flow from Investing Activities</b>	<b>(581)</b>	<b>–</b>	<b>225</b>	<b>(472)</b>	<b>(1084)</b>
1.(Increase)/Decrease in Long Term Investment	–	–	174	(173)	(1041)
2.(Increase)/Decrease in Fixed Assets	23	–	(27)	(374)	(131)
3. Interest Income from Long Term Investment	–	–	71	51	85
4. Dividend Income	–	–	0.1	2	2
5. Others	–	–	7	22	60
<b>C. Cash Flow from Financing Activities</b>	<b>256</b>	<b>–</b>	<b>–</b>	<b>240</b>	<b>60</b>
1.Increase/(Decrease) in Long term Borrowings	(213)	–	–	–	–
2.Increase/(Decrease) in Share Capital	–	–	–	240	–
3.Increase/(Decrease) in Refinancing/Facilities received	–	–	–	–	–
4.Other Liabilities	–	–	–	–	–
<b>D.Income/(Loss) from Change in Exchange Rate</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>E. Current Year's Cash Flow from all Activities</b>	<b>(141)</b>	<b>–</b>	<b>770</b>	<b>1271</b>	<b>701</b>
<b>F.Opening Cash and Bank Balance</b>	<b>287</b>	<b>630</b>	<b>1399</b>	<b>2671</b>	<b>–</b>
<b>G. Closing Cash and Bank Balance</b>	<b>146</b>	<b>1399</b>	<b>2671</b>	<b>3372</b>	<b>–</b>

(Source: Annual Report of related Bank 20/10)

**Table 4.11**  
**Cash Flow Statement of Standard Chartered Nepal Bank Ltd.**  
**For the FY 2005/06 to 2009/10**

Rs. in millions

<b>A. Cash flow from Operating Activities</b>	<b>306</b>	<b>(659)</b>	<b>1093</b>	<b>(45)</b>	<b>6949</b>
<b>1. Cash Receipt</b>	<b>1552</b>	<b>715</b>	<b>1572</b>	<b>1862</b>	<b>2128</b>
1.1 Interest Income	1070	182	1072	1296	1480
1.2 Commission & Discount Income	–	220	224	272	239
1.3 Income from Foreign Exchange Transaction	–	283	237	255	352
1.4 Recovery of Loan Written off	–	2	1	5	24
1.5 Non- Operating Income	3	–	–	–	–
1.6 Exchange & Discount	–	–	–	–	–
1.7 Other Income	29	27	38	33	33
<b>2. Cash Payment</b>	<b>183</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
2.1 Interest Expense	–	1373	1632	1621	–
2.2 Staffs Expenses	1247	300	398	475	1964
2.3 Office Operating Expenses	256	168	200	224	522
2.4 Exchange fluctuation Loss	148	188	208	207	250
2.5 Non Operating Expense	167	–	–	–	–
2.6 Income tax Paid	2	–	–	–	–
2.7 Other Expenses	673	450	496	331	–
<b>Cash flow from before change in Working Capital</b>	<b>–</b>	<b>265</b>	<b>330</b>	<b>385</b>	<b>441</b>
<b>(Increase)/Decrease of Current Assets</b>	<b>–</b>	<b>(659)</b>	<b>(69)</b>	<b>240</b>	<b>496</b>
1.(Increase)/Decrease in Bank Balance	920	(611)	(1352)	–	–
2.(Increase)/Decrease Money at Call	(41)	282	216	-4364	234
3.(Increase)/Decrease Other short term Investment	1658	–	–	-436	142
4. (Increase)/Decrease Loan, advance & bill purchase	(1729)	(791)	(1590)	(3255)	44
5.(Increase)/Decrease other assets	(862)	(102)	22	-673	–
<b>Increase/(Decrease) of Current Liabilities</b>	<b>–</b>	<b>3675</b>	<b>2504</b>	<b>4078</b>	<b>48</b>
1.Increase/(Decrease) in Deposit	(1826)	3698	–	5097	6551
2.Increase/(Decrease) in Certificates of Deposit	–	–	1586	–	6128
3.Increase/(Decrease) in short Term Borrowings	–	(28)	380	(349)	–
4.Increase/(Decrease) in Other Liabilities	117	–	–	–	286
5.Bills Payable	3	5	538	(670)	138
<b>B. Cash flow from Investing Activities</b>	<b>1670</b>	<b>-2241</b>	<b>-42</b>	<b>-17</b>	<b>-5590</b>
1.(Increase)/Decrease in Long Term Investment	–	(3145)	(715)	(324)	(6333)
2.(Increase)/Decrease in Fixed Assets	1	(48)	(33)	(14)	(24)
3. Interest Income from Long Term Investment	–	952	327	320	365
4. Dividend Income	–	0.9	0.2	1	2
5. Others	–	–	–	–	–
<b>C. Cash Flow from Financing Activities</b>	<b>(1968)</b>	<b>–</b>	<b>1</b>	<b>0.9</b>	<b>0.7</b>
1.Increase/(Decrease) in Long term Borrowings	(22)	–	–	–	–
2.Increase/(Decrease) in Share Capital	–	–	1	0.9	0.7
3.Increase/(Decrease) in Refinancing/Facilities received from	–	–	–	–	–
4.Other Liabilities	–	–	–	–	–
<b>D.Income/(Loss) from Change in Exchange Rate in cash</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>E. Current Year's Cash Flow from all Activities</b>	<b>8</b>	<b>165</b>	<b>745</b>	<b>29</b>	<b>1087</b>
<b>F.Opening Cash and Bank Balance</b>	<b>188</b>	<b>1111</b>	<b>1276</b>	<b>2021</b>	<b>2050</b>
<b>G. Closing Cash and Bank Balance</b>	<b>196</b>	<b>1276</b>	<b>2021</b>	<b>2050</b>	<b>3137</b>

(Source: Annual Report of Related Bank 2010)

The most commonly used format for the cash flow statement is broken down into two sections: cash flows from operating activities, cash flows from investing activities, and cash flows from financing activities.

**i) Cash from Operating Activity**

Operating activities include the production, sales and delivery of the company's product as well as collecting payment from its customers. This could include purchasing raw materials, building inventory, advertising, and shipping the product. Cash flow from operating includes all the cash flow from transaction that is not defined as investing or financing activities.

While observing the operating activity of these two banks from the above Table, NABIL Bank is decreasing its operating activities in the year 2005/06, 2006/07, 2007/08, 2008/09 and 2009/010 i.e. 1512 million, 1031 million, 544 million, 1504 million and 1726 millions but NABIL Bank increased its operating activities in the year 2009/010 i.e. 1726 millions. While SCBNL operating activities is in fluctuating i.e. 2005/06 is 306 million, 2006/07 is (659) million , 2007/08 is 1093 million , 2008/09 is(45) million and 2009/010 is 6949 million. Whereas 2009/010 operating activities is highest than other year .Same as,

**ii) Cash from Investing Activity**

Cash flow from investing activities includes capital expenditures – disbursements that are not charged to expense but rather are capitalized as assets on the balance sheet. It is used to determine the non- current item of comparative balance sheets.

These cash flows could include, Purchases of property, plant and equipment Proceeds from the sale of property, plant and equipment, Purchases of stock or other securities (other than cash equivalents), Proceeds from the sale or redemption of investments.

From the above Table, NABIL investing activities in the year 2005/06 is (581) million,

2008/09 is (472) million and 2009/010 is (1084) million. Which recover its investing activities in the year 2006/07 i.e. 225 million? Whereas, SCBNL investing activities in the year 2004/05 is 1670 million this is the highest. But, in rest of the year 2005/06 is (2241) million, 2006/07 is (42) million, 2007/08 is (17) million and in the year 2008/09 is (5590) million. SCBNL has the lowest investing activities.

### **iii) Cash from Financing Activities**

Financing activities include the inflow of cash from investors such as banks and shareholders, as well as the outflow of cash to shareholders as dividend as the company generates income. Other activities which impact the long-term liabilities and equity of the company are also listed in the financing activities section of the cash flow statement.

Financing activities include cash flows relating to the business's debt or equity financing: Proceeds from loans, notes, and other debt instruments, Installment payments on loans or other repayment of debts, Cash received from the issuance of stock or equity in the business, Dividend payments, purchases of treasury stock, or returns of capital.

From observing the above table, NABIL shows the financing activities only in the year 2005/06. (256)million, 2006/07 is nill, 2008/09 (240) million and 2009/10 (60) million. Same as, SCBNL shows its financing activities in the year 2005/06 is (1968) million, 2007/08 is 1 million, 2008/09 is 0.9 million and 2009/010 is 0.7 million. But, there is nil financing activities in the year 2006/07.

## **4.5 Trend Series Analysis**

### **i) Trend Analysis of Dividend Per Share**

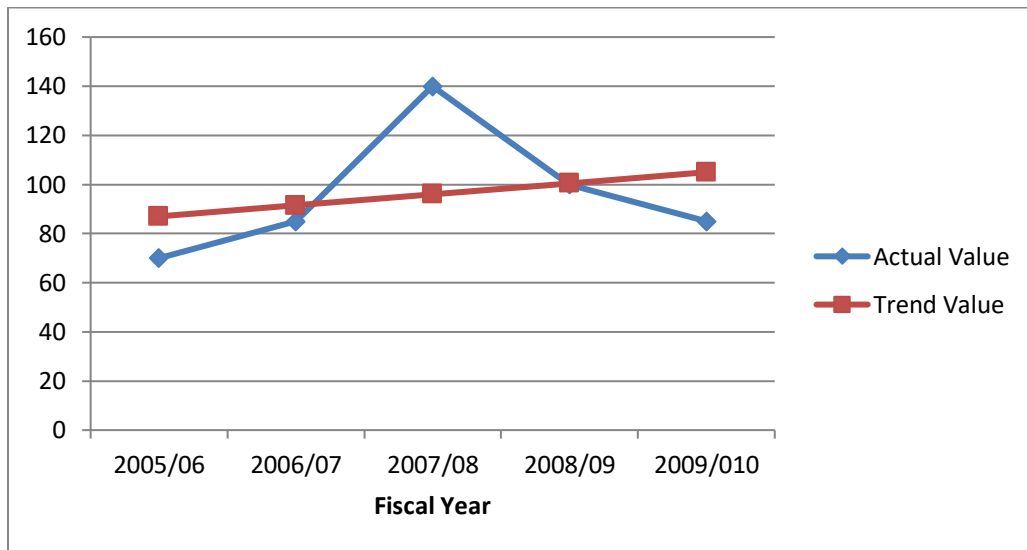
Analysis of DPS is an important indicator to know the part of earning distributed to the shareholders on per share basis. So, researcher is going to analyze the trend movement of DPS whether the trend movement is satisfactory or not by taking the relevant data.

**Table 4.12**  
**The Actual and Trend Value of Dividend per Share of NABIL Bank**  
**For The FY 2005/06 to 2009/010**

Fiscal Year	Actual Value	Trend Value
2005/06	70	87
2006/07	85	91.5
2007/08	140	96
2008/09	100	100.5
2009/010	85	105

*Source: Annex -1*

**Figure- 4.1**  
**Actual and Trend value of Dividend per share of Nabil Bank ltd.**

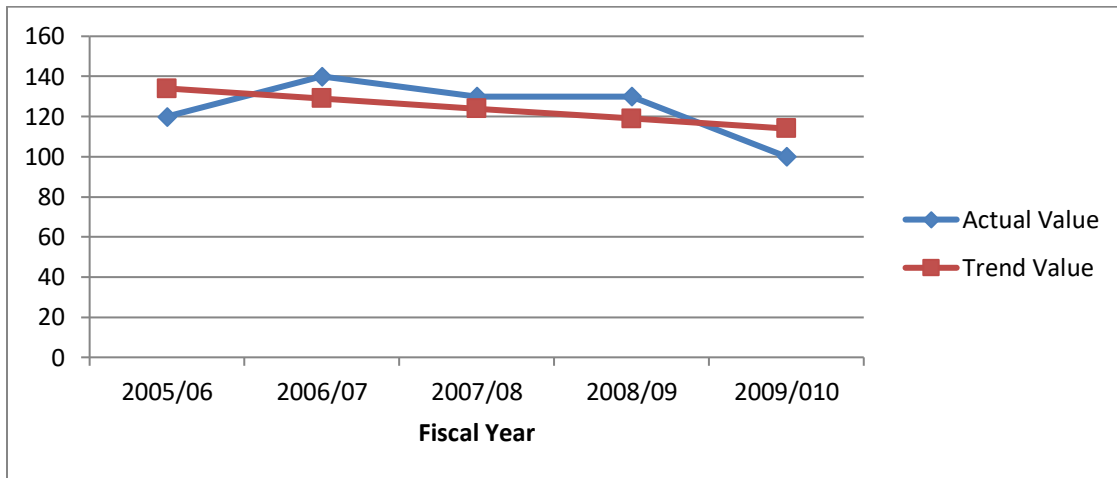


**Table 4.13**  
**The Actual and Trend Value of Dividend per Share of SCBNL Bank**  
**For The FY 2005/06 to 2009/010**

Fiscal Year	Actual Value	Trend Value
2005/06	120	134
2006/07	140	129
2007/08	130	124
2008/09	130	119
2009/010	100	114

*Source: Annex -22*

**Figure-4.2**  
**Actual and Trend value of Dividend per share of SCBNL.**



The trend equation of DPS if NABIL us  $Y=96+4.5x$ , SCBNL is  $Y=124+ (-5) x$ . Where, Y and x are denoted for DPS and time variable respectively. The Y intercept is the average amount of DPS of five year period. Y intercept of NABIL, SCBNL are 96, 124 respectively. Slope trend of NABIL, SCBNL were 4.5, and -5, respectively. The slope trend of NABIL Bank's Fiscal Year 2005/06 to Fiscal Year 2013/14 is in increasing ratio. Whereas the slope trend of SCBNL DPS is in decreasing ratio. In comparison of two banks NABIL Bank has high increasing ratio than SCBNL Bank. The table clearly reveals that the actual amount of NABIL's DPS in the year 2005/06 was 70 then it reached to 85 in the year 2009/10. Similarly the trend value of DPS was 87 and had

amount to 105 with annual increase of 4.5. Same as, the table defined that the actual amount of SCBNL's DPS in the year 2005/06 was 120 then it reached to 100 in the year 2009/010. Similarly, the trend value of DPS of SCBNL was 134 and had amount to 114 with annual increase of (-5).

**ii) Trend Analysis of Earning Per Share**

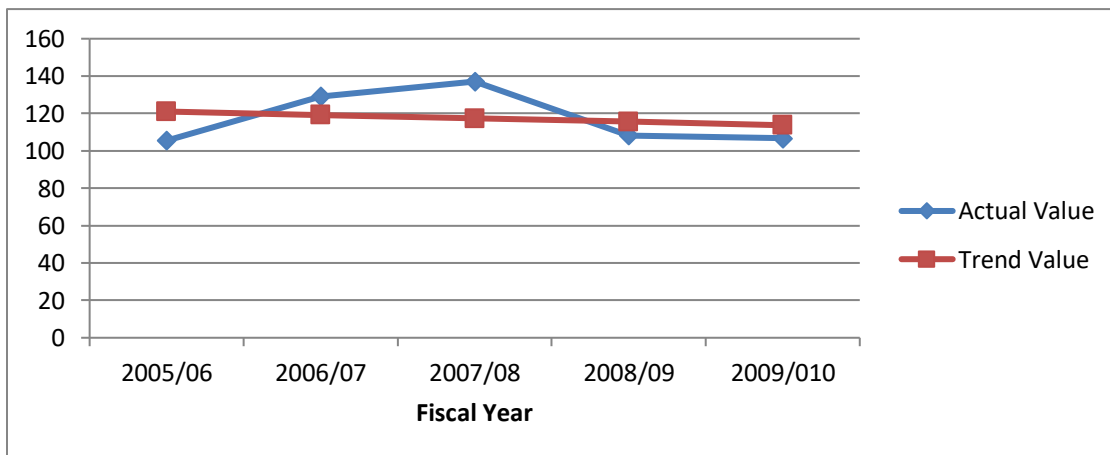
An analysis of the earning helps the management, shareholders and depositors to evaluate the performance of the banks, sustainability of earnings and to forecast growth of the bank. So, researcher is going to analysis the trend movement of EPS of five year

**Table 4.14**  
**The Actual and Trend Value of Earning Per Share of NABIL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	105.49	121.042
2006/07	129.21	119.206
2007/08	137.08	117.37
2008/09	108.31	115.534
2009/010	106.76	113.698

Source: Annex -3

**Figure-4.3:**  
**Actual and Trend Value of Earning Per Share of NABIL Bank**



**Table 4.15**

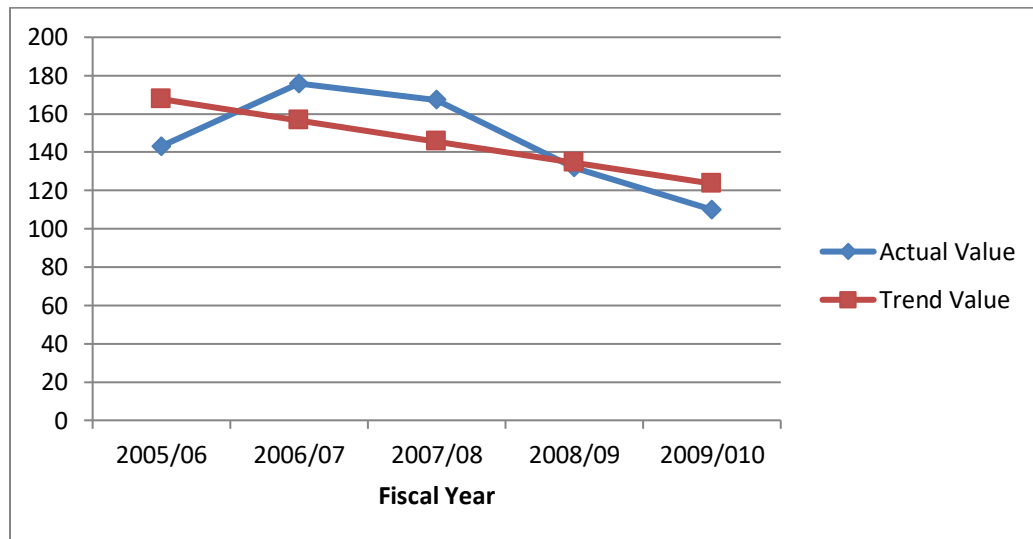
**The Actual and Trend Value of Earning Per Share of SCBNL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	143.14	167.694
2006/07	175.84	156.672
2007/08	167.37	145.65
2008/09	131.92	134.628
2009/010	109.99	123.606

*Source: Annex -4*

**Figure-4.4**

**Actual and Trend Value of Earning Per Share of SCBNL**



The trend equation of DPS of NABIL, and SCBNL is  $Y=117.37+ (-1.836) x$ , and  $Y=145+(-11.022)x$ . Where Y and x are denoted for EPS and time variable respectively. The Y intercept is the average amount of EPS of five year period. Y intercepts NABIL and SCBNL were 117.37 and 145 respectively. The slope trends which indicate the EPS of all two banks were in decreasing trend. The table has defined that the actual amount of NABIL's EPS in the year 2005/06 was 105.49 then it reached to 106.76 in the year 2009/010. Similarly, the trend value of EPS of NABIL was 121.042 and had amount to 113.698 with annual increase of (-1.836). Same as, SCBNL table defined that the actual amount of SCBNL's EPS in the year 2005/06 was 143.14 then it reached to 109.99 in the

year 2009/010. Similarly, the trend value of EPS of SCBNL was 167.694 and had amount to 123.606 with annual increase of (-11.022).

### Trend Analysis of Dividend Payout Ratio

It analyzes the amount of earnings paid out in dividends to shareholders. Investors can use the payout ratio to determine what companies are doing with their earnings the meaning behind Dividend payout ratio (DPR) is the money that is paid out in the form of dividends by the company to its shareholders. Here, researcher is trying to analysis the trend movement of DPR of five year.

**Table 4.16**

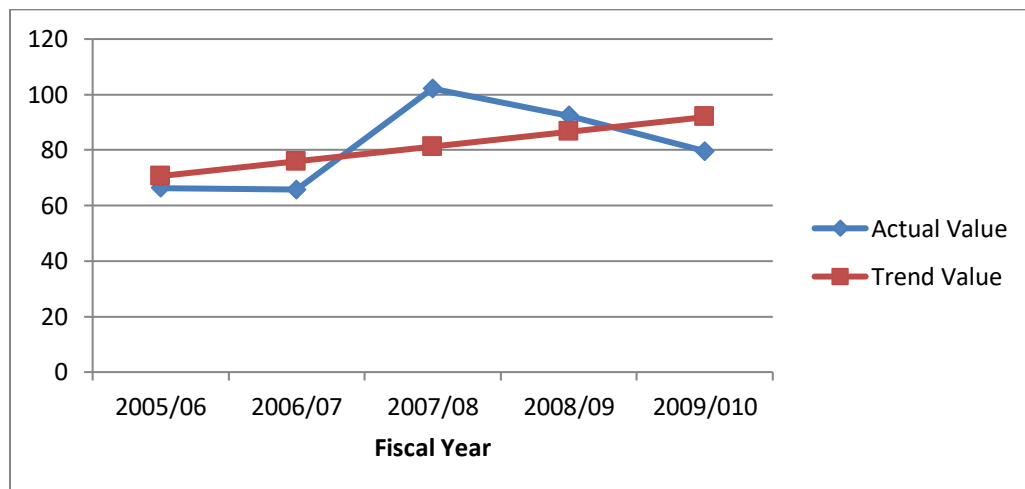
**The Actual and Trend Value of Dividend Pay Out Ratio of NABIL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	66.36	70.63
2006/07	65.78	75.937
2007/08	102.13	81.244
2008/09	92.33	86.551
2009/010	79.62	91.858

*Source: Annex -5*

**Figure-4.5:**

**Actual and Trend Value of Dividend Pay Out Ratio of NABIL Bank**



**Table 4.17**

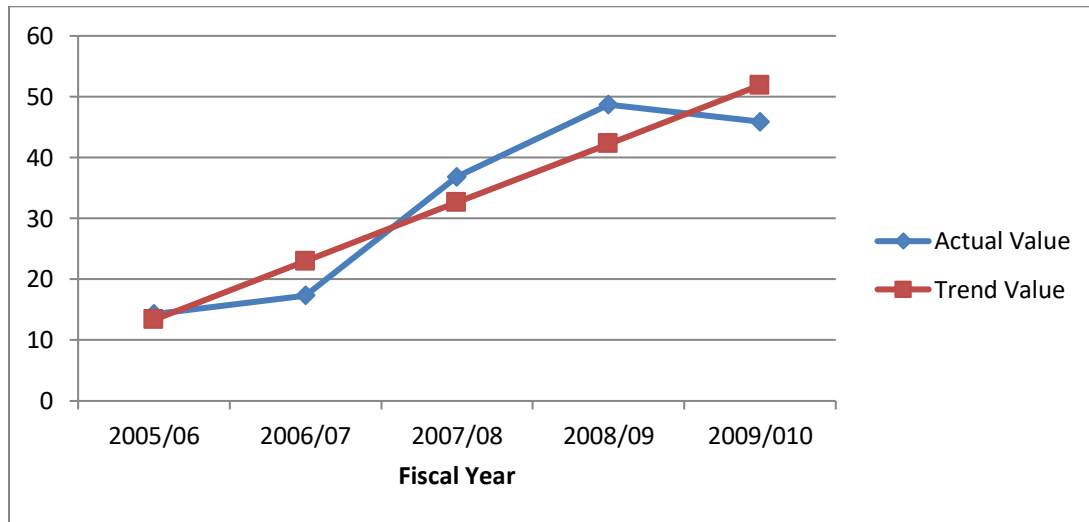
**The Actual and Trend Value of Dividend Pay Out Ratio of SCBNL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	83.83	79.5
2006/07	79.62	82.81
2007/08	77.67	86.12
2008/09	98.54	89.43
2009/010	90.92	92.74

*Source: Annex-6*

**Figure-4.6:**

**Actual and Trend Value of Dividend Pay Out Ratio of SCBNL Bank**



The trend equation of DPR of NABIL and SCBNL is  $Y=81.244+5.307x$ ,  $Y=86.12+3.31x$ . Where Y and x are denoted for DPR and time variable respectively. The Y intercept is the average amount of DPR of five year period. Y intercepts NABIL and SCBNL were 81.244, 86.12 respectively. The slope trends which indicate the DPR of all two banks were in decreasing trend. The table has defined that the actual amount of NABIL's DPR in the year 2005/06 was 66.36 then it reached to 79.62 in the year 2009/010. Similarly, the trend value of DPR of NABIL was 70.63 and had amount to 91.858 with annual increase of 5.307. Same as, SCBNL table defined that the actual amount of SCBNL's DPR in the year 2005/06 was 83.83 then it reached to 90.92 in the year 2009/010. Similarly, the trend value of DPR of SCBNL was 79.5 and had amount to 92.74 with annual increase of 3.32 whereas.

### Trend Analysis of PE-Ratio

PE-Ratio indicates how much investors are willing to pay per dollar of current earnings. As such, high PE-Ratio is associated with growth stocks (Investors who are willing to pay a high price for dollars of current earnings obviously expect high earnings in the future). In this manner, the PE-Ratio also indicates how expensive a particular stock is. It analyzes the current market price per share of the stock by earnings per share. Here, is the trend movement of PE Ratio of five year that analyze by the researcher.

**Table- 4.18**

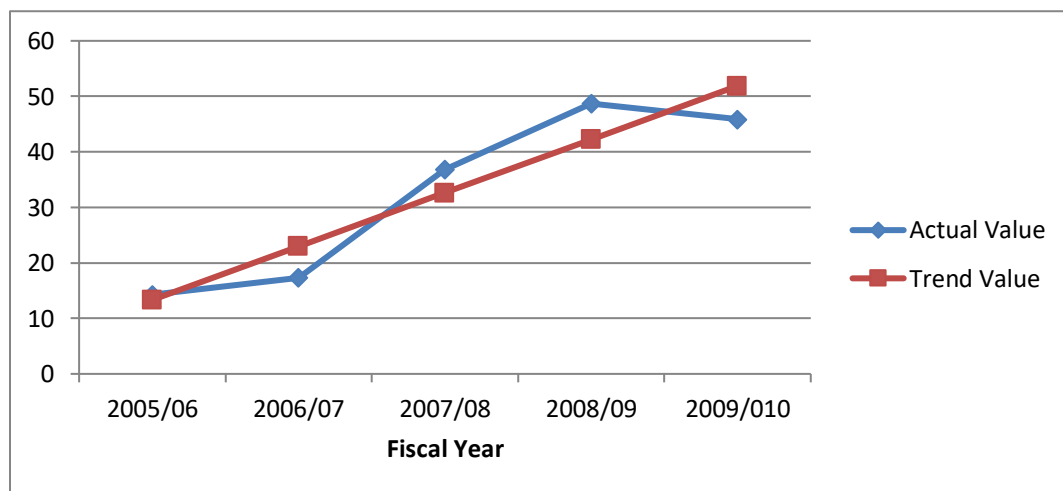
**The Actual and Trend Value of PE-Ratio of NABIL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	14.27	13.33
2006/07	17.34	22.97
2007/08	36.84	32.61
2008/09	48.7	42.25
2009/010	45.89	51.89

*Source: Annex -7*

**Figure- 4.7**

**Actual and Trend Value of PE-Ratio of NABIL Bank**



**Table 4.19**

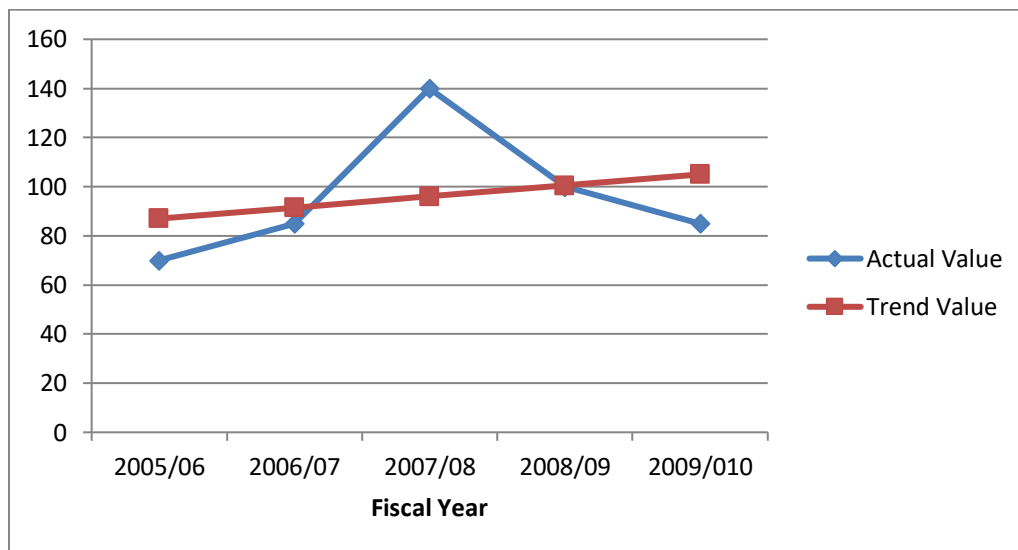
**The Actual and Trend Value of PE-Ratio of SCBNL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	16.38	14.538
2006/07	21.47	25.22
2007/08	35.25	35.902
2008/09	51.77	46.584
2009/010	54.64	57.266

*Source: Annex - 8*

**Figure-4.8:**

**Actual and Trend Value of PE-Ratio of SCBNL Bank**



The trend equation of PE-Ratio of NABIL and SCBNL is  $Y=32.61+9.46x$ ,  $Y=35.902+10.682x$ . Where Y and x are denoted for PE-Ratio and time variable respectively. The Y intercept is the average amount of PE-Ratio of five year period. Y intercept NABIL and SCBNL were 32.61 and 35.902 respectively. The slope trend which indicate that the PE-Ratio of all two banks' were in decreasing trend. The table has defined that the actual amount of NABIL's PE-Ratio in the year 2005/06 was 14.27 then it reached to 45.89 in the year 2009/010. Similarly, the trend value of PE-Ratio of NABIL was 13.33 and had amount to 51.89 with annual increase of 9.46. Same as, SCBNL table

defined that the actual amount of SCBNL’s PE-Ratio in the year 2005/06 was 16.38 then it reached to 54.64 in the year 2009/010. Similarly, the trend value of PE-Ratio of SCBNL was 14.538 and had amount to 57.266 with annual increase of 10.682.

**iii) Trend Analysis of Dividend Yield**

It shows how much a company pays out in dividends each year relative to its share price. In the absence of any capital gains, the dividend yield is the return on investment for a stock. It tells us what percentage of our purchase price the company will return to us in dividends. Here, i have analyzed the trend movement of Dividend Yield of five years.

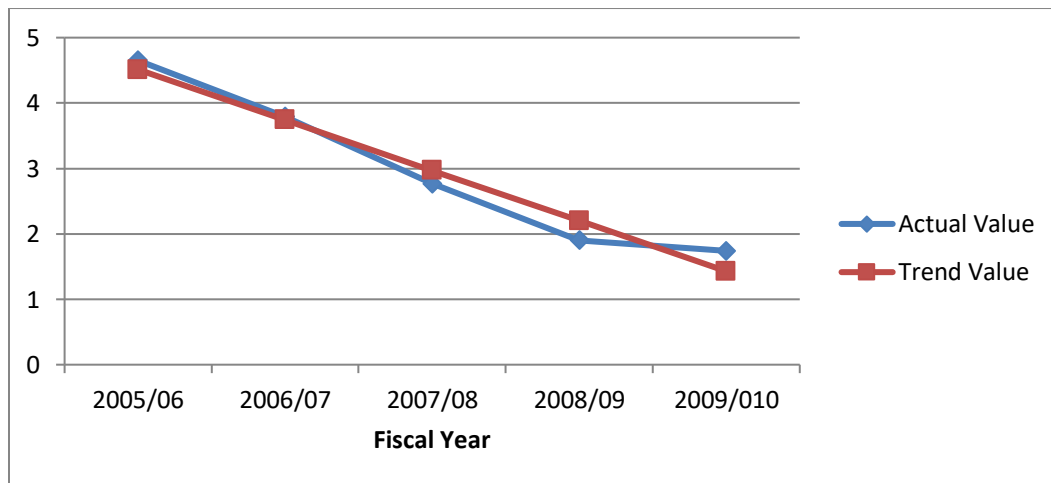
**Table 4.20**  
**The Actual and Trend Value of Dividend Yield of NABIL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	4.65	4.512
2006/07	3.79	3.741
2007/08	2.77	2.97
2008/09	1.9	2.199
2009/010	1.74	1.428

*Source: Annex- 9*

**Figure-4.9:**

**Actual and Trend Value of Dividend Yield of NABIL Bank**



**Table 4.21**

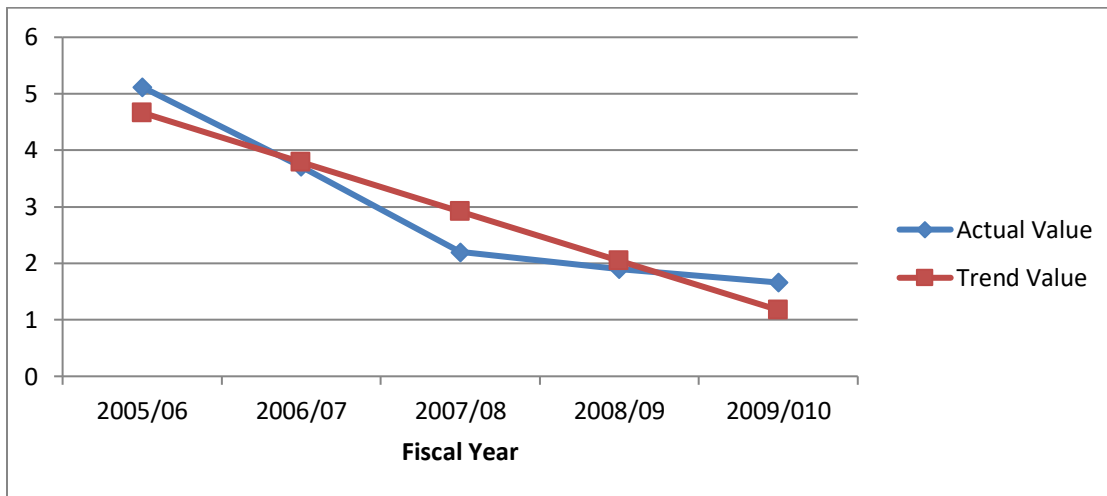
**The Actual and Trend Value of Dividend Yield of SCBNL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	5.12	4.666
2006/07	3.71	3.793
2007/08	2.2	2.92
2008/09	1.9	2.047
2009/010	1.66	1.174

*Source: Annex -10*

**Figure-4.10:**

**Actual and Trend Value of Dividend Yield of SCBNL Bank**



The trend equation of Dividend Yield of NABIL and SCBNL is  $Y=2.97+ (-0.771) x$  and  $Y=2.92+ (-0.873) x$  .where Y and x are denoted for Dividend Yield and time variable respectively. The Y intercept is the average amount of Dividend Yield of five year period. Y intercepts NABIL and SCBNL were 2.97 and 2.92 respectively. The slope trend which indicate that the Dividend Yield of all two banks' were in decreasing trend. The table has defined that the actual amount of NABIL's Dividend Yield in the year 2005/06 was 4.65 then it reached to 1.74 in the year 2009/010. Similarly, the trend value of Dividend Yield of NABIL was 4.512 and had amount to 1.428 with annual increase of (-0.771). Same as, SCBNL table defined that the actual amount of SCBNL's Dividend

Yield in the year 2005/06 was 5.12 then it reached to 1.66 in the year 2009/010. Similarly, the trend value of Dividend Yield of SCBNL was 4.666 and had amount to 1.174 with annual decrease of (-0.873)

### Trend Analysis of Liquidity Ratio

A liquidity ratio measures a company's ability to pay its bills. It determines a company's ability to pay off its short-terms debts obligations. Generally, the higher the value of the ratio, the larger the margin of safety of the company possesses to cover short-term debts. I have analyzed the trend movement of the Liquidity Ratio of five year.

**Table 4.22**

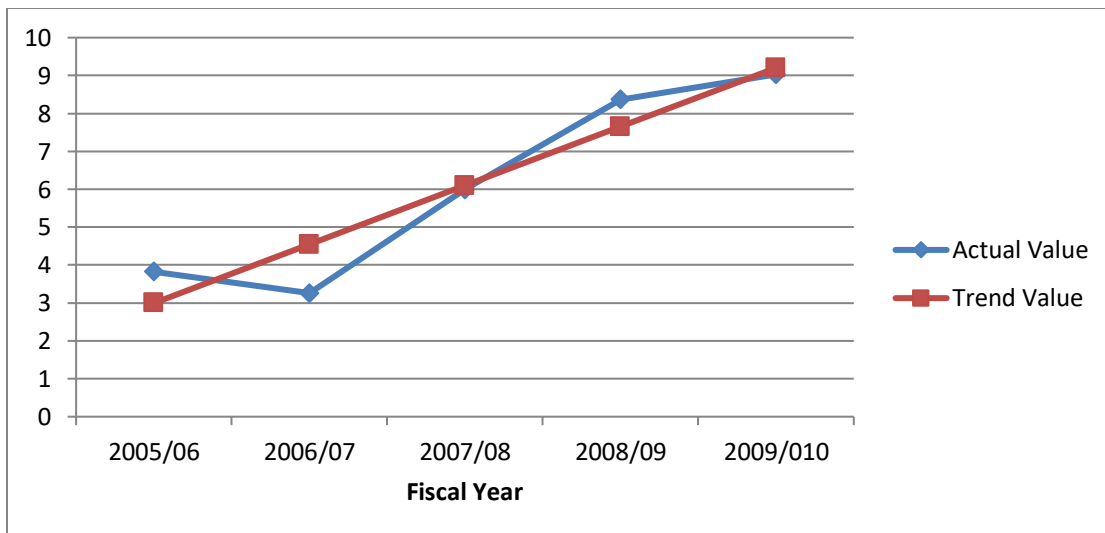
**The Actual and Trend Value of Liquidity Ratio of NABIL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	3.83	2.996
2006/07	3.26	4.547
2007/08	6	6.098
2008/09	8.37	7.649
2009/010	9.03	9.2

*Source: Annex- 11*

**Figure- 4.11**

**Actual and Trend Value of Liquidity Ratio of NABIL Bank**



**Table 4.23**

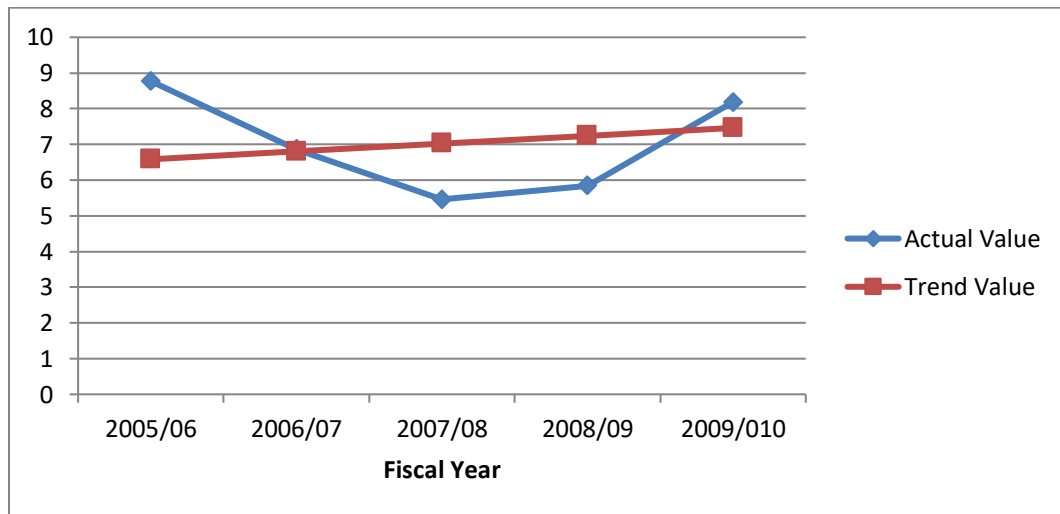
**The Actual and Trend Value of Liquidity Ratio of SCBNL Bank**

Fiscal Year	Actual Value	Trend Value
2005/06	8.77	6.582
2006/07	6.86	6.802
2007/08	5.46	7.022
2008/09	5.84	7.242
2009/010	8.18	7.462

*Source: Annex- 12*

**Figure-4.12:**

**Actual and Trend Value of Liquidity Ratio of SCBNL Bank**



The trend equation of Liquidity Ratio of NABIL and SCBNL is  $Y=6.098+1.551x$ ,  $Y=7.022+0.22x$  .where Y and x are denoted for Liquidity Ratio and time variable respectively. The Y intercept is the average amount of Liquidity Ratio of five year period. Y intercepts NABIL and SCBNL were 6.098, 7.022 respectively. The slope trend which indicate that the Liquidity Ratio of all two banks' were in decreasing trend. The table has defined that the actual amount of NABIL's Liquidity Ratio in the year 2005/06 was 3.83 then it reached to 9.03 in the year 2009/010. Similarly, the trend value of Liquidity of NABIL was 2.996 and had amount to 9.2 with annual increase of 1.551. Same as, SCBNL table defined that the actual amount of SCBNL's Liquidity Ratio in the year 2005/06 was 8.77 then it reached to 8.18 in the year 2009/010. Similarly, the trend value of Liquidity Ratio of SCBNL was 6.582 and had amount to 7.462 with annual increase of

**Future Trend Analysis of DPS, EPS, DPR, PE-RATIO, Div. Yield, Liq. Ratio of  
NABIL Bank, SCBNL Bank**

**DPS NABIL**

YEAR	x	$Y=96+4.5x$
2005/06	-2	87
2006/07	-1	91.5
2007/08	0	96
2008/09	1	100.5
2009/010	2	105
2010/11	3	109.5
2011/12	4	114
2012/13	5	118.5
2013/14	6	123
2014/15	7	127.5

**DPS SCBNL**

YEAR	X	$Y=124+(-5)x$
2005/06	-2	134
2006/07	-1	129
2007/08	0	124
2008/09	1	119
2009/010	2	114
2010/11	3	109
2011/12	4	104
2012/13	5	99
2013/14	6	94
2014/15	7	89

**EPS NABIL**

YEAR	x	$Y=117.37+(-1.836)x$
	-	
2005/06	2	121.042
	-	
2006/07	1	119.206
2007/08	0	117.37
2008/09	1	115.534
2009/010	2	113.698
2010/11	3	111.862
2011/12	4	110.026
2012/13	5	108.19
2013/14	6	106.354
2014/15	7	104.518

**EPS SCBNL**

YEAR	x	$Y=145.65+(-11.022)x$
	-	
2005/06	2	167.694
	-	
2006/07	1	156.672
2007/08	0	145.65
2008/09	1	134.628
2009/010	2	123.606
2010/11	3	112.584
2011/12	4	101.562
2012/13	5	90.54
2013/14	6	79.518
2014/15	7	68.496

**DPR NABIL**

YEAR	x	Y=81.244+5.307x
2005/06	2	70.63
2006/07	1	75.937
2007/08	0	81.244
2008/09	1	86.551
2009/010	2	91.858
2010/11	3	97.165
2011/12	4	102.472
2012/13	5	107.779
2013/14	6	113.086
2014/15	7	118.393

**PE. RATO NABIL**

YEAR	x	Y=32.61+9.46x
2005/06	2	13.33
2006/07	1	22.97
2007/08	0	32.61
2008/09	1	42.25
2009/010	2	51.89
2010/11	3	61.53
2011/12	4	71.17
2012/13	5	80.81
2013/14	6	90.45
2014/15	7	100.09

**DPR SCBNL**

YEAR	x	Y=86.12+3.31x
2005/06	2	79.5
2006/07	1	82.81
2007/08	0	86.12
2008/09	1	89.43
2009/010	2	92.74
2010/11	3	96.05
2011/12	4	99.36
2012/13	5	102.67
2013/14	6	105.98
2014/15	7	109.29

**PE. TATIO SCBNL**

YEAR	X	Y=35.902+10.682x
2005/06	-2	14.538
2006/07	-1	25.22
2007/08	0	35.902
2008/09	1	46.584
2009/010	2	57.266
2010/11	3	67.948
2011/12	4	78.63
2012/13	5	89.312
2013/14	6	99.994
2014/15	7	110.676

**DIV.YIELD NABIL**

YEAR	x	$Y=2.97+(-0.771)x$
2005/06	-2	4.512
2006/07	-1	3.741
2007/08	0	2.97
2008/09	1	2.199
2009/010	2	1.428
2010/11	3	0.657
2011/12	4	-0.114
2012/13	5	-0.885
2013/14	6	-1.656
2014/15	7	-2.427

**DIV.YIELD SCBNL**

YEAR	x	$Y=2.92+(-0.873)x$
2005/06	-2	4.666
2006/07	-1	3.793
2007/08	0	2.92
2008/09	1	2.047
2009/010	2	1.174
2010/11	3	0.301
2011/12	4	-0.572
2012/13	5	-1.445
2013/14	6	-2.318
2014/15	7	-3.191

**LIQ- RATIO NABIL**

YEAR	x	$Y=6.098+1.551x$
2005/06	-2	2.996
2006/07	-1	4.547
2007/08	0	6.098
2008/09	1	7.649
2009/010	2	9.2
2010/11	3	10.751
2011/12	4	12.302
2012/13	5	13.853
2013/14	6	15.404
2014/15	7	16.955

**LIQ- RATIO SCBNL**

YEAR	x	$Y=7.022+0.22x$
2005/06	-2	6.582
2006/07	-1	6.802
2007/08	0	7.022
2008/09	1	7.242
2009/010	2	7.462
2010/11	3	7.682
2011/12	4	7.902
2012/13	5	8.122
2013/14	6	8.342
2014/15	7	8.562

## 4.5 Profitability Ratio

Table-4.32

Profitability Ratio of NABIL Bank and SCBNL Bank

For the FY 2005/06 to 2009/010

Year	NABIL	SCBNL
2005/06	34.294	40.604
2006/07	22.606	24.945
2007/08	24.899	25.585
2008/09	30.998	25.148
2009/010	26.969	24.864

(Source: Annual report of related bank 2009/10)

The above table 4.32 shows profitability ratio which indicates the degree of success in achieving desired profit level. A firm should earn profit to survive. Profit is the major thing that is to **anal** size to know the financial position of any firm. Profitability ratio indicates the degree of success in achieving desired profit level. In the year 2005/06.

## 4.6 Major findings of the Study

1. Dividends per share of all concerned banks are satisfactory. SCBNL paid the highest average DPS to its shareholders Rs. 124.
2. Average earning per share for the period covered by the study is also satisfactory. At the same time, average EPS of SCBNL is highest Rs.145.65.
3. Analysis of coefficient of variation indicates that there are fluctuations in DPS. On the other hand, EPS of NABIL, SCBNL.
4. At the same time, coefficient of variation of NABIL is the highly variation in the PE Ratio.
5. In average, SCBNL followed aggressive dividend payout ratio, on other hand, NABIL applied moderate pay-out ratio, followed conservative dividend pay-out Ratio. In other word, dividend payout ratio shows that none of the banks exhibit consistent. SCBNL is remarkable here in the sense of its DPR which is the highest and most consistent of all. All the same time, The analysis of dividend payout ratio is one of the hallmarks of our study which help us to find out dividend

payout dividend policy adopted by the mentioned banks.

6. From the coefficient of variation, the market value of shares in the market is fluctuating in all sample banks. The coefficient of variation is most fluctuating SCBNL is most consistent in market value per share (MVPS). As far as dividend yield analyses are concerned, the highest dividend yield is associated with NABIL, 2.97%, on average. As for the pooled average show 2.68%, on the other hand, the highest variation in the dividend yield is associated with dividend yield of NABIL is more consistent (37.45).
7. Correlation between DPS and MVPS of NABIL Bank is positive but DPS and MVPS of SCBNL is negative. Correlation between EPS and MVPS of NABIL Bank is positive, where as correlation between EPS and MVPS of SCBNL is negative. Same as, correlation between PE-Ratio and MVPS of NABIL, and SCBNL were positive. Correlation between DPR and MVPS of all two banks are positive. But correlate between Divided Yield and MVPS of NABIL Bank is positive except other two banks. Same as, correlation between Liquidity Ratio of NABIL Bank are positive but SCBNL is negative.
8. Cash flow analysis, as we know that cash is measure things for every enterprises entrepreneur should think about the cash availability before establishing any enterprises. So a business must have an adequate amount of cash to operate. As such decision makes must pay close attention to firm's cash position to change. There are different source cash inflow and different source where cash are used as cash. There are two parts in cash flows statement i.e. are cash flow from operating activity, cash flow from investing activity and cash flow from financing activity. In year 2008/09 bank is able to raise its cash balance to 1313 million. In the year, 2009/010, the bank is still in increasing trend which is 4163 million. Analyzing the net cash flow of banks is in good conditions of bank it able to pay its debt whenever it need.

In comparison in second, we found SCBNL's maintenance is also good. But we can found there is lots of fluctuation in maintaining its cash balance. In the

year 2005/06, SCBNL maintain very low cash balance i.e. 8 million. In the year 2006/07, SCBNL increase little bit better than the previous year but 165 million. Same as in the 2007/08, bank is able to maintain its balance of 745 million. Which is highest than previous year. But in the year 2008/09, its net cash is highly decreases and reached to 29 million. In the year 2009/010, SCBNL is able to rise its cash balance up to 1087 million. Analyzing the cash flow of bank is in a good condition but not good. It is able to maintain its cash balance but there is lot of fluctuation.

On the other hand, NABIL bank not good to maintain its cash balance than and SCBNL bank. In the year 2005/06, we can found loss of (141) million where in the year 2006/07, there is NIL. In the year 2007/08, bank is able to increase its cash balance i.e. 770 million. Same as, in the year 2008/09, there is high increasing in cash balance where bank can maintain its balance of 1271 million. But in the year 2009/010, there is slightly decrease in its cash balance by 701 million. Analyzing the net cash flow of NABIL bank is not so good than other two banks

10. Profitability Ratio indicated the degree of success in achieving desired profit level. A firm should earn profit to survive. Profit is the major thing that is to analyze to know the financial position of any firm. Profitability ratio indicates the degree to success in achieving desired profit level. Same as, in the year, 2006/07, 2007/08, 2008/09 is having higher profitability ratio in comparison of two banks. i.e. 38.4%, 34.67%, 34.65%. But in the year 2009/010, NABIL is able to earn highest profit then others two banks.

## **CHAPTER-V**

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

This chapter focuses on some selected action oriented findings, conclusion and recommendation on the basis of analysis which are derived from the two joint venture banks.

#### **5.1 SUMMARY:**

Dividend serves as a sample, comprehensive signal of management's interpretation of the firm's recent performance and its future prospects. Dividends refer to that portion of a firm's net earnings which are paid out to the share holders in return to their investment. Paying dividend to shareholders is an effective way to attract new investors to invest in shares.

Most of the things about dividend policy and brief introduction of this study have been already presented in the first chapter. In the second chapter, the available literatures related to dividend policy are reviewed. Moreover, research methodology is described in third chapter. All the available data are presented and analyzed in the fourth chapter. In the final chapter, an attempt has been made to present summary, findings, conclusion and recommendation.

Among many commercial banks, two banks named by NABIL, and SCBNL are selected for study for the fiscal year 2005/06 to 2009/010.

The main objective of the study is to see the relationship of dividend per share, earning per share, dividend payout ratio, dividend yield, liquidity ratio and profitability ratio on market price per share. The study has revealed the following facts.

#### **5.2 CONCLUSIONS:**

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.

In case of Trend Analysis the study of trend allows describing a historical pattern and projecting past pattern or trends into the future. So, trend analysis is done in this study to now the trend of past as well as future.

Trend Analysis of DPS of NABIL Bank shows that the trend of DPS is in increasing in past but SCBNL Bank shows that the trend of DPS is in decreasing in past. The increasing trend of NABIL Bank is 4.5 and decreasing trend of SCBNL Bank is (-5). This shows increasing trend of NABIL bank is high than SCBNL Banks. The Trend shows that DPS of NABIL Bank is going to increasing in coming years.

Trend Analysis of EPS of two Banks is in decreasing trend i.e. NABIL by -1.836, SCBNL by -11.022. This shows that there is decreasing trend in future too.

Trend Analysis of DPR of two Banks is in increasing trend i.e. NABIL by 5.307, SCBNL by 3.31. This trend shows all two banks can analyze the amount of earnings paid out in dividends to shareholders in future.

Same as, Trend Analysis of PE-Ratio of two banks are in increasing trend i.e. NABIL by 9.46, and SCBNL by 10.682. This shows that in future these banks analyze the current market price per share of the stock by earnings per share.

Trend Analysis of Dividend Yield of two banks is in decreasing trend. So, It tells us the purchase price return to us in dividend is low.

Trend Analysis of Liquidity Ratio of NABIL and SCBNL are in increasing trend by 1.551 and 0.22 whereas .It shows NABIL and SCBNL ability to pay its bills is good in comparison.

### **5.3 RECOMMENDATIONS:**

1. Most the banks have had great fluctuation in coefficient of variation (C.V) of DPS, EPS, DPR, Dividend Yield, Share Price and PE Ratio. It should be necessary decrease in fluctuation and become consistent in these variables.
2. The practices of dividend payment adopted by the banks are 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.
3. Payment of dividend is neither static nor constantly growing. It is highly fluctuating. Such way of paying dividend could not impress the market positively. So, these banks are advised to follow either static or constantly growing dividend 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.
4. Formulation of dividend policy will clearly guide the way on how to follow dividend distribution strategy. The policy should determine whether the company is going to adopt stable dividend policy, constant pay out 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.
5. 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.

**Annex- 1**

**Dividend per Share (DPS)**

**NABIL**

<b>Year</b>	<b>(X)</b>	<b>X<sup>2</sup></b>
2005/06	70	4900
2006/07	85	7225
2007/08	140	19600
2008/09	100	10000
2009/10	85	7225
	$\sum X = 480$	$\sum X^2 = 48950$

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

Where,

$$\sum X = 480, n = 5$$

$$\bar{X} = \frac{480}{5} = 96$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{48950}{5} - \left(\frac{480}{5}\right)^2}$$

$$(\sigma) = \sqrt{9790 - 9216} = \sqrt{514} = 23.95$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{23.95}{96} \times 100\% = 24.97\%$$

**SCBNL**

<b>Year</b>	<b>X</b>	<b>X<sup>2</sup></b>
2005/06	120	14400
2006/07	140	19600
2007/08	130	16900
2008/09	130	16900
2009/10	100	10000
	$\sum X = 620$	$\sum X^2 = 77800$

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

Where,

$$\sum X = 620, n= 5$$

$$\bar{X} = \frac{620}{5} = 124$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{77800}{5} - \left(\frac{620}{5}\right)^2}$$

$$(\sigma) = \sqrt{15560 - 15376} = \sqrt{514} = 13.56$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{13.56}{124} \times 100\% \quad \text{C.V.} = 10.93\%$$

## Annex-2 Earnings per Share (EPS)

### NABIL

Year	X	X <sup>2</sup>
2005/06	105.49	11128.140
2006/07	129.21	16695.221
2007/08	137.08	18790.92
2008/09	108.31	11731.05
2009/10	106.76	11397.69
	$\sum X = 586.85$	$\sum X^2 = 69743.02$

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

Where,

$$\sum X = 586.85, n= 5$$

$$\bar{X} = \frac{586.85}{5} = 117.37$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{69743.02}{5} - \left(\frac{586.85}{5}\right)^2}$$

$$(\sigma) = \sqrt{13948.61 - 13775.72} = \sqrt{172.89} = 13.15$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% \quad \text{C.V.} = \frac{13.15}{117.37} \times 100\% \quad \text{C.V.} = 11.20\%$$

**SCBNL**

Year	X	X <sup>2</sup>
2005/06	143.14	20489.10
2006/07	175.84	30919.71
2007/08	167.37	28012.72
2008/09	131.92	17402.89
2009/10	109.99	12097.80
	$\sum X = 728.26$	$\sum X^2 = 108922.2$

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

Where,

$$\sum X = 728.26, n = 5$$

$$\bar{X} = \frac{728.26}{5} = 145.65$$

$$S.D (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{108922.2}{5} - \left(\frac{728.26}{5}\right)^2}$$

$$(\sigma) = \sqrt{21784.44 - 21213.93} = \sqrt{570.52} = 23.89$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100\% = \frac{23.89}{145.657} \times 100\% = 16.40\%$$

**Annex - 3****Dividend Pay Out Ratio (DPR)****NABIL**

Year	X	X <sup>2</sup>
2005/06	66.36	4403.65
2006/07	65.78	4327.10
2007/08	102.13	10430.54
2008/09	92.33	8524.83
2009/10	79.62	6339.34
	$\sum X = 326.60$	$\sum X^2 = 34025.46$

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

Where,

$$\sum X = 326.60, n = 5$$

$$\bar{X} = \frac{326.60}{5} = 65.32$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{34025.46}{5} - \left(\frac{256.51}{5}\right)^2}$$

$$(\sigma) = \sqrt{6805.09 - 4266.70} = \sqrt{2538.39} = 50.38$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{50.38}{65.32} \times 100\% = 77.12\%$$

### SCBNL

Year	X	X <sup>2</sup>
2005/06	83.83	7027.47
2006/07	79.62	6339.34
2007/08	77.67	6032.63
2008/09	98.54	9710.13
2009/10	90.92	8266.45
	$\sum X = 430.58$	$\sum X^2 = 37376.02$

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

Where,

$$\sum X = 430.58, n = 5$$

$$\bar{X} = \frac{430.58}{5} = 86.12$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{37376.02}{5} - \left(\frac{430.58}{5}\right)^2}$$

$$(\sigma) = \sqrt{7475.20 - 7416.65} = \sqrt{58.37} = 7.64$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{7.64}{86.12} \times 100\% = 8.87\%$$

**Annex - 4**  
**Price Earnings Ratio (PE)**

**NABIL**

Year	X	X <sup>2</sup>
2005/06	14.27	203.63
2006/07	17.34	300.68
2007/08	36.84	1357.19
2008/09	48.70	2371.69
2009/10	45.89	2105.89
	$\sum X = 163.04$	$\sum X^2 = 6339.08$

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

Where,

$$\sum X = 163.04, n = 5$$

$$\bar{X} = \frac{297.20}{5} = 32.608$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2}$$

$$(\sigma) = \sqrt{\frac{6339.08}{5} - \left(\frac{163.04}{5}\right)^2}$$

$$(\sigma) = \sqrt{1267.82 - 1063.28} = \sqrt{204.54} = 14.51$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{14.51}{32.608} \times 100\% = 44.50\%$$

**SCBNL**

Year	X	X <sup>2</sup>
2005/06	16.38	268.30
2006/07	21.47	460.96
2007/08	35.25	1242.56
2008/09	51.77	2680.13
2009/10	54.64	2985.53
	$\sum X = 179.51$	$\sum X^2 = 7637.48$

Where,

$$\sum X = 179.51, n= 5$$

$$\bar{X} = \frac{179.51}{5} = 35.902$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2}$$

$$(\sigma) = \sqrt{\frac{7637.48}{5} - \left(\frac{179.51}{5}\right)^2}$$

$$(\sigma) = \sqrt{1527.496 - 1288.95} = \sqrt{238.55} = 15.44$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{15.44}{35.90} \times 100\% = 43.02\%$$

### Annex - 5 Dividend Yield Ratio

#### NABIL

Year	X	X <sup>2</sup>
2005/06	4.65	21.62
2006/07	3.79	14.36
2007/08	2.77	7.67
2008/09	1.90	3.61
2009/10	1.74	3.02
	$\sum X = 14.85$	$\sum X^2 = 52.28$

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

Where,

$$\sum X = 14.85, n= 5$$

$$\bar{X} = \frac{14.85}{5} = 2.79$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2}$$

$$(\sigma) = \sqrt{\frac{52.28}{5} - \left(\frac{14.85}{5}\right)^2}$$

$$(\sigma) = \sqrt{10.45 - 7.78} = \sqrt{2.66} = 1.112$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{1.11}{2.97} \times 100\% = 37.45\%$$

**SCBNL**

Year	X	X <sup>2</sup>
2005/06	5.12	26.21
2006/07	3.71	13.76
2007/08	2.20	4.84
2008/09	1.90	3.61
2009/10	1.66	2.75
	$\sum X = 14.49$	$\sum X^2 = 51.17$

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

Where,

$$\sum X = 14.49, n = 5$$

$$\bar{X} = \frac{14.49}{5} = 2.92$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2}$$

$$(\sigma) = \sqrt{\frac{51.17}{5} - \left(\frac{14.49}{5}\right)^2}$$

$$(\sigma) = \sqrt{10.23 - 8.52} = \sqrt{1.71} = 1.30$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{1.30}{2.92} \times 100\% = 44.94\%$$

**Annex -6  
Earning Yield Ratio**

**NABIL**

Year	X	X <sup>2</sup>
2005/06	7.01	49.14
2006/07	5.77	33.29
2007/08	2.71	7.34
2008/09	2.05	4.20
2009/10	2.18	4.75
	$\sum X = 19.72$	$\sum X^2 = 98.72$

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

Where,

$$\sum X = 19.72, n = 5$$

$$\bar{X} = \frac{19.72}{5} = 3.94$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{98.72}{5} - \left(\frac{19.72}{5}\right)^2}$$

$$(\sigma) = \sqrt{19.74 - 15.52} = \sqrt{4.21} = 2.05$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{2.05}{3.94} \times 100\% = 51.94\%$$

### SCBNL

Year	X	X <sup>2</sup>
2005/06	6.10	37.21
2006/07	4.66	21.71
2007/08	2.84	8.065
2008/09	1.93	3.72
2009/10	1.83	3.34
	$\sum X = 17.36$	$\sum X^2 = 74.45$

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

Where,

$$\sum X = 17.26, n = 5$$

$$\bar{X} = \frac{17.36}{5} = 3.47$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2}$$

$$(\sigma) = \sqrt{\frac{74.45}{5} - \left(\frac{17.26}{5}\right)^2}$$

$$(\sigma) = \sqrt{14.89 - 12.04} = \sqrt{2.85} = 1.66$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{1.66}{3.47} \times 100\% = 47.87\%$$

**Annex -7**  
**Liquidity Ratio in Percentage**

**NABIL**

Fiscal Year	X	X <sup>2</sup>
2005/06	3.83	14.6689
2006/07	3.26	10.6276
2007/08	6	36
2008/09	8.37	70.0569
2009/10	9.03	81.5409
<b>Total</b>	<b>ΣX= 30.49</b>	<b>ΣX<sup>2</sup> = 212.8943</b>

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

Where,

$$\sum X = 30.49, n = 5$$

$$\bar{X} = \frac{30.49}{5} = 6.09$$

$$S.D (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{212.89}{5} - \left(\frac{30.49}{5}\right)^2}$$

$$(\sigma) = \sqrt{42.57 - 37.185} = \sqrt{5.3938} = 2.322$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100\% = \frac{2.322}{6.098} \times 100\% = 38.07\%$$

**SCBNL**

Fiscal Year	X	X <sup>2</sup>
2005/06	8.77	76.9129
2006/07	6.86	47.0596
2007/08	5.46	29.8116
2008/09	5.84	34.1056
2009/10	8.18	66.9124
<b>Total</b>	<b>35.11</b>	<b>254.8021</b>

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

Where,

$$\sum X = 35.11, n = 5$$

$$\bar{X} = \frac{35.11}{5} = 7.22$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{254.8021}{5} - \left(\frac{35.11}{5}\right)^2}$$

$$(\sigma) = \sqrt{50.96 - 49.308} = \sqrt{1.65} = 1.284$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{1.28}{7.22} \times 100\% = 17.72\%$$

### Annex -8 Share Price Analysis (MVPS)

#### NABIL

Year	X	X <sup>2</sup>
2005/06	1505	2265025
2006/07	2240	5017600
2007/08	5050	25502500
2008/09	5275	27825625
2009/10	4899	24000201
	$\sum X = 18969$	$\sum X^2 = 84610951$

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

Where,

$$\sum X = 18969, n = 5$$

$$\bar{X} = \frac{18969}{5} = 3793.8$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} = \sqrt{\frac{84610951}{5} - \left(\frac{18969}{5}\right)^2}$$

$$(\sigma) = \sqrt{16922190 - 14392918} = \sqrt{2529271.56} = 1590.37$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{1590.37}{3793.8} \times 100\% = 41.92\%$$

**SCBNL**

<b>Year</b>	<b>X</b>	<b>X<sup>2</sup></b>
2005/06	2345	5499025
2006/07	3775	14250625
2007/08	5900	34810000
2008/09	6830	46648900
2009/10	6010	36120100
	$\Sigma X = 24860$	$\Sigma X^2 = 137328650$

$$\bar{X} = \frac{\Sigma X}{n}$$

Where,

$$\Sigma X = 24860, n = 5$$

$$\bar{X} = \frac{24860}{5} = 4972$$

$$\text{S.D } (\sigma) = \sqrt{\frac{\Sigma X^2}{n} - \left(\frac{\Sigma X}{n}\right)^2}$$

$$(\sigma) = \sqrt{\frac{137328650}{5} - \left(\frac{24860}{5}\right)^2}$$

$$(\sigma) = \sqrt{2746570 - 24720784} = \sqrt{21974214} = 1482.36$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\% = \frac{1482.36}{4972} \times 100\% = 29.81\%$$

**Annex-9**

**Coefficient of Correlation of DPS and MVPS of NABIL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	70	1505	4900	2265025	105350
	85	2240	7225	5017600	190400
	140	5050	19600	25502500	707000
	100	5275	10000	27825625	527500
	85	4899	7225	24000201	416415
<b>Total</b>	<b>480</b>	<b>18969</b>	<b>48950</b>	<b>84610951</b>	<b>1946665</b>

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

$$r = \frac{5 \times 1946665 - 480 \times 18969}{\sqrt{5 \times 48950 - 230400} \sqrt{5 \times 84610951 - 359822961}}$$

$$r = \frac{628205}{\sqrt{14350} \sqrt{63231794}}$$

$$= 0.6594$$

**Annex-10**

**Coefficient of Correlation of DPS and MVPS of SCBNL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	120	2345	14400	5499025	281400
	140	3775	19600	14250625	528500
	130	5900	16900	34810000	767000
	130	6830	16900	46648900	887900
	100	6010	10000	36120100	601000
<b>Total</b>	<b>620</b>	<b>24860</b>	<b>77800</b>	<b>137328650</b>	<b>3065800</b>

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

$$r = \frac{5 \times 3065800 - 620 \times 24860}{\sqrt{5 \times 77800 - 384400} \sqrt{5 \times 137328650 - 618019600}}$$

$$= -0.1499$$

**Annex-11**

**Coefficient of Correlation of EPS and MVPS of NABIL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	105.49	1505	11128.14	2265025	158762.5
	129.21	2240	16695.22	5017600	289430.4
	137.08	5050	18790.93	25502500	692254
	108.31	5275	11731.06	27825625	571335.3
	106.76	4899	11397.7	24000201	523017.2
<b>Total</b>	<b>586.85</b>	<b>18969</b>	<b>69743.04</b>	<b>84610951</b>	<b>2234799</b>

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

$$r = \frac{5 \times 2234799 - 586.85 \times 18969}{\sqrt{5 \times 69743.04 - 344392.922} \sqrt{5 \times 84610951 - 359822961}}$$

0.0804

**Annex-12**

**Coefficient of Correlation of EPS and MVPS of SCBNL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	143.14	2345	20489.06	5499025	335663.3
	175.84	3775	30919.71	14250625	663796
	167.37	5900	28012.72	34810000	987483
	131.92	6830	17402.89	46648900	901013.6
	109.99	6010	12097.8	36120100	661039.9
<b>Total</b>	<b>728.26</b>	<b>24860</b>	<b>108922.2</b>	<b>137328650</b>	<b>3548996</b>

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

$$r = \frac{5 \times 3548996 - 728.26 \times 24860}{\sqrt{5 \times 108922.2 - 530362.62} \sqrt{6 \times 137328650 - 618019600}}$$

$$r = \frac{-359563.6}{\sqrt{14248.38} \sqrt{68623650}} \quad r = \frac{-359563.6}{988825.486}$$

r= 0.3636

**Annex-13**

**Coefficient of Correlation of DPR and MVPS of NABIL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	66.36	1505	4403.65	2265025	99871.8
	65.78	2240	4327.008	5017600	147347.2
	102.13	5050	10430.54	25502500	515756.5
	92.33	5275	8524.829	27825625	487040.8
	79.62	4899	6339.344	24000201	390058.4
<b>Total</b>	<b>406.22</b>	<b>18969</b>	<b>34025.37</b>	<b>84610951</b>	<b>1640075</b>

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

$$r = \frac{5 \times 1640075 - 406.22 \times 18969}{\sqrt{5 \times 34025.37 - 165014.688} \sqrt{5 \times 84610951 - 359822961}}$$

0.8702

**Annex-14**

**Coefficient of Correlation of DPR and MVPS of SCBNL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	83.83	2345	7027.469	5499025	196581.35
	79.62	3775	6339.344	14250625	300565.5
	77.67	5900	6032.629	34810000	458253
	98.54	6830	9710.132	46648900	673028.2
	90.92	6010	8266.446	36120100	546429.2
<b>Total</b>	<b>430.58</b>	<b>24860</b>	<b>37376.02</b>	<b>137328650</b>	<b>2174857.25</b>

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

$$r = \frac{5 \times 2174857.25 - 430.58 \times 24860}{\sqrt{5 \times 37376.02 - 185399.136} \sqrt{5 \times 137328650 - 618019600}}$$

0.5334

**Annex-15**

**Coefficient of Correlation of PE-Ratio and MVPS of NABIL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	14.27	1505	203.6329	2265025	21476.35
	17.34	2240	300.6756	5017600	38841.6
	36.84	5050	1357.186	25502500	186042
	48.7	5275	2371.69	27825625	256892.5
	45.89	4899	2105.892	24000201	224815.1
<b>Total</b>	<b>163.04</b>	<b>18969</b>	<b>6339.076</b>	<b>84610951</b>	<b>728067.6</b>

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

$$r = \frac{5 \times 728067.6 - 163.04 \times 18969}{\sqrt{5 \times 6339.076 - 26582.041} \sqrt{5 \times 84610951 - 359822961}}$$

0.9631

**Annex-16**

**Coefficient of Correlation of PE-Ratio and MVPS of SCBNL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	16.38	2345	268.3044	5499025	38411.1
	21.47	3775	460.9609	14250625	81049.25
	35.25	5900	1242.563	34810000	207975
	51.77	6830	2680.133	46648900	353589.1
	54.64	6010	2985.53	36120100	328386.4
<b>Total</b>	<b>179.51</b>	<b>24860</b>	<b>7637.49</b>	<b>137328650</b>	<b>1009410.9</b>

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

$$r = \frac{5 \times 1009410.9 - 179.51 \times 24860}{\sqrt{5 \times 7637.49 - 32223.84} \sqrt{5 \times 137328650 - 618019600}}$$

0.9136

**Annex-17**

**Coefficient of Correlation of DIV. Ratio and MVPS of NABIL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	4.65	1505	21.6225	2265025	6998.25
	3.79	2240	14.3641	5017600	8489.6
	2.77	5050	7.6729	25502500	13988.5
	1.9	5275	3.61	27825625	10022.5
	1.74	4899	3.0276	24000201	8524.26
<b>Total</b>	<b>14.85</b>	<b>18969</b>	<b>50.2971</b>	<b>84610951</b>	<b>48023.11</b>

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

$$r = \frac{5 \times 48023.11 - 14.85 \times 18969}{\sqrt{5 \times 50.2971 - 220.52} \sqrt{5 \times 84610951 - 359822961}}$$

0.9398

**Annex-18**

**Coefficient of Correlation of DIV. Ratio and MVPS of SCBNL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	5.12	2345	26.2144	5499025	12006.4
	3.71	3775	13.7641	14250625	14005.25
	2.2	5900	4.84	34810000	12980
	1.9	6830	3.61	46648900	12977
	1.66	6010	2.7556	36120100	9976.6
<b>Total</b>	<b>14.59</b>	<b>24860</b>	<b>51.1841</b>	<b>137328650</b>	<b>61945.25</b>

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

$$r = \frac{5 \times 61945.25 - 14.59 \times 24860}{\sqrt{5 \times 51.1841 - 212.86} \sqrt{5 \times 137328650 - 618019600}}$$

-0.9743

**Annex-19**

**Coefficient of Correlation of LIQ. Ratio and MVPS of NABIL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	3.83	1505	14.6689	2265025	5764.15
	3.26	2240	10.6276	5017600	7302.4
	6	5050	36	25502500	30300
	8.37	5275	70.0569	27825625	44151.75
	9.03	4899	81.5409	24000201	44237.97
<b>Total</b>	<b>30.49</b>	<b>18969</b>	<b>212.8943</b>	<b>84610951</b>	<b>131756.3</b>

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

$$r = \frac{5 \times 131756.3 - 30.49 \times 18969}{\sqrt{5 \times 212.89 - 929.64} \sqrt{5 \times 84610951 - 359822961}}$$

0.8709

**Annex-20**

**Coefficient of Correlation of LIQ. Ratio and MVPS of SCBNL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	8.77	2345	76.9129	5499025	20565.65
	6.86	3775	47.0596	14250625	25896.5
	5.46	5900	29.8116	34810000	32214
	5.84	6830	34.1056	46648900	39887.2
	8.18	6010	66.9124	36120100	49161.8
<b>Total</b>	<b>35.11</b>	<b>24860</b>	<b>254.8021</b>	<b>137328650</b>	<b>167725.2</b>

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

$$r = \frac{5 \times 167725.2 - 35.11 \times 24860}{\sqrt{5 \times 254.802 - 1232.71} \sqrt{5 \times 137328650 - 618019600}}$$

-0.6426

**Annex-21**

**Coefficient of Correlation of LIQ. Ratio and MVPS of NIBL Bank**

	<b>X</b>	<b>Y</b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
	9.78	800	95.6484	7027.469	819.8574
	13.61	1260	185.2321	6339.344	1083.628
	10.47	1729	109.6209	6032.629	813.2049
	10.91	2450	119.0281	9710.132	1075.071
	10.31	1388	106.2961	8266.446	937.3852
<b>Total</b>	<b>55.08</b>	<b>7627</b>	<b>615.8256</b>	<b>37376.02</b>	<b>4729.147</b>

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

$$r = \frac{5 \times 4729.147 - 55.08 \times 7627}{\sqrt{5 \times 615.8256 - 3113.64} \sqrt{5 \times 37376.02 - 185399.136}}$$

0.2726

**Annex- 22**

**Calculation of Trend Value of DPS of NABIL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	70	-2	4	-140	87
2006/07	2	85	-1	1	-85	91.5
2007/08	3	140	0	0	0	96
2008/09	4	100	1	1	100	100.5
2009/10	5	85	2	4	170	105
	<b>N=5</b>	<b>480</b>	<b>0</b>	<b>10</b>	<b>45</b>	

$$a = \frac{\sum y}{n} = \frac{480}{5} = 96$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{45}{10} = 4.5$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 96 + 4.5x$$

Fiscal Year	X	x= X-3	y =a+bx
2010/11	6	3	109.5
2011/12	7	4	114
2012/13	8	5	118.5
2013/14	9	6	123
2014/15	10	7	127.5

**Annex -23**

**Calculation of Trend Value of DPS of SCBNL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	120	-2	4	-240	134
2006/07	2	140	-1	1	-140	129
2007/08	3	130	0	0	0	124
2008/09	4	130	1	1	130	119
2009/10	5	100	2	4	200	114
	<b>N=5</b>	<b>620</b>	<b>0</b>	<b>10</b>	<b>-50</b>	

$$a = \frac{\sum y}{n} = \boxed{-124}$$

$$b = \frac{\sum xy}{\sum x^2} = \boxed{-5}$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 124 + (-5)x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	109
2011/12	7	4	104
2012/13	8	5	99
2013/14	9	6	94
2014/15	10	7	89

## Annex -24

### Calculation of Trend Value of EPS of NABIL

Year	X	EPS(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	105.49	-2	4	-210.98	121.042
2006/07	2	129.21	-1	1	-129.21	119.206
2007/08	3	137.08	0	0	0	117.37
2008/09	4	108.31	1	1	108.31	115.534
2009/10	5	106.76	2	4	213.52	113.698
	<b>N=5</b>	<b>586.85</b>	<b>0</b>	<b>10</b>	<b>-18.36</b>	

$$a = \frac{\sum y}{n} = \frac{586.85}{5} = 117.37$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-18.36}{10} = -1.836$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 117.37 + (-1.836)x$$

<b>Fiscal Year</b>	<b>X</b>	<b>x= X-3</b>	<b>y<sub>c</sub> =a+bx</b>
2010/11	6	3	111.862
2011/12	7	4	110.026
2012/13	8	5	108.19
2013/14	9	6	106.354
2014/15	10	7	104.518

## Annex -25

### Calculation of Trend Value of EPS of SCBNL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	143.14	-2	4	-286.28	167.694
2006/07	2	175.84	-1	1	-175.84	156.672
2007/08	3	167.37	0	0	0	145.65
2008/09	4	131.92	1	1	131.92	134.628
2009/10	5	109.99	2	4	219.98	123.606
	<b>N=5</b>	<b>728.26</b>	<b>0</b>	<b>10</b>	<b>-110.22</b>	

$$a = \frac{\sum y}{n} = \frac{728.26}{5} = 145.65$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-110.22}{10} = -11.022$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 145.65 + (-11.022)x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	112.584
2011/12	7	4	101.562
2012/13	8	5	90.54
2013/14	9	6	79.518
2014/15	10	7	68.496

## Annex -26

### Calculation of Trend Value of DPR of NABIL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	66.36	-2	4	-132.72	70.63
2006/07	2	65.78	-1	1	-65.78	75.937
2007/08	3	102.13	0	0	0	81.244
2008/09	4	92.33	1	1	92.33	86.551
2009/10	5	79.62	2	4	159.24	91.858
	<b>N=5</b>	<b>406.22</b>	<b>0</b>	<b>10</b>	<b>53.07</b>	

$$a = \frac{\sum y}{n} = \frac{406.22}{5} = 81.244$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{53.07}{10} = 5.307$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 81.244 + 5.307x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	97.165
2011/12	7	4	102.472
2012/13	8	5	107.779
2013/14	9	6	113.086
2014/15	10	7	118.393

**Annex -27**

**Calculation of Trend Value of DPR of SCBNL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	83.83	-2	4	-167.66	79.5
2006/07	2	79.62	-1	1	-79.62	82.81
2007/08	3	77.67	0	0	0	86.12
2008/09	4	98.54	1	1	98.54	89.43
2009/10	5	90.92	2	4	181.84	92.74
	<b>N=5</b>	<b>430.58</b>	<b>0</b>	<b>10</b>	<b>33.1</b>	

$$a = \frac{\sum y}{n} = \frac{430.58}{5} = 86.116$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{33.1}{10} = 3.31$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 86.12 + 3.31x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	96.05
2011/12	7	4	99.36
2012/13	8	5	102.67
2013/14	9	6	105.98
2014/15	10	7	109.29

**Annex -28**

**Calculation of Trend Value of PE-Ratio of NABIL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	14.27	-2	4	-28.54	13.33
2006/07	2	17.34	-1	1	-17.34	22.97
2007/08	3	36.84	0	0	0	32.61
2008/09	4	48.7	1	1	48.7	42.25
2009/10	5	45.89	2	4	91.78	51.89
	<b>N=5</b>	<b>163.04</b>	<b>0</b>	<b>10</b>	<b>94.6</b>	

$$a = \frac{\sum y}{n} = \frac{163.04}{5} = 32.61$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{94.6}{10} = 9.46$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 32.61 + 9.46x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	60.99
2011/12	7	4	70.45
2012/13	8	5	79.91
2013/14	9	6	89.37
2014/15	10	7	98.83

**Annex -29**

**Calculation of Trend Value of PE-Ratio of SCBNL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	16.38	-2	4	-32.76	18.81
2006/07	2	21.47	-1	1	-21.47	24.26
2007/08	3	35.25	0	0	0	29.71
2008/09	4	51.77	1	1	51.77	35.16
2009/10	5	54.64	2	4	109.28	40.61
	<b>N=5</b>	<b>179.51</b>	<b>0</b>	<b>10</b>	<b>106.82</b>	

$$a = \frac{\sum y}{n} = \frac{179.51}{5} = 35.902$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{106.82}{10} = 10.68$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 35.902 + 10.68x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	67.942
2011/12	7	4	78.622
2012/13	8	5	89.302
2013/14	9	6	99.982
2014/15	10	7	110.676

**Annex -30**

**Calculation of Trend Value of DIV. Yield of NABIL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	4.65	-2	4	-9.3	4.512
2006/07	2	3.79	-1	1	-3.79	3.741
2007/08	3	2.77	0	0	0	2.397
2008/09	4	1.9	1	1	1.9	2.199
2009/10	5	1.74	2	4	3.48	1.428
	<b>N=5</b>	<b>14.85</b>	<b>0</b>	<b>10</b>	<b>-7.71</b>	

$$a = \frac{\sum y}{n} = \frac{14.85}{5} = 2.97$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-7.71}{10} = 0.771$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 2.97 + 0.771x$$

<b>Fiscal Year</b>	<b>X</b>	<b>x= X-3</b>	<b>y<sub>c</sub> =a+bx</b>
2010/11	6	3	0.657
2011/12	7	4	-0.114
2012/13	8	5	-0.885
2013/14	9	6	-1.656
2014/15	10	7	-2.427

**Annex -31**

**Calculation of Trend Value of DIV. Yield of SCBNL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	5.12	-2	4	-10.24	4.66
2006/07	2	3.71	-1	1	-3.71	3.793
2007/08	3	2.2	0	0	0	2.92
2008/09	4	1.9	1	1	1.9	2.047
2009/10	5	1.66	2	4	3.32	1.174
	<b>N=5</b>	<b>14.59</b>	<b>0</b>	<b>10</b>	<b>-8.73</b>	

$$a = \frac{\sum y}{N} = \frac{14.59}{5} = 2.92$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-8.73}{10} = 0.873$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 2.92 + 0.873x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	0.301
2011/12	7	4	-0.572
2012/13	8	5	-1.445
2013/14	9	6	-2.318
2014/15	10	7	-3.91

**Annex -32**

**Calculation of Trend Value of LIQ. Ratio of NABIL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	3.83	-2	4	-7.66	2.996
2006/07	2	3.26	-1	1	-3.26	4.547
2007/08	3	6	0	0	0	6.098
2008/09	4	8.37	1	1	8.37	7.649
2009/10	5	9.03	2	4	18.06	9.2
	<b>N=5</b>	<b>30.49</b>	<b>0</b>	<b>10</b>	<b>15.51</b>	

$$a = \frac{\sum y}{n} = \frac{30.49}{5} = 6.098$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{15.51}{10} = 1.551$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 6.098 + 1.551x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	10.751
2011/12	7	4	12.302
2012/13	8	5	13.853
2013/14	9	6	15.404
2014/15	10	7	16.955

**Annex -33**

**Calculation of Trend Value of LIQ. Ratio of SCBNL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy	y=a+bx
2005/06	1	8.77	-2	4	-17.54	6.582
2006/07	2	6.86	-1	1	-6.86	6.802
2007/08	3	5.46	0	0	0	7.022
2008/09	4	5.84	1	1	5.84	7.242
2009/10	5	8.18	2	4	16.36	7.462
	<b>N=5</b>	<b>35.11</b>	<b>0</b>	<b>10</b>	<b>-2.2</b>	

$$a = \frac{\sum y}{N} = \frac{35.11}{5} = 7.022$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-2.2}{10} = -0.22$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 7.022 + (-0.22)x$$

Fiscal Year	X	x= X-3	y <sub>c</sub> =a+bx
2010/11	6	3	7.682
2011/12	7	4	7.902
2012/13	8	5	8.122
2013/14	9	6	8.342
2014/15	10	7	8.562

### APPENDIX-1

#### Calculation of Trend Value of DPS of NABIL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	70	-2	4	-140
2006/07	2	85	-1	1	-85
2007/08	3	140	0	0	0
2008/09	4	100	1	1	100
2009/010	5	85	2	4	170
	<b>N=5</b>	<b>480</b>	<b>0</b>	<b>10</b>	<b>45</b>

$$a = \frac{\sum y}{n} = \frac{480}{5} = 96$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{45}{10} = 4.5$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 96 + 4.5x$$

### APPENDIX-2

#### Calculation of Trend Value of DPS of SCBNL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	120	-2	4	-240
2006/07	2	140	-1	1	-140
2007/08	3	130	0	0	0
2008/09	4	130	1	1	130
2009/010	5	100	2	4	200
	<b>N=5</b>	<b>620</b>	<b>0</b>	<b>10</b>	<b>-50</b>

$$a = \frac{\sum y}{n} = \frac{620}{5}$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{50}{10} = -5$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 124 + (-5)x$$

### APPENDIX-3

#### Calculation of Trend Value of EPS of NABIL

Year	X	EPS(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	105.49	-2	4	-210.98
2006/07	2	129.21	-1	1	-129.21
2007/08	3	137.08	0	0	0
2008/09	4	108.31	1	1	108.31
2009/010	5	106.76	2	4	213.52
	<b>N=5</b>	<b>586.85</b>	<b>0</b>	<b>10</b>	<b>-18.36</b>

$$a = \frac{\sum y}{n} = \frac{586.85}{5} = 117.37$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-18.36}{10} = -1.836$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 117.37 + (-1.836)x$$

### APPENDIX-4

#### Calculation of Trend Value of EPS of SCBNL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	143.14	-2	4	-286.28
2006/07	2	175.84	-1	1	-175.84
2007/08	3	167.37	0	0	0
2008/09	4	131.92	1	1	131.92
2009/010	5	109.99	2	4	219.98
	<b>N=5</b>	<b>728.26</b>	<b>0</b>	<b>10</b>	<b>-110.22</b>

$$a = \frac{\sum y}{n} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}} = 145.65$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{\text{Market Value Share} / \text{EPS}}{\text{Book Value Per Share}} = -11.022$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 145.65 + (-11.022)x$$

**APPENDIX-5**

**Calculation of Trend Value of DPR of NABIL**

2005/06	1	66.36	-2	4	-132.72
2006/07	2	65.78	-1	1	-65.78
2007/08	3	102.13	0	0	0
2008/09	4	92.33	1	1	92.33
2009/010	5	79.62	2	4	159.24
	<b>N=5</b>	<b>406.22</b>	<b>0</b>	<b>10</b>	<b>53.07</b>

$$a = \frac{\sum y}{n} = \frac{\text{Total Assets}}{\text{Total Liability}} = 81.244$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{53.07}{10} = 5.307$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 81.244 + 5.307x$$

**APPENDIX-6**

**Calculation of Trend Value of DPR of SCBNL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	83.83	-2	4	-167.66
2006/07	2	79.62	-1	1	-79.62
2007/08	3	77.67	0	0	0
2008/09	4	98.54	1	1	98.54
2009/010	5	90.92	2	4	181.84
	<b>N=5</b>	<b>430.58</b>	<b>0</b>	<b>10</b>	<b>33.1</b>

$$a = \frac{\sum y}{n} = \frac{\text{Net Assets}}{\text{Capital Employed (BEIT)}} = 86.116$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{33.1}{10} = 3.31$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 86.12 + 3.31x$$

**APPENDIX-7**

**Calculation of Trend Value of PE-Ratio of NABIL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	14.27	-2	4	-28.54
2006/07	2	17.34	-1	1	-17.34
2007/08	3	36.84	0	0	0
2008/09	4	48.7	1	1	48.7
2009/010	5	45.89	2	4	91.78
	<b>N=5</b>	<b>163.04</b>	<b>0</b>	<b>10</b>	<b>94.6</b>

$$a = \frac{\sum y}{n} = \frac{163.04}{5} = 32.61$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{94.6}{10} = 9.46$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 32.61 + 9.46x$$

**APPENDIX-8**

**Calculation of Trend Value of PE-Ratio of SCBNL**

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	16.38	-2	4	-32.76
2006/07	2	21.47	-1	1	-21.47
2007/08	3	35.25	0	0	0
2008/09	4	51.77	1	1	51.77
2009/010	5	54.64	2	4	109.28
	<b>N=5</b>	<b>179.51</b>	<b>0</b>	<b>10</b>	<b>106.82</b>

$$a = \frac{\sum y}{n} = \frac{179.51}{5} = 35.902$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{106.82}{10} = 10.68$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 35.902 + 10.68x$$

### APPENDIX-9

#### Calculation of Trend Value of DIV. Yield of NABIL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	4.65	-2	4	-9.3
2006/07	2	3.79	-1	1	-3.79
2007/08	3	2.77	0	0	0
2008/09	4	1.9	1	1	1.9
2009/010	5	1.74	2	4	3.48
	<b>N=5</b>	<b>14.85</b>	<b>0</b>	<b>10</b>	<b>-7.71</b>

$$a = \frac{\sum y}{n} = \frac{14.85}{5} = 2.97$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-7.71}{10} = -0.771$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 2.97 + 0.771x$$

### APPENDIX-10

#### Calculation of Trend Value of DIV. Yield of SCBNL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	5.12	-2	4	-10.24
2006/07	2	3.71	-1	1	-3.71
2007/08	3	2.2	0	0	0
2008/09	4	1.9	1	1	1.9
2009/010	5	1.66	2	4	3.32
	<b>N=5</b>	<b>14.59</b>	<b>0</b>	<b>10</b>	<b>-8.73</b>

$$a = \frac{\sum y}{n} = \frac{14.59}{5} = 2.92$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-8.73}{10} = -0.873$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 2.92 + 0.873x$$

$$Y = 2.16 + (-0.30)x$$

### APPENDIX-11

#### Calculation of Trend Value of LIQ. Ratio of NABIL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	3.83	-2	4	-7.66
2006/07	2	3.26	-1	1	-3.26
2007/08	3	6	0	0	0
2008/09	4	8.37	1	1	8.37
2009/010	5	9.03	2	4	18.06
	<b>N=5</b>	<b>30.49</b>	<b>0</b>	<b>10</b>	<b>15.51</b>

$$a = \frac{\sum y}{N} = \frac{30.49}{5} = 6.098$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{15.51}{10} = 1.551$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 6.098 + 1.551x$$

### APPENDIX-12

#### Calculation of Trend Value of LIQ. Ratio of SCBNL

Year	X	Actual Value(y)	x=X-3	x <sup>2</sup>	xy
2005/06	1	8.77	-2	4	-17.54
2006/07	2	6.86	-1	1	-6.86
2007/08	3	5.46	0	0	0
2008/09	4	5.84	1	1	5.84
2009/010	5	8.18	2	4	16.36
	<b>N=5</b>	<b>35.11</b>	<b>0</b>	<b>10</b>	<b>-2.2</b>

$$a = \frac{\sum y}{N} = \frac{35.11}{5} = 7.022$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{-2.2}{10} = -0.22$$

Therefore, Trend is calculated by substituting this value in the following formula,

$$Y = a + bx$$

$$Y = 7.022 + (-0.22)x$$

**APPENDIX-13**

**Coefficient of Correlation of DPS of NABIL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
70	1505	-26.00	-2288.80	676.00	5238605.44	59508.80
85	2240	-11.00	-1553.80	121.00	2414294.44	17091.80
140	5050	44.00	1256.20	1936.00	1578038.44	55272.80
100	5275	4.00	1481.20	16.00	2193953.44	5924.80
85	4899	-11.00	1105.20	121.00	1221467.04	-12157.20
480.00	18969.00	0.00	0.00	2870.00	12646358.80	125641.00
<b>96</b>	<b>3793.8</b>					

**APPENDIX-14**

**Coefficient of Correlation of DPS of SCBNL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
120	2345	-4.00	-2627.00	16.00	6901129.00	10508.00
140	3775	16.00	-1197.00	256.00	1432809.00	-19152.00
130	5900	6.00	928.00	36.00	861184.00	5568.00
130	6830	6.00	1858.00	36.00	3452164.00	11148.00
100	6010	-24.00	1038.00	576.00	1077444.00	-24912.00
620.00	24860.00	0.00	0.00	920.00	13724730.00	-16840.00
<b>124</b>	<b>4972</b>	0.00	0.00			

**APPENDIX-15**

**Coefficient of Correlation of EPS of NABIL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
105.49	1505	-11.88	-2288.80	141.13	5238605.44	27190.94
129.21	2240	11.84	-1553.80	140.19	2414294.44	-18396.99
137.08	5050	19.71	1256.20	388.48	1578038.44	24759.70
108.31	5275	-9.06	1481.20	82.08	2193953.44	-13419.67
106.76	4899	-10.61	1105.20	112.57	1221467.04	-11726.17
586.85	18969.00	0.00	0.00	864.46	12646358.80	8407.81
<b>117.37</b>	<b>3793.8</b>	0.00	0.00			

**APPENDIX-16**

**Coefficient of Correlation of EPS of SCBNL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
143.14	2345	-2.51	-2627.00	6.31	6901129.00	6599.02
175.84	3775	30.19	-1197.00	911.32	1432809.00	-36135.04
167.37	5900	21.72	928.00	471.67	861184.00	20154.30
131.92	6830	-13.73	1858.00	188.57	3452164.00	-25514.06
109.99	6010	-35.66	1038.00	1271.78	1077444.00	-37017.16
728.26	24860	0	0	2849.64308	13724730	-71912.92
<b>145.652</b>	<b>4972</b>	0.00	0.00			

**APPENDIX-17**

**Coefficient of Correlation of DPR of NABIL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
66.36	1505	-14.88	-2288.80	221.53	5238605.44	34066.50
65.78	2240	-15.46	-1553.80	239.14	2414294.44	24027.96
102.13	5050	20.89	1256.20	436.22	1578038.44	26236.99
92.33	5275	11.09	1481.20	122.90	2193953.44	16420.58
79.62	4899	-1.62	1105.20	2.64	1221467.04	-1794.84
406.22	18969	0	0	1022.43052	12646358.8	98957.194
81.244	3793.8	0.00	0.00			

**APPENDIX-18**

**Coefficient of Correlation of DPR of SCBNL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
83.83	2345	-2.29	-2627.00	5.23	6901129.00	6005.32
79.62	3775	-6.50	-1197.00	42.20	1432809.00	7775.71
77.67	5900	-8.45	928.00	71.33	861184.00	-7837.89
98.54	6830	12.42	1858.00	154.36	3452164.00	23083.79
90.92	6010	4.80	1038.00	23.08	1077444.00	4986.55
430.58	24860	1.4211E-14	0	296.19292	13724730	34013.49
<b>86.116</b>	<b>4972</b>	0.00	0.00			

**APPENDIX-19**

**Coefficient of Correlation of PE-Ratio of NABIL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
14.27	1505	-18.34	-2288.80	336.28	5238605.44	41972.01
17.34	2240	-15.27	-1553.80	233.11	2414294.44	23723.42
36.84	5050	4.23	1256.20	17.91	1578038.44	5316.24
48.7	5275	16.09	1481.20	258.95	2193953.44	23835.47
45.89	4899	13.28	1105.20	176.41	1221467.04	14679.27
163.04	18969.00	0.00	0.00	1022.67	12646358.80	109526.41
<b>32.608</b>	<b>3793.8</b>	0.00	0.00			

**APPENDIX-20**

**Coefficient of Correlation of PE-Ratio of SCBNL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
16.38	2345	-19.52	-2627.00	381.11	6901129.00	51284.29
21.47	3775	-14.43	-1197.00	208.28	1432809.00	17275.10
35.25	5900	-0.65	928.00	0.43	861184.00	-605.06
51.77	6830	15.87	1858.00	251.79	3452164.00	29482.74
54.64	6010	18.74	1038.00	351.11	1077444.00	19450.04
179.51	24860	0	0	1192.72228	13724730	116887.13
<b>35.902</b>	<b>4972</b>	0.00	0.00			

**APPENDIX-21**

**Coefficient of Correlation of DIV. Ratio of NABIL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
4.65	1505	1.68	-2288.80	2.82	5238605.44	-3845.18
3.79	2240	0.82	-1553.80	0.67	2414294.44	-1274.12
2.77	5050	-0.20	1256.20	0.04	1578038.44	-251.24
1.9	5275	-1.07	1481.20	1.14	2193953.44	-1584.88
1.74	4899	-1.23	1105.20	1.51	1221467.04	-1359.40
14.85	18969.00	0.00	0.00	6.19	12646358.80	-8314.82
<b>2.97</b>	<b>3793.8</b>	0.00	0.00			

**APPENDIX-22**

**Coefficient of Correlation of DIV. Ratio of SCBNL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
5.12	2345	2.20	-2627.00	4.85	6901129.00	-5784.65
3.71	3775	0.79	-1197.00	0.63	1432809.00	-948.02
2.2	5900	-0.72	928.00	0.52	861184.00	-666.30
1.9	6830	-1.02	1858.00	1.04	3452164.00	-1891.44
1.66	6010	-1.26	1038.00	1.58	1077444.00	-1305.80
14.59	24860	0	0	8.61048	13724730	-10596.23
<b>2.918</b>	<b>4972</b>	0.00	0.00			

**APPENDIX-23**

**Coefficient of Correlation of LIQ. Ratio of NABIL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
3.83	1505.00	-2.27	-2288.80	5.14	5238605.44	5191.00
3.26	2240.00	-2.84	-1553.80	8.05	2414294.44	4409.68
6.00	5050.00	-0.10	1256.20	0.01	1578038.44	-123.11
8.37	5275.00	2.27	1481.20	5.16	2193953.44	3365.29
9.03	4899.00	2.93	1105.20	8.60	1221467.04	3240.45
30.49	18969.00	0.00	0.00	26.97	12646358.80	16083.31
<b>6.098</b>	<b>3793.8</b>	<b>0</b>	<b>0</b>			

**APPENDIX-24**

**Coefficient of Correlation of LIQ. Ratio of SCBNL Bank**

<b>X</b>	<b>Y</b>	<b>x=X-<math>\sum X</math></b>	<b>y=Y-<math>\sum Y</math></b>	<b>x<sup>2</sup></b>	<b>y<sup>2</sup></b>	<b>xy</b>
8.77	2345	1.75	-2627.00	3.06	6901129.00	-4592.00
6.86	3775	-0.16	-1197.00	0.03	1432809.00	193.91
5.46	5900	-1.56	928.00	2.44	861184.00	-1449.54
5.84	6830	-1.18	1858.00	1.40	3452164.00	-2196.16
8.18	6010	1.16	1038.00	1.34	1077444.00	1202.00
35.11	24860.00	0.00	0.00	8.26	13724730.00	-6841.77
<b>7.022</b>	<b>4972</b>	0.00	0.00			