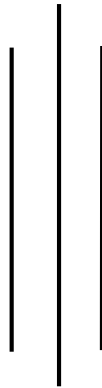


AN OVERVIEW OF CORPORATE DIVIDEND POLICY AND PRACTICES IN NEPAL



Submitted By:

Binod Raj Pant

Kailali Multiple Campus

Campus Roll No: 04/063

T.U Regd. No.: 7-3-327-740-2006

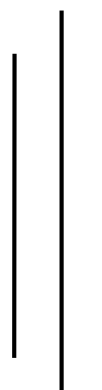
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In partial fulfillment of the requirements for the degree of

Masters of Business Studies (M.B.S)

Dhangadhi, Kailali

April, 2011

DECLARATION

I hereby declare that the work reported in this thesis entitled “**An Overview Of Corporate Dividend Policy And Practices In Nepal**” submitted to Research Department of Kailali Multiple Campus, Dhangadhi, Faculty of Management, Tribhuvan University, is my original work done for the partial fulfillment of the requirement for the Masters Degree in Business Studies (MBS) under the supervision of research department chief Dr. Padam Raj Joshi and Mr. Padamkant Joshi, lecturer of Kailali Multiple Campus, Dhangadhi, Kailali.

.....

Binod Raj Pant

Kailali Multiple Campus

TU Regd. No: 7-3-327-740-2006

Campus Roll No. : 04/063

MBS-II symbol No. : 1470

Date:

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To accomplish this study, I have done the optimum effort from my level to offer precise information in the related topics and hope it will act as reliable reference to upcoming students, respective institutions as well as seekers of related studies.

Binod Raj Pant

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ABBREVIATIONS

a	- Constant of Regression
b	- Coefficient of Regression
CF	- Correction Factor
Co	- Company
CR	- Current Ratio
CV	- Coefficients of Variable
D/Y	- Dividend Yield
DF	- Degree of Freedom
DPR	- Dividend Payout Ratio
DPS	- Dividend Per Share
E/Y	- Earning Yield
EBIT	- Earning Before Interest and Tax
EICL	- Everest Insurance Company Limited
EPS	- Earning Per Share
FY	- Fiscal Year
Ltd	- Limited
MM	- Modigliani and Miller's Approach
MPS	- Market Price Per Share
GFCL	- Goodwill Finance Company Limited
BOK	- Bank of Kathmandu Limited
ULL	- Unilever Limited
NRB	- Nepal Rashtra Bank
P/E Ratio	- Price-Earning Ratio
PE	- Probable Error
r	- Coefficient or Correlation
r ²	- Coefficient of Determination
SEE	- Standard Error of Estimate

Chapter- I

INTRODUCTION

1.1 General Background

Dividend refers that portion of firm's net earning, which is paid to the shareholders. It is the payment made to the common stock holder out of the firm's earning instead of their investment on equity share of the firm. In other words, dividend refers that form of return which is distributed to the stockholders after retaining firm's profit for its expansion. A company decides to declare its dividend to its equity shareholder as a part of return on their investment only of the financial report of the company shows net profit during the financial year. The popular forms of dividend are cash and stock dividend. How much cash and stock dividend is to be distributed to the common stockholders is decided by the board of directors. The common stockholders are real owners of the business but they are least in the priority of the disbursement of the profit. Before the distribution of the dividend to the common stockholder, interest to bondholder, preferred dividend to the preferred stockholder and revenue to the government must be paid. Dividend is the most inspiring aspect for the investment in the shares of various companies for an investor, so to attract the new investors; dividend should be paid to the shareholder in an effective way.

Dividend policy is defined as the decision regarding the separation of net earning between distribution to shareholders as dividend and retention within the firm to meet its further financial requirement. Dividend policy decision is a major decision of a firm, which determines the division of earning between payment to stockholders and reinvestment in the firm. There is no uniformity in the distribution of dividend in Nepal. Firm may choose one of the many combinations between two extremes is, distribution of zero to hundred percent as cash dividend. Dividend policy has strong effect on the stock price of the firm. Thus, it is one to the major decision that may contribute to maximize the value of the firm. There is conceptual conflict about whether cash dividend should be paid or retain in company for the purpose of internal financing. Both alternatives leave their own impact on the growth of a company.

Retained earnings are the most significant internal source of financing the growth of the firm; on the other hand dividends are desirable from shareholder's point of view, as it tends to increase their current wealth.

Dividend policy is a crucial area of financial management of a firm. 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. There is inverse relationship between retained earnings and cash dividend. If more retained earning is made, the amount of dividend would be less and in the case of less retained the investor would be able to enjoy more dividend. The objective of a dividend policy should be to maximize shareholder's return so that the value of his investment is maximized. Shareholder's return consists of two components, dividend and capital gains. Dividend policy has direct influence on these two components of return. If the firm adopts the policy of retained earning for the purpose of expansion of its business in the long run capital gain would be the result. Dividend payment to shareholders will obviously reduce the capital gain but it will increase their current wealth and plug them back into the business.

After the adaptation of liberal economy policy by Nepalese Government, joint venture and national investors are encouraged to invest in different private sector, which results Nepalese capital market under the stage of the developing during the decade of 90's. People are attracting to invest in the organizational profitable securities. Scattered money is taking its shape into an organized capital market of Nepal though it is suffering from the numerous hurdles. This is human nature that he wants a smart return from his investment. When someone is considering to invest in any organization as the form of equity share his first attempt would be to wards gathering information about firm's present position and profitability, which can be reveal through the dividend policy of the firm. So, the study of the dividend policy is very important as well as challenging task in the field of financial decision making. An optimum dividend policy is a major tool to attract a potential investor to invest for the expansion of the capital position and business operation of the firm.

This research includes the study of four companies from different sectors. Each sample consists of banking, finance, insurance and manufacturing & processing

sector. The focus of my study is on the relevant factors regarding of dividend policy and practices of the above mentioned samples. Before starting the study, the review on the history of Nepalese financial market could be beneficial. Following paragraph contains a brief description of the history of related sectors of the study.

Banks

In Nepal, banking in true sense of term started with the inception of Nepal Bank Ltd, which is the first commercial bank in Nepal. Established in 1937 AD (1994 B.S), Nepal Bank Ltd. Carried out the functions of a commercial bank. It collected the deposits and provided loans to the needy people. This bank played a major role in Nepalese economy at that period. After the establishment of Nepal Bank Limited, banking transaction was flourished, this was an initial step towards the structure of the capital market. Having felt the need of a central bank, Nepal Rastra Bank was established in 2013 B.S under the central Bank Act 2012. To fulfill the adequate services for increasing commercial activities in the country, Rastriya Banija Bank (R.B.B) was established in 2022 B.S as a fully government owned commercial bank. Despite these efforts of the government, financial sector was found sluggish. Banking services to the satisfaction of customers was a far cry. In the meantime, when government permitted establishment of foreign Joint Venture Banks (JVB's), the inspection of Nepal Arab Bank Limited (NABIL) in 1984 AD as a first joint venture bank proved to be milestone in the history of banking. Following NABIL, Nepal Indosusez Bank Ltd. And Nepal Grindlays Bank Ltd. (now Standard Chartered Bank Limited) was established as joint venture banks. After restoration of the multiparty democracy, the newly elected government adopted the liberal market oriented economic policy, as the result Nepalese capital market has jumped a step upward by establishing remarkable number of banks in collaboration with joint ventures and Nepalese promoters.

Financial Institutions

Financial institutions are the organizations that are engaged in any type of the financial transactions. Financial Institutions accepts deposits as well as provide loans to the needy persons, business or industries. According to NRB Act 2012 article 2(7a), "The financial institution in Nepal refers to any institutions, established with

the objective of providing loan to agriculture, cooperative, industry or any other specific economic sector or accepting deposit from the public. The term also refers to any other institution called financial institution by Government of Nepal by publishing a notice in gazette. However the term doesn't signify Commercial Banks". Finance companies are one of the forms of the financial institutions. In Nepal the finance company act 2042 governs finance companies. Besides providing banking facilities, it performs agency function i.e. transferring of money, underwriting shares and debentures. Finance company also deals in stocks and bond issued by government as well as provides brokerage and underwriting service to non-governmental organization.

Insurance

Insurance is a way of providing security to the property as well as person against any particular risk. It is means of shifting the risk to insurer in consider action of nominal cost. Insurance provides financial protection against any specific risk. Insurance business act 2042 states insurance as, "A contract made by person/persons paying certain amount based on estimated life and he or his representative gets the amount based on estimated life of the policy period"

Insurance has two functions:

1. **Primary Function:** Primary function of insurance includes act of assessing risk and minimizing financial risk using remedial measures to protect from loss immediately.
2. **Secondary Function:** Secondary function consist of capital mobilization and also it helps to maintain financial stability against and numerous of hazards in the world of business.

Manufacturing and Processing Industries:

Manufacturing Industries refers to those Industries, which produces goods by utilizing or /processing raw materials, semi processed materials, by products or waste products, or any other goods. Manufacturing and processing Industries produces such products, which are very familiar among the consumers. The regular consumable products are main focus of these types of the Industries.

1.2 Brief Profile of Selected Companies

In this study, due to time consistency and reliability of the data available, only four companies are selected as sample among 48 'A-category' enlisted companies of NEPSE. Following are the brief introduction of them.

1. Bank of Kathmandu Ltd. (BOK)

Bank of Kathmandu Limited, one of the A-category enlisted banks of NEPSE offers a wide range of services. Some of them are Trade finance, deposits, fund transfer, remittances, export credit, bills purchase, loans and advances, locker facilities, ATM with any branch banking 365 days banking etc. Bank of Kathmandu Limited purely established by Nepalese promoter and public in March 1995. The Authorized Capital of the company is Rupees 1000 millions, Issued Capital is Rupees 844.398 millions and Paid up Capital is Rupees 844.398 millions.

Share Ownership Structure:

2. Promoters holding 41.81% of capital
3. General Public holding 58.19% of capital

3. Goodwill Finance Company Ltd.

Goodwill Finance Limited is a leading provider of financial solutions with unique mix of dedication and perfect execution. With the vision of providing best financial services for success, Goodwill Finance Limited started its operation as financial institution under the license from Nepal Rastra Bank in 1995. It is a public limited company established under the financial company act 2042, on 2051BS. The Authorized Capital of the company is Rupees 640 millions and the Issued Capital is 288.75 millions & Paid-Up Capital is 115.50 millions. 60 percent of the Paid-Up Capital is held by the promoter and remaining 40 percent is held by the general public.

3. Everest Insurance Company Ltd

Nepalese finance market has remarkable contrition from insurance sector i.e., insurance companies. Among numerous insurance companies, Everest Insurance Company has its own identity as 'A-category' enlisted insurance companies of NEPSE. Everest Insurance Company Ltd. commenced its insurance business in 1994A.D after receiving an insurance license from Beema Samiti after privatization

of Insurance Business in Nepal. Everest Insurance Company has promoted by leading Industrial and Business houses of Nepal. The share structure of Everest Insurance Company reveals that the company has 40% of its total capital with the general public. Everest Insurance Company was the first company to declare with successful in developing relationship with the best reinsure throughout the world. Providing various insurance services form last twelve years, the company has established itself as one of the leading insurance companies in Nepal.

4. Nepal Lever Limited (Unilever Nepal Limited)

With the purpose of meeting the every day need of everywhere, Nepal Lever Ltd. Was established in 1992 under company Act of Nepal1964 as a subsidiary body of Hindustan Lever Ltd. The Hindustan Lever Limited has invested Rs.73.7 millions in equity as 80% ownership in Unilever Nepal Limited. Similarly Sibkrim Land and industrial Co. Ltd. Has invested Rs.49.03 millions in equity as 5% ownership in Unilever Nepal Limited. Rest 15% on equity has been issued as public preference share. However, the company Unilever Nepal Limited is firstly established as the name of Nepal Lever Limited. Later on after the great success of 10th AGM, the company's name is changed into Unilever Nepal Limited. Nepal Lever Ltd. (Unilever Nepal Limited) is providing various consumable home appliances as well as cosmetic goods to its costumers either be producing itself or importing them from other countries. The product of Unilever Nepal Limited is quite popular among the Nepalese people because it has brought its wealth of knowledge and international expertise to the service of local consumers. Due to its smooth operation, NLL is able to remain only one 'A-category' enlisted company from manufacturing and processing sector. Believing hat to succeed it requires higher standard of corporate behavior towards employees, consumers, society and the world in which we live, NLL is moving a head in the path of sustainable and profitable growth, which is assisting creation of long term value for its investors as well as employees.

1.3 Statement of the Problem

Dividend decision is the crucial decision in financial analysis of a firm. It is a fundamental but still a controversial area of managerial finance. The relationship between the dividend payment and market price of the share is a subject of long

standing argument. Some assume that dividend and stock price has positive relationship however others believe there is a negative relationship between dividend and stock price. In the developed capital market, many empirical studies have been carried out to analyze the relationship between dividend and stock prices like Linter (1956), Modigliani and Miller (1961), Gordon (1962), Friend and Puckett (1964), Walter (1966), Van Horne and McDonald (1971), Chawla and Shrinivasan (1987). However, there is still a controversy concerning the effect of dividend policy on the corporation's market value or market value of share.

Dividend is desirable from the stockholder's point of view. It is the most stimulating factor for the investment on the shares of the company. Payment of dividend makes the investors happy but for the expansion of the firm and get the opportunity of investment in profitable securities, the firm should have an optimum amount of retained earnings. Earnings are also treated as financing sources of the firms. If firm retains its earnings as the source of internal financing, the amount of dividend would be less. In the case of less retained the investor would be able to enjoy more dividend, but this will hamper the growth of the firm. Therefore, there are many dimensions to be considered on dividend theories, policies and practices.

The capital market is an important part of corporate development of a country. Even if capital market is in early stage of development in Nepal, Nepalese investors have heavily made investment in newly established companies, especially in the financial sector. This trend will remain to continue until the investors are satisfied by the decision made by the management of these companies. Dividend is the most inspiring aspect for the investment in the shares of various companies for an investor. Even if dividends affect the firm's value unless management knows exactly how they affect value, there is not much that they can do to increase the shareholder's wealth. So it is necessary for the management to understand how the dividend policy affects the market valuation of the firm. In Nepalese context, different companies paying dividend adopting different dividend policies. Some companies are paying dividend on regular basis but, no companies following a single convincing policy. Dividend is paid in different forms such as cash dividend, stock dividend that are widely popular among Nepalese companies

The major problems that have been identified for the purpose of this study are

1. What is the relationship between the dividend policy and the valuation of the firm?
2. What are the factors that affect the dividend and valuation of the firms?
3. Does the market price of share affected by the dividend policy?

1.4 Objectives of the Study

Main objective of this study is to trace the impact of dividend policy adopted by the firm on the market price of the share as well as the overall value of the firm. Dividend refers to “an amount to the profit that a company pays to people who owns shares in the company” (A.S. Hornby:2000:P230) which means that dividend serve as return on investment. For the management of any organization, examination of the relationship between dividend and market price of share may become an important guideline in setting suitable dividend policy. The major objective of the study is to obtain in-depth knowledge about the impact of dividend policy adopted by the firm to its market price of shares as well as the overall valuation of the firm.

Some of the important objectives of this study can be pointed as follows.

1. To study the dividend policy of the organizations under study.
2. To evaluate the current practices of the dividend policy.
3. To examine the impact of dividend on share price.
4. To study the relationship between dividend policy and other financial indicators.
5. To provide applicable suggestions, which might be helpful to the formulation of an optimal dividend policy and maximize the stock price.

1.5 Significance of the Study

Decision relating to the dividend policy is very important decision regarding financial performance of the company. If the market does not receive its expected dosage, stock price will suffer. Dividend announcement also help to solve symmetric information problem between management and shareholders. Besides this, shareholders usually think that dividend is less risky than capital gain and they use the announcement of changes in dividend payment in assessing the value of a security.

The dividend is most sensitive element in the area of investment in the common stock. Now a day people are attracted to invest in share for the purpose of getting more return as well as to maximize their wealth. So the dividend policy has become an effective way to attract new investors, to keep present investors happy and to maintain goodwill of the company. When a new company floats shares in the capital market, very big congregation gathers to apply for owner's certificate. It indicates people's expectation on higher return of investment in shares. The study may be helpful to investors in identifying the productivity of their investment and justify the rational of their investment decision.

In Nepalese context, dividend distribution is inconsistent and fluctuating. This research may be helpful to the policymakers to formulate an optimum dividend policy in accordance with international standard and this research may try point out the loopholes and suggest the remedies about the appropriate dividend policy.

1.6 Limitations of the Study

When analyzing the study, this research also couldn't be untouched from the boundaries of limitations. Some of these limitations may refer inadequate time, lacking of the experience in research work and reliability of the applied statistical tools. Although we have 48 companies enlisted in 'A-category' due to limited time and quality of the research, only four samples have been used for the analysis. Besides these, some other limitations are discussed below.

1. This study is based specially on secondary data like annual reports of the companies, journals, related materials from various websites and the outcomes may depend on reliability of data of such nature
2. Only cash dividend is referring as dividend at the time of the study.
3. Due to time consistency, only limited number of companies has been considered as samples.
4. Due to the scattered company, it is very difficult to collect the reliable data.
5. Among the limited samples, some samples are not interested in providing the necessary report of their activities.
6. Due to lack of experience in research work, there may be lack of detailed information required for research.

1.7 Organization of the Study

This research consists of five chapters, each chapter is concerned with the dividend policy and practices followed by the four samples. The chapters are very carefully planned to make a simple and meaningful methodology approach. Organization of the chapters and content of each chapter are discussed in following way:

Chapter One: Introduction

This chapter deals with the introductory part of the research. This chapter covers general background, Statement of problems, Objectives of the study, Significance of the study, research methodology and Organization of the study.

Chapter Two: Review of Literature

This chapter includes theoretical analysis as well as brief review of related literatures. This chapter is divided into conceptual framework and review of related major studies.

Chapter Three: Research Methodology

This chapter deals with the nature and sources of the data, research design, data collection and processing procedures, methods of analysis of statistical tools.

Chapter Four: Data Analysis and Presentation

This chapter consists of presentation and analysis of data by applying statistical and non-statistical tools to indicate the quantitative factor on dividend policy and practice as well as the major findings are also shown in this chapter.

Chapter Five: Summary, Conclusion and Recommendations

This chapter includes the summary of the study and presents the conclusion which has been found as the outcome of the research with a suggestive package of recommendations.

Besides these, bibliography and appendices have been included at the end of the Thesis Report.

CAPTER II

REVIEW OF LITERATURE

In this chapter, concerned literatures relevant to the dividend policy are reviewed. While reviewing the literature, different books, studies of magazines, articles, Journals and unpublished dissertation of seniors have been used. This chapter is divided into two groups. First is conceptual framework and another is review of related studies.

2.1 Review of Conceptual Framework

By dividend, we mean the portion of earning made by the firm that is distributed to the shareholders in return of their investment in shares. Profit maximization is the main objective of the entire firm. While making the profit the firm has two alternatives, the first alternative related to determine how much amount of profit to be retained in the firm for business expansion and other alternative tells the amount of the money distributed to its investors (shareholders). Most of the firms try to make balance between these two alternatives. For this they retain certain percentage of profit in business and rest is distributed to the stockholders. The distributed income is simply called dividend. “Dividend refers to that portion of a firm’s net earning, which are paid out to the shareholders.”(Khan & Jain: 1999: P.13.3)

Paying dividend to the shareholders is an effective way to attract the new investors. But it is not an easy task to decide how much should be paid to the shareholders, as the firm needs more fund to expand its operation. An effective dividend policy can solve the problem of how much amount should be retained and how much should be paid to the shareholders. The dividend policy includes all aspects related to the payment of dividend. Dividend policy is the policy of any firm/company regarding the division of its profit between shareholders as dividend and retention of the profit for making investment. “Dividend Policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute the cash flows that accrue to stockholders”. (Weston, & Copeland: 1990: P.657)

The policy of a company in segmentation of its earning as dividend and as retention for its investment is known to be dividend policy. Dividend policy may consider as one of the essential decision to maximize the value of common stock as it directly affects the structure of the firm, the flow of funds, corporate liquidity and investor's attitude. It determines the ratio of earning to be retained and payout. As the dividend payment and retained earning have inverse relationship, the entire problem relating dividend payment and retention of earning is closely examined before applying appropriate dividend policy. Higher dividend payout reduces the retention amount, which affects the internal financing, in other hand lower dividend payment affects the market price of the stock. The decision of dividend payment is closely related to the objective of the firm. The firm pays higher dividend in wealth maximization objective but in the objective of the expansion of the firm, the principle of lower payout should be adopted. "Most of the investors expect to continue in each year as well as to receive price when they sell the stock."(Weston & Brigham: 1989: P.228) The expected final stock price includes the return of original investment plus a capital gain. If the stock is actually sold at price above its purchase price, the investor will receive capital gain; as such the shareholders expect increase in market value of the common stock over time. At the same time, they also expect firm's earning in the form of dividend or capital gain. "Financial Manager is therefore concerned with the activities of the corporation that affects the well being of stockholders. That well being partially measures by dividend received but a more accurate measure is the market value of the stock." (Dean: 1973: P.1) In the view of the shareholders, dividend is less risky than capital gain. "Since dividends would be more attractive to the shareholders, one might think that there would be a tendency for corporation to increase the distribution of dividend. 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 earning for the corporation." (Throp: 1977: PP. 90-91)

Dividend serves as simple comprehensive signal of management interpretation of the firm's recent performance and its future prospects. Some companies may pay whole earning as dividend at the beginning to create good image in financial sector but later, they may change their policy and announce a certain percent of dividend pay out term. Dividend policy should be concerned with the well being of the shareholder,

which can be partially measured by dividend received but more accurately measured in terms of the market value of the stock. “The dividend policy must be formulated with the basic objectives of maximizing the wealth of the firm’s owners and providing for the sufficient financing. These objectives are not mutually exclusive but rather interrelated” (Lawrance: 1994: P.696)

Thus dividend decision is one of the central and major decision area related to the policies seeking to maximize the value of firm’s common stock as well as the wealth of the shareholders.

2.1.1 Major Forms of Dividend

Dividend refers to left out of earnings. The portion of dividend payout will fluctuate from period to period by making support in the amount of acceptable investment opportunity available to the firm. Dividend can be paid to the shareholders in various forms depending upon the objectives and policies implemented by a firm. A firm must ensure the smooth growth of the firm as well as satisfy the expectation of the shareholders before adopting any dividend policy. The corporations in Nepal are in the early stage of development due to which they need to pay extensive concentration in the dividend policy. In Nepalese context, cash dividend and stock dividend and are the most popular form of dividend payment. When the firm doesn’t have sufficient cash, it pays different forms of dividend to its investors. Besides cash and stock dividend, scrip dividend, property dividend, bond dividend can also be paid as the return of the investors (Shareholders).

I. Cash Dividend

By its name, cash dividend refers to the portion of earning paid to the investors in the form of cash in proportion to their share investment in the company. In context of Nepal, cash dividend is the most popular form of dividend and is mostly adopted by many companies/forms/financial institutions. When cash dividend is paid, the cash account and the reserve account of a company will be reduced, thus both the total assets and the net worth of the company are reduced as well when cash dividend is

distributed. A company must arrange sufficient cash at the time of dividend payment in cash. “When a company follows a stable dividend payment policy, it should prepare cash budget for a coming period to indicate the necessary funds which would be needed to meet regular dividend payment of the company”(Pandy: 1999: P.782)

II. Stock Dividend and Stock Split

“A stock dividend is paid in additional shares of the stock instead of in cash and simply involves a book keeping transfer from retained earning to the capital stock account.” (Weston & Copeland: 1990: P.980) In other words, stock dividend refers to issuing of additional shares to existing shareholders instead of cash. Stock dividend increases number of shares outstanding of the company as result EPS, DPS and MPS of the shares decreases. The shares are distributed proportionately so the shareholder retains his proportionate ownership of the company. The declaration of shares dividend will increase the paid-up share capital and reduce the retained earning (reserve and surplus) of the company but the total net worth is not affected by the bonus share issue.

“With the stock split, the number of shares is increased through a proportional reduction in the par value of the stock” (Van Horne: 1988: P.373) A stock split is a method to increase the number of outstanding shares through a proportional reduction in the par value of the share. A stock split affects only the par value and the number of outstanding shares. The shareholder’s total fund remains unaffected. Some of the joint venture companies of Nepal have adopted the policy of paying cash along with stock dividend.

III Scrip Dividend

Scrip refers to promissory notes, when company doesn’t have sufficient cash to pay its shareholders or the company’s cash position is temporarily weak and does not permit cash dividend, the company may issue promissory note stating that dividend would be paid within the maturity period. Scrip dividend could be interest bearing and non-interest bearing. The dividend would be paid to shareholders when the company has sufficient amount of cash. Scrip dividends are justified only when the

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

IV Property Dividend

By property dividend, we mean payment of dividend in the form of property or assets instead of cash. Usually this form of dividend is paid when the company has useless or unnecessary property or assets at the time of operation. This excess of property is to be distributed among its equity shareholders as the form of return to their investment

V Bond Dividend

With the view of reserving cash flow, the company pays the dividend in the form of its own bond. When the company generates more profit for a long time, they issue the bond with the view of avoiding cash outflows. The issue of bond dividend increases the long term obligation of the company's current liability.

VI Special Dividend

Companies with wasting assets may declare this kind of dividend, by those wishing to retrench operations and by those winding up their corporate existence. Cash dividends, in such cases are considered as a return of capital in gradual stages.

VII Optional Dividend

Optional dividends are payable in cash or stock at the option of stockholders. Sometimes cash dividends are applied towards the purchase of new stock unless the stockholder expresses his/her desire to have cash.

VIII Depression Dividend

Depression dividends may arise from reduction in stated capital. A corporation thus wipes out its deficits and creates surpluses in order to keep up dividend payments. Unintelligent and indifferent stock holders lend their approval to such hocus-pocus.

IX Dividends from Appreciation

When assets are disposed of for more than the book value, dividends may be paid out of the realized appreciation.

X Liquidation Dividend

Liquidation dividends represent the distribution of assets as a result of the failure of a company or on its dissolution. They are paid out of properties that are surrendered for cash or some other form of wealth. Liquidation dividends may be paid to bondholders as well as to stockholders.

2.1.2 Theories of the Dividend

The firm would be well advised to use the net profits for paying dividend to the shareholders if the payment will lead to the maximization of wealth of the owners. If not, the firm should rather return them to finance its investment programme. The relationship between dividends and value of the firm should, therefore, be the decision criterion. There are, however, conflicting opinions regarding the impact of dividends on the valuation of a firm. Modigliani and Miller (MM) think “under a perfect market situation, the dividend policy of a firm is irrelevant, as it does not affect the value of the firm” (Miller & Modigliani: 1961: PP.411-433). On the other hand Professor James E. Walter argues that “the choice of dividend policies almost always affect the value of the firm” (Walter: 1963: PP.280-291). For the convenience of the study dividend theory can be divided into two groups which is as follows.

- a) Residual Theory of Dividend
- b) Stability of Dividend

a) Residual Theory of Dividend

According to this theory, “the dividend is distributed if there exists a balance earning after paying fixed obligations and investment opportunities.” (Pandey: 1999: P.537) This theory tells only left after earnings should be distributed to the shareholders in the form of dividend after accepting all the profitable investments opportunities in accordance with the firm’s investment policy. The firm must invest in such project, which have greater than required and only residual amount of earning should be distributed to the stockholders as the form of cash dividend.

Dividend amount wouldn't remain constant in every time because the firm usually gets investment opportunity in profitable securities. It must prefer retained earning instead of external funding because external funding is quite expensive in comparison with internal funding due to flotation cost and others. When the firm uses huge amount of earning for its expansion, the dividend payout to its stockholders would certainly be bit lower. "Although the residual theory of the dividend appears to make further analysis of the dividend policy unnecessary, it is not clear that dividends are solely a means of disbursing excess funds" (Rao: 1992: P.458)

In a bird's eye view, we can conclude that dividend amount of the firm can be determined by investment opportunity as well as availability of the internally generated fund of a firm.

b) Stability of Dividend

This theory refers to regularity in dividend payout even the amount fluctuates from time to time. Stability of dividend is considered as a desirable policy by the management of most companies. Shareholders also generally favor this policy and value of stable dividend is higher than the fluctuating ones. "All the other things being the same, stable dividend have a positive impact of the market price of the share". (Pandey: 1999: P.778)

Under this theory, three different forms of dividend was developed which are as follows:

i. Constant Dividend per Share

In this policy, a fixed amount per share as dividend each year is to be paid to its stockholders. Respective to the fluctuation in the earning, when the earning of the firm is stable, it is easy to follow this policy but if the earnings are fluctuating, the company may face many difficulties. With the earning fluctuating year to year, it is essential for the company which wants to adopt this policy, to build up surpluses in year of higher than average earning to maintain dividend in years of below average income.

This policy doesn't imply that the dividend per share will never be increased. When the company reaches new level and expect to maintain it, the annual dividend per share may be increased. If the income is expected to be temporary, the annual dividend per share is not changed and remains at the existing level.

This policy generally preferred by those persons and Institutions that depends upon the dividend income to meet their living and operating expenses. "Increase or decrease in market value may even be of little concern to these investors, and this condition tends to produce a steady long run demand that automatically stabilizes the market value of the shares." (Brandt: 1972: P.447)

ii. Constant Dividend Payout Ratio

Some company follows constant dividend payout ratio. The policy refers to paying a fixed percent of net earning every year. With this policy, the amount of dividend will fluctuate in direct proportion of earning and are likely to be highly volatile in the wake of wide fluctuations in the earnings of the company. Management may support this type of policy because it is related to the company's ability to pay dividends. It ensures that dividends are paid when profits are earned and at the time of losses, no dividend shall be paid regardless of the desire of the shareholders. "One of the most appealing features of this policy to some extent is its conservation and its guarantee against over or under payment, since it doesn't allow management to pay dividend if profit are not earned in current year, and it does not allow management to for go dividend, if profits are earned." (Brandt: 1972: PP.448-449)

iii. Low cost Dividend Per Share Plus Extra Dividend

Under this policy, a small amount of dividend is fixed to reduce the possibility of ever missing of dividend payment. In the period of prosperity, extra dividend is paid to prevent investors from expecting that the dividend represent an increase in the established dividend amount. "This type of policy enables a company to pay constant amount of dividend regularly without a default and allows a great deal of flexibility for company's earning higher than the usual without committing itself to make larger payment as a part of the fixed dividend." (Pandey: 1999: P.780)

This policy is preferable to some shareholders because of certain amount of dividend with extra dividends.

2.1.3 Constraints on Dividend Payment

The decision regarding distribution of earnings to its shareholders of a company related to number of factors. Many internal as well as external factors may influence the payment of dividend. Management has to consider economic and non-economic factors before establishing any dividend policy. The factor which affects the dividend policy of a firm, are discussed below.

a) Legal Restriction

Legal restriction is one of the most important constraints in paying dividend of a company. These constraints can be discussed as follows:

- I) Capital impairment rule states that dividend should not be paid out of paid-up capital, which causes adverse effect on security of creditors and preference shareholders.
- II) The firm should not pay cash dividend greater than the current net profit plus accumulated balance of retained earning. Accumulated loss should be recouped out of current earnings. This rule is violated by some of Nepalese companies due to management intention and government intervention.
- III) Insolvent firms i.e. liabilities exceeding assets or unable to pay bills are prohibited for paying cash dividend to protect creditors of the firm.
- IV) If the firm has retained earning to provide opportunity to shareholders for capital gain and thereby evade tax liability of income, under such condition the firm may be forced to pay dividends.

b) Liquidity Position

Liquidity position or the cash availability of a company is another one of the major constraints in making dividend decision. The firm must have adequate cash while paying the dividend. The dividend payment means cash outflow. So the availability of cash of a firm is important consideration for dividend payment. The greater the cash position and overall liquidity of a company, the greater is its ability to pay dividend regularly. While an immature firm faces difficulties in maintaining a sound

cash liquidity position because of the expansion of the business, but a mature company generally have adequate liquidity and able to pay large amount of dividend with a sound cash position.

c) Access to the capital market

If a company can raises debt or equity in the capital market, it can pay dividend even the cash position of the firm is insufficient. A firm, which is large and well established and has a record of profitability and stability of earning, will not find much difficulty in raising funds in the capital market. Even if the firm is not in liquid position its ability to pay dividend will be higher because of its ability to raise funds in capital market. In contrast a small and new firm is riskier for potential investors so its ability to raise equity or debt funds from capital market is restricted. That's why small firms must retain more earnings to finance its investment opportunities. Thus a well established firm has higher dividend payout ratio than of a new and smaller one.

d) Control

“The objective of maintaining control over the company by the existing management group or the body of the shareholders can be an important variable in influencing the company's dividend policy” (Pandey: 1999: P777) If the company pays excess cash dividend, there would be shortage of fund to finance investment opportunities, which must be fulfilled by issuing new securities. This affects the control position of existing shareholders. So, they are not desirable to distribute earning as dividend which prevents them to loose the control position of the company.

e) Investment Opportunity

The dividend policy is greatly influenced by the financial need of the company. Companies invest its earning to the projects rather paying dividend, if any profitable project is found. “A growing firm gives precedence to the retention of earning over the payment of dividend in order to finance its expanding activities. But when the investment opportunities do not occur continuously but infrequently then the company may not justify in retaining the earning at least during those period when such opportunities does not exists.” (Pandey: 1999: P778) When the investment opportunities occur in frequently, company follows a policy of paying dividend and raises external funds when the investment opportunities occur.

f) Inflation

Inflation act as one of the constraint in the dividend policy. Cost of replacing assets increase due to inflation and funds generated by depreciation would be inadequate to replace the assets. To maintain the capital in act and preserve the earning power of the firm, earning would be retained. In another words, to maintain the capital in act that reduces dividend payment, the greater profit retention would be required.

g) Stability of Earning

A company can declare its dividend only when there is stability in its earning. Stable earning can predict the company's approximation regarding future earnings. The company with stable earning can pay out higher percent of earning as dividend than a firm with fluctuating earnings. A lower dividend will be easier to sustain if a firm is not certain that in succeeding years the anticipated earnings will be realized. In another words, if the earning is unstable, the company has to retain higher percentage of earning.

h) Restriction in Loan Agreement.

When the firm is experiencing liquidity, restriction on dividend payment may be employed by the lenders to protect their interests. This could be happen in those circumstances when a firm aggresses as a part of contract with its lenders that it will restrict dividend payment to conserve the company's ability to service debt. Similarly preferred stock agreements generally state that no cash dividends can be paid on the common stock until all accrued preferred dividend have been paid. In the period of these restrictions, the firm is forced to retain earning and have a low payout of dividend.

i) Past Dividend

A firm with record of past dividend payment strive to maintain the same in the future. Dividends are habit forming. If the market does not receive its expected dosage, the stock price will suffer. The majority of firms surveyed indicated that they would maintain their current dividend payments even if they were operating at a net loss for an interim period.(Jensen & Johnson: 1995: P.32)

j) Tax position of stockholders

The dividend payment of a company is highly influenced by the tax position of its owners. If a company is closely held by few taxpayers in high income tax brackets then they will certainly like to get the return of their investment in the form of capital gains rather than as dividends, which are subject to higher personal income tax rates. On the other hand, a high dividend payout might be preferred by the stockholders of a large widely held corporation.

k) Other considerations

The above mentioned things are not sufficient to decide a sound dividend policy. Other considerations which have to be taken into accounts are; the future growth of the company, maturity period, government policies, age of the corporation, informational contents of dividend are a few examples which plays vital role at the time of deciding an optimum dividend policy.

2.1.4 Legal Provision Regarding Dividend Practice in Nepal

In Nepalese context, regarding dividend payment, some provisions are made by Nepal Company Act 1997. The provisions regarding dividend practices are discussed as follows:

) Section 2 (M) states that bonus shares (stock dividends) means shares issued in the form of additional shares to share holders 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 funds. (Endi Consultants Research Group: 1997: P.43)

) Section 47 has prohibited company from purchasing is own shares. This section states that no company shall purchase its own shares or supply loans against the security of its own shares. (Endi Consultants Research Group: 1997: P.60)

) Section 134 Bonus Shares and Sub Section (1) states that the company must inform the office before issuing bonus shares. Under Sub Section (1), this may be done

only according to a special resolution passed by the general meeting. (Endi Consultants Research Group: 1997: P.94)

) Section 140: Dividends and Sub Sections of this Section are as follows; (Ibid, P.94-95)

➤ Sub Section (1): Except in the following circumstances, dividends shall be distributed among the shareholders within 45 days from the date of decision to distribute them.

- In case any law forbids the distribution of dividends.

- In case the right to dividend is disputed.

- In case dividends can not 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.

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

➤ Sub Section (3): Only the person whose name stands registered in the register of existing shareholder at the time the dividend shall be entitled to.

2.2 Review of the Major Studies in General

Various studies have been made concerning the dividends and stock prices. Some of the major international studies on the relating to dividend are stated as below.

2.2.1 Modigliani and Miller's Study

According to Modigliani and Miller, dividend policy of a firm is irrelevant as it doesn't affect the wealth of the shareholders (Miller & Modigliani: 1961: PP.411-433). In other words, the division of earnings between dividend and retained earning is irrelevant from shareholders viewpoint. This is the most comprehensive argument for the irrelevant of the dividend. In their 1961 article, for the first time in the history of finance, Modigliani and Miller advocated that dividend policy does not affect the value of the firm i.e. dividend policy has no effect on the share price of the firm. They argued that the value

of the firm depends on the firm's earnings which depend on its investment policy. Therefore there is no significant relationship between dividend policy and value of firm. In other words a firm's value is independent of dividend policy.

The MM approach of irrelevance dividend is based on following assumptions:

- a. The firms operate in perfect capital market where all investors are rational and information is freely available to all. Securities are infinitely divisible and no investor is large enough to influence the market price of securities.
- b. There are no flotation costs. The securities can be purchased and sold without payment of any commission or brokerage etc.
- c. Taxes do not exist. Alternatively, there are no differences in tax rates applicable to capital gains and dividends.
- d. The firm has a fixed investment policy, which is not subject to change.
- e. Risk of uncertainty does not exist. Investors are also able to forecast future prices and dividends with certainty, and one discount rate is appropriate for all securities and all time periods.

The proof of the support of the argument is discussed as below:

Step 1:

The market price of the share in the beginning of the period 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 the equity capital

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

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

Step 2:

The market value of the firm can be calculated as follows when the firm doesn't resort any external or new financing. (Multiplying both sides of equation 1 by the number of shares outstanding (n) to obtain the total value of the firm)

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

Where,

n = Number of the equity shares outstanding at the zero period.

Step 3:

If the firm's internal source financing all short of the funds required to meet its investment opportunities then the firm issues new shares to finance the new investment needs of funds at a price of P₁, the value of the firm at time zero will be:

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

Where,

n = no. of shares at the beginning

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

Step 4:

If the firm were to finance all investment proposals, (either of retained earning or the issuance of new shares or both) the total amount of the new share issued would be given below.

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

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

Where,

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

I = the total amount requirement of capital budget.

E = Earning of the firm during the period

$E - nD_1$ = Retained Earning

Step 5:

By substituting the value of $D_n P_1$ from the equation of step 4 to equation of step 3, we find,

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

$$\text{or, } nP_o = \frac{P_1 (n + D_n) - I + E}{1 + K_e}$$

Conclusion

As stated earlier MM assumption tells that dividend policy has no effect on the share price. In other words MM conclude that dividend policy is irrelevant and it has no effect in the value of the firm. So the role of dividend can't be shown on above equations.

MM approach does not seem so relevant to apply in Nepalese context. Because when we apply this approach, the assumptions supposed by MM are significantly deviated. We are unable to find the rational investors as well as perfect capital market in Nepal, which are considered by MM. It's also not seemed so sound to neglect the flotation cost, transaction cost and tax effect on capital gain as neglected by MM. A conscious investor always finds difference between dividend and retained earning. Arbitrage arguments as explained by MM apply only when there are very sensitive investors and which are lacking in Nepal. Thus, MM approach is not relevant in the case of Nepal.

2.2.2 Friend and Puckett's Study

Friend and Puckett made a detailed study of 110 firms from 5 Industries during the year of 1956 to 1958. Their study was mainly focused on the relationship between stock

price and dividend by the application of regression analysis. These five sample industries were from chemicals (n=20), electric utilities (n=25), electronic (n=20), food (n=25) and steels (n=20) sectors. Those industries were selected to permit a distinction to be made between the results for the growth and non-growth industries and to provide a basis for comparison with results by other authors for earlier years. Both cyclical and non-cyclical industries were covered. The periods covered include a boom year for the economy when stock prices leveled off after a substantial rise (1956) and a somewhat depressed year for the economy when stock prices, however rose strongly (1958).

They used dividend, retained earning, and price earning ratio as independent variable in their regression model of price function and dividend model acts the role of supply function. In dividend function, earning, last year's dividend and price earning ratio are independent variable. Symbolically, the price function and dividend supply function can be written as follows:

Price Function

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

Where,

P_t = Price per share at time 't'

D_t = Dividends at time 't'

R_t = Retained earning at time 't'

$(E/P)_{t-1}$ = Lagged Earning Price Ratio

Dividend supply Function

$$D_t = e + f E_t + g D_{t-1} + h (E/P)_{t-1}$$

Where,

E_t = Earning per share at time 't'

D_{t-1} = Last years dividend

The followings are some basic assumptions of their study.

- Price doesn't contain the speculative components
- Earning fluctuation may not sum zero over the sample
- Dividend reacts year- to- year fluctuation in earnings.

The regression equation of five industries was based on the equation of

$P_t = a + bD_t + cR_t$ presents the usual simple linear relationship between average prices and dividend and retained earnings to show with the data. They found the customary strong dividend and relatively weak retained earnings effect in three of five industries i.e., chemicals, foods and steels.

Again they tested other regression equation by adding lagged earning price ratio to the earlier equation results the following equation,

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

After testing this equation, they found the result that more than 80% of the variation in stock price can be explained by three independent variables. Dividends have a predominant influence of stock price in the three industries among five but they found the differences between the dividends and retained earning coefficients were not quite so marked as in the first set of regression. The dividend and retained earning are closer to each other for all the industries in both year except for steel in 1956, and the correlation are higher, again except for steels.

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

Similarly they tested the regression equation of $P_t = a + bD_t + cR_t + d(E/P)_{t-1}$ by using normalized earnings again. They obtained normalized retained earnings by subtracting dividends from normalized earnings. That normalization procedure was based on the period 1950-1961. Again they added prior year's normalized earning price variable and they compared the result. Comparing the result, they found that there was significant

role of normalized earning and retained earning but effect of normalized price earning ratio was constant. When they examined later equation, they found that the difference between dividend and retained earning coefficient disappeared. Finally, they concluded that management might be able to increase prices somewhat by raising dividend in food and steel industries.

The conclusion of their study was that the management might be able, at least in some measure to increase in stock price in no growth industries by raising dividends and in growth industries by paying low dividends.

2.2.3 Walter's Study

Professor Walter conducted a study on dividend policy and common stock prices in 1966, arguing that dividend policy almost always affects the value of the enterprise. According to him, the dividend policy of the firm affects the value of the shares, so the dividends are relevant. In the view of Professor Walter Investment policy and Dividend policy are correlated to each other. The importance of the relationship between internal rate of return (R) and its cost of capital (k) in determining the dividend policy is clearly shown in his study.

Assumptions of this model are as follows:

- I. The firm survives in infinite life.
- II. Either the firm distributes entire earnings as dividend or immediately reinvested
- III. Internal rate of return (r) and cost of capital (k) remain constant.
- IV. The value of EPS and DPS are assumed to remain constant forever in determining a given value.
- V. The firm finances all investment through retained earning. There is no need of debt or new equity shares.

Based on above assumptions, Walter has given following formula of valuation of equity share.

$$P = \frac{DPS}{K_e} + \frac{r/k_e(EP\text{-}DPS)}{k_e} \quad \text{or} \quad P = \frac{DPS + r/k_e(EP\text{-}DPS)}{k_e}$$

Where,

P = Market price per share

DPS = Dividend per share

EPS = Earning per share

R = Internal rate of return

Ke = Cost of capital

In the opinion of Walter, optimum relationship between firm's internal rate of return(r) and its cost of capital (k) results optimum dividend policy for the firm. Different dividend policies for the different types of the firms suggested by Walter are discussed below:

a. Growth Firm (r>k)

The firms which expand rapidly are known as growth firms. Because of the sample investment opportunities, these firms enjoy reinvesting their earning at the rate which is higher than the rate expected by shareholders. So, firms having $r > k$ is referred as growth firms which yielding return (r) is higher than the opportunity cost of capital (k). They will maximize the value per share if they follow a policy of retaining all earnings for internal investment. For such a firm dividend payout ratio is zero and correlation between dividend and stock price is negative. The market value per share (P), increases as payout ratio decreases when $r > k$.

b. Normal Firm (r=k)

When the firm's required rate of return and cost of capital are equal, those firms used to be called normal firm. In such model, market value per share would be unaffected by the dividend payout ratio; i.e. dividends are indifferent from the stock price. In normal firms, whether company retains the profit or distributes it as dividend could not make any difference. The market price of share will remain constant for different dividend payout ratio from zero to 100. Thus there is no unique optimum payout ratio for a

normal firm. One dividend policy is as good as other and the market value per share is not affected by the payout ratio when $r=k$.

c. Declining Firm ($r < k$)

If the firms don't have any profitable business opportunities, their investment rate would be less than required rate of return. The investors would expect to get earning as dividend so that they could spend elsewhere with higher return than declining firm. In these firms, the relation between dividend and stock price is positive. So, by distributing the entire earnings as dividend, the value of the share will be at its optimum level. In other words, the market value per share of a declining firm with $r < k$ will be maximum when it does not retain its earnings at all. To maximize the value of share, dividend also should be maximized. The optimum payout ratio for a declining firm is 100% and the market value per share increases as payout ratio increases when $r < k$.

Walter's model concludes that the dividend policy of a firm depends on the availability of investment opportunities and the relationship between the internal rate of return and cost of capital of the firm.

This model has the following Limitations:

- a) No external financing: Walter's approach assumes that retained earning finance is the only investment opportunity of the firm and no external financing debt or equity is used for the financing. When such a situation exists, either the firm's investment or its dividend policy or both will be sub-optimum. This means when the firm's earning aren't adequate to exploit all the investment opportunities having return at equal or more than cost of capital, this approach doesn't allow financing the gap by using other sources.
- b) Constant 'r' and 'k': Walter's approach is based on assumption that rate of return (r) and opportunity cost of capital or discount rate (k) are constant. In fact 'r' decreases as more investment occurs and 'k' changes directly with the firm's risk. This model may not be applicable in case of Nepalese companies because of his other assumption i.e., EPS, DPS etc are constant.

2.2.4 Linter's Study

John Linter made an important study in 1956 on 'Distribution of Incomes of corporations among Dividend, Retained earning and taxes', focusing on the behavioral

aspect of dividend policy in American context. He investigated a partial adjustment model as he tested the dividend pattern of 28 companies. According to him; dividend is a function of earnings of that year, existing dividend rate, target payout ratio and speed of adjustment.

The following were the basic objectives of the study:

- 1) To identify occasion when a change in dividends might well have under active consideration even though no change was made
- 2) To determine the factors which existed most actively into dividends.

His study reflects that a major portion of dividend of a firm could be expressed in the following ways:

$$DIV_t^* = P \text{ EPS}_t \quad \text{-----(1)}$$

And $DIV_t - DIV_{t-1} = a + b (DIV_t^* - DIV_{t-1}) + e_t \quad \text{-----(2)}$

Adding DIV_{t-1} on both sides of equation (2)

$$DIV_t = a + b DIV_t^* + (1-b) DIV_{t-1} + e_t \quad \text{-----(3)}$$

Where,

DIV_t^* = Firm's desired payment

e_t = Earnings

p = targeted payout ratio

a = constant relating to dividend growth

b = adjustment factor relating to the previous period's dividend and new desired level of dividend where $b < 1$

The major findings of this study were as follows:

-) Firms generally think in terms of proportion of earning to be paid out.
-) Investments required are not considered for modifying the pattern of dividend behavior.
-) Firms generally have targeted payout ratios in view while determining change in dividend rate or dividend per share.

2.2.5 Gordon's Model

Myron Gordon developed a popular and important model on dividend policy, which is explicitly relating to the market value of the firm. Gordon explaining that inventory are

not indifferent between current dividend and retention of earning with the prospect of future dividend, capital gain and both. He concludes that dividend policy does affect the value of share even when the return on investment and required rate of return are equal. Under the uncertainty period it is assured that inventory have a strong preference for present dividends more than future capital gain. The expected capital gain is assumed as more risky then current dividend. His assumption argues that an increase in dividend payout ratio leads to increase in the stock price for the reason that inventory consider the dividend yield is less risky than the expected capital gain.

Gordon's model is also described as "a bird in hand argument". It supports the argument, which is popularly known as a bird in hand is worth two is the bush. This model believes that what is available at present is preferable than what may be available in the future. That is to say current dividends are considered certain and risk-less. So it is preferred by rational investors as compared to deferred dividend in future. The future is uncertain. The investors would naturally like to avoid uncertainty. So the current dividends are given more weight than expected future dividend by the investors. So the value per share increases if dividend payout ratio increases. This means there exists positive relationship between the amount of dividend and stock prices.

Gordon's model is based on the following assumption:

-) The firm uses equity capital only.
-) Internal rate of return (r) and cost of capital (ke)are constant.
-) Not availability of external financing, retained earning would be used to finance for expansion.
-) Not existence of corporate taxes. The firm and its stream of earning is perpetual.
-) 'Ke' must be greater than g (=br) to get meaningful value.
-) The retention ratio is once decided upon is constant. Thus growth rate g=br is constant forever.

Gordon's model may be explained as dividend-capitalization model. According to his model, the market value of a share is equal to the present value of an infinite stream of the dividend. Symbolically, it can be expressed as:

$$P = \frac{EPS(1-b)}{k_e - b_r}$$

Where,

P = Price per share

EPS= Earning per share

b = Retention ratio

(1-b)= Dividend payout ratio

k_e = Capitalization rate or cost of capital

b_r = Growth rate

Gordon's model shows following relations in different kind of the firms

Growth firm ($r > k_e$)

The market value of the share increases with the retention ratio for the growth firms in other words; share price tends to decline in correspondence with increase in payout ratio or decrease in retention ratio. In such firms, Dividend and stock price are negatively correlated.

Normal firm ($r = k_e$)

The model tells that Market value of the share is not affected by dividend policy, which means there is not relationship between dividend and stock price. Even there is change in dividend policies, market value of the share remains constant.

Declining firm ($r < k_e$)

The market value of the share increases with the payout ratio. In declining firms, dividend and stock price are strongly positive correlated with each other.

Because of the similarity in assumptions, Gordon's model and Walter's model are quite alike to each other.

2.2.6 Van Horne and McDonald's Study

Van Horne and McDonald conducted comprehensive study on dividend policy and new equity financing. The purpose of this study was to investigate the combined effect of dividend policy and new equity financing decision on the market value of the firm's common stocks.

Empirical tests were performed with year-end 1968 cross sections for two industries, using a well-known valuation model. For there investigation, they employed two samples of firms viz. the 86 electric utilities in the continental U.S. which were included on the COMPUSTAT utility data tape; and companies in the electronics and electric component industries as listed on the COMPUSTAT industrial data tape in 1968.

They performed empirical study by testing two regressions for the electric utilities and one regression model for electronics and electronic and electronic components industry.

The first model was,

$$P_0/E_0 = a_0 + a_1(g) + a_2 (D_0/E_0) + a_3 (Lev) + u$$

Where,

- P_0/E_0 = Closing market price in 1968 divided by average EPS for 1967 & 1968.
- G = Expected growth rate, measured by the compound annual rate of growth
in assets per share for 1960 through 1968
- D_0/E_0 = Dividend payout, measured by cash dividend in 1968 divided by earnings in 1968.
- Lev = Financial risk, measured by interest charges divided by the difference of operating revenues and operating expenses.
- u = Error term.

The Second Model was,

$$P_0/E_0 = a_0 + a_1(g) + a_2(D_0/E_0) + a_3(Lev) + a_4(F_a) + a_5(F_b) + a_6(F_c) + a_7(F_d) + u$$

Where,

- F_a, F_b, F_c and F_d 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 value of remaining dummy variables is zero.

Again, they tested the following regression equation for electronics electronic components industry.

$$P_0/E_0 = a_0 + a_1(g) + a_2(D_0/E_0) + a_3(Lev) + a_4(OR) + u$$

Where,

Lev = Financial risk, measured by long term debt plus preferred stock divided by net worth 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 198601 through 1968, and rest are as in First Model above.

By using these models, they compared the result obtained for the firms which both pay dividend 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, except for those firms in the highest new issue group and it made new equity a more costly form of financing than the retention of earnings. They also indicated that the payment of dividend through excessive component industry, a significant relationship between new equity financing and value was not demonstrated.

2.2.7 Deepak Chawla and G. Shrinivasan's Study

They studied the impact of dividend and retention on share price. The followings were the prime objectives of their study.

- i. To test the hypothesis of dividend and retained earnings.
- ii. To estimate a model to explain share price, dividend and retained earnings relationship.
- iii. To examine the structural changes in estimated relations over time.

In order to achieve (attain) those objectives, they used simultaneous equation model as developed by Friend and Puckett (1964). The following was the model in its unspecified form.

1 Price Function

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

2 Dividend Supply Function,

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

3 Identity

$$E_t = D_t + R_{ts}$$

Where,

P = Market price per share

D = Dividend per share.

R = Retained earning per share.

E = Earning per share.

$(P/E)^1$ = Deviation from the sample, average of price earning's ratio.

T = Subscript for time.

As per the financial theories they expected the coefficients of both dividend and retained earnings to be positive in the price equation. Similarly in the dividend supply function also they expected a positive sign for current earnings and previous dividend.

They selected 18 chemicals and 13 sugar companies and estimated cross-sectional relationship for the years 1969 and 1973. They collected the required data from the official directory of Bombay Stock Exchange. They used two stages least square technique for estimation. They also used lagged, earnings price ratio instead of lagged price earnings ratio. i.e $P/E_{(t-1)}$.

It was found from the result of their two stages least square estimation, that the estimated coefficients had the correct sign and the coefficients of determination of all the equations were very high in case of chemical industry. It implies that the stock price and dividend supply variations can be explained by their independent variables. But in case of sugar industry, they found that the sign for retained earnings is negative in both years and left for further analysis of sugar industry. It was observed that the coefficient of dividend was very high as compared to retained earnings for chemical industry. They

also found that coefficient of dividend was significant one percent level in both years whereas coefficient so retained earnings was significant at ten percent level in 1969 and one percent level in 1973.

2.3 Review of Major Studies in Nepal

The review of studies regarding dividend policy can be broadly classified into two categories.

2.3.1 Review of Articles

I) Review of Books and Journals in Nepalese Perspective

Very few articles relating directly or indirectly with dividend and stock price are published in Nepal. Some of them, which are significant in this study, are reviewed in this section.

a) Dr. R.S. Pradhan's Study

Dr. R.S. Pradhan has conducted a study on small Market Behaviour in **A Small Capital Market: A case of Nepal** in 1993. It is pertinent to put forth here because he has analyzed various ratios related to dividend and market price of shares. The study was based on the pooled – cross sectional data of 17 enterprises covering the year from 1986 to 1990.

The objectives of this study were as follows:

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

The following model was employed.

$$V = b_0 + b_1 LIQ + b_2 LEV + b_3 EARN + b_4 TURN + b_5 COV + U_i \dots$$

The dependent variable, V chosen for the study has been are specified as under:

- Market equity, number of shares multiplied by market price of shares (ME).

- Market value of equity to its book value (MV/BV)
- Price –earning ratio (PE)
- Dividend per share to market price per share (DPS/MPS)
- Dividend per share to earning per share (DPS /EPS)

The independent variables are specified as:

LIQ = Current Ratio (CR) to Quick / Acid Test Ratio (QR)

LEV = Long –Term Debt to Total Assets(LTD /TA) or Long-Term Debt to Total Capitalization (LTD /TC). Total Capitalization is specified as Long-Term Debt plus Net Worth.

EARN = return on Assets, i.e. Earnings Before Tax to Total Assets (ROA) or Return on Net Worth, i.e. Earnings Before Tax to Net Worth (RONW).

COV = Interest Coverage Ratio, i.e. Earnings Before Tax to Interest.

TURN =Fixed Assets Turnover, i.e. Sales to Average Fixed Assets (S/FA), or Total Assets Turnover, i.e. Sales to Average Total Assets (S/ TA)

U = Error Term

Some findings of his study, among others were as follows:

- i. Stocks with larger ratio of dividend per share to market price per share have higher liquidity. Liquidity position of stocks paying lower dividends is also more inconsistent as compared to stocks paying higher dividends.
- ii. Stocks with larger ratio of dividend per share to market price per share have lower leverage ratios. So, leverage ratios of stocks paying smaller dividends were also more variable as compared to stocks paying higher dividends.
- iii. Stocks with larger ratio of dividend per share to market price per share also have higher earnings. But these earning ratios of stocks paying larger dividends were also more variable as compared to stocks paying smaller dividends.
- iv. Positive relationship is observed between the ratio of dividend per share to market price per share and turnover ratios. Stocks with larger ratio of dividend per share to market price per share also have higher turnover ratios. Turnover ratios of stocks paying larger dividends are also more variable than that of stocks paying smaller dividends.

- v. There is also a positive relationship between the ratio of dividend per share to a market price per share and interest coverage. Stocks with higher ratio of dividend per share to market price per share also have higher interest coverage. Interest coverage of stocks paying larger dividends were also more variable as compared to stocks paying smaller dividends.
- vi. So, in conclusion, it indicates positive relationship of dividend per share to market price per share with liquidity, profitability, assets turnover and interest coverage; and negative relationship with leverage.

b) Dr. M.K. Shrestha's Article

Dr. M.K. Shrestha has written an article about “**Public Enterprises; Have They Dividend Paying Ability?**” which was published in the book ‘PRASHASAN’ in March 1981. It gives short glimpse of the dividend performance of some public enterprises of that time in Nepal. Dr. Shrestha has highlighted (focused) the following issues in the article.

Government of Nepal wants two things from the public enterprises: (i) they should be in a position to pay minimum dividend & (ii) Public enterprises should be self-supporting in financial matters in future years to come.

But these both objectives are not achieved by public enterprises.

1. One reason for this inefficiency is caused by excessive governmental interference over daily affairs even though there is provision of government interference only for policy matters. On the other hand, high-ranking officials of Government of Nepal appointed as directors of board do nothing but simply show their bureaucratic personalities. Bureaucracy has been the enemy of efficiency and thus led corporation to face losses. Losing corporations are, therefore, not in a position of paying dividends to government.
2. Another reason of this is the lack of self-criticism and self-consciousness. Esman³³ has pointed out that lack of favorable leadership is one of the biggest constraints to institution building. Moreover corporate leadership comes, as managers are not ready to have self-criticisms. In fact, all so called managers of corporations have not been able to identify themselves regarding what they can contribute as managers of corporations. So Government of Nepal must be in a position to

develop a financial target on corporate investment by imposing financial obligation on corporations.

3. The articles points out the irony of government biasness that government has not allowed banks to adopt an independent dividend policy and Government of Nepal is found to have pressurized on dividend payment in case of Nepal Bank Limited regardless of profit. But, it has allowed Rastriya Banijya Bank to be relieved from dividend obligation despite considerable profit.
4. The improvement suggested by authors are:
 - i. Adopt a criteria-guided policy to drain resources from corporations through the medium of dividend payment.
 - ii. Realization by managers about cost of equity capital and dividend obligation.

If Government of Nepal wants to tap resources through dividend, the following criteria should be followed.

- i. Proper evaluation of public enterprises interns of capabilities of paying dividend through corporation coordination committee.
- ii. Imposition of fixed rate of dividend by government on financially sound public enterprises.
- iii. Circulating the information about minimum rate of dividend to all public enterprises.
- iv. Specifying performance targets in terms of profit, priorities on timings and plans and development of strategic plans that bridges the gap between aspiration and reality.

Identification of corporation objectives in Corporations Act, Company Act or special charters so as to clarify public enterprise mangers regarding their financial obligation to pay dividend to Government of Nepal.

II) International Journals and Articles

R. Mehotra's Study

Rohit Mehotra (2003) conducted a study on 'Dividend Policy and its Effect on Market Pricing', the study is concerned with dividend and its effect on the price fluctuation of the stock. This study is based on the scenario of Indian stock market, top 50 Indian companies of Bombay stock exchange has been taken as sample of this study. All the

samples are paying dividend, although some of the samples suffering from losses, they are also paying nominal dividend using their prior reserves.

His study reveals that market risk of any security depends on its beta (β), which shows the relationship between the sensex return and security return. It also measures the relative risk associated with the security with respect to market. Higher the beta, greater the risk associated with the security. If the value of beta is less than one, the security will be affected less than the proportion of the market sensex.

This research reflects that some of the renowned companies followed the conservation policy while others were paying an excellent dividend. Samples representing the companies like NIIT, Satyam Computers, Glaxo, P &G, Health care, etc., 37% of the sample sizes have performed as per the SENSEX movement. All of these companies have very good track record of dividend payment and appreciated by investors. But, since April 2000, Indian stock market is being victim of continuous chain of national and international negative sentiment (including the US slowdown to TEHELEKA issue), due to which the share price has come down drastically.

Samples holding 26% of the total samples, including Hindustan Lever Limited, ITC, Reliance India Ltd. performed extraordinarily well after debacle of SENSEX. The stock of these companies are continuously paying handsome dividend and showing positive trend in the price movement and have never experienced significant downfall in past couple of years.

Due to some specific factors, 25% of the samples having fluctuation in dividend payment from last couple of years. Though factors may consist of liberalized economic policy, strict government policy in certain sectors, economic fluctuations etc. Some samples are continuously paying certain amount of the dividend from last couple of years, a continuous dividend payment record find no appreciation along with this, they want smooth performance of the company so that they can earn some capital gain also.

Rest of companies, representing 11% of the sample size performed negatively. Those companies were paying dividend on regular basis, the stock price were declining continuously from last couple of years. This situation reveals that investors are very

rational about their current as well as future earnings. They can't accept any window dressing.

In conclusion, investors make equity investment with the expectation of capital gains irrespective of whether they are short term or long term investors. Typically there is who can ensure capital gains to investors without declaring continuous dividend. In other words, the investors do care about dividends however a small impact on their wealth. It is not only the investors' care about dividend but also growth in dividend and profitability of the companies in which they made investments. Since the dividends are taxed in the hands of the companies, but not investors, Indian investors don't give weight age on tax matter unlike US market where tax is the major determinants for the investors for accepting dividends.

Oak tree Research

A recent research on dividend was published on Oak tree (2003) a website relating to business and finance consist of a deep study on dividend with heading of 'Dividend: Relevance or reverence'. This study describes dividend as, dividend represents one of the most interesting puzzles in corporate finance, knowing that dividend are paid in the face of tax disadvantage. This study attempts to tell the answer of the following questions:

-) Why do corporations continue to pay dividends?
-) What then is the relevance of the dividends?
-) What does it play the role in corporate finance?

This study wants to describe the role of dividend policy by two schools of thoughts in the view on whether the dividend adds to the value to the firm.

The first school of thoughts originated by Modigliani and Miller claims that dividend should have no impact on the value of the firm under the perfect market condition. The shareholders of the firm are indifferent towards retention of net income and payment of the dividend, since the dividend policy of a firm doesn't affect its current price.

In the second school of thought, the imperfect market school begins to relax the unrealistic assumption that Modigliani and Miller have introduced. They begin to

introduce both dividend and capital gain taxes. If dividends are taxed at a different rate of capital gain, a distinct preference could develop for either dividend income or capital gains. In 1979, Elton and Gruber found evidence that is consistent with the notion that the investors prefer capital gain to dividend.

This study considers following factors:

Signaling effects of dividend

In 1984, Easterbook studied the signaling effect of dividend and its role in reducing agency cost. He believed that firms that pay high dividend signals the managers intent to maximize investors wealth and to subject him to capital market monitoring and reduces the potential for managerial self dealing and thus reduces the agency cost. His study states that quality firms will signal their strength to investors by passing and sustainable dividend.

Dividend and corporate governance

Easterbook didn't state about motivation that will drive a firm to pay the dividend in his research. Investigation on this issue has derived the outcome models and substitute model. They formulated two hypotheses on the former model:

1. Economies with better investor protection will have higher dividends.
2. Economies with higher investors' rights, firms with growth opportunities will retain earning and invest them, resulting in low dividend payout whereas mature firm will have low growth opportunities and will have high dividend payout ratios.

Hypothesis of second model is as follows:

1. Economies with weak investor protection will have higher dividends.
2. Firms with better growth prospects in weak investor protection economies will have higher dividend payout ratio than firms with lower growth opportunities.

The study conducted by Faccio, Long and Young (2001) investigated the link between dividend and expropriation of minority shareholders. In their study, they found that loosely controlled firms and those with lower CV paid lower dividend. Efficient capital Market requires firms to pay high dividend when agency problem are high. The findings of FLY study are as follows:

-) Dividend work to constrain agency problem in Europe.
-) Dividends do not work constrain agency problem in Asia.
-) Capital structure works to constrain problem in Europe.
-) Capital structure facilitates agency problem in Asia through cross shareholding and pyramids.

This study was conducted with that companies paying higher dividend had strong operating track records and growing profits.

A.K. Saxena's Study

A study conducted by A.K. Saxena (2003) conducted a study entitled 'Determinants of dividend policy: Regulated vs unregulated firms', where he tries to state the importance of dividend policy in several reasons for example, using dividend as a mechanism for the financial signaling to the outsiders regarding growth and stability of the firm, the role of dividend in capital structure, the dividend decision is key phenomenon in establishment of investment decisions.

Though there are sufficient literatures in dividend policy, most of the study excludes regulated firm from their analysis. His study includes several financial variables to explain the possible differences in the dividend policy of both regulated and unregulated firms. While comparing regulated and unregulated firms, the study reflects one interesting results. On average the regulated firms are less risky, has a lower growth rate, has such fewer insiders holding its common stocks, and has fewer investment opportunities, but pays higher percentage in dividend.

His study consists of the data randomly drawn from 333 firms. The total sample is split between 235 unregulated and 98 regulated firms, covering 56 industries. The regulated samples are taken from commercial banking, saving and loan association, investment and brokerage services, life and prosperity and causality insurance, electric utilities, gas, petroleum, telecommunications, railroads, and airlines industries.

The study applied regression equation and hypothesis in order to predict the relationship of variables (with respect o dividend payout ratio) for regulated and unregulated firms.

The study also reflects that the mean dividend payout for regulated firm is significantly larger than that for unregulated firms. Unregulated firms grew more than regulated ones

in the samples over past years. This probably states the fact that regulated firms are more matured and have stabilized over times. It might indicate the fact that managers of regulated firms don't have as much freedom to make them grow as their counterparts in unregulated firms.

This model predicts that dividend payout of unregulated firms are inversely related to past and expected growth, their systematic risk, and the level of holding of common stocks by the managers, directors and officers. On the other hand, payouts are directly related to the number of stockholders in unregulated firms. While the results for the regulated subgroup provide some interesting insights regarding the payout behavior of regulated firms. It seems that insiders don't play a significant role in dividend policy of regulated firms. It is suggested that if a firm is unregulated, the firm's insiders will act to 'regulate' and monitor the firm's financial performance in long run. They do not care as much about receiving dividend today, if they can reinvest these dollars in positive net value projects that will increase firm's value, which in turn attract new investors.

The conclusion of this study reflects that a firm's dividend policy will depend upon its past growth rate, future growth rate and systematic risk, the percentage of common stock held by insiders and the number of common stock holders. More importantly, however some of the determinants of dividend policy are different for regulated and unregulated firms. Specially, the percentage of common stock held by insiders, and expected future growth rate, do not play a key role in regulated firm's payout ratio.

2.3.2 Review of Previous Thesis

In last few years, prior to his thesis; some students of M.B.S programme have conducted research about the dividend and its relation with stock prices in various sectors. Some of them, which are supposed to be relevant for this study have been reviewed and presented in this section.

a) Bishnu Hari Bhattarai's Study

The study of the dividend decision and its impact on the stock valuation was carried out by Bishnu Hari Bhattarai, in 1996 using 10 companies of various sectors. The basic

objective of the study was to identify the relationship between dividend and the stock price. The major objectives of this study can be stated as follows:

- i. Highlight various aspects of dividend policies and practices in Nepal.
- ii. Analyze the variables such as profit, dividend, retained earning, growth rate and relevant variables to how the relationship between the value and other ingredients affecting it.
- iii. Provide feedback to the policy makers and executive working in various companies chosen for study based on the findings of the analysis.

The major findings of this study are as follows:

- i. The companies while paying dividend generally neglect shareholder's expectations.
- ii. Dividends were paid out in profitable years.
- iii. In aggregate, there was no stable dividend paid by the companies i.e. instability of dividend.
- iv. There were no criteria to adopt a certain payout ratio. There is haphazard payout ratio in the companies under study.
- v. Cash balance and dividend payment were positively correlated.
- vi. Mostly the joint venture companies were paying dividend.
- vii. There was positive impact of dividend on valuation of shares.
- viii. Dividend paid was inadequate to cover the required rate of return of the investors.
- ix. Market price considerably higher than actual net worth.

b) Nabaraj Adhikari's Study

The study has covered the period from 1990 to 1996 with total observations of 47 in financial sector and 30 non-financial sectors. This study has used both primary and secondary data. The major objectives of this study were to assess corporate dividend practices in Nepal. The specific objectives were as follows:

- i. To analyze the properties of portfolios formed on dividends.
- ii. To examine the relationship between dividends & stock prices.
- iii. To survey the opinions of financial executives on corporate dividend practices.

The major conclusions, of this research study were as follows:

It is observed that there are differences in financial position of high dividend paying and low dividend paying companies. Other things remaining the same, financial position of high dividend paying companies is comparatively better than that of low dividend paying companies. Thus 'Dividends affect the market price of share' is the major conclusion of this study.

Likewise, the other findings based on primary data are given below:

- i. The price of common stock was induced by dividend payout ratio.
- ii. Nepalese shareholders were not really indifferent towards payments or non-payment of dividend.
- iii. The majority of the respondents feel that the major motives to pay cash dividend was to convey information to shareholders that the company is in good position.
- iv. As regards dividend as a residual decision, the majority of the respondents feel that it was not a residual decision.

With respect to factors affecting corporate dividend policy, the majority of the respondents gave the first priority to 'earnings' the second priority to 'availability of cash', the third priority to 'past dividends' & fourth priority to 'concern about maintaining or increasing stock price'.

c) Bhattarai's Study

Anjani Raj Bhattarai conducted his study on 'Share market in Nepal' in 1990. His study has following issues related to dividend practices:

-) The actual percentage dividend was not matching with the expected percentage dividend. So most of the listed companies declaring less percentage than risk free rate of return and risk premium are unable to maintain investors psychology in marketing.
-) Most of the companies are paying less than the expected cash dividend per share to its investors. Most companies were underwriting the expectation of the investors and there by resulting the two marketability of shares on trading floor of stock exchange.
-) There was a huge gap in the percentage of cash dividend paid by the public companies.

-) There were mismatch between calculated and quoted price of share observed only one calculated price of share was near the actual Market price of the share. This reveals over pricing were guided by technical factors.
-) The price-earning ratio showing by most of the company is lower.

Bhattarai's study couldn't be untouched from limitations but his topic was only focuses on dividend policy. So discussion on those limitations might be irrelevant here.

d) Gautam's study

Rishi Raj Gautam has conducted a study on dividend policy in commercial banks a comparative study of NGBL, NIBL and NABIL in 1995. His study reveals some important aspects of dividend performance of three samples. Major finding of his studies are as follows:

-) Commercial banks represent a robust body of profit earning organization in comparing with other sectors.
-) Though they have good earning potentials, it doesn't seem that commercial banks are guided by clearly defined dividend policy.
-) Share of the financial institution are actively traded and market price are increasing.
-) Average EPS and DPS of the concerned banks are satisfactory.
-) This study indicates there are the largest fluctuation in EPS and DPS, on the other hand, have relatively more consistency DPS in all samples.
-) One of the important finding of this study is that none of the sample has defined the dividend strategy. On the other hand there was significant relationship percentage between earning and dividend of expansion program.

However Gautam's study suffers from following limitations:

There are many factors affects dividend policy, those factors are EPS, DPS, MPS, DPR, dividend yield, liquidity ratio and profitability ratio. But only has used a few financial indicators that result the validity of the research is not worthwhile.

In this study, he has selected samples from commercial bank only. It would be perfect research if he has taken the samples from other sectors and performs while spread analysis in the variables mentioned above.

e) Khatiwada's Study

N.P. Khatiwada has conducted a study on 'Impact of dividend and earning announcement on shareholder's return and stock prices in Nepal' in May 2001, through the data collected from 053/54 to 055/56 for four joint venture banks viz. Nepal Indosuez Bank Ltd., Nepal SBI Bank Ltd., Nepal Grindlays Bank Ltd. and Nepal Bangladesh Bank Limited.

The main objectives of the study were as follows:

-) To analyze the impact of earning and dividend announcement on shareholder's return.
-) To see the correlation between the return of the individual securities with market return.
-) To identify the quality of systematic and unsystematic system.

Major findings of the study are as follows:

-) Announcement of dividend and earning didn't affect the shareholders return in average.
-) Other banks except Nepal SBI Bank Ltd. having different dividend rates didn't provide significant abnormal return to the shareholders.
-) Shareholders realized the positive abnormal return from NB Bank, SBI Bank and Grindlays Bank.

f) Joshi's Study

Bhawani Prasad Joshi has conducted a research on 'Dividend policy in commercial banks' in July 2006, based on data collected for three commercial banks.

He has conducted the research with following objectives:

-) To study the current practices of dividend policy in commercial banks.
-) To find out the impact of dividend on share price.
-) To analyze the relationship of financial indicators.

-) To examine either there is any uniformity among DPS, EPS and DPR of the six sample banks.

The major findings of this study are as follows:

-) Average EPS and DPS for the period covered by the study of all the concerned banks are satisfactory.
-) Analysis of CV indicated that there is largest fluctuation in EPS and DPS and other are relatively more consistent.
-) The analysis of DPR shows that none of the sample banks has consistent dividend policy.
-) The market value of shares in market is fluctuating in all sample banks.

g) Joshi's Study

Krishna Raj Joshi conducted his study on 'Dividend Policy: A Practice in Nepal in August, 2007'.

He has conducted the following objectives

-) To analysis the impact of dividend per share on market price per share;
-) To analysis the relationship of dividend per share with other variables such as EPS, DPR, P/E ratio, MPS, D/Y and return on net worth;
-) To examine the dividend policy of listed finance companies;
-) To assess the financial position of the listed finance companies in terms of dividend and other variables regarding dividend;
-) To provide valuable suggestions to stakeholders;

Joshi's study couldn't be untouched from limitations:

-) Secondary data have been analyzed to draw the result of study;
-) The related data are considered only cash dividend of the finance companies;
-) This study only takes five finance companies as samples whereas there are 32 finance companies listed in NEPSE;

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Introduction:

This chapter deals about research methodology which is used for research purpose. Research is a system enquiry for seeking facts and methodology is the method of doing research in well manner. So, research methodology means the analysis of specific topic by using proper method.

“The term research methodology refers to the various segmental steps to be adopted by a researcher in studying a problem with certain objectives in a view. It describe the methods and process applied in the entire aspect of study” (Kothari, 1994: 19).

"This process of investigation involves a series of well thought out activities of gathering, recording, analyzing and interpreting the data with the purpose of finding answers to the problem. Thus the entire process by which we attempt to solve problems is called research." Wolff and Pant (2000:203)

It is significant to have appropriate choice of research methodology that helps to make this research study meaningful and more scientific. Therefore, appropriate methodology has been followed to meet the purpose objectives of the study. So, the methodologies of this research include the research design, research question, nature and sources of data, population and samples, period covered, types and sources of data, data processing procedures, and presentation of data and method of analysis.

3.2. Research Design

The term “research” refers to the systematic and organized effort to investigate a specific problem that needs a solution. “Design” means planning to carry out investigation conceived to obtain an answer to reason question. Thus research design is a plan, structure and strategy of investigation conceived to obtain possible solution to the research problem in one’s area of study.

The study is based on historical data, which covers a period of five years from F.Y. 2005/2006 to 2009/2010. The analysis of the study is based on certain research design. Selection of appropriate research design is necessary to meet the study objectives. The main objective of the study is to analyze dividend policy of the selected companies in Nepal. It emphasizes on descriptive and analytical study of collected data of Profit and Loss Account and Balance Sheet over the period of time, and it gives suggestion of the dividend policy.

Comparatively this study has been designed as a descriptive cum analytical design. This study is concluded with the measurable suggestion to strengthen or improve the dividend policy in the position of the selected firms.

This chapter is composed of six sections:

- Period Covered
- Selection of Enterprises
- Types and sources of data
- Data Processing Procedures
- Presentation of data and Method of analysis

3.3 Population and Samples of the study

Various studies have been made by Master Degree researchers and other scholars on this topic. But only some studies are considered on dividend policy decision of companies from various sectors in the same study. By reviewing these difficulties, the researcher focused on BOK, one of the leading commercial banks whereas GFCL, EICL and ULL's dividend policy.

3.4 Nature and Sources of Data

The authenticity of a research depends upon the data it collects. Data collected for any kind of research study can be either primary or secondary or both. This study is related to the capital structure management; therefore the sources of data used in this study are basically of secondary nature. All the study analysis and evaluation have been based on the available annual report (P/L A/C and B/S) and progress reports of the concerned companies. The other sources were Unpublished Thesis, Research

Study, Several Books, Journals, Magazines and Newspapers in different libraries. Internet was also an important source. The use of primary source was negligible.

3.5 Data Collection and processing Procedures

All the data necessary for the research is collected from secondary sources. Data related to market prices of shares, market capitalization, movement of NEPSE index etc is taken from the Trading Report published by NEPSE. Other data of related companies are taken from their Web Sites.

The collection procedures are summarized below:

- Financial documents provided by companies.
- Trading manual published by Nepal Stock Exchange Limited.
- Related Web Sites.
- Materials published in papers and magazines.
- Other related books and booklets.

The data are processing collecting by above procedures in crude form in the initial stage and then properly synthesized, arranged, tabulated and calculated to serve the objective of the study.

3.6 Data Presentation and Method of analysis

Method of analysis is an important part in research work. The careful study of available facts for proper understanding of data and extraction of the conclusion from them on the basis of established principles and sound logic is Analysis.

The analysis of data requires a number of closely related operations such as establishment of categories, the application of these categories to raw data through collecting, tabulation and then drawing statistical interlays. On the basis of research problem and objectives of the study data and information needed is identified and collected. The collected data are properly processed and arranged in the form of the table for simplicity. Financial and statistical tools have been used for analysis and interpretation of arranged data. For this purpose, statistical tools such as Karl Pearson's coefficient of correlation and regression analysis have been calculated to see the relationship between various variables. Likewise, some financial tools such as ratio analysis and trend analysis have been used.

For quantitative analysis and calculation of correlation and regression SPSS software is used and for the analyzing purpose the following technical tools are employed in this study:

3.6.1 Analysis of Financial Indicators

3.6.2 Analysis of Statistical Variable

3.6.1 Analysis of Financial Indicators:

To evaluate the performance of any organization financial tools are very useful to determine the strengths and weakness of a firm as well as its historical performance and current financial condition. Ratio is an important analytical tool to summarize the large quantities of data and to make quantitative judgments about organization. Basically, the financial tools employed following financial tools in this study:

3.6.1.1 Earning Price Per Share

3.6.1.2 Market Price of Stock

3.6.1.3 Dividend Per Share

3.6.1.4 Dividend Payout Ratio

3.6.1.5 Price Earning Ratio

3.6.1.6 Earning Yield

3.6.1.7 Dividend Yield

3.6.1.1 Earning Price per Share:

The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability.

Calculated as:

$$\text{Earing per share} = \frac{\text{Net income} - \text{Dividend on Preferred Shares}}{\text{No of Shares}}$$

When calculating, it is more accurate to use a weighted average number of shares outstanding over the reporting term, because the number of shares outstanding can change over time. However, data sources sometimes simplify the calculation by using the number of shares outstanding at the end of the period.

3.6.1.2 Market Price of Stock:

The current quoted price at which investors buy or sell a share of common stock at a given time is known as "market price". If the market prices of shares of companies are followed then it can be found that there are three types of prices high, low and closing price approaches can be use. Here in this study the closing price is taken as the market price of the stock, which has specific time of span of one year and the study has focused in annual basis. To get the real average, volume and price of each transaction in the stock and duration of time of each transaction in the whole year are essential which is tedious and impossible too, considering the data availability and maintenance. Hence, the closing price is used as the market price of stock, which has a specific time span of one year and the study has focused in annual basis.

3.6.1.3 Dividend Per Share:

The sum of declared dividend for every ordinary share issued. Dividend per share (DPS) is the total dividends paid out over an entire year (including interim dividends but not including special dividends) divided by the number of outstanding ordinary shares issued after deducting retaining earning.

DPS can be calculated by using the following formula:

$$\text{Dividend per Share} \times \frac{\text{Net Income} - \text{Retained earning}}{\text{No of shares}}$$

Dividend is relevant during the computation of rate of return, which is a reward to; the shareholders for their investment. If a company declares only the cash dividend, there is no problems to take the dividend amount. But if the company declares stock dividend (Bonus share), it is difficult to obtain the amount that really shareholders has gained. In this case, they get extra numbers of shares as dividend and simultaneously price of the stock declines as a result of increased number of stocks. To get a real amount of dividend following model has been used through out.

3.6.1.4 Dividend Payout Ratio

The percentage of earnings paid to shareholders in dividends is known as dividend payout ratio.

Calculated as:

$$D / P \text{ Ratio} \times \frac{\text{Yearly Dividend per Share}}{\text{Earning Price Per Share}}$$

or

$$D / P \text{ Ratio} \times \frac{\text{Dividends}}{\text{Net Incomes}}$$

where as

D/P Ratio = Dividend Payout Ratio

The payout ratio provides an idea of how well earnings support the dividend payments. More mature companies tend to have a higher payout ratio. Therefore, if profit increases the dividend per share is also increases and vice verse.

3.6.1.5 Price Earnings Ratio

Price-earning ratio is the ratio between market price per share and earning per share. It is also called earning multiplier. P/E is short for the ratio of a company's share price to its per-share earnings. As the name implies, to calculate the P/E, you simply take the current stock price of a company and divide by its earnings per share (EPS):

Calculated as:

$$P / E \text{ Ratio} \times \frac{\text{Market Price per share}}{\text{Earnings Per Shares}} \text{ or } \frac{\text{MPS}}{\text{EPS}}$$

where as ,

P/E Ratio = Price Earning Ratio

The P/E is sometimes referred to as the "multiple", because it shows how much investors are willing to pay per Rupee of earnings. It is important that investors note an important problem that arises with the P/E measure, and to avoid basing a decision on this measure alone.

3.6.1.6 Earning Yield (E/Y):

Earning yield is the percentage of earning per share to market price per share in the secondary market. The earnings per share (EPS) divided by the current market price per share (MPS). The earnings yield (which is the inverse of the P/E ratio) shows the percentage of each Rupee invested in the stock that was earned by the company.

Calculated as:

$$\text{Earning Yield} \times \frac{\text{Earning per share}}{\text{Market price of Stock}} \text{ or } \frac{\text{EPS}}{\text{MPS}}$$

The earnings yield is used by many investment managers to determine optimal asset allocations.

3.6.1.7 Dividend Yield (D/Y)

Dividend yield is the percentage of DPS on MPS. A financial ratio that 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.

Dividend yield is calculated as follows:

$$\text{Dividend Yield} = \frac{\text{Dividend per share}}{\text{Market price of Stock}} \text{ or } \frac{\text{DPS}}{\text{MPS}}$$

Dividend yield is a way to measure how much cash flow you are getting for each dollar invested in an equity position.

3.6.1.8 Other Related Financial Tools:

a) Average or mean:

Mean or Average is defined as the sum of all the given elements divided by the total number of elements.

$$\bar{X} = \frac{\text{Sum of data}}{\text{no. of sample}}$$

b) Standard Deviation:

Standard deviation is in finance, where the standard deviation on the rate of return on an investment is a measure of the volatility of the investment. A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data are spread out over a large range of values.

$$S = \sqrt{\frac{\sum f_x (x - \bar{x})^2}{n}}$$

Whereas,

S = Standard deviation

X = each value of data

\bar{X} = mean of each value of data

n = no of samples

c) Coefficient of Variation:

The coefficient of variation represents 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. It is calculated as follows:

$$\text{Coefficient of Variation} = \frac{\text{Standard Deviation}}{\text{Expected Return}}$$

3.6.2 Analysis of Statistical Variables:

Many statistical tools are often employed in the analysis and interpretation of data as an aid to management and to meet the objectives of the study. Following statistical tools are used more systematically in this chapter:-

3.6.2.1 Coefficient of correlation

3.6.2.2 Regression Analysis

3.6.2.2.1 Simple

3.6.2.2.2 Multiple

3.6.2.3 Trend analysis

To avoid ambiguity, confusion and misunderstanding the key terms used in this study have been defined as follows:

3.6.2.1 Coefficient of Correlation

The term correlation indicates the relationship between two such variables in which with changes in the values of one variable the values of other variable also change.

In this study, correlation coefficient is used to measure the relationship between the two variables of each type of companies. Here, the financial ratios are used to show their general relationship between them. The correlation coefficient is denoted by 'r' and can be calculated by using following formula:

$$r = \frac{N \sum XY - (\sum X) \cdot (\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}}$$

Where, N = No. of observations of X and Y

X = Sum of the observations in series X

Y = Sum of the observations in series Y

X² = Square of the sum of the observations in series X

Y² = Square of the sum of the observations in series Y

XY = Sum of the product of the observations in series X and Y.

3.5.2.2 Regression Analysis:

Regression analysis is used to develop an estimating equation that is mathematical formula that relates the known variable to the unknown variable. It is a statistical tool used to determine the statistical relationship between two or more variables and to make estimation of one variable on the basis of other variable. It is to understand here that 'a' constant indicates the mean or average effect on dependent variable of all the variables omitted from the model. Averages are the measures, which condense a huge unwieldy data into single value which represents the entire data. It's value lies between two extreme observations, i.e. the largest and the smallest items. Similarly, the regression coefficient 'b' of each independent variable indicates the marginal relationship between variables and value of dependent variable, holding constant the effect of all other independent variables in the regression model. In other words, the coefficient describes how changes in independent variable affect the values of dependent variable estimate. In this study, regression coefficient is calculated for selected dependent and independent variable specified in the model.

a. Simple Regression:

Regression is the estimation of unknown values or prediction of one variable from known values of other variables. The formula for simple regression coefficient can be calculated as follows:

$$b = \frac{N \sum XY - (\sum X) \cdot (\sum Y)}{N \sum X^2 - (\sum X)^2}$$

$$a = \frac{\sum Y - b (\sum X)}{n}$$

Or

$$Y = a + bX$$

And $\sum Y = a \sum 1 + b \sum X$

The equation of simple regression line is, $Y = a + bX$

Where,

- Y = Dependent variable
- X = Independent variable
- b = Slope of regression or Regression co-efficient
- a = Regression constant

3.6.2.2.2 Multiple Regression:

Multiple regression analysis is a logical extension of the simple linear regression analysis. In multiple regression analysis, instead of a single independent variable, two or more independent variables are used to estimate the unknown values of a dependent variable. In other words, multiple regression equation describes the average relationship between one dependent variable and two or more independent variables and this relationship is very much useful for estimating the dependent variables.

The equation for multiple regression coefficients can be calculated as follows:

$$X_1 X a_1 \Gamma b_1 X_2 \Gamma b_2 X_3 \dots\dots\dots(1)$$

Where as,

- X_1 = Dependent variable
- X_2 and X_3 = Independent variables
- a_1 = Regression Constant
- b_1 and b_2 = Slope of regression or Regression co-efficient

The value of the constants a_1 , b_1 and b_2 can be obtained by solving following three normal equations:

$$\begin{aligned} X_1 X n a_1 \Gamma b_1 \quad X_2 \Gamma b_2 \quad X_3 \\ X_1 X_2 X a_1 \quad X_2 \Gamma b_1 \quad X_2^2 \Gamma b_2 \quad X_2 X_3 \\ X_1 X_3 X a_1 \quad X_3 \Gamma b_1 \quad X_2 X_3 \Gamma b_2 \quad X_3^2 \end{aligned}$$

3.6.2.3 Trend Analysis:

Ratio analysis is not able to show the fluctuation of the financial position of the companies with time. The financial position is improving or deteriorating over the years show by the use of trend analysis. The significance of a trend analysis or ratios lies in the fact that the analysis can know the direction of movement, i.e. whether the movement is favorable or unfavorable. For example, the ratio may be low as compared to the norms and standard but the trend may be upward. On the other hand, though the present level may be satisfactory, the trend may be a declining one. Thus, trend analysis is of great significance to the study.

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

This chapter includes the presentation and analysis of relevant data for the achievement of the objectives of the study. The effort has been made to analyze the comparative dividend policy of the samples. This analysis is highly supported by the practices of dividend distribution. For this supportive reason the data has been taken for elaboration, explanation and come to conclusions. The chapter begins with the descriptive analysis of financial indicators i.e., EPS, DPS, DPR, MPS, P\E Ratio, Earning yield and Dividend yield analysis of the samples. The financial indicators then analyzed and interpreted with the help of available statistical tools. Statistical indicators include means standard deviations regression analysis and correlation analysis. Besides these the data are also presented in tabular form.

4.1 Analysis of Financial Indicators

4.1.1 Analysis of Earning Per Share

Earning per share refers the rupee amount earned per share of common stock outstanding. It measures the profitability of the shareholders investment. The higher earning indicates the better achievements of the profitability of the company and vice versa. The earning per share of the companies under study is tabulated as follows:

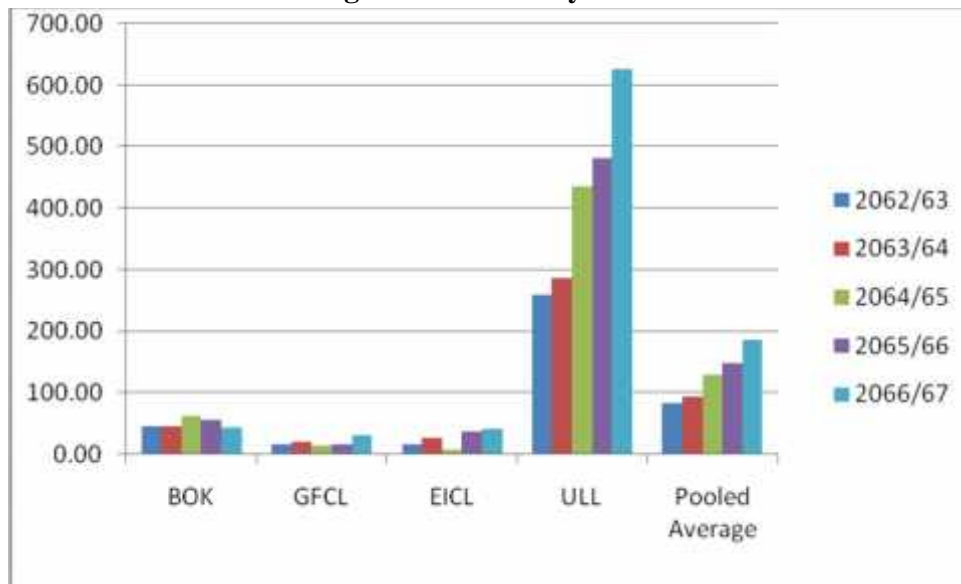
Table No: 4.1
Earning Per Share Analysis

Year	BOK	GFCL	EICL	ULL	Pooled Average
2062/63	43.67	14.98	13.94	258.66	82.81
2063/64	43.50	18.45	24.54	285.71	93.05
2064/65	59.94	12.48	6.42	436.15	128.75
2065/66	54.68	14.98	36.16	482.29	147.03
2066/67	43.08	28.48	40.57	626.19	184.58
Mean	48.97	17.87	24.33	417.80	127.24
St.Dev()	7.01	5.63	12.9	134.68	36.95
C.V	14.31	31.51	53.03	32.24	29.04

Source: Annual Report and Websites

The earning per share of the companies under study is presented in graphical form as below.

Figure No: 4.1
Earning Per Share Analysis



The above Table No. 4.1 shows Earning per share of the samples from the year 2062/63 to 2066/67. While analyzing the earning, higher earning indicates the company is in prosperity while lower earning indicates difficulties.

In FY 2062/63, ULL has the highest EPS among all the samples amounting Rs.258.66. Among the four samples, EICL has least EPS of Rs.13.94. The EPS data of BOK and GFCL for the year was Rs.43.67 and Rs.14.98 respectively. During the year, the pooled average EPS was Rs.82.81.

ULL has the highest EPS in the FY 2063/64 too amounting Rs.285.71 following by EICL, BOK and GFCL with amount RS 24.54, Rs.43.50 and Rs.18.45 respectively. During this year the pooled average was also increased to Rs.93.05 in this year.

The EPS data reveals that EPS with worth Rs.436.15 of ULL was highest in the year 2064/65. In this year EPS of BOK and EICL was decreased in comparing with previous year but EPS of ULL was increased throughout the year and the EPS of BOK was also decreased in comparing with previous year. The EPS of the remaining samples i.e. BOK, GFCL and EICL were Rs.59.54, Rs.12.48 and Rs.6.42 respectively. The pooled average EPS was Rs.128.75 for the period.

The EPS of ULL was again the highest with Rs.482.29 in the year 2065/66 following by GFCL, BOK and EICL with EPS amounting Rs.14.98, Rs.54.68 and Rs.36.16 respectively. The pooled average data was increasing during the year in comparing with previous year. The pooled average amount was Rs 147.03 for the year.

The analysis of EPS data of the samples in the FY 2066/67 reveals that ULL has the highest EPS for the period amounting Rs.626.19 while the lowest EPS belongs to GFCL with the worth of Rs.28.48 In the same period, the EPS of BOK and EICL was Rs.43.08 and Rs.40.57 respectively. The pooled data shows that the EPS amount was increased to 184.58 in the corresponding year.

While going through the average of the samples, the average EPS of ULL has highest among all the samples of Rs.417.80 following by BOK, GFCL and EICL with Rs.48.97, Rs.17.87 and Rs.24.33 respectively.

S.D. of the samples is 7.01, 5.63, 12.9, 134.68 for BOK, GFCL, EICL and ULL respectively. The pooled average S.D of EPS is 36.95 respectively. Small S.D represents high degree of uniformity of the observation as well as homogeneity of the series.

Coefficient of variation (CV) shows the rate of fluctuation. CV of EICL, 53.03% is the highest among the entire sample, followed by 14.31% of BOK, 31.51% of GFCL, 32.24% of ULL respectively. Pooled average of the fluctuation shows 29.04%

Dividend policy can't be predicted only by the analysis of EPS of the samples. Therefore to give the true picture of dividend policy it is necessary to measure other necessary financial tools too.

4.1.2 Analysis of Dividend Per Share (DPS)

Dividend per share is the rupee earnings distributed per share to common stockholders. Dividend per share shows the portion of earning distributed to the shareholders on per share basis. Generally, the higher DPS creates positive attitude among the shareholders toward the company, which accordingly helps to increase the market value of shares. It also works as the indicator of better performance of the company's management. The dividend per share of the companies under study is stated in the table below.

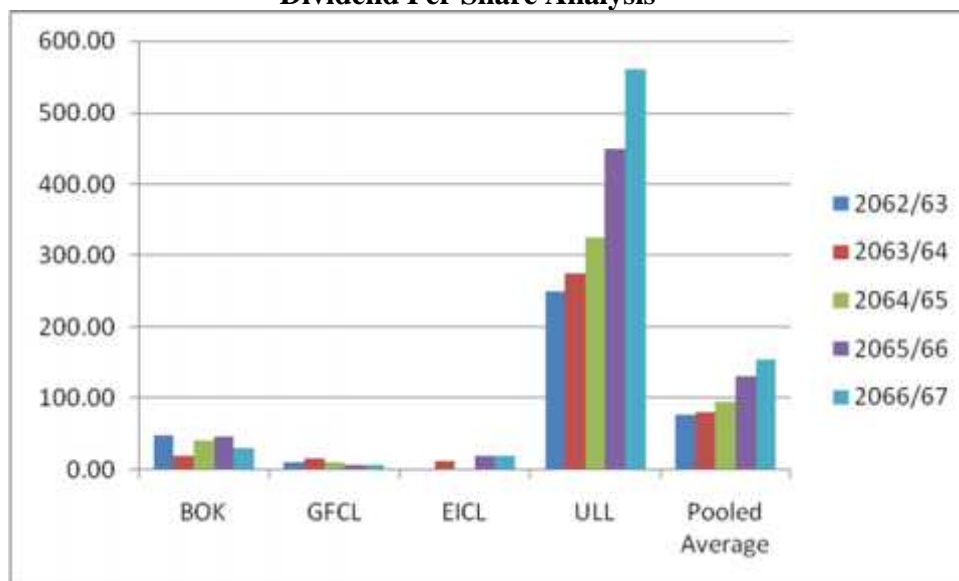
Table No: 4.2
Dividend Per Share Analysis

Year	BOK	GFCL	EICL	ULL	Pooled Average
2062/63	48.00	10.53	0	250.00	77.13
2063/64	20.00	15.79	13.16	275.00	80.99
2064/65	42.11	10.53	0	325.00	94.41
2065/66	47.37	7.63	20	450.00	131.25
2066/67	30.00	6.89	20	560.00	154.22
Mean	37.49	10.27	10.63	372.00	107.60
St.Dev()	10.87	3.13	9.03	116.56	30.15
C.V	28.99	30.47	84.93	31.33	28.02

Source: Annual Report and Websites

The Dividend Per Share of the companies under study, during the period is presented in the following graph:

Figure No: 4.2
Dividend Per Share Analysis



The Table No. 4.2 presented above represents the DPS of the concerned samples. DPS shows the impact of dividend on the share price.

In the year 2062/63, ULL paid highest cash dividend of Rs.250.00 per share which is highest among all the samples followed by Rs.48.00 of BOK, Rs.10.53 of GFCL, and EICL didn't declare their cash dividend. Pooled average DPS during the year was Rs.77.13.

The data representing FY 2063/64 states that, the DPS of ULL was highest of Rs.275.00 among all the samples. EICL paid the lowest dividend of Rs.13.16 in the year. In same time the DPS of BOK and GFCL was Rs.20.00 and Rs.15.79 respectively. The pooled average DPS for the year 2063/64 was Rs.80.99.

The data related to FY 2064/65 illustrates that EICL didn't pay any dividend to its shareholders in this year. ULL with Rs.325.00 as DPS is the highest among the samples followed by BOK with Rs.42.11 and GFCL with Rs.10.53. the pooled average DPS for the year was Rs.94.41.

In the FY 2065/66, GFCL declare lowest cash dividend Rs.7.63, ULL highest was Rs.250.00 and for BOK and EICL the DPS was worth of Rs.47.37 and Rs. 20.00 respectively. The pooled average DPS for the year was Rs.131.25.

The data representing FY 2066/67 reveals that ULL with DPS of Rs.560.00 was the highest among all the samples. In this year, BOK,GFCL and EICL pay cash dividend to its shareholders Rs.30, Rs.6.89 and Rs.20.00 respectively. The pooled average column of the DPS was increased than previous year amounting Rs.154.22.

On the average, ULL has paid the highest DPS of Rs.372.00 during the period of the study, followed by BOK with average DPS of Rs.37.49. EICL has paid dividend to its shareholders with the average of Rs.10.27. The lowest average DPS among the samples belongs to GFCL with Rs.10.27. The pooled average column of the average shows the value of Rs.107.60 for the study period.

At the time of observing standard deviation, a small S.D measures higher degree of uniformity and vice versa. Here S.D of ULL is 116.56, BOK 10.87, GFCL 3.13 and EICL

9.03. The pooled average S.D of DPS was 13.15 during the period of the study. With the help of CV, we are able to state the rate of fluctuation. The data reveals that EICL has highest fluctuation rate in the payment of dividend with 84.93% followed by GFCL with 30.47% and ULL with 31.33%. The fluctuation rate of BOK is the lowest among the samples with the rate of 28.99%. The pooled average column states that the CV of all the samples during the time of the study is 28.02% which reveals that the samples haven't followed the consistent dividend policy.

4.1.3 Analysis of Dividend Payout Ratio (DPR)

The proportion of earning paid in the form of dividend is called Dividend Payout Ratio (DPR). This ratio shows what percentage of the profit is distributed as dividend and it is measured in percentage. The dividend payout ratio of a company depends upon the earnings made by the company. The DPR of the companies under study are stated in the table and graph as follows:

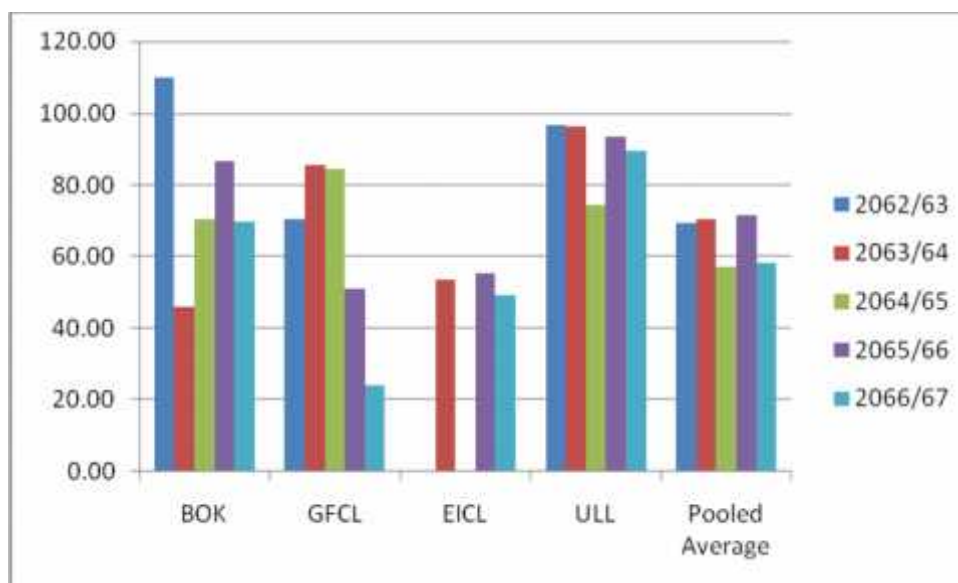
Table No: 4.3
Dividend Payout Ratio Analysis

Year	BOK	GFCL	EICL	ULL	Pooled Average
2062/63	109.92	70.29	0	96.65	69.22
2063/64	45.97	85.58	53.63	96.25	70.36
2064/65	70.25	84.38	0	74.52	57.29
2065/66	86.62	50.93	55.31	93.31	71.54
2066/67	69.64	24.19	49.30	89.43	58.14
Mean	76.48	63.07	31.65	90.03	65.31
St.Dev()	21.15	23.12	25.91	8.17	6.25
C.V	27.65	36.65	81.87	9.07	9.57

Source: Annual Report and Websites

The Dividend Payout Ratio of the companies under study, during the period is presented in the following graph:

Figure No: 4.3
Dividend Payout Ratio Analysis



Dividend payout ratio is the result of the dividend per share divided by earning per share. The above Table No. 4.3 illustrates DPR of different samples. DPR represents the percentage of dividend paid out of the total earning. Before studying of DPR, the following policy has been assumed in the study:

Assumption	DPR
Conservative Dividend Policy	Less than 20%
Moderate Dividend Policy	20% -50%
Aggressive Dividend Policy	More than 50%

Above table No. 4.3 reveals that in FY 2062/63, BOK, GFCL and ULL had applied aggressive dividend policy with DPR of 109.92%, 70.29% and 96.65% respectively. On the other hand, the EICL had not paid any cash dividend during the year. The pooled average illustrates DPR of the year was 69.22% with aggressive dividend policy of the year according to the assumption.

The data relating to FY 2063/64 reflects that aggressive dividend policy was applied by GFCL, EICL, and ULL with DPR of 85.58%, 53.63% and 96.25% respectively. In the same year, BOK applied the moderate dividend policy with DPR 45.97%. The pooled average of DPR for the year was 70.36% with aggressive dividend policy according to the assumption.

In the year 2064/65 BOK, GFCL and ULL applied aggressive dividend policy with DPR of 70.25%, 84.38% and 74.52% respectively. On the other hand, EICL has not paid any cash dividend during the year. The pooled average DPR for the year also applied the assumption of aggressive policy with 57.29% for the corresponding year.

In the FY 2065/66, BOK, GFCL, EICL and ULL had applied the policy of aggressive dividend payment with DPR of 86.62%, 50.93%, 55.31% and 93.31% respectively. Pooled average DPR for the year was 71.54% with the assumption of aggressive policy.

In FY 2066/67, BOK and ULL has applied the policy of aggressive dividend payment with DPR of 69.64% and 89.43% respectively. Remaining all the samples applied the moderates dividend policy during this year i.e. 24.19%, and 49.30% by GFCL and EICL respectively. The pooled average DPR for the year with moderate policy was 58.14%.

On the average DPR of ULL is highest among all the samples, followed by BOK, EICL and GFCL. In average, BOK, GFCL and ULL, applied the aggressive dividend policy with DPR 76.48%, 63.07% and 90.03% respectively. Moderate dividend policy had applied by EICL with DPR 31.65%. The pooled average column of the average was 65.31% for the period of the study.

The S.D of DPR was 25.91% for EICL followed by GFCL, BOK and ULL with SD 23.12%, 21.15% and 8.17% respectively. The pooled average SD of DPR for the period of the study was 6.25%.

The CV represents the degree of fluctuation of the indicators at the time of analysis. The fluctuation rate of EICL was highest among the samples with the 81.87%. Whereas the fluctuation rate of GFCL, BOK, and ULL were 36.65% and 27.65% and 9.07% respectively. The pooled average CV of the DPR during the period of the study was 9.57%. Variance in the fluctuation of the DPR indicates that there is not uniformity in dividend payment of the samples.

4.1.4 Analysis of Price Earning Ratio (P/E Ratio) Analysis

Price-earnings ratio is the ratio between market price per share and earning per share. It is also called earning multiplier. The price earning ratio of the companies under study is presented in the table and graph as follows.

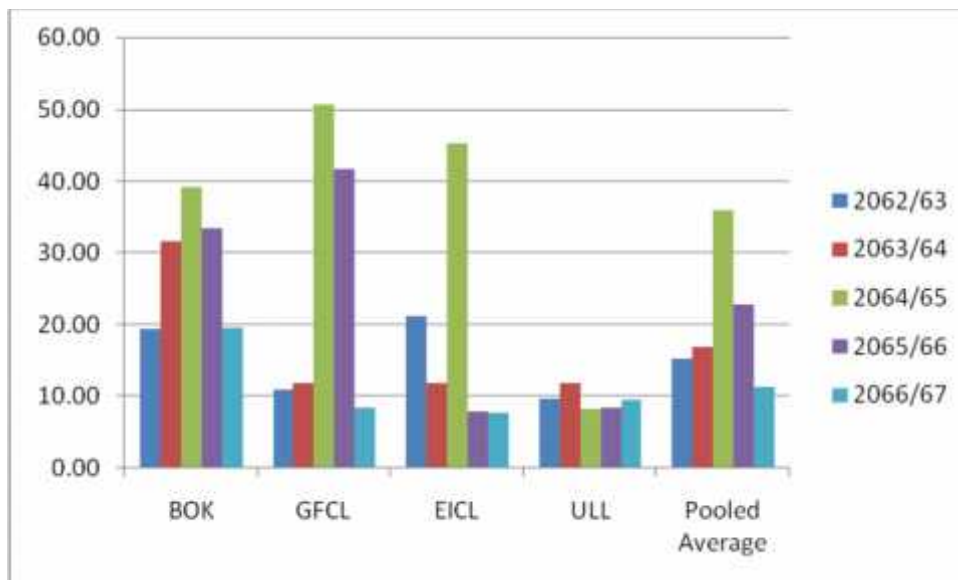
Table No: 4.4
Price Earning Ratio (P/E Ratio) Analysis

Year	BOK	GFCL	EICL	ULL	Pooled Average
2062/63	19.46	11.01	21.16	9.67	15.33
2063/64	31.61	11.92	11.82	11.90	16.81
2064/65	39.21	50.72	45.33	8.25	35.88
2065/66	33.37	41.72	7.88	8.40	22.84
2066/67	19.50	8.46	7.72	9.52	11.30
Mean	28.63	24.77	18.78	9.55	20.43
St.Dev()	7.88	17.78	14.14	1.31	8.57
C.V	27.52	71.78	75.29	13.72	41.94

Source: Annual Report and Websites

The Price Earning Ratio of the companies under study is also presented in graphical form as below.

Figure No: 4.4
Price Earning Ratio (P/E Ratio) Analysis



The above table no. 4.4 illustrates P/E ratio of the samples for the period of the study. P/E ratio describes the relationship between EPS and MPS.

In the year 2062/63, P/E ratio of 21.16 was the highest, which was belonged to EICL. P/E ratio of ULL was lowest i.e. 9.67. Similarly P/E ratio of BOK and GFCL was 19.46 and 11.01 respectively. The pooled average column of P/E ratio for the year was 15.33.

P/E ratio of BOK with 31.61 was highest among the samples for the year 2063/64 followed by GFCL, ULL and EICL with P/E ratio of 11.92, 11.90 and 11.82 respectively. The pooled average column reflects the ratio of 16.81 for the corresponding FY.

The P/E ratio of the sample is fluctuating in the FY 2064/65, BOK, GFCL and EICL have increasing P/E ratio while ULL have decreasing ratios. The highest P/E ratio was 39.21 of BOK while the lowest P/E ratio belonged to ULL with 8.25. The pooled average P/E ratio for the year was 35.88 for the year.

The data representing to FY 2065/66 also reflects that GFCL has the highest P/E ratio with the value 41.72 followed by BOK, ULL and EICL with 33.57, 8.40 and 7.88 respectively. The pooled average was increased to 22.84 for the FY 2065/66.

In the year 2066/67, P/E ratio of all the samples excluding ULL has decreased in comparison with the P/E ratio of previous FY. In this year BOK has the highest P/E ratio of 19.50, EICL had the lowest P/E ratio of 7.72. The P/E ratio of ULL and GFCL was 9.52 and 8.46 respectively. The pooled average P/E ratio was 11.30 for the year.

On the average, BOK has the highest P/E ratio with 28.63 GFCL, EICL and ULL have the average of 24.77, 18.78 and 9.55 respectively. Pooled average of the average P/E ratio was 20.43 for the period of the study.

As we analyzed the S.D. of P/E ratio of the samples, it can be reflected that the S.D. of GFCL, EICL, BOK and ULL are 17.78, 14.14, 7.88 and 1.39 respectively. Pooled average S.D of P/E ratio was 8.57 for the study period.

The CV analysis shows that ULL is more consistent than other samples. P/E ratio of EICL and GFCL is more fluctuating than other samples during the time of the study. The pooled average column shows that the fluctuation rate of P/E ratio is 41.94% during the period of study.

4.1.5 Analysis of Market Price Per Share (MPS)

Market Price Per Share (MPS) is the price of share on which shares are traded in the secondary market. The average market price per share of the companies under study is presented in table and in graphical form as follows:

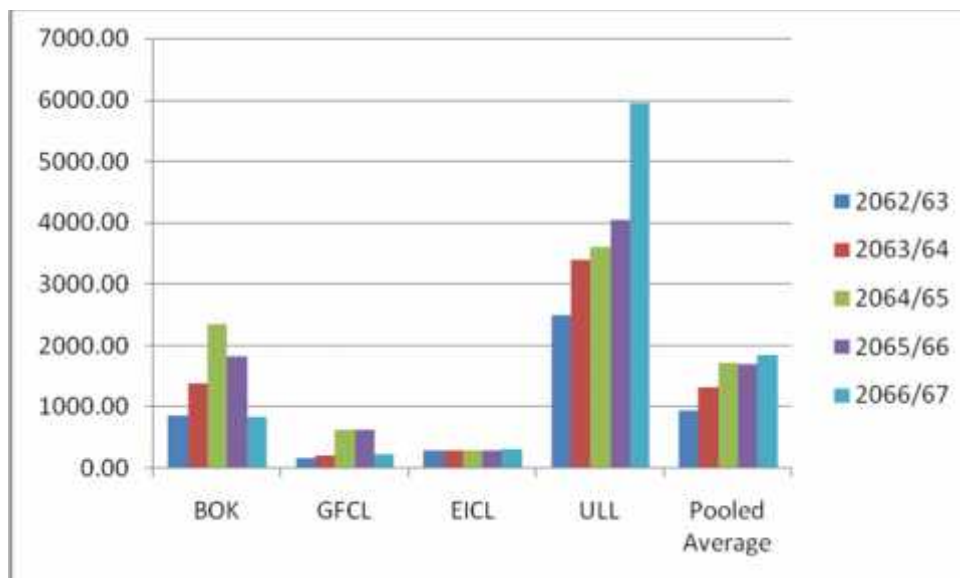
Table No: 4.5
Market Price Per Share Analysis

Year	BOK	GFCL	EICL	ULL	Pooled Average
2062/63	850.00	165.00	295	2500.00	952.50
2063/64	1375.00	220.00	290	3400.00	1321.25
2064/65	2350.00	633.00	291	3600.00	1718.50
2065/66	1825.00	625.00	285	4050.00	1696.25
2066/67	840.00	241.00	313	5960.00	1838.50
Mean	1448.00	376.80	294.80	3902.00	1505.40
St.Dev()	581.09	207.43	9.64	1145.96	326.31
C.V	40.13	55.05	3.27	29.37	21.68

Source: Annual Report and Websites

The Market Price Per Share of the companies under study, during the period is presented in the following graph:

Figure No: 4.5
Market Price Per Share Analysis



The table no. 4.5 above shows the market value of the shares. The objective to analyze market value is to evaluate the value of the shares in the market.

In the year 2062/63, the share price of ULL is Rs.2500.00, highest among the samples while MPS of Rs.165.00 of GFCL is the lowest for the year. The data shows MPS of BOK and

EICL was Rs.850.00 and Rs.295.00 respectively. The pooled average MPS column shows the value of Rs.952.50 for the year.

The data of 2063/64 reflects that ULL has the highest MPS with Rs.3400.00, followed by BOK, GFCL and EICL with Rs.1375.00, Rs.220.00 and RS.290.00 respectively. The pooled average column shows MPS with Rs.1321.25 for the Year.

Again, ULL has the highest MPS of Rs.3600.00 in the FY 2064/65. EICL has the lowest MPS at this time with Rs.291.00. the pooled average column of MPS shows the value of Rs.1718.50 for the corresponding year.

The MPS of ULL was the highest for the year 2065/66 while the MPS of EICL is the lowest for the period. The pooled average column shows that Rs.1696.25 as per pooled average MPS for the year.

The data of 2066/67 reflects that there is fluctuation in MPS of all the samples. In the year, MPS of ULL was Rs.5960.00 followed by BOK with Rs.840.00, EICL with Rs.313.00 and GFCL with Rs241.00. The pooled average MPS was Rs.11838.50 for the year.

The study of average shows that ULL has highest MPS where as EICL has the lowest average MPS during the period of study. The column of pooled average of the average reflects that the value of Rs. 1505.40 during the period of the study.

While analyzing the S.D of the sample, the S.D. of MPS for the samples is 3145.96, 581.09, 207.43 and 9.64 respectively for ULL, BOK, GFCL and EICL respectively. The pooled average S.D. of MPS during the study period is 326.31.

The CV reflects the rate of the fluctuation of the samples at the time of the study. While analyzing the CV, GFCL has the highest CV with 40.13% and EICL has lowest CV of 3.27%. At the time of the study, the pooled average CV of MPS was 21.68%, which indicates that there is not uniformity in the calculated of MPS by all the samples.

4.1.6 Analysis of Dividend Yield (DY)

Dividend yield is the percentage of DPS on MPS. It measures the dividend in relation to market value of share. It is the dividend received by the investors as a percentage of market price per share in the stock market. This ratio highly influences the market price per share because a small change in dividend per share can bring effective change in the market value of the share. The dividend yield of the companies under study is presented in the table and graph as below.

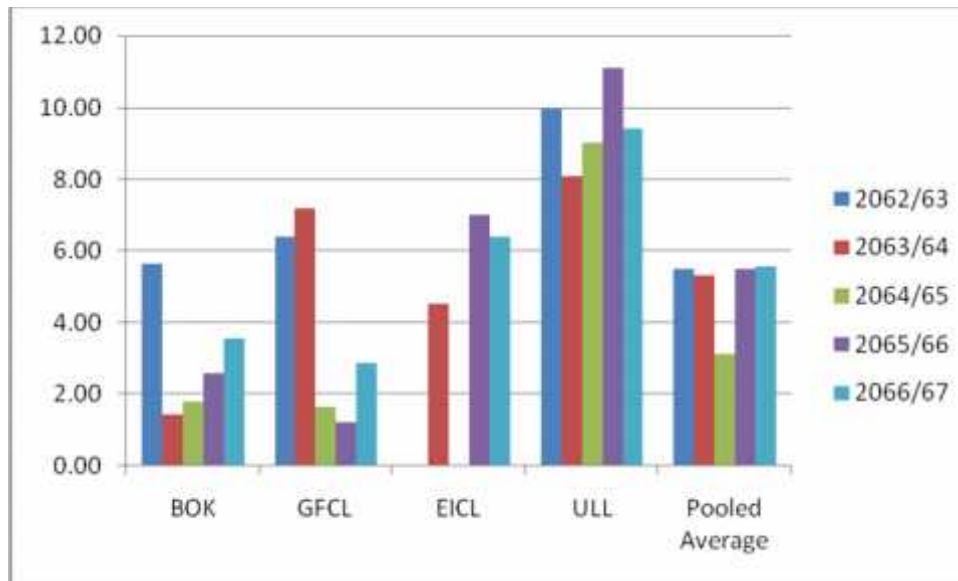
Table No: 4.6
Dividend Yield Analysis

Year	BOK	GFCL	EICL	ULL	Pooled Average
2062/63	5.65	6.38	0.00	10.00	5.51
2063/64	1.45	7.18	4.54	8.09	5.31
2064/65	1.79	1.66	0.00	9.03	3.12
2065/66	2.60	1.22	7.02	11.11	5.49
2066/67	3.57	2.86	6.39	9.40	5.55
Mean	3.01	3.86	3.59	9.52	5.00
St.Dev()	1.51	2.46	3.04	1.01	0.94
C.V	50.13	63.72	84.70	10.60	18.81

Source: Annual Report and Websites

The Dividend Yield Analysis of the companies under study, during the period is presented in the following graph:

**Figure No:4.6
Dividend Yield Analysis**



The above table no. 4.6 illustrates data relating to the dividend yield for the period cover by study. Market price of the share is highly affected by the dividend yield and a small change in DPS can result a remarkable change in Market value of the share. So for the long distance run and survival of the firm, dividend yield impact (on market by fluctuation on dividend) should be properly studied.

In the year 2062/63, dividend yield of ULL was highest at 10.00% followed by GFCL with 6.38%, BOK at 5.65%. EICL didn't pay any cash dividend result nil value on DY. The pooled average DY for the period was 5.51%.

Dividend yield of BOK and ULL had decreased in FY 2063/64. The dividend yield of BOK, GFCL, EICL and ULL are 1.45%, 7.18%, 4.54% and 8.09% respectively. The pooled average for the period was 5.31%.

In the year 2064/65, EICL didn't paid cash dividend to its common shareholders resulting nil DY. BOK, GFCL, and ULL has the DY of 1.79%, 1.66% and 9.03% respectively. The pooled average DY for the period was 3.12%.

The data relating to FY 2065/66, the dividend yield was 2.60% of BOK, 1.22% for GFCL, 7.02% of EICL and 11.11% for ULL for the corresponding year. The pooled average DY for the period was 5.49%.

In the year 2066/67, BOK, GFCL, EICL and ULL has the DY of 3.57%, 2.86%, 6.39% and 9.40% respectively. The pooled average DY for the period was 5.55%.

On the average, BOK has dividend yield of 3.01. Remaining samples GFCL, EICL and ULL having the average of 3.86, 3.59 and 9.52 respectively. The pooled average of the average for the period was 5.00.

While analyzing the standard deviation, EICL has the highest S.D among the samples with the value of 3.04% followed by BOK with 1.51%, GFCL with 2.46% and ULL with 1.01%. The pooled average S.D. for the period of study was 0.94%.

While studying of the CV, the lowest fluctuating sample is ULL with least CV of 10.60%. The fluctuation rate of the remaining samples isn't satisfactory during the study period. The pooled average with the value of 18.81% reveals the condition of the samples is not so smooth.

4.1.7 Analysis of Earning Yield (EY)

Earning yield is the percentage of earning per share to market price per share in the secondary market. It gives an idea of how much an investor might get for his money. The share with higher earnings yield is worth buying. Earning yield of the companies under study under study are presented in the table and graph below.

**Table No: 4.7
Earning Yield Analysis**

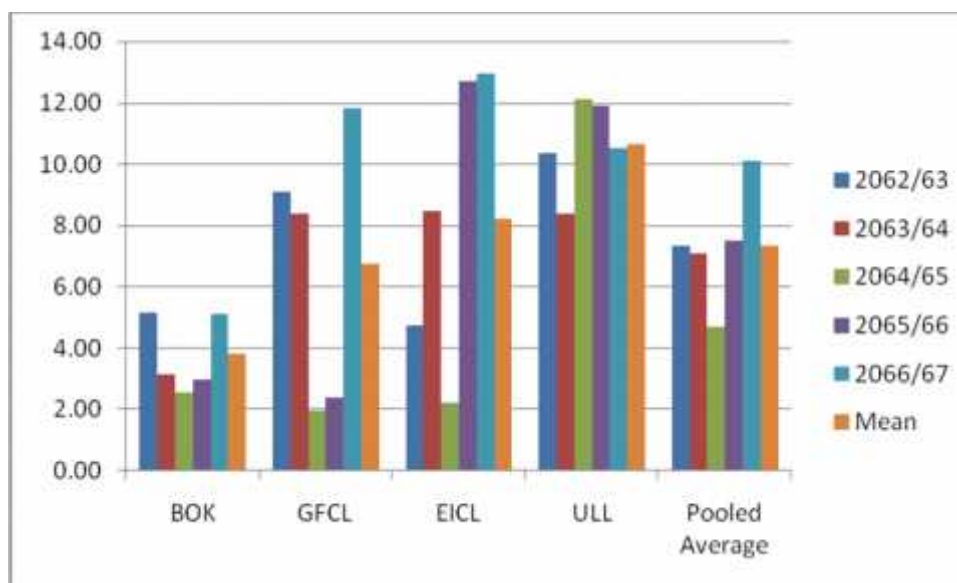
Year	BOK	GFCL	EICL	ULL	Pooled Average
2062/63	5.14	9.08	4.73	10.35	7.32
2063/64	3.16	8.39	8.46	8.40	7.10
2064/65	2.55	1.97	2.21	12.12	4.71
2065/66	3.00	2.40	12.69	11.91	7.50
2066/67	5.13	11.82	12.96	10.51	10.10

Mean	3.80	6.73	8.21	10.66	7.35
St.Dev()	1.11	3.89	4.26	1.33	1.71
C.V	29.25	57.80	51.90	12.48	23.27

Source: Annual Report and Websites

The Earning Yield of the companies under study, during the period is presented in the following graph:

Figure No: 4.7
Earning Yield Analysis



The above table 4.7 illustrates data relating to the earning yield for the period cover by study. In the year 2062/63, earning yield of ULL was highest at 10.35% followed by GFCL with 9.08%, BOK at 5.14% and EICL at 4.73. The pooled average EY for the period was 7.32%.

Earning yield of ULL had decreased in FY 2063/64. The dividend yield of BOK, GFCL, EICL and ULL are 3.16%, 8.39%, 8.46% and 8.40% respectively. The pooled average for the period was 7.10%.

In the year 2064/65, earning yield of BOK, GFCL, EICL and ULL are 2.55%, 1.97%, 2.21% and 12.12% respectively. The pooled average EY for the period was 4.71%.

The data relating to FY 2065/66 reflects that earning yield of all companies has increased except ULL earning yield was 3.00% of BOK, 2.40% of GFCL, 12.69% of EICL and 11.91% of ULL for the corresponding year. The pooled average EY for the period was 7.50%.

In the year 2066/67, again EY of all companies has increased. Earning Yield of BOK, GFCL, EICL and ULL for this year are 5.13%, 11.82%, 12.96% and 10.51% respectively. The pooled average EY for the period was 10.10%.

On the average, BOK has earning yield of 3.80. Remaining samples GFCL, EICL and ULL having the average of 6.73, 8.21 and 10.66 respectively. The pooled average of the average for the period was 7.35.

While analyzing the standard deviation, EICL has the highest S.D among the samples with the value of 4.26% followed by GFCL with 3.89%, ULL with 1.33% and BOK with 1.11%. The pooled average S.D. for the period of study was 1.71%.

While studying of the CV, the lowest fluctuating sample is ULL with least CV of 12.48%. The EY of the remaining samples are 29.25%, 57.80%, and 51.90 of BOK, GFCL and EICL respectively. The pooled average with the value of 23.27% reveals the condition of the samples is not so smooth.

4.2 Analysis of Statistical Variables

4.2.1 Correlation Analysis

Correlation analysis helps us to determine how strongly the variables are correlated to each other. It is a statistical tool, which can describe the relationship or the degree to which one variable linearly related to another variable. The analysis is a useful statistical tool, which describes the relationship of the variables in following ways; whether the relationship is positive or negative, whether the relationship between the variables exists or not. Here the correlation analysis is referred to identify the relationship between various variables such as DPS, EPS, MPS D_{t-1} , etc.

a) Correlation between Earning Per Share (EPS) and Market Price Per Share (MPS)

Table No: 4.8

Company	Correlation(r)	Relationship	r²	6 (PE)	Sig./Insig.
BOK	0.943	Positive	0.851	0.270	Sig
GFCL	0.517	Positive	0.267	1.327	Insig
EICL	0.393	Positive	0.155	1.529	Insig
ULL	0.936	Positive	0.876	0.224	Sig

Source: Annual Report and Websites

The above table no. 4.8 shows the relationship between EPS and MPS of the four samples during the study period. The correlation coefficient between EPS and MPS of BOK, GFCL, EICL and ULL are 0.943, 0.517, 0.393 and 0.936 respectively. The figure or coefficient of correlation only is not sufficient to reveal the significance of the relationship.

The coefficient of determination (r^2) measures the strength of the relationship between two variables. It plays vital role in interpretation because it can be presented as proportion or as percentage. The coefficient of determination between EPS and MPS of BOK, GFCL, EICL and ULL are 0.851, 0.267, 0.155 and 0.876 respectively which means that the variation in independent variables is 85.10%, 26.70%, 15.50% and 87.60%. Which shows the effect on variables of EPS with respect to independent variables MPS.

Probable error is calculated to measure the significance of the relationship. From the above table no 4.8, it can be observed that the coefficient of correlation. (r) is greater than 6P.E. in case of BOK and ULL therefore the relationship is significance here which implies the increase in EPS directly connected with increase in MPS of BOK and ULL. For the rest of the samples, r is less than 6 P.E. so the relationship is insignificant.

The significance relationship of BOK indicates 85.10% MPS explains to the EPS of the sample. Similarly significance relationship of ULL indicates 87.60% MPS explains to the EPS of the sample. While going through other samples, the relationship is not significant; here we can conclude that the samples should try to find out the other factors that influence MPS in deciding EPS.

b) Correlation analysis between Earning Per Share (EPS) and Dividend Per Share (DPS)

Table No: 4.9

Company	Correlation(r)	Relationship	r ²	6 (PE)	Sig./Insig.
BOK	0.502	Positive	0.252	1.354	Insig
GFCL	0.308	Positive	0.095	1.638	Insig
EICL	0.968	Positive	0.938	0.112	Sig
ULL	0.963	Positive	0.927	0.132	Sig

Source: Annual Report and Websites

Above table no. 4.9 reveals the relationship between EPS and DPS of four samples during the period of the study (2062/63 to 2066/67). The coefficient of correlation (r) between EPS and DPS of BOK, GFCL, EICL and ULL are 0.502, 0.308, 0.968 and 0.963 respectively. All the samples have the positive relationship. Coefficient of determination (r²) between EPS and MPS of the sample are 0.252, 0.095, 0.938 and 0.927 for BOK, GFCL, EIBL and ULL respectively. The least r² 0.252 indicates that the independent variable MPS explain only 25.20% in dependent variable. 6(P.E). of concerned samples is 1.354, 1.638, 0.112 and 0.132 respectively.

The sample of BOK and GFCL has more 6(PE) then correlation (r), so relation is insignificant, which implies that, the samples shouldn't late in finding out other influencing factors rather than DPS in deciding EPS of the rest of the samples, and EICL and ULL has less 6(PE) then correlation (r), so the relation is significant.

c) Correlation analysis between Earning Yield and Dividend Yield

Table No: 4.10

Company	Correlation(r)	Relationship	r ²	6 (PE)	Sig./Insig.
BOK	0.851	Positive	0.724	0.500	Sig
GFCL	0.591	Positive	0.350	1.176	Insig
EICL	0.971	Positive	0.942	0.105	Sig
ULL	0.651	Positive	0.424	1.042	Insig

Source: Annual Report and Websites

The above table no. 4.10 depicts that the correlation between EY and DY of four samples for the respective period of analysis (FY 2062/63 to 2066/67). The coefficient correlation

between EY and DY of BOK, GFCL, EICL and ULL are 0.851, 0.591, 0.971 and 0.651 respectively with positive relationship between the variables of all the samples.

The column of multiple determinations (r^2) represents the strength of the relationship between two variables. It plays vital role in interpretation because it can be presented as proportion or as a percentage. During the period of the study, r^2 for BOK, GFCL, EICL and ULL are 72.40%, 35.00%, 94.20% and 42.40% respectively. The least r^2 of GFCL implies that independent variable EY explains only 35.00% in dependent variable.

In the above correlation model, the lowest coefficient of multiple determinations belongs to GFCL and ULL hence the relationship is insignificant and we can say Dividend yield explains to the Earning yield of the samples. And they should drive their attention towards other factors beside DY at the time of deciding EY. The relationship between EY and DY of BOK and EICL reveals that the relationship is statistically significant and DY is dependent in case of increase of EY of these samples.

d) Correlation analysis between Market Price Per Share and Lagged Dividend

Table No: 4.11

Company	Correlation(r)	Relationship	r^2	6 (PE)	Sig./Insig.
BOK	0.862	Positive	0.744	0.463	Sig
GFCL	0.688	Positive	0.474	0.952	Insig
EICL	0.848	Positive	0.719	0.509	Sig
ULL	0.991	Positive	0.985	0.027	Sig

Source: Annual Report and Websites

The above-presented table no. 4.11 shows the relationship between last year's dividend and market price per share. The coefficient of correlation between MPS and D_{t-1} for BOK, GFCL, EICL and ULL is 0.862, 688, 848 and 0.991 respectively with the positive relationship for all the samples. Coefficient of determination shows 74.44%, 47.40%, 71.90% and 98.50% for BOK, GFCL, EICL and ULL respectively. The coefficient of determination between D_{t-1} and MPS is lowest of GFCL having 47.4% implies that last year's dividend of GFCL explains only 47.40% variation in market price of the stock. The 6(PE) columns of the above table shows 0.463 of BOK, 0.952 of GFCL, 0.509 of EICL and 0.027 of ULL. For the 6(PE) of BOK, EICL and ULL has not greater than correlation (r), so the relationship of MPS with lagged dividend is significant and 6(PE) of GFCL has less than the correlation (r), so

relationship of MPS with lagged dividend is insignificant which implies that the entire samples try to find else things that influences deciding MPS rather than Lagged Dividend.

4.2.2 Regression Analysis

When we know the value of one variable and we have to estimate the value of another variable, we need regression analysis to calculate the values of an unknown variable. In other words, it is a statistical tool, which helps us to estimate the value of one variable when another variable is known. Regression analysis is a general process of predicting one variable from another by using statistical means. Regression is the estimation of unknown values or prediction of one variable from known values of other variables. The estimation of regression plays a vital role in every step of many sectors. Here in the study, regression analysis has also been used into two folds:

- a) Simple Regression Analysis
- b) Multiple Regression Analysis

I. Simple Regression Analysis

a) Simple regression analysis of dependent variable MPS on independent variable EPS.

Table No: 4.12

Companies	No. of observations	Constant 'a'	Regression coefficient 'b'	S.E. of 'b'	r ²	S.E. of estimate	t-value	Sig 't'
BOK	5	-2379.329	78.150	15.974	0.851	250.3635	4.892	0.057
GFCL	5	716.774	-19.021	18.203	0.267	229.2935	-1.045	0.126
EICL	5	287.652	0.294	0.397	0.155	11.4444	0.741	0.00
ULL	5	574.664	7.964	1.729	0.876	520.8263	4.605	0.504

Source: Annual Report and Websites

Note: Significant at 5% level of significance.

The above table no 4.12 of regression analysis shows that among the companies under study, BOK, EICL, and ULL have positive relation, but GFCL has negative relation. The regression relation between MPS and EPS of BOK indicates that with an increase of Re.1 in EPS the MPS will increase by Rs.78.150 other variables remaining constant. Similarly, in case of EICL, ULL with an increase of Re.1 in EPS, the MPS will increase by Rs.0.294, Rs.7.964 respectively assuming that the other variables are constant but GFCL indicates that with decrease of Re 1 in EPS the MPS will decrease by Rs.19.021 assuming that the other variables are constant.

The standard error of estimate of BOK, GFCL, EICL, and ULL are 15.974, 18.203, 0.397 and 1.729 respectively. These values indicate the probable error in the predicted value for the respective companies.

The coefficient of multiple determinations (r²) is lowest for EICL, which indicates that only 15.50% variation in MPS of the company is explained due to the change in value of EPS of the company. The value of r² of BOK, GFCL and ULL are 0.851, 0.267 and 0.876 respectively, which indicate that 85.10%, 26.70% and 87.60% variation in the MPS of these companies are explained by to the change in EPS of the respective companies.

While testing the variable in the t-statistics, it reveals that the calculated value of t is less than tabulated value in case of GFCL and EICL the result is insignificant at 5% level of significance. But the calculated t- value of BOK and ULL is greater than tabulated value hence the relationship of EPS and MPS is statistically significant at 5% level of significance.

b) **Simple regression analysis of dependent variable MPS on independent variable D_{t-1} .**

Table No: 4.13

Companies	No. of observations	Constant 'a'	Regression coefficient 'b'	S.E. of 'b'	r^2	S.E. of estimate	t-value	Sig 't'
BOK	4	3254.298	-42.083	17.476	0.744	398.9576	-2.408	0.045
GFCL	4	-88.487	46.604	34.740	0.474	204.5981	1.342	0.845
EICL	4	285.978	1.058	0.468	0.719	8.08482	2.261	0.000
ULL	4	10.395	13.053	1.149	0.985	177.1429	11.355	0.981

Source: Annual Report and Websites

Note: Significant at 5% level of significance.

Above table no 4.13 shows the major output of the simple regression analysis of dependent variable MPS on independent variable lagged dividend of the concerned samples for the period of study. The values of constant (a) is 3254.294, -88.487, 285.978 and 10.395 for BOK, GFCL, EICL and ULL respectively which indicates that MPS of all the samples except the GFCL wouldn't be negative even last year's dividend carries a zero value. The column representing beta coefficient shows that except BOK, all the samples have positive coefficient, the beta coefficient of BOK indicates that one rupees increase in lagged dividend leads to Rs.42.083 decrease in stock price respectively remaining other variables constant. GFCL, EICL and ULL with beta coefficient 46.604, 1.058 and 13.053 reflect that 1 rupee increase in last year dividend causes Rs.46.604, Rs.1.058 and Rs13.053 increase in the stock price of concerning samples. The coefficient of determination r^2 of four samples is 0.744, 0.474, 0.719 and 0.985 respectively. The highest r^2 belonging to ULL reflects that variation in the independent variable D_{t-1} explain 98.50% variation in MPS while the lowest r^2 0.474 of GFCL indicates the variation of D_{t-1} explain only 47.40% variation in MPS of GFCL, other variables remaining constant.

While observing the t- statistics, the calculated values for the samples except the ULL are less than tabulated values, therefore the results of BOK, GFCL and EICL here is not statistically significant at 5% level of significance. But the calculated t-value of ULL is greater than tabulated value hence the relationship between MPS and D_{t-1} is statistically significant at 5% level of significance.

c) **Simple regression analysis of dependent variable DPS on independent variable EPS.**

Table No: 4.14

Companies	No. of observations	Constant 'a'	Regression coefficient 'b'	S.E. of 'b'	r ²	S.E. of estimate	t-value	Sig 't'
BOK	5	-0.619	0.778	0.775	0.252	12.14675	1.004	0.988
GFCL	5	13.336	-0.171	0.305	0.095	3.84457	-0.561	0.102
EICL	5	-5.860	0.678	0.101	0.938	2.90738	6.728	0.125
ULL	5	23.864	0.833	0.135	0.927	40.65329	6.173	0.714

Source: Annual Report and Websites

Note: Significant at 5% level of significance.

In the above table no.4.14, the regression analysis between DPS and EPS shows a positive relation between DPS and EPS in BOK, EICL and ULL and negative relation in GFCL. The regression relation between DPS and EPS of GFCL indicates that with an increase of Re.1 in EPS the DPS will decrease by Rs.0.171, assuming that other variables held constant. In the other hand, there will be increase in DPS of BOK, EICL and ULL by Rs.0.778, Rs.0.678 and Rs.1.833 respectively with an increase in EPS by Re.1 remaining other variables constant.

The standard error of estimate of BOK, GFCL, EICL, and ULL are 12.14675, 3.84457, 2.90738 and 40.65329 respectively. These values indicate the possible error in the predicted value for the respective companies.

The coefficient of multiple determinations (r²) is lowest for GFCL (0.095), which indicates that only 9.50% in DPS, is explained by EPS i.e. 9.50% variation in DPS of the firm is explained due to the change in value of EPS of the company. The value of r² of BOK, EICL and ULL are 0.252, 0.938, and 0.927 respectively, which indicates that 25.20%, 93.80% and 92.70% variation in the DPS of these companies are explained due to the change in EPS of the respective companies. While observing the t- statistics, the calculated values for the samples of BOK and GFCL are less than tabulated values, therefore the results here is not statistically significant at 5% level of significance. But the calculated t-value of EICL and ULL is greater than tabulated value hence the relationship between DPS and EPS is statistically significant at 5% level of significance.

d) **Simple regression analysis of dependent variable Earning Yield on independent variable Dividend Yield.**

Table No: 4.15

Companies	No. of observations	Constant 'a'	Regression coefficient 'b'	S.E. of 'b'	r ²	S.E. of estimate	t-value	Sig 't'
BOK	5	1.907	0.627	0.223	0.724	0.75318	2.809	0.085
GFCL	5	3.120	0.936	0.737	0.350	4.04797	1.270	0.423
EICL	5	3.328	1.360	0.194	0.942	1.31947	7.011	0.036
ULL	5	2.421	0.865	0.582	0.424	1.30882	1.486	0.693

Source: Annual Report and Websites

Note: Significant at 5% level of significance.

Above table no. 4.15 depicts simple regression analysis of dependent variable earning yield (E/Y) on independent variable dividend yield (D/Y) of the concerning samples representing FY 2062/63 to 2066/67. While analyzing the constant 'a', the value is positive in all the cases. Regression coefficients (beta coefficient) of corresponding samples are 0.627, 0.936, 1.360 and 0.865 for BOK, GFCL, EICL and ULL respectively. Positive beta coefficient shows that one rupees increase in dividend yield tends to Rs.0.627, Rs.936, Rs.1.360 and Rs.0.865 increase in earning yield of BOK, GFCL, EICL and ULL respectively. The coefficient of determination r² for the sample companies is 0.724, 0.350, 0.942 and 0.424 for BOK, GFCL, EICL and ULL respectively. Among them higher r² concerning to EICL represents that variation in independent variable dividend yield explain 0.942 of dependent variable earning yield of EICL. While going through the t value of the samples, calculated t-value for BOK, GFCL, EICL and ULL is 2.809, 1.270, 7.011 and 1.486 respectively, which is less than the tabulated value of 't' at 5% level of significance. The t- statistic reveals that the calculated value of t is less than tabulated value in case of GFCL and ULL, the result is insignificant at 5% level of significance. But the calculated t-value of BOK and EICL is greater than tabulated value hence the relationship between earning yield and dividend yield is statistically significant at 5% level of significance.

II. Multiple Regression Analysis

a) Multiple regression analysis MPS on EPS and DPS $MPS = a + b_1 \text{ EPS} + b_2 \text{ DPS}$

Table No: 4.16

Company	No. of cases	Constant	Regression coefficients		r ²	S.E.E.	F	Sig F
			b1	b2				
BOK	5	-2389.819	-16.951 (8.292) [-2.360]	91.343 (12.866) [7.100]	0.910	174.446	26.740	0.036
GFCL	5	1188.146	-25.076 (18.877) [-1.328]	-35.345 (33.969) [-1.041]	0.524	226.196	1.102	0.476
EICL	5	273.554	-2.406 (2.203) [-1.092]	1.925 (1.542) [1.248]	0.470	11.094	0.888	0.530
ULL	5	427.761	6.156 (7.945) [0.775]	2.834 (6.876) [0.412]	0.905	559.415	9.491	0.095

Source: Annual Report and Websites

Note: Significant at 10% level of significance for t-test

Significant at 5% level of significance for F-test

The above table no. 4.16 shows the relationship between dependent variable MPS on independent variables EPS and DPS of BOK, GFCL, EICL and ULL for corresponding five fiscal years i.e., 2062/63 to 2066/67. The value in () and [] represents standard error of the coefficient and t value of the coefficient respectively.

The regression coefficient b₁ for the samples are -16.651, -25.076, -2.406 and 6.156 correspondingly. Among them b₁ of ULL is the highest which indicates one rupees increase in EPS leads to Rs.6.156 increase in MPS of ULL remaining other variable constant. In other case, as concerning beta coefficient (b₁) of BOK, GFCL and EICL it indicates one rupee increases in EPS in leads of about Rs.16.951, Rs.25.076 and Rs.2.406 respectively decrease of MPS remaining other variables constant.

The beta coefficient b₂ representing the relationship between MPS and dividend per share reflects the value for BOK, GFCL, EICL and ULL are 91.343, -35.345, 1.925 and 2.834

respectively. Here the lowest b^2 concerning to GFCL reflects that Re. 1 increase in last year dividend of GFCL leads to in average Rs.35.345 decrease in MPS remaining other variables constant.

The column representing coefficient of determination (r^2) shows the value representing BOK, GFCL, EICL and ULL are 0.910, 0.524, 0.470 and 0.905 respectively. The highest r^2 representing BOK reflects that 91.00% variation in MPS explained by variation in EPS and DPS. While observing t-statistics of the coefficients, t value relating to the variables of EPS and DPS are smaller than the tabulated value of 't' at 10% level of significance so the relationship is statistically insignificant in all of the cases.

The F-statistics of the samples reveals that the calculated value of 'F' at 5% level of significance is greater than the tabulated value of F statistic for BOK and ULL, therefore the relationship is significant while going through EICL and GFCL, the calculated value of F is less than tabulated value, the relationship is insignificant in these cases.

b) **Multiple regression analysis MPS on P/E ratio and DPR**
MPS=a+b₁ P/E ratio + b₂ DPR

Table No: 4.17

Company	No. of cases	Constant	Regression coefficients		r ²	S.E.E.	F	Sig F
			b1	b2				
BOK	5	-1171.256	5.309 (3.974) [1.336]	77.305 (10.665) [7.248]	0.966	170.327	28.098	0.034
GFCL	5	184.460	-1.665 (0.837) [-1.989]	12.008 (1.088) [11.033]	0.984	41.438	61.643	0.016
EICL	5	306.375	-0.142 (0.448) [-0.317]	0.377 (0.820) [-0.460]	0.101	14.452	0.113	0.899
ULL	5	6250.882	-18.772 (121.067) [-0.155]	-68.996 (75.892) [-0.091]	0.037	1778.367	0.038	0.963

Source: Annual Report and Websites

Note: Significant at 10% level of significance for t-test

Significant at 5% level of significance for F-test

The above table no. 4.17 depicts the result of multiple regression analysis between dependent variable MPS and Independent variables P/E ratio and DPR. The values in () and [] represents standard error of coefficient and t- value of the coefficient respectively. The regression coefficient of P/E ratio and DPR are represented by b₁, and b₂ .

The regression coefficient b₁ shows the positive relation in BOK, which indicates one rupees increase in P/E ration leads to Rs.5.309 increase in MPS and show the negative relation in GFCL, EICL and ULL which indicates one rupees increase in P/E ratio leads to Rs.1.665, 0.142 and 18.772 decreases in MPS assuming other variables remain constant in case of GFCL, EICL and ULL.

The liquidity position of the samples is denoted by b₂. The beta coefficient representing DPR for the samples are 77.305, 12.008, 0.377 and -68.996 for BOK, GFCL, EICL and ULL respectively. The regression coefficient of ULL represents that one rupee increase in DPR leads to Rs.68.99 decrease in MPS.

The coefficients of multiple determinations (r^2) of the samples are 0.966, 0.984, 0.101 and 0.037 for BOK, GFCL, EICL and ULL respectively. Which means for instant, for ULL r^2 is 0.037 that indicates 3.70% variation in MPS is explain by variation in P/E ratio and DPR.

The t-value of regression coefficient b_1 is insignificant in all case, all samples has calculated 't' less than tabulated value of 't. Statistic at 10% level of significance, the relation isn't significant. While observing 't' value of b_2 , the result is insignificant for EICL and ULL but the result is significant for the BOK and GFCL.

The column representing to 'F- test ' reveals that the calculated value of 'F' at 5% level of significance is greater than the tabulated value of F statistic for BOK and GFCL, therefore the relationship is significant while going through EICL and ULL, the calculated value of F is less than tabulated value, the relationship is insignificant in these cases.

4.3 Major Findings of the Study

- During the period of the study, EPS of the sample reveals that, the fluctuation of EPS is very high for BOK. The EPS of GFCL grows steadily in first 2 years but falls down from three year, after that year, going to increase order. EPS of EICL up and down during the study period. The highest EPS during the period of study belongs to ULL and it also grows steadily.
- While analyzing DPS, the trend of dividend payment seems slightly constant in case of BOK only. This indicates that the sign is satisfactory for the forthcoming days. Though there is fluctuation in dividend payment of ULL, it has highest pooling average dividend payment among the samples. The DPS of GFCL falls down from 1st year to last year. The cash dividend is not being regularly paid by EICL during the period of study.
- The analysis of DPR reveal that the average DPR of ULL is highest among all the samples, followed by BOK, EICL and GFCL. In average, BOK, GFCL and ULL, applied the aggressive dividend policy with DPR 76.48%, 63.07% and 90.03% respectively. Moderate dividend policy had applied by EICL with DPR 31.65%. The pooled average column of the average was 65.31% for the period of the study
- The analysis of P/E ratio reflects that the pooled average of BOK has the highest P/E ratio with 28.63 GFCL, EICL and ULL have the average of 24.77, 18.78 and 9.55 respectively. Pooled average of the average P/E ratio was 20.43 for the period of the study.
- The dividend analysis reveals that the pooled average of 107.6%. At the time, the analysis of CV shows the dividend yield doesn't seem consistent for all the samples.
- The earning analysis reveals that the pooled average is 32.41%. At the time , the analysis of CV shows the earning yield of BOK and ULL is only consistent and for remaining samples, it is inconsistent.
- At the time of determining correlation analysis between EPS and MPS, it is revealed that correlation is positive for all the samples. The significant relationship can be seen in the case of BOK and ULL, for remaining samples, the relationship is insignificant.
- The correlation between EPS and DPS reveals that the relationship is positive for all the sample. The relationship between EPS and DPS is insignificant for BOK and GFCL, remaining samples, the relation is significant of this study.

- It can be reflected that the correlation between earning yield and dividend yield is positive in all case. The relationship is significant in case of BOK and EICL only. For rest of the samples, relationship between EY and DY is insignificant.
- The correlation between MPS and Lagged dividend is positive for all the samples. While going through the relationship, it is insignificant for GFCL But other is significant.
- While analyzing the correlations, it is reflected that most of the relationship for the samples were insignificant which indicates that the samples should consider other factors also while deciding impact on explained variables to the independent variables. In the same time, dependent significance relationship indicates that the variables are correlated to each other and dependent variable is influencing on independent variable.
- The simple regression MPS on EPS reflects that, constant 'b' is positive in all of the cases except the BOK, hence we can conclude that there is positive relationship between EPS and MPS. With the increase in EPS, MPS also increases and vice versa.
- In other regression relating to MPS on lagged dividend, the constant 'b' is positive for BOK, EICL and ULL which indicates that MPS and lagged dividend has positive relationship for these samples. But, in the case of GFCL constant 'b' is negative which shows that with increase in lagged dividend, MPS decreases.
- The simple regression analysis DPS on EPS reveals that constant 'b' is negative in the case of BOK and EICL which shows negative relation between DPS and EPS. In the case of GFCL and ULL, constant 'b' is positive which reveal positive relation between DPS and EPS.
- The regression equation of MPS on EPS shows that the relationship is significant only in case of BOK and ULL, at 5% level of significance while in case of remaining samples, the relationship is insignificant. For regression equation MPS on lagged dividend, the relationship is insignificant for BOK, GFCL and EICL. Also regression equation DPS on EPS, the relationship is insignificant for BOK and GFCL. Similarly, the regression analysis of earning yield on dividend yield reflects that the relationship is insignificant in the case of GFCL and ULL, for the rest of the samples the relationship is significant.
- The dependency in variable is explained by coefficient of determination (r^2), the dependency of MPS and EPS is highest in case of ULL. Similarly, the dependency of MPS on lagged dividend reflects that the dependency rate is higher again in case of

ULL. For another regression equation, DPS on EPS and earning yield on dividend yield, the rate of dependency is higher in case of EICL only.

- The multiple regression analysis MPS on EPS and DPS reflects value of F at 5% level of significant. Here, the relationship is statistically significant in case of BOK and ULL. For the remaining samples, the F-value is less than tabulated value, hence the relationship is insignificant.
- The multiple regression analysis, MPS on P/E ratio and DPR reflects that value of F at 5% level of significant is significance for BOK and EICL which means calculated value of 'F' is greater than tabulated value of 'F' for GFCL and ULL. That indicates that regression equation provides statistically significant explanation of variation in MPS due to P/E ratio and DPR for these samples.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The term dividend refers to earnings, which is distributed to common stockholders of the company in return of their investment. The analysis of dividend represents present status as well as future prospects of the company. Paying dividend is an effective way to attract prospective investors to invest in the common stock of the company. With the help of dividend, the actual financial figure of the company can be reflected.

The financial indicators such as earning, liquidity position, net worth, etc of the company may be affected by the decision of the dividend. These factors indicate the financial position of a company. If a firm has a strong financial position, the firm will able to provide parts regarding dividend policy have already been presented in the chapter of introduction.

The main objective of this study is to find out the financial relationship between dividend and other financial indicators. The key focus of the study is to find out the appropriated dividend policy of different companies representing different sectors.

The study has been conducted on the basis of secondary data of the concerning samples. The companies enlisted in ‘A’ – category by NEPSE have been taken as samples. Each sample represents different sectors of its own. The samples are BOK from banking sector, GFCL from finance sector, EICL from insurance sector and ULL from manufacturing and processing sector.

Various statistical as well as non-statistical tools have been adopted to make this study reliable. The consistency regarding the distribution of dividend of different companies has also been analyzed by using different statistical tools.

The major finding that are mentioned in previous chapter led this study conclude that there is no uniformity in paying dividend by all the samples. The earning of ULL is highest among all the samples. The fluctuation in the payment of DPS can also be revealed at the time of conducting research. The DPS of rest of the samples are quite lower in comparison with DPS of ULL. The DPR analysis shows that BOK, GFCL and ULL are following aggressive dividend policy whereas EICL is following moderate policy. Analysis of coefficient of correlation depicts that the market price of the share of the company is not affected by the dividend and earning of the samples.

Because of uncertainty in paying dividend, the credibility of the companies are loosing in Nepalese capital market. But the study shows that most of the samples are paying dividend on regular basis during last couple of years. Although the financial sector of the nation is affected by the adverse situation of the nation, the payment of dividend is satisfactory by analyzing different financial indicators of the samples. The situation would be convenience for all the samples if they pay dividend regularly by adopting optimum dividend payment policy, according to the interest, expectation and welfare of the common stockholder. In other words, to win the credibility or the confidence of their investors, payment to existing investors is most important to attract potential investors.

At the time of declaring dividend, the company mustn't neglect the important factors like liquidity position and earning position of the firm. While conducting the study, it seems that above mentioned factors are not considering by the firms at the time of declaring the dividend. The company must pay its attention towards these important factors while paying dividend.

This study includes analyzing and examining dividend policy and practices of four samples representing different four sectors for the period of five years from 2062/63 to 2066/67. If more samples are taken, the research may accurate and statistically reliable but due to time consistency and other numerous constraints, only limited number of the samples has been taken into consideration. So, dividend policy may be subject for further study, which can be more appropriate.

5.2 Conclusion

From the analysis of financial variables using statistical tools mean, standard deviation and coefficient of variation, following conclusions have been drawn.

- The average earning per share (EPS) of the samples under study shows a positive result. But the coefficient of variation indicates that the EPS of the samples are not stable. The CV ranges between 53.03% and 14.31%. Among the sample under study, ULL has the highest average EPS and GFCL has the least with high degree of fluctuation.
- The average DPS shows that there is no regularity in payment of dividend. The DPS is quite fluctuating. The CV of DPS ranges between 84.93% and 28.99%. The ULL has the highest average DPS and the most regular to pay dividend to its shareholders. Among the samples under study, EICL has the lowest average DPS and also the highest fluctuation in DPS. Since the paid up capital per share is Rs. 100, the analysis of dividend percent also depicts the same result as that of DPS.
- The analysis of DPR also shows that the DPR of the samples are not stable. The fluctuation ranges between 81.87% and 9.07%. Among the samples under study, ULL has highest average DPR and least fluctuation in the DPR. The result also shows that, EICL has the lowest average DPR but highest fluctuation as indicated by highest CV.
- The average Price Earning ratio of ULL among the samples under study is the highest and also highly unstable. The ratio of remaining samples is satisfactory and quite stable.
- The average MPS of the samples indicate quite high level of fluctuation .ULL has the highest average MPS while EICL has the lowest except the 2066/067's MPS. Among the samples under study, the MPS of EICL is highly fluctuating and that of BOK's MPS is going to decreasing order.
- The average dividend yields of the samples are very low ranging between 9.52% and 3.01%. Among the samples ULL has the highest dividend yield and GFCL has the lowest. Besides the dividend yield being low, there is high fluctuation in the dividend ranging from 84.70 % to 10.60%.

- The average earning yield of samples under study indicates that the earning yield is quite low ranging between 28.63% and 9.55% and the stability of the earning yield is also low i.e. fluctuation of earning yield range from 75.29 % to 13.72 .

Upon using the major statistical tools i.e. correlation and regression, following conclusion have been drawn.

- The correlation between Earning Per Share (EPS) and Market Price Per share (MPS) of all the four samples: BOK, GFCL, EICL and ULL is positive.
- The correlation analysis between EPS and DPS of all the samples: BOK, GFCL, EICL and ULL shows positive relationship.
- The correlation between Earning Yield and Dividend Yield of all the four samples is positive.
- The correlation analysis between Market Price Per Share and Lagged Dividend shows the positive relationship.
- The regression coefficient (b) of the regression analysis between MPS on EPS is positive for the sample of BOK, EICL, ULL and sample of GFCL is negative.
- The regression analysis between MPS and lagged dividend shows that the regression coefficient (b) is positive for GFCL, EICL and ULL while for BOK regression coefficient is negative.
- The regression analysis between DPS on EPS shows that the regression coefficient (b) is positive for BOK, EICL and ULL only while in the case of GFCL the regression coefficient (b) is negative.
- The regression analysis between earning yield on dividend yield shows that the regression coefficient (b) for all samples are positive.
- The multiple regression analysis of MPS on EPS and DPS shows that the regression coefficient b_1 for the samples ULL is positive which shows the positive relation between MPS and EPS. But b_1 is negative for BOK, GFCL and EICL. The beta coefficient b_2 representing the relationship between MPS and DPS reflects the value for BOK, GFCL, EICL and ULL are positive.
- The multiple regression analysis of MPS on P\E ratio and DPR shows that the regression coefficient b_1 for all the samples except BOK is negative. The beta

coefficient b_2 is also positive for all the samples except ULL which shows the positive relation between MPS and DPR for the samples except EICL.

After analyzing the financial variables using mean, standard deviation and coefficient of variation, making analysis of relation between the variables using correlation and regression, the following conclusions have been drawn.

- All the samples under study have not uniform behavior in dividend distribution. Some pay dividend to their stockholders regularly but some does not, so, there is no uniformity in dividend payment. Different sample give importance to dividend in different way and manner.
- The market price per share is affected by the dividend related financial variables i.e. DPS, DPR and Dividend yield either positively or negatively. The nature of effect is different for different samples. In case of some samples, there exists positive relation between dividend and market price per share while for other there exists negative relation. Besides this the market price per share largely depends upon the dividend, which has been shown by the coefficient of multiple determinations.
- Besides dividend, other factors also affect the market price per share e.g.: earning per share, price earning ratio etc. Their effect is also different for different samples.
- The dividend per share is affected by earning per share, retention ratio and net profit differently in different samples. The extent of effect is also different for each sample.
- An analysis of the average DPR of the samples shows that out of the total income generated, about 65.31% is distributed as dividend in general. If the individual DPR of the samples are compared to this figure, ULL has the average DPR (90.03%) above that the average DPR of all samples. The individual average DPR of BOK (76.48%) is also near about this figure. On the other hand the average DPR of GFCL (63.07%) and EICL (31.65%) are quite low as compare to the average of all samples. The coefficients of variation of the average DPR of the samples indicate that the fluctuation in the payment of dividend is 9.57% which is above conservative level. Thus it can be concluded that dividend policy of the companies are not uniform. There is no strategy of calculating growth in the dividends paid by the company, which depicts that the dividend policy of the

companies is not stable and consistent. There is fluctuation in the dividend payment even if the company is making profit regularly. The dividend payout ratio also does not show any stability and coordination with other variables. There is large fluctuation in dividend in each year. There is not certain criterion for paying dividend. From this we can conclude that there is no long-term vision regarding the dividend policy.

5.3 Recommendations

At the end of the research, the research would be incomplete without some suggestions that came from the basis of the problems. The following would be some recommendations found from the research work:

- The dividend policy isn't clearly defined by the samples; the fluctuation in dividend payment is high. The ratio of DPR seems unbalance, which may cause serious problem among stockholders and other sectors of the samples. For this reason it is strongly recommended that company should maintain constant dividend payout ratio.
- Irregularity in payment of dividend may change the interest of the investors. So, the samples are suggested to pay regular and attractive dividend to its stockholders.
- As we know, DPS is more dependent on earning, it can be observed through the study that samples are not paying dividend in comparison with their earning. The investors are more concerned with dividend payment ability as well as the earning of the company. That is why; EPS should be taken as a considerable factor at the time of declaring dividend.
- From the above analysis it can be revealed that the liquidity position as well as retained earning has been ignored by the samples at the time of decision making about dividend. These factors shouldn't be ignored while declaring the dividend by the samples.
- The companies should be able to grasp the better opportunity by creating innovative ideas, activities and technologies. The greater volume of new activities certainly increases the earning opportunities of the investors.

- While conducting the study, it is observed that, investment in the stock of these companies are in increasing trend, which means, without considering company's financial performance, the investment is made which is irrational. So it can be suggested that the investor should understand the condition and financial performance of the company before making investment decision,
- The necessary rules and regulation should be introduced by the state and concerning samples for the convenience in the transaction of the stock at the stock market.
- The ordinary shareholders are original owners of the company, so the company should pay high attention over the investment of their worthwhile shareholders. The executive committee of the company should always pay its attention about the desire of the shareholders regarding the forms of dividend (return) on their investment.
- The decision relating to the dividend should be in favor of prosperity and in favor of the company and the investors.
- The government or private sectors relating to the blossoming of the stock market for the betterment and uniformity in paying dividend should conduct the interactions, meetings, seminars etc. For this reason expertise and consultant relating to financial performance should be recruited or hired.
- The capital market of Nepal is in the growing stage. The capital market should be perfect and efficient to attract new investors. The price of the stock should be declared within norms and the values of financial policy and practices of the nation.
- There is lack of proper legal provisions regarding the dividend payment. The government should pay attention in this matter for prescribing certain provision and rules regarding the percentage of earning as payment of dividend.

The above suggestions further are described as:

-) Rules and legislation should be implemented as well as evaluated by the government regarding perfect dividend policy.
-) Company should formulate an effective dividend policy
-) The investors should know the basic knowledge of finance.

-) Strengthen and empowered the capacity and boundaries of Nepal Stock Exchange Limited.
-) Formulation of shareholders welfare association by the effort of government.
-) All the information regarding to investment policy, financial performance, etc should be disclose to the general public.

BIBLIOGRAPHY

Books

Baker, H.K. and Philips, Aaron L. (1992), “**Management View on Stock Dividends**”, Working Paper Series, Jacksonville, Florida.

Brandt, Luis K. (1972), “**Analysis for Financial Management**” Eaglewoods Cliffs, N.J., Prentice Hall Inc.

Brealey, Richard A. and Myres, Stewart C.(1998), “**Principles of Corporate Finance**” New Delhi, Tata Mc Graw-Hill Publishing Co. Ltd.

Endi Consultants Research Group Kathmandu, Nepal, “**Nepalese Company Act 1997**”, Nepal For Profitable Investment, (Kathmandu, Shree Star Printing Press Baghbazar),

Friend, Irwin and Puckett, Marshall (1964), “**Dividend and Stock Prices**”, American Economic Review, Vol. IV, September

Gorden, Myron J. (1962), “**The Investment Financing and Valuation of Corporation**”, Home Wood III, Richard D, Irwin

Gupta, S.C.(1997), “**Statistics**”, New Delhi, Himalayan Publishing House,

Gupta, S.P.(1991), “**Statistical Methods**”, New Delhi, Sultan Chand and Sons Publication

Hasting, P.G.(1996), “**The Management of Business Finance,**” New York Von Nostrand Co.

Hornby, A.S.(2000),”**Oxford Advance Learner’s Dictionary**”, 6th edition, Oxford University, Great Clarendon Street, Oxford OXZ GDP.

Hunt, Peterson, Wiliam, Charles M. and Govlen, Donald son (1972), “**Basic Business Finance**” Homewood Illinois D. Irwin Inc

Jensen, Gerald R. & Johnson, James M.(1995), “**The Dynamics of Corporate Dividend Reductions**”, Financial Management, Vol.24, No.4,

Khan, M.Y. & Jain, P.K.(1999), “**Dividend Policy Decision**”, Financial Management Text and Problems, Third Edition, (New Delhi, Tata MC Graw-Hill Publishing Company Limited,

Khan, M.Y and Jain P.K.(1992), “**Financial Management Text and Problems**”, New Delhi, Tata Mc-Graw Hill Publishing Limited

- Kothari, C.R.(1992), “**Quantitative Techniques**”, Vikas Publishing House Pvt. Ltd. New Delhi
- Kuchhal S.C.(1974), “**Financial Management**”, New Delhi, Chaitanya Publishing House Pvt. Ltd.
- Lawrance J. Gitman, (1994) “**Principles of Managerial Finance**”, 7th Edition, New York, Haper Collins’ College
- Levin, Richard I. and Rubin, David S.(1999), “**Statistics for Management**” New Delhi, Prentice Hall of India Pvt. Ltd
- Linter, John (1956), “**Distribution of Incomes of Corporations among Dividend, Retained Earning and Taxes**”, American Economic Review, vol. 46
- Miller, Merton H. and Modigliani, France (1961), “**Dividend Policy, Growth and Valuation of the Shares**” Journal of Business, XXIV
- Miller, M.H. and Modigliani, F. (June 19966) “**Some Estimates of the Cost of Capital to the Electric Utility Industry 1954-57**”. American Economic Review.
- Pandey, I.M.(1999), “**Financial Management**” 8th edition. New Delhi, Vikash Publishing House P. Ltd.
- Pradhan, Radhe S.(1994), “**Financial Management Practice in Nepal**”, New Delhi, Vikash Publishing House Pbt. Ltd.
- Pradhan, Surendra (1992), “**Basic Of Financial Management**”, Kathmandu, Educational Enterprises Pvt. Ltd
- Rao, Ramesh K., (1992), “**The Dividend Policy Decision, Financial Management Concept and Application**”, 2nd Edition, New York Macmillan Publishing Co.
- Sharma, Puskar Kumar and Chaudhary, A.K.(2001), “**Statistical Methods**”, Kathmandu, Khanal Books Prakashan,
- Shrestha, Dr. R.B. (1992) “**Statistics and Probablity**”, Ekta Books Distribution Pvt. 1992
- Shrestha, Prakash et al. (2008), “**Fundamental Principles of Financial Management**” Telaju Prakashan.
- Soloman, Ezra.(1963), “**The Theory of Financial Management**”, New York, Columbia University Press
- Throp, Smith Dan (1977, “**Relief from Double Taxation of Dividend Income**”, Harvard Business Review

Walter, James E. (1963) **“Dividend Policy: It’s Influence on the Value of the Enterprise”**, Journal of Finance

Walter, James E. (1966), **“Dividend Policy and Common Stock Prices”**, Journal of Finance

Weston, J. Fred. and Brigham Eugene F. (1989), **“Managerial Finance”**, 9th edition, Chicago. The Dryden Press

Weston, J. Fred & Copeland, Thomas, E. (1990), **“Dividend Policy”**, Managerial Finance Ninth Edition (USA, The Dryden Press

Thesis

Adhikari, Navaraj, **“Corporate Dividend Practices in Nepal”** a master’s degree dissertation submitted to Tribhuvan University, Central Department of Management 1999

Bhattarai, Bishnu Hari, **“Dividend decision and its impact on the stock Valuation”**, thesis, T.U., Kirtipur, Kathmandu, 1996

Bhattarai, Anjani Raj, **“Share Markets in Nepal”**, an unpublished master’s degree thesis, T.U., Kirtipur, Kathmandu, 1990

Gautam, Rishi Raj, **“Dividend Policy in Commercial Banks a Comparative Study of NGBL, NIBL, NABIL”**, unpublished Master’s Degree Thesis, SDC, October 1995

Khatiwada, Narayan Prasad, **“Impact of Dividend and Earning Announcement on Shareholder’s Return and Stock Prices in Nepal”**, unpublished Master’s Degree Thesis, Shanker Dev Campus, May 2001

Joshi, Bhawani Prasad, **“Dividend Policy in Commercial Banks”**, an unpublished Master’s Degree Thesis, Kailali Multiple Campus, July 2006

Joshi, Krishna Raj, **“Dividend Policy: A Practice in Nepal”**, an unpublished Master’s Degree Thesis, Kailali Multiple Campus, August, 2007

Internet web sites:

Search engines

www.astavista.com

www.google.com

www.yahoo.com

Related website:

www.bok.com.np

www.eicl.com

www.goodwillfinance.com

www.uniliver.com.np

www.gsb.unichicago.edu

www.heritage.com

www.nepalstock.com

www.oaktree.com

www.pldis.org

Annex - I

a) Financial Indicator of BOK

Year	EPS	DPS	MPS	DPR	P/E Ratio	E/Y	D/Y
2062/63	43.67	48.00	850	109.92	19.46	5.14	5.65
2063/64	43.50	20.00	1375	45.97	31.61	3.16	1.45
2064/65	59.94	42.11	2350	70.25	39.21	2.55	1.79
2065/66	54.68	47.37	1825	86.62	33.37	3.00	2.60
2066/67	43.08	30.00	840	69.64	19.50	5.13	3.57

b) Financial Indicator of GFCL

Year	EPS	DPS	MPS	DPR	P/E Ratio	E/Y	D/Y
2062/63	14.98	10.53	165	70.29	11.01	9.08	6.38
2063/64	18.45	15.79	220	85.58	11.92	8.39	7.18
2064/65	12.48	10.53	633	84.38	50.72	1.97	1.66
2065/66	14.98	7.63	625	50.93	41.72	2.40	1.22
2066/67	28.48	6.89	241	24.19	8.46	11.82	2.86

c) Financial Indicator of EICL

Year	EPS	DPS	MPS	DPR	P/E Ratio	E/Y	D/Y
2062/63	13.94	0	295	0.00	21.16	4.73	0.00
2063/64	24.54	13.16	290	53.63	11.82	8.46	4.54
2064/65	6.42	0	291	0.00	45.33	2.21	0.00
2065/66	36.16	20	285	55.31	7.88	12.69	7.02
2066/67	40.57	20	313	49.30	7.72	12.96	6.39

d) Financial Indicator of ULL

Year	EPS	DPS	MPS	DPR	P/E Ratio	E/Y	D/Y
2062/63	258.66	250	2500	96.65	9.67	10.35	10.00
2063/64	285.71	275	3400	96.25	11.90	8.40	8.09
2064/65	436.15	325	3600	74.52	8.25	12.12	9.03
2065/66	482.29	450	4050	93.31	8.40	11.91	11.11
2066/67	626.19	560	5960	89.43	9.52	10.51	9.40

Annex-II

a) Correlation Analysis of BOK

1) MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943 ^a	.889	.851	250.36358

a. Predictors: (Constant), EPS

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1500284.238	1	1500284.238	23.935	.016 ^a
	Residual	188045.762	3	62681.921		
	Total	1688330.000	4			

a. Predictors: (Constant), EPS

b. Dependent Variable: MPS

2) DPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502 ^a	.252	.002	12.14675

a. Predictors: (Constant), EPS

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	148.789	1	148.789	1.008	.389 ^a
	Residual	442.630	3	147.543		
	Total	591.419	4			

a. Predictors: (Constant), EPS

b. Dependent Variable: DPS

3) E/Y on D/Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851 ^a	.724	.633	.75318

a. Predictors: (Constant), DY

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.475	1	4.475	7.888	.067 ^a
	Residual	1.702	3	.567		
	Total	6.177	4			

a. Predictors: (Constant), DY

b. Dependent Variable: EY

4) MPS on Dt-1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.862 ^a	.744	.615	398.95765

a. Predictors: (Constant), Dt1

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	922990.580	1	922990.580	5.799	.138 ^a
	Residual	318334.420	2	159167.210		
	Total	1241325.000	3			

a. Predictors: (Constant), Dt1

b. Dependent Variable: MPS

b) Correlation Analysis of GFCL

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.517 ^a	.267	.022	229.29359

a. Predictors: (Constant), EPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57402.151	1	57402.151	1.092	.373 ^a
	Residual	157726.649	3	52575.550		
	Total	215128.800	4			

a. Predictors: (Constant), EPS

b. Dependent Variable: MPS

2. DPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.308 ^a	.095	-.207	3.84457

a. Predictors: (Constant), EPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.657	1	4.657	.315	.614 ^a
	Residual	44.342	3	14.781		
	Total	49.000	4			

a. Predictors: (Constant), EPS

b. Dependent Variable: DPS

3. E/Y on D/Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591 ^a	.350	.133	4.04797

a. Predictors: (Constant), DY

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.435	1	26.435	1.613	.294 ^a
	Residual	49.158	3	16.386		
	Total	75.593	4			

a. Predictors: (Constant), DY

b. Dependent Variable: EY

4. MPS on D_{t-1}

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688 ^a	.474	.210	204.59807

a. Predictors: (Constant), Dt1

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75334.012	1	75334.012	1.800	.312 ^a
	Residual	83720.738	2	41860.369		
	Total	159054.750	3			

a. Predictors: (Constant), Dt1

b. Dependent Variable: MPS

c) Correlation Analysis of EICL

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.393 ^a	.155	-.127	11.44444

a. Predictors: (Constant), EPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	71.875	1	71.875	.549	.513 ^a
	Residual	392.925	3	130.975		
	Total	464.800	4			

a. Predictors: (Constant), EPS

b. Dependent Variable: MPS

2. DPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968 ^a	.938	.917	2.90738

a. Predictors: (Constant), EPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	382.630	1	382.630	45.266	.007 ^a
	Residual	25.359	3	8.453		
	Total	407.988	4			

a. Predictors: (Constant), EPS

b. Dependent Variable: DPS

3. E/Y on D/Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.971 ^a	.942	.923	1.31947

a. Predictors: (Constant), DY

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.583	1	85.583	49.157	.006 ^a
	Residual	5.223	3	1.741		
	Total	90.806	4			

a. Predictors: (Constant), DY

b. Dependent Variable: EY

4. MPS on D_{t-1}

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848 ^a	.719	.578	8.08482

a. Predictors: (Constant), Dt1

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	334.021	1	334.021	5.110	.152 ^a
	Residual	130.729	2	65.364		
	Total	464.750	3			

a. Predictors: (Constant), Dt1

b. Dependent Variable: MPS

d) Correlation Analysis of ULL

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936 ^a	.876	.835	520.82632

a. Predictors: (Constant), EPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5752299.837	1	5752299.837	21.206	.019 ^a
	Residual	813780.163	3	271260.054		
	Total	6566080.000	4			

a. Predictors: (Constant), EPS

b. Dependent Variable: MPS

2. DPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963 ^a	.927	.903	40.65329

a. Predictors: (Constant), EPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62971.929	1	62971.929	38.103	.009 ^a
	Residual	4958.071	3	1652.690		
	Total	67930.000	4			

a. Predictors: (Constant), EPS

b. Dependent Variable: DPS

3. E/Y on D/Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 ^a	.424	.232	1.30882

a. Predictors: (Constant), DY

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.781	1	3.781	2.207	.234 ^a
	Residual	5.139	3	1.713		
	Total	8.920	4			

a. Predictors: (Constant), DY

b. Dependent Variable: EY

4. MPS on D_{t-1}

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	.985	.977	177.14290

a. Predictors: (Constant), Dt1

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4046315.789	1	4046315.789	128.947	.008 ^a
	Residual	62759.211	2	31379.605		
	Total	4109075.000	3			

a. Predictors: (Constant), Dt1

b. Dependent Variable: MPS

Annex-III

a) Regression Analysis of BOK

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943 ^a	.889	.851	250.36358

a. Predictors: (Constant), EPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2379.329	790.284		-3.011	.057
	EPS	78.150	15.974	.943	4.892	.016

a. Dependent Variable: MPS

2. DPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502 ^a	.252	.002	12.14675

a. Predictors: (Constant), EPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.619	38.342		-.016	.988
	EPS	.778	.775	.502	1.004	.389

a. Dependent Variable: DPS

3. E/Y on D/Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851 ^a	.724	.633	.75318

a. Predictors: (Constant), DY

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.907	.752		2.535	.085
	DY	.627	.223	.851	2.809	.067

a. Dependent Variable: EY

4. MPS on D_{t-1}

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.862 ^a	.744	.615	398.95765

a. Predictors: (Constant), Dt1

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3254.298	716.349		4.543	.045
	Dt1	-42.083	17.476	-.862	-2.408	.138

a. Dependent Variable: MPS

b) Regression Analysis of GFCL

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.517 ^a	.267	.022	229.29359

a. Predictors: (Constant), EPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	716.774	341.143		2.101	.126
	EPS	-19.021	18.203	-.517	-1.045	.373

a. Dependent Variable: MPS

2. DPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.308 ^a	.095	-.207	3.84457

a. Predictors: (Constant), EPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.336	5.720		2.332	.102
	EPS	-.171	.305	-.308	-.561	.614

a. Dependent Variable: DPS

3. E/Y on D/Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591 ^a	.350	.133	4.04797

a. Predictors: (Constant), DY

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.120	3.371		.925	.423
	DY	.936	.737	.591	1.270	.294

a. Dependent Variable: EY

4. MPS on D_{t-1}

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688 ^a	.474	.210	204.59807

a. Predictors: (Constant), Dt1

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-88.487	399.624		-.221	.845
	Dt1	46.604	34.740	.688	1.342	.312

a. Dependent Variable: MPS

c) Regression Analysis of EICL

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.393 ^a	.155	-.127	11.44444

a. Predictors: (Constant), EPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	287.652	10.922		26.336	.000
	EPS	.294	.397	.393	.741	.513

a. Dependent Variable: MPS

2. DPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968 ^a	.938	.917	2.90738

a. Predictors: (Constant), EPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.860	2.775		-2.112	.125
	EPS	.678	.101	.968	6.728	.007

a. Dependent Variable: DPS

3. E/Y on D/Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.971 ^a	.942	.923	1.31947

a. Predictors: (Constant), DY

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.328	.913		3.647	.036
	DY	1.360	.194	.971	7.011	.006

a. Dependent Variable: EY

4. MPS on D_{t-1}

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848 ^a	.719	.578	8.08482

a. Predictors: (Constant), Dt1

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	285.978	5.604		51.034	.000
	Dt1	1.058	.468	.848	2.261	.152

a. Dependent Variable: MPS

d) Regression Analysis of ULL

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936 ^a	.876	.835	520.82632

a. Predictors: (Constant), EPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	574.664	759.166		.757	.504
	EPS	7.964	1.729	.936	4.605	.019

a. Dependent Variable: MPS

2. DPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963 ^a	.927	.903	40.65329

a. Predictors: (Constant), EPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.864	59.257		.403	.714
	EPS	.833	.135	.963	6.173	.009

a. Dependent Variable: DPS

3. E/Y on D/Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 ^a	.424	.232	1.30882

a. Predictors: (Constant), DY

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.421	5.575		.434	.693
	DY	.865	.582	.651	1.486	.234

a. Dependent Variable: EY

4. MPS on D_{t-1}

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	.985	.977	177.14290

a. Predictors: (Constant), Dt1

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.395	383.929		.027	.981
	Dt1	13.053	1.149	.992	11.355	.008

a. Dependent Variable: MPS

Annex-IV

a) Multiple Regression of BOK

1) MPS on DPS and EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.982 ^a	.964	.928	174.44564

a. Predictors: (Constant), EPS, DPS

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1627467.434	2	813733.717	26.740	.036 ^a
	Residual	60862.566	2	30431.283		
	Total	1688330.000	4			

a. Predictors: (Constant), EPS, DPS

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2389.819	550.670		-4.340	.049
	DPS	-16.951	8.292	-.317	-2.044	.178
	EPS	91.343	12.866	1.102	7.100	.019

a. Dependent Variable: MPS

2) MPS on DPR and P/E

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.983 ^a	.966	.931	170.32707

a. Predictors: (Constant), PER, DPR

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1630307.377	2	815153.689	28.098	.034 ^a
	Residual	58022.623	2	29011.311		
	Total	1688330.000	4			

a. Predictors: (Constant), PER, DPR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.983 ^a	.966	.931	170.32707

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1171.256	519.629		-2.254	.153
	DPR	5.309	3.974	.193	1.336	.313
	PER	77.305	10.665	1.049	7.248	.019

a. Dependent Variable: MPS

2) Multiple Regression of GFCL

1) MPS on DPS and EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 ^a	.524	.049	226.19784

a. Predictors: (Constant), DPS, EPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	112797.875	2	56398.937	1.102	.476 ^a
	Residual	102330.925	2	51165.463		
	Total	215128.800	4			

a. Predictors: (Constant), DPS, EPS

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1188.146	564.342		2.105	.170
	EPS	-25.076	18.877	-.681	-1.328	.315
	DPS	-35.345	33.969	-.533	-1.041	.407

a. Dependent Variable: MPS

2. MPS on DPR and P/E

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	.984	.968	41.43793

a. Predictors: (Constant), PER, DPR

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	211694.596	2	105847.298	61.643	.016 ^a
	Residual	3434.204	2	1717.102		
	Total	215128.800	4			

a. Predictors: (Constant), PER, DPR

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	184.460	55.114		3.347	.079
	DPR	-1.665	.837	-.186	-1.989	.185
	PER	12.008	1.088	1.029	11.033	.008

a. Dependent Variable: MPS

3) Multiple Regression of EICL

1) MPS on DPS and EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.686 ^a	.470	-.059	11.09445

a. Predictors: (Constant), EPS, DPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	218.626	2	109.313	.888	.530 ^a
	Residual	246.174	2	123.087		
	Total	464.800	4			

a. Predictors: (Constant), EPS, DPS

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	273.554	16.698		16.383	.004
	DPS	-2.406	2.203	-2.254	-1.092	.389
	EPS	1.925	1.542	2.576	1.248	.338

a. Dependent Variable: MPS

2) MPS on DPR and P/E

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.318 ^a	.101	-.798	14.45251

a. Predictors: (Constant), PER, DPR

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.050	2	23.525	.113	.899 ^a
	Residual	417.750	2	208.875		
	Total	464.800	4			

a. Predictors: (Constant), PER, DPR

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	306.375	29.019		10.558	.009
	DPR	-.142	.448	-.381	-.317	.781
	PER	-.377	.820	-.553	-.460	.691

a. Dependent Variable: MPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.050	2	23.525	.113	.899 ^a
	Residual	417.750	2	208.875		
	Total	464.800	4			

a. Predictors: (Constant), PER, DPR

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	306.375	29.019		10.558	.009
	DPR	-.142	.448	-.381	-.317	.781
	PER	-.377	.820	-.553	-.460	.691

a. Dependent Variable: MPS

4) Multiple Regression of ULL
1) MPS on DPS and EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.951 ^a	.905	.809	559.41477

a. Predictors: (Constant), EPS, DPS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5940190.238	2	2970095.119	9.491	.095 ^a
	Residual	625889.762	2	312944.881		
	Total	6566080.000	4			

a. Predictors: (Constant), EPS, DPS

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	427.761	837.163		.511	.660
	DPS	6.156	7.945	.626	.775	.519
	EPS	2.834	6.876	.333	.412	.720

a. Dependent Variable: MPS

2) MPS on DPR and P/E

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.192 ^a	.037	-.927	1778.36713

a. Predictors: (Constant), PER, DPR

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	240900.709	2	120450.354	.038	.963 ^a
	Residual	6325179.291	2	3162589.646		
	Total	6566080.000	4			

a. Predictors: (Constant), PER, DPR

b. Dependent Variable: MPS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6250.882	8825.295		.708	.552
	DPR	-18.772	121.067	-.134	-.155	.891
	PER	-68.996	756.892	-.079	-.091	.936

a. Dependent Variable: MPS

Note: These analysis are based on SPSS Program