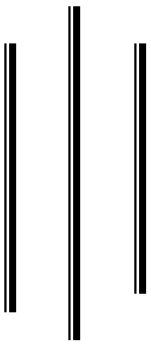
Dividend Practices in Commercial Banks;

Comparative study of Himalayan Bank Limited, Everest Bank Limited and Bank of Kathmandu



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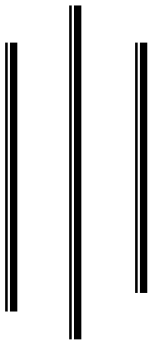

A Thesis Submitted To**:**
Shanker Dev Campus
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In partial fulfillment of the requirements for the degree of
Master of Business Studies (M.B.S.)
RamshahPath, Putalisadak
Kathmandu, Nepal
2010

TRIBHUVAN UNIVERSITY
Faculty of Management

Shankar Dev Campus

Use Only For Thesis

Ref. No……..

RECOMMENDATION

This is to certify that the thesis

Submitted by
BAL KRISHNA KHADKA

Entitled
"DIVIDEND PRACTICES IN COMMERCIAL BANKS; COMPARATIVE STUDY OF HIMALAYAN BANK LIMITED EVEREST BANK LIMITED AND BANK OF KATHMANDU"

has been prepared as approved by this Department in the prescribed format of Faculty of Management

This thesis is forwarded for examination.

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TRIBHUVAN UNIVERSITY

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VIVA-VOCE SHEET

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"DIVIDEND PRACTICES IN COMMERCIAL BANKS; COMPARATIVE STUDY OF HIMALAYAN BANK LIMITED EVEREST BANK LIMITED AND BANK OF KATHMANDU"

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

Master of Business Studies (M.B.S)

Viva-Voce Committee

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Member (External Expert):……

Date:- ……

DECLARATION

I, hereby, declare that the work reported in this thesis entitled **"DIVIDEND PRACTICES IN COMMERCIAL BANKS; COMPARATIVE STUDY OF HIMALAYAN BANK LIMITED EVEREST BANK LIMITED AND BANK OF KATHMANDU"** submitted to Shankar Dev Campus, Faculty of Management, Tribhuvan University is my original research work don in the form of partial fulfillment of the requirements of degree of Master of Business Studies (M.B.S) under the supervision of Supervisor Mr. Shree Bhadra Neupane and Mr. Achyut Bhattarai Associate Professor of Shanker Dev Campus, T. U.

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(Shanker Dev Campus)

TABLE OF CONTENT

1. RECOMMENDATION
2. VIVA-VOCE SHEET
3. DECLRATION
4. ACKNOWLEDGEMENT
5. LIST OF ABBREVIATIONS
6. LIST OF TABLES

CHAPTER I: INTRODUCTION

1.1 Background of the Study 1
1.2 Statement of the Problem 4
1.3 Objectives of the Study 5
1.4 Significant of the Study 5
1.5 Limitation of the Study 6
1.6 Chapter Plan 7

CHAPTER II: REVIEW F LITERATURE

2.1 Conceptual Framework 8
2.1.1 Theories of Dividend 9
2.1.1.1 Residual Theory 9
2.1.1.2 Wealth Maximization Theory 10
2.1.1.3 The Bird-In-The-Hand Theory 10
2.1.1.4 Dividend Signaling Theory 11
2.1.2 Forms of Dividends 12
2.1.3 Stability of Dividend 13
2.1.4 Factor Influencing Dividend Policy 15
2.2 Review of Major Studies 18
2.3 Legal Provision Regarding Dividend Practice in Nepal 27
2.3.1 Legal Provisions on Dividend Policy According to Nepalese Company Act, 2063 27
2.3.2 Legal Provisions on Dividend Policy According to Bank and Financial Institution act, 2063 29
2.3.3 NRB Directives 30

2.3.3.1 Minimum capital Reserve to be managed 30
2.3.3.2 Investment 31
2.3.3.3 Transfer and sale of Promoters shares 31
2.4 Review of Journals and Articles 32
2.5 Review of Thesis 37

Research Gap

CHAPTER III: RESEARCH METHODOLOGY

3.1 Introduction 44
3.2 Research Design 44
3.3 Sources of Data 44
3.4 Population And Sample 45
3.5 Method of Analysis 45
3.6 Financial Tools 45
3.7 Statistical Tools Used 47

CHAPTER IV: PRESENTATION AND ANALYSIS OF DATA

4.1 Analysis of Financial Indicator Variables 53
4.2 Analysis of Means, Standard Deviation and Correlation Matrix 64
4.3 Simple Regression Analysis 65
4.4 Test of Hypothesis 72
4.5 Main Findings 76

CHAPTER V: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary 78
5.2 Conclusion of the Study 80
5.3 Recommendations 82

BIBLIOGRAPHY

APENDICES

LIST OF TABLES

Table No	Title	Page No.
4.1	Total earning, number of share and Earning per Share	53
4.2	Total earning, number of share and Earning per Share	54
4.3	Total earning, number of share and Earning per Share	55
4.4	Dividend per Share	56
4.5	Dividend based on Growth rate and Actual amount	58
4.6	Dividend Based on Growth Rate and Actual Amount	59
4.7	Dividend Payout Ratio	60
4.8	Price Earning Ratio	61
4.9	Market value per share to Book Value per share	62
4.10	Dividend Yield Ratio	63
4.11	Means, Standard Deviations and Correlation of Dividend per Share with Earning per Share, Net Profit, Market price per share and Net Worth	64
4.12	Simple regression results of dividend per share on earning per share (DPS = a + b EPS)	66
4.13	Simple regression results of dividend per share on net profit (DPS= a + b NP)	67

4.14 Simple regression results of market price per share on dividend per share (Pm = a + b DPS) 68

4.15 Simple regression results of net worth on dividend per share (NW= a + b DPS) 69

4.16 Testing of Hypothesis on Earning Per Share 72

4.17 Testing of Hypothesis on Dividend Per Share 73

4.18 Testing of Hypothesis on Market Price Per Share 74

4.19 Testing of Hypothesis on Net Worth

ABBREVIATIONS USED

C.V.	-	Coefficient of Variation
DJIA	-	Dow Jones Industrial Average
DJTA	-	Dow Jones Transportation Average
DPS	-	Dividend Per Share
EPS	-	Earning Per Share
FY	-	Fiscal Year
HBL	-	Himalayan Bank Limited
JVBS	-	Joint Venture Banks
K_{avg}	-	Average Rate of Return
Ltd.	-	Limited
MPS	-	Market Price per Share
N	-	Number of Observations
NABIL	-	Nepal Arab Bank Limited
NEPSE	-	Nepal Stock Exchange
NG	-	Nepal Government
NIBL	-	Nepal Investment Bank Limited
NRB	-	Nepal Rastra Bank
NWPS	-	Net Worth Per Share
P/E	-	Price Earning
P/E Ratio	-	Price Earning Ratio
S.D.	-	Standard Deviation
SEBON	-	Security Board of Nepal
SEC	-	Security Exchange Centre
SEE	-	Standard Error
T.U.	-	Tribhuvan University

Fiscal Year	Translated
2059/60	2002/03
2060/61	2003/04
2061/62	2004/05
2062/63	2005/06
2063/64	2006/07
2064/65	2007/08

CHAPTER I
INTRODUCTION

1.1 Background of the Study

Nepal is a land locked country. It lies between India and China. It is a developing country and also one f the poor countries on the world. The living standard of the Nepalese people is very low. Nepal could not develop its trade, foreign business technology and so on till now. In this situation banking plays significant role in the economic development of a country. Bank is a resource for the economic development, which maintains the Self-Confidence of Various Segments of society and extends credit to the people. So commercial banks are those financial institutions manila dealing with activities of the trade, commerce, industry and agriculture that seek regular financial and other helps from them (banks) for growing and flourishing. The objective of commercial banks is to mobilize idle resources into the most profitable sector after collecting them from scattered sources. Commercial banks contribute significantly in the formation and mobilization of internal capital and development efforts. They furnish necessary capital required for trade and commerce in mobilizing the disperse savings of the individuals and institutions. Especially commercial banks provide different facilities to the people engaged in trade, commerce and industry. That is why they are being the means of up liftment of society. The functions of commercial banks are in many ways such as accepting deposit provide interest in the formulation of capital, granting loans which helps to remove the deficiency of capital performing agency functions which make life easier and they also play and important role in credit creation. In the present context, the role and importance of the commercial banks have loomed larger. In this connection Nepalese economy has witnessed several changes in the financial system in the last few years such as financial liberalization. Since the importance of banks is highly appreciated, it needs Proper attention to run successfully. Normally, banks should pay more attention whether their money is properly utilized or not and running at profit or loss. The existence of profit to any business firm is the basic factor. If there is no profit a business firm becomes unable to provide its facilities

in the long run. This profit which is distributed among the owners is called as dividend.

One of the major reasons for which public are interested to invest money on the shares of bank or other institutions is dividend. It (dividend) refers to the distributed earning to the ordinary shareholders of the firm in return to their investment. Basically, the firm which is running in profit is capable to pay dividend. The amount which is distributed as dividend should be adequate to meet the normal expectation of shareholders.

Dividend Policy decision is one of the major decision of financial management because it affect the financial structure the flow of funds, Corporate Liquidity and investor's attitudes. After the successful completion of fiscal year having sufficient profits, management decides to declare dividend to shareholders. The important aspect of dividend policy is to determine the amount to be retained in the firm. It is, therefore a wise policy to maintain a balance between shareholders interest with that of corporate growth from internally generated funds. The return to shareholders should be better paid as dividend.

The concept of the banking had been developed from the ancient history with the effort of ancient goldsmiths who developed the practice of staring people's gold & valuables under such arrangement the depositors would leave their gold for safe keeping and given a receipt by the goldsmith. Whenever, the receipt was presented the depositors would get back their gold & valuables after paying a small amount as fee for safekeeping & serving.

In Nepal "Tejarath Adda" may be regarded ad the father of modern banking institution and for a quite long time it tendered a good service to the government as well as to the general public. Now ever the concept of modern banking institution in Nepal was introduced as the first commercial band named "The Nepal bank Limited" established in 1994 B.S. under Nepal Bank Act 1993 B.S. before that credit needs of the people for commercial and other purpose were met mostly by the un organized market of the private money Landers.

In the early 1980's when government permitted establishment of joint venture bank(JVBs) three JVBs namely Nepal Arab Bank Ltd. Nepal grind-lays Bank Ltd. Were established in 1984 and 1985 respectively. After the democratically elected government adopted the liberal and market oriented economic policy, the number of JVBs has been increasing continuously. In Nepal there are only few companies that pay dividend. But after establishment of joint venture companies there is new trend for distributing dividend. Dividend policy is major decision of the firm. Mostly dividend pays in cash to its shareholders. Dividend payment reduces the total amount of internal financial. Consequently, it must be considered in relation to the overall financing decision. A commercial bank is dealer in money and in substitutes for money, such as cheque or a bill of exchange. It also provides a variety of financial service.

Dividend, in corporation finance, a fund appropriated out of the profits of a corporation and distributed among its stockholders; also the share of the fund received by a stockholder. Dividends are usually declared periodically (quarterly, semiannually, or annually) by the directors of a corporation. The action of a board of directors with respect to the declaration or no declaration of dividends is usually final and conclusive upon the stockholders and is subject to review by the courts only in the event that the action is arbitrary or capricious.

Dividends are distributed on a proportional basis; the fractional share of the total dividend received by stockholders is equal to the proportional share of the stocks owned by them. Holders of the preferred stock of a company generally have a prior right to the payment of dividends over holders of common stock, and if their stock so provides, are paid at a fixed periodic rate. Preferred dividends may be cumulative or noncumulative. Cumulative dividends are those that, if not paid for one or more periods, constitute charges on the profits of succeeding periods and must be paid at a future date before dividends may be distributed on common stock. Noncumulative dividends, if omitted, do not constitute charges on future profits. Dividends may take the form of additional shares of stock or of the right to purchase stock for a fixed sum per share; such dividends are called stock dividends and rights.

The term dividend is applied also to the assets of a bankrupt or insolvent business that are distributed among its creditors during the course of its liquidation. The term is used in insurance to signify the sum appropriated out of profits for distribution among policyholders whose policies so provide; such dividends may be used to reduce the next premium.

In global prospective, joint ventures are the modes of trading though partnership among nations and also a form of negotiations between various groups of industries and trades to achieve mutual exchange of goods and service for sharing comparative advantage. "A joint venture is the joining of force between two or more enterprise for the purpose of carrying out a specific operation (Industrial or commercial investment, production or trade). The major decision of firm is its dividend policy, the percentage of earnings it pays in cash to its shareholders. Dividend payout of course reduces the total amount of internal financing. "By a dividend policy we mean some kind of consistent approach to the distribution versus retention decision rather than making the decision on the purely adhoc basis from period." (*Gurdon, Charles and Pearson; 1972:405*).

1.2 Statement of the Problem

Nowadays people are attracted to invest in shares for the purpose of getting greater returns, 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. Dividends, the most inspiring factor for the investment on shares of the company is thus desirable from the stockholder point of view.

Commercial banks in Nepal have not produced satisfactory result about dividend decision, because of the various government rules and regulations acting and reacting in the banking operations. There is not limit to the identification of the problem about dividend policy that is visible in Nepalese commercial banks. In Nepal, there are only a few commercial banks that pay dividend to shareholders. Dividend distribution is not matching with the earnings of the commercial banks. Here, especially joint venture banks have sufficient earning and are capable to pay dividend. But they are not following appropriate dividend policies while

there earning is low but they pay high dividend and sometime earning is high they pay low dividend. The above facts inspire to study what are the factors that affect the dividend decision and valuation of the share. Following are the major problems that have been identified for the purpose to the study.

1. The problem is not the ability to pay dividend but the attitude to pay dividend.
2. Are share prices affected by dividend per share in these three banks?
3. What is the relationship between dividend with earning per share, market price of share, book value of share, net profit and net worth of the companies?
4. Whether the relationship between dividend and other variables such as earning per share market price per share, books value of stock, net worth and net earning are positive or negative?

1.3 Objectives of the Study

The objective of a dividend decision should be to maximize the shareholders return, so that the value of his investment is maximized. This study is primarily undertaken to focus on the prevalent dividend policies and to suggest the direction of future endeavors for the overall healthier development of the share market and also the possible impact of such endeavors on share market in Nepal.

The main objectives of this study are as follows:

a) To identify the type of dividend policy followed by the banks.
b) To highlight dividend practice of the banks in Nepal.
c) To analyze the relationship between dividend per share with various important variables such as earning per share, net profit, net worth & stock prices.
d) To make comparative study on the pattern of dividend distribution among the banks under study.

1.4 Significant of the Study

People are attracted to invest in shares for the purpose to getting more and more returns. Therefore dividend policy should be effective to attract new investors, keep and present investors happy and maintain goodwill of the company. When

any new company floats shares through capital market very big crowd gathers to apply for owner's certificate. It indicates people's expectation of higher return on investment of shares.

It may be useful to government of policy making, controlling, Supervision and monitoring. It will be useful to the concerned people like shareholders, management and policy makers.

- This study will assist the policy makers to formulate their dividend regarding their company. They will be able to analyze the fluctuating dividend distributions in Nepal.
- This study will be matter of interest for the academicians, students and investors. They might be able to understand the current dividend related practices in Nepal.
- This research might shade light to the investors on where to invest. They might be able to identify the correct investment from all the investment opportunities in front of them.

1.5 Limitations of the Study

There are limitations that weaken the generalization, e.g., inadequate coverage of industries, shortage of time, used and other variables. This study is simply a partial requirement of MBS programmed. So, this study will be limited by following.

a) This study is mainly conducted on the secondary data so the result depends on the secondary data.
b) The study period only covers five fiscal years between 2003 to 2008.
c) Only three joint venture banks are taken for the study.
d) Different variables and factors can be analyzed and interpreted but Data related to cash dividend like EPS, Net worth, Net profit and Stock price will be analyzed and interpreted.

e) There are many factors that affect dividend decision and valuation of the firm. However only those factors related with dividend will be considered in the study.

1.6 Chapter Plan

This will be presented in five chapters which are as follows:

Chapter I Introduction

This chapter deals with the subject matter of the study consisting introduction, significance of the study, statement of the problems and the objective of the study.

Chapter II Review of literature

This chapter deals with the review of literature. It includes a discussions on the conceptual framework on dividend policy also includes major studies relating with dividend decision.

Chapter III Research Methodology

This chapter explains the Research Methodology used to evaluate practices of joint venture banks in Nepal. It consists of research design, sources of data, population & sample, statistical tools & financial tools.

Chapter IV Presentation and analysis of Data

This chapter deals with analysis and presentation of data & information through a definite course of research methodology.

Chapter V Summary, Conclusion and Recommendation

Ultimately, chapter five deals with summary, conclusions and recommendation.

Bibliography, appendixes are also there in this study.

CHAPTER II

REVIEW OF LITERATURE

In this chapter, an attempt has been made to analyze the theoretical aspect and related literature relating to the topic. To make the review simple and systematic, this chapter has been divided into different sections. First section is the conceptual review, Second section is the review of major studies, Third Second is rules governing dividend practice in Nepal, fourth section is Review of journals and articles and fifth section of this chapter is review of previous thesis.

2.1 Conceptual Framework

Dividend decision of the firm is yet another crucial area of financial management. The important aspect of dividend policy is to determine the amount of earning to be distributed to shareholders and the amount to be retained in the firm. It is that portion of the net earning dividend by the company among the shareholders as a return for their money invested. Dividends are distributed out of the profits; the alternative to the payment of dividends is the retention of earnings/ profits. The retained earnings constitute an easily accessible important source of financing the investment requirements of firms. The policy of a company on the division of its profits between distribution to shareholders as dividend and retention for its investment is known as dividend policy. All aspects and questions related to payment of dividend are contained in a dividend policy. Dividend policy determines the amount of earnings to be retained and paid out by the firm. "The dividend policy must be formulated with the basic objectives in mind maximizing the wealth of the firm's owners and providing for the sufficient financing. These objectives are not mutually exclusive but rather interrelated." *(Gitman; 1994:696)*

Generally, there are two types of shares: preference shares and equity shares. Dividend paid on reference shares is called preference dividend, which is generally fixed and payable before payment of equity dividend. There is no choice to management for the preference dividend. But there is full choice about the rate of equity dividend. Dividend decision is the major decision of financial

management. It is in the sense that the firm has to choose between distribution profits to shareholders and sloughing them back into the business. The dividend decision is depends upon the objectives of the management for wealth maximization of the shareholders and owners.

Dividends are generally paid in cash because it is easy to paid shareholders. There is a reciprocal relationship between retained earnings and cash dividend: larger retention lesser dividends; smaller retention, larger dividends. Thus, the alternative uses of the net earnings, dividends and retained earnings are competitive and conflicting. "Financial management is therefore concerned with the activities of corporation that affect the well being of stockholders. That well-being can be partially measured by the dividends received, but the more accurate measure is the market value of stock. But stockholders usually think that the dividend yield is less than capital gain." *(Dean; 1973:1)*

2.1.1 Theories of Dividend

There are different types of dividend theories have been advance in financial management; they are relevant or irrelevant in dividend decision. Among them some relevant and irrelevant theories have been discussed below.

2.1.1.1 Residual Theory of Dividend

Under this theory, the payment of dividend is depends on its investment policy. "One school of thought, the residual theory of dividends suggests that the dividend paid by a firm should be viewed as a residual amount left after all acceptable investment opportunities have been undertaken." *(Gitman; 1994:537)* In this theory the shareholders get dividends only when there exist balance of earning after paying fixed obligations and investing in profitable sector or expansion.

"The starting point in the theory is that investors prefer to have the form retain and reinvest earning exceeds the rate of return the investors can obtain on other investments of comparable risk." *(Weston an Brigham; 1987:682)* It assumes that the internally generated funds are comparatively cheaper than the funds obtained

from external sources. It is because the retained earning or internally generated funds does not imply any flotation cost as in the external sources by issuing new shares. If the firm has retained earning left over after financing all acceptable investment opportunities, these earning than will be distributed to stockholders in the from of cash dividends. If not there will be no dividends, if not there will be in dividends.

At last it can be concluded that dividend policy is affected by the company's investment opportunities and the availability of internally generated funds where dividends are paid only after all acceptable investment have been financed. So, according to this theory dividend policy is totally passive in nature.

2.1.1.2 Wealth Maximization Theory

Larger dividend is announced and distributed to shareholders under this theory in order to maximize their wealth. This theory is generally adopted by the newly established and declining companies to upkeep it's image and retain the shareholder's positive attitude towards the company's stock *(Bhattarai; 2002:20).*

2.1.1.3 The Bird-In-The-Hand Theory (*http://www.articlesbase.com/authors*)

The essence of the bird-in-the-hand theory of dividend policy (advanced by John Litner in 1962 and Myron Gordon in 1963) is that shareholders are risk-averse and prefer to receive dividend payments rather than future capital gains. Shareholders consider dividend payments to be more certain that future capital gains – thus a "bird in the hand is worth more than two in the bush".

Gorden contended that the payment of current dividends "resolves investor uncertainty". Investors have a preference for a certain level of income now rather that the prospect of a higher, but less certain, income at some time in the future.

The key implication, as argued by Litner and Gordon, is that because of the less risky nature dividends, shareholders and investors will discount the firm's dividend stream at a lower rate of return, "r", thus increasing the value of the firm's shares.

According to the constant growth dividend valuation (or Gordon's growth) model, the value of an ordinary share, SV0 is given by:

$$SV0 = D1/(r-g)$$

Where the constant dividend growth rate is denoted by g, r is the investor's required rate of return, and D1, represents the next dividend payments. Thus the lower r is in relation to the value of the dividend payment D1, the greater the share's value. In the investor's view, according to Linter and Gordon, r, the return from the dividend, is less risky than the future growth rate g.

M&M argued against this and referred to it as the bird-in-the-hand fallacy. In their irrelevancy model, M&M assume that the required rate of return or cost or capital, r, is independent of dividend policy. They maintain that a firm's risk (which influences the investor's required rate of return, r) is a function of its investment and financing decisions, not its dividend policy.

M&M contend that investors are indifferent between dividends and capital gains that is, they are indifferent between r and g is the dividend valuation model. The reason for this indifference, according to M&M, is that shareholders simply reinvest their dividends in share of the same or similar risk companies.

2.1.1.4 Dividend Signaling Theory *(http://www.articlesbase.com/authors)*

In practice, change in a firm's dividend policy can be observed to have an effect on its share price – an increase in dividend producing an increasing in share price and a reduction in dividends producing a decrease in share price. This pattern led many observers to conclude, contrary to M&M's model, that shareholders do indeed prefer dividends to future capital gains. Needless to say M&M disagreed.

The change in dividend payment is to be interpreted as a signal to shareholders and investors about the future earnings prospects of the firm. Generally a rise in dividend payment is viewed as a positive signal, conveying positive information about a firm's future earning prospects resulting in an increase in share price.

Conversely a reduction in dividend payment is viewed as negative signal about future earnings prospects, resulting in a decrease in share price.

2.1.2 Forms of Dividends

The usual practice is to pay dividends in cash. Different companies follow different types of dividend policy. Corporations need to follow implement. According to various circumstances and changing needs of corporations dividend is being distributed not only in cash but different forms of dividend they are, script dividend, stock dividend and property dividend.

"The type of dividend that corporations follow is partly of a matter of attitude of directors and partly a matter of the various circumstances and financial constraints that bounds corporate plans and policies." *(Shrestha; 1980: 670)*

Cash Dividend

When a dividend is distributed in cash to the shareholder out of the company is called cash dividend. "When cash dividend is paid both the total assets ands the net worth of the company are reduce. The market price of the share drops in most cases by the amount of the cash dividend distributed." *(Pandey; 1999:788)* when cash dividend is paid the cash bank account and the total assets of the company is automatically reduced. So, the company needs to have enough cash ands sufficient balance for the payment of cash dividend. If it does not have enough balance arrangement should be made to borrow fund, which is difficult to company.

Stock Dividend

Distribution of additional shares to the existing shareholder as dividend is known as a stock dividend. This has the effect of increasing the number of outstanding shares of the company. The shares are distributes proportionately. although stock dividend do not have a real value, firms pay stock dividend as replacement for a supplement to cash dividend, the declaration of the stock dividend will increase the paid up share capital and the reserves and surplus of the company.

Property Dividend

When dividend is paid in terms of assets of property to the stockholders in any from other than cash is said to be property dividend. Whenever the firms have assts that are no longer necessary in the reparations of the business, this type of dividend may be uses. For examples companies own products ands the securities of subsidiaries that have been paid as property dividends.

Scrip Dividend

That type of dividend, which is paid in promissory notes, is called scrip dividend. In this method of dividends, company issues ands distribute to the shareholders transferable Promissory notes which may interest be Bering or not. "Scrip dividends are those paid in the company's promises to pay instead of cash."

Dividends are distributed on a proportional basis; the fractional share of the total dividend received by stockholders is equal to the proportional share of the stocks owned by them. Holders of the preferred stock of a company generally have a prior right to the payment of dividends over holders of common stock, and if their stock so provides, are paid at a fixed periodic rate. Preferred dividends may be cumulative or noncumulative. Cumulative dividends are those that, if not paid for one or more periods, constitute charges on the profits of succeeding periods and must be paid at a future date before dividends may be distributed on common stock. Noncumulative dividends, if omitted, do not constitute charges on future profits. Dividends may take the form of additional shares of stock or of the right to purchase stock for a fixed sum per share; such dividends are called stock dividend and rights.

"Scrip dividends are justified only when the company has really earned profit ands have only to wait for the conversion of other current assets into cash in the course of operation." *(Gautam; 1998:721)*

2.1.3 Stability of Dividend

A stable dividend policy is a long-term policy. It does not affect by variation in earning from year to year. The dividend will be regular. "Stability of dividend

means regularity in paying dividend even though the amount of dividend may fluctuate from year to year. By stability we maintaining a position in relating to a dividends trends line, preferably one that is upwards slopping." *(Van Horn; 1998: 325)*

The shareholders generally prefer stability or regularity of dividend because the company distributes a stable dividend over the year the market price of the shares may be increased, it is suitable for those companies, which have got stable income. All other being the same stable dividend may have a positive impact on the market price of the share, we can define it in other words that are the term dividend stability refers to the consistency or lack of variability in the stream of dividend. There are three types of dividend stability are as following:

(a) constant Dividends per share

Constant dividend per share means that the dividend can be fixed either in amount or in percentage. According to this form of stable dividend policy a company follows a policy of paying a certain fixed amount per share as dividend every year. In this policy the fluctuation in earnings would not affect the dividend payment. In fact, when a company follows such a dividend policy, it will pay dividend to the shareholders even suffers loose. This policy does not imply that the dividend per share or dividend rate will never be increased, when the company reaches new level of earnings and expects to maintain it, the annual dividend per share ma be increased. If the increase is expected to be temporary, the annual dividend per share isn't changed ands remains at the existing level.

(b) constant Payout Ratio

Another form of stable dividend policy is constant payout ratio. The ration of dividend to earning is known as payout ratio a stable dividend payout ratio implies that the percentage of earning paid out each year is fixed. Some companies may follow a policy of constant payout ratio i.e. paying a fixed percentage of net earnings every year. With this policy the amount of dividend will fluctuate in direct proportion to earnings. This policy does not put any pressure on a company's liquidity since dividends are distributed only when the company has profits.

(c) Low Constant Dividend Per Share plus Extra Dividend

This policy is a combination of small regular dividend and an extra dividend. The alternative to the combination of a small regular dividend and extra dividend is suitable for companies whose earnings fluctuate widely. Those firms use this policy, which have fluctuating earnings. With this methods, a firm can regularly pay fixed, though small amount of dividend so that there is not risk of not being able to pay dividend to the shareholders. "This type of policy enables a company to pay constant amount of dividend regularly without a default and allows a great deal of amount of dividend regularly without a default and allows a great deal of flexibility for supplementing the income of shareholders only when the company's earnings are higher than the usual, without committing itself to make larger payment as a part of the future fixed dividend." *(Pandey; 1999: 780)*

2.1.4 Factor Influencing Dividend Policy

Many factors may affect a firm's decision about dividends. The company's decision regarding the amount of earnings to be distributed as dividends depends on a number of factors. Some of these factors are trying to mention below.

a) Legal Restriction

A firm/corporation is bounced by certain legal constraints for the decision of dividend payment. The legal rules provide that dividends must be paid from earnings-either from the current year's earnings or from past year's earning as reflected in the balance sheet account retained earnings." Legal rules do not require a dividend declaration but they specify the rules under which dividends must not be paid. Such types of rules are as follows;

The net profit rule; it provides that dividends can be paid past and present earnings.

The capital impairment rule; It states that dividends cannot be paid out of invested capital.

The insolvency rule; It states that dividends cannot be paid out of invested capital.

In this way legal rules are significant in that they provide the framework with in which dividend policies can be formulated.

b) Liquidity Position

The cash or liquidity position of the firm affected its dividends policy. The payment of dividends means cash outflow. Although a firm may have adequate earnings to declare dividend, it may not have sufficient cash to pay dividends. The greater the cash position and overall liquidity of a company, the greater will be its ability to pay dividends. A mature company is generally liquids and it's able to pay large amount of dividends. On the other hands a growing firm faces the problem of liquidity. Even though it makes goods profits, it needs funds for its expanding and permanent working capital. Because of the insufficient cash or pressure on liquidity its management may not be able to declare high dividends.

c) Borrowing capacity of the company

The financial condition or capability of a firm depends on its use of borrowing and interest charges payable. All firms do not have equal access to the capital markets. A large well established company with goods profit ands stability of earnings has easy access to capital markets with greater ability to borrow. On the other hands a small new and growing company is likely to have a higher dividends payout ratio than a small new or growing company.

d) control

Dividends policy may also be strongly influenced by shareholders or management control objectives. The objective of maintaining control over the company by the existing management group of the body of the shareholders can be an important variable in influencing the company's dividends policy. When a company pays large dividends, its cash position is affected. As a result, the will have to issue new shares to raise funds to finance its investment programs. The control of the existing shareholders will be diluted if they do not want or cannot by additional shares. Therefore as a result dividend ratio will be reduced.

e) Inflation

Inflation is another factor that the firm's dividend decision. In an indirect way inflation can act as a constraint on paying dividends. Depreciation is charged on the basis of original costs at which assets were acquired. As a result with rising prices, funds generated from depreciation may be inadequate to replace obsolete

equipment. So greater profit retention may be required fro the companies in order to make replacement or to maintain the capital intact. This aspect becomes all the more important if the assets are to be replaced in the near future. Consequently, their dividend payout tends to be low during periods of inflation.

f) Stability of Earnings

A firm that has stable earnings is often going predict approximately what its future earnings will be. Such a firm is therefore more likely to pay a larger portion of its earnings in dividends than is a fir with fluctuating earnings.

g) Profit rate

The rate of return on assets determines the relativeness of paying out earnings in the form of dividends to stockholders or using them in the present enterprise.

h) Need to repay debt

The needs to repay debt are also one of the factors that affected to the company in paying dividends. It influences the availability of cash flow to pay dividend. When a firm has sold debt it finance expansion or to substitute for other forms of financing, it is faced with two alternatives:

a. It can refund the debt at maturity by replacing it with another form of security.
b. It can make provisions for paying off the debt.

If the decision is to retire the debt this will generally require the retention of earnings.

i) Rate of assets expansion

A high rate of assets expansion creates needs to retain funds rather than to pay dividends, the more rapids the rate at which the firm is growing the greater its needs for financing asset expansion.

j) The Tax Position

In addition, the tax position of the corporations affects its dividend policies. Possible penalties for excess accumulation of retained earnings may induce higher payout rations.

2.2 Review of Major Studies

Linter, (1959) made an important study focusing on the behavioral aspect of dividend policy in the American context. He investigated a partial adjustment model as he tested the dividend patterns of 28 companies. He concluded that a major portion of the dividend of a firm could be expressed in the following way:

$$Div^*_t = {}_P EPS_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$Div^*_t - Div_{t-1} = a + b\,(Div^*_t\, Div_{t-1}) + e_1 \ldots\ldots\ldots\ldots (2)$$

$$Div^*_t - Div_{t-1} = a + b\, Div^*_t + (1b)\, Div_{t-1} + E_1 \ldots\ldots\ldots (3).$$

Where,

Div^*_t	=	Firm's desired payment
${}_P EPS_t$	=	Firm's earnings.
P	=	Targeted payout ratio
a	=	It is constant relating to dividend growth.
b	=	It is adjustment factor relating to the previous period's Dividend and new desired level of dividends where b<1.

The major findings of the study were as follows:

1. Firms generally think in items of proportion of earnings to be paid out.
2. Investment requirement are not considered for modifying g pattern of dividends behaviors.
3. First generally have target payout ratios in view while determining exchange in dividends per share (or dividend rate).

Modigliani and Miller, (1961) first propounded the major argument indicating that dividends are irrelevant in 1961. It is popularly known as M-M approach. It is sometimes termed as "Dividend Irrelevance Model."

In general, the argument supporting the irrelevance of dividend valuation is that dividend policy of the firm is a part of its financing decisions. As a part of the financing decision of the firm, the dividend policy of the firm is residual decision and dividend is passive residual. According to Modigliani and Miller (M-M)

Model, under a perfect market situation, the dividend policy of a firm is irrelevant, as it does not affect the value of the firm. The dividend policy is irrelevant for valuation when the investment policy is given. The theory more states that the values are only determined by earning power of the firm. As per MM theory the firm's value is independent of its dividend policy.

The Modigliani and Miller approach of irrelevance dividend is based on the following critical assumptions:

a. The firm operates in perfect capital market where all investors are rational. Information is freely available to all. Securities are divisible. Perfect capital market also impulses that no investor is large enough to affect the market price of shares.
b. There are no transaction costs. The securities can be purchased and sold without payment any commission or brokerage etc.
c. Taxes do not exist.
d. The firm has a fixed investment policy, which is not subject to change. This implies that the financing of new investment out of retained earning will not change the business risk completion of the firm and therefore no change n the required rate of return.
e. Risk of uncertainty does not exist.

M-M provides the profit in support of their argument in the following manner:

Step 1

The market price of a share in the beginning of the period is equal to the present value of dividend paid at the ends of the periods plus the market price of the share at the ends of the period, symbolically:

$$P_0 \text{ X} \frac{D_1 \Gamma P_1}{1 \Gamma ke} \text{ ……..(i)}$$

Where,

P_0 = There prevailing market price of a share

D_1 = The dividend to be received at the end of period one.

P_1=The market price of a share at the end of period one.

Ke =The cost of equity capital

Step 2

Assuming no external financing, the total capitalized value of the firm would be simply the number of shares (n) times the price of each share (Po). Thus, we have:

$$nP_0 \text{ X} \frac{n(d_1 \Gamma P_1)}{1 \Gamma ke} \text{ ……(ii)}$$

Where,

n = Number of equity shares at zero period

Step 3

Assume that the retained earning is not sufficient to finance the new investment needs of the finds; in that case issuing the new shares is the other alternative and |ζn is the number of new shares issued at the ends of year 1 at price of p1, equation no (ii) can be written as

$$nP_0 \text{ X} \frac{nD_1 \Gamma (n \Gamma \zeta n)P_1 \text{ Z} \zeta nP_1}{1 \Gamma ke} \text{ …….(iii)}$$

Where,

ζn = No. of equity shares at the end of the years

N = No. of shares at the beginning

Step 4

The issuing of new stock is determined by the amount of investment in periods 1 not financed by retained earning. The number of new shares can be finds out in following way.

$$\zeta nP_1 \text{ X} I \text{ Z}(E \text{ Z} nD_1)$$

Or, $\zeta nP_1 \text{ X} I \text{ Z} E \text{ X} nD_1$ ……..... (iv)

Where,

ζnP_1 = The amount obtained the sale of new shares to finance capital budget

I = Total new investment required

E = Earning of the firm during the period

nD_1 = Total dividend Paid

$(E\text{-}nD_1)$ = Retained earning

Step 5

If we substitute eq^{n}. (iv) Into eq^{n} . (iii) We get eq^{n} . (v)

$$nP_0 \text{ X} \frac{nD_1 \Gamma (n \Gamma \zeta n) P_1 \text{ Z} (I \text{ Z} E \Gamma nD_1}{1 \Gamma ke}$$

$$nP_0 \text{ X} \frac{nD_1 \Gamma (n \Gamma \zeta n) P_1 \text{ Z} I \Gamma E \text{ Z} nD_1}{1 \Gamma ke}$$

$$nP_0 \text{ X} \frac{(n \Gamma \zeta n) P_1 \text{ Z} I \Gamma E}{1 \Gamma ke} \text{ ……..(v)}$$

Conclusion

There is no any role of dividends (SD1) in eg. (v). so MM concludes that dividends do not count therefore dividend policy is irrelevant and dividend policy has no effect on the share price.

Gordon, (1962) develops one very poplar model explicitly relating the market value of the firm to dividend policy. It is model of stock valuation using the dividend capitalization approach. This model assumes that dividend per share determine the value of shares. So according to him the dividends policy of a firm affects its value even when the return on investment is equal to the capitalization rate (r=k). this argument suggest that an increase in dividend payout ration leads to increase in the stock prices for the reason that investors consider the dividend yields less risky than the expected capital gain. What is available at preset is referable than what may be available in the future. That is to say current dividends are considered certain and risk less, So rational investors' would naturally like to avoid uncertainty. So the current dividends are given more than expected future dividends by the investors. So the value per share increases if dividend payout ratio in increasing. Gordon's model is known as Growth Model.

Gordon's model is based on the following assumptions:

ii) The firm is an all equity firm, ands it has no debt.

iii) The only source of financing new investment is retained earning. No external financing is available.

iv) The internal rate of return(r) and the cost of capital (k) for the firm remain constant.

v) The firm and its stream of earnings are perpetual.

vi) Corporate taxes do not exist.

vii) The retention ratio, (b) once decide upon, is constant. Thus, the growth rate g=br, is constant.

viii) The cost of capital of the firm is greater than the growth rate (g) of the firm (k >g) to get meaningful value.

Based on above assumptions the formula for finding out the market value per share, proposed by Gordon is given below.

$$P = \frac{E(1-b)}{k-br}$$

Where,

P = Price of share

E = Earnings per share

B = Retention ratio or percentage retained

(1-b) = Dividend payout ration i.e. percentage of earnings distributed as dividends

k = Cost of capital or capitalization

br = Growth rate

(a) r>k (Growth Firm)

In growth firm the share price tends to decline is correspondence with increase in payout ratio or decrease in retention ratio i.e. high dividends corresponding to earnings leads to decrease in share price are negatively correlated in case of growth firm.

(b) r=k (Normal firm)

The share value remains constant regardless of changes in dividend policies in the case of normal firms.

(c) r<k (Declining firm)

The share price tends to rise in dividend payout ratio it means dividends and stock prices are positively co-related in a declining firm.

Van Horne and Mc Donald, (1971) conducted a more comprehensive study on dividend policy and new equity financing. The purpose of this study was to investigate the combined effect of dividends policy and new equity financing decision on the market value of the firm's common stocks. They are using a well known valuation model, i.e. cross section regression model during the year ends 1968 performed the empirical test. The required data were collected from 86 electric utility firms included on the XCOMP STAT utility data tape ands 39 firms in the electronics and electronic component industries as listed on the XCOMP STAT industrial data type. They tested two regression models for the utilities industries.

$$P_0/E_0 = a_0+a_1(g) +a_2(D_0/E_0)+a_3 (Lev) +u^{16}$$

Where,

P_0/E_0= Closing market price in 1968 dividend by average EPS for 1967 and 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 dividend by earning in 1968.

Lev = Financial risk, measured interest charges dividend by the difference of operating revenues an operating expenses.

U = Error term.

Second Model was,

$$P_0/E_0 = a_0+a_1(g) +a_2(D_0/E_0)+a_3 (Lev) +a_4(F_a)+a_5(F_b)+a_6(F_c)+a_7(F_d)+u^{16}$$

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 each year the value of dummy variables representing its NIR groups one and the value of remaining dummy variables are zero.

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

$$P_0/E_0 = a_0+a_1(g) +a_2(D_0/E_0)+a_3 (Lev) +a_4(OR) + u^{16}$$

Lev = Financial risk, measured by long term debt plus preferred stock dividend 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 1960 through 1968, and rest are as in first model above.

By using these models or methodology, they compared the result obtained for the firms, which both pay dividends and engage in new equity financing with other firms in an industry sample. They conclude that for electric utility firm's in 1968, share value was not adversely affected by new equity financing in the presence of cash dividends, except for those in the highest new issue group and it made new equity a more costly from of financing than the retention of earnings.

They also indicate that payment of dividends through excessive equity financing reduces share prices. For electronics components industry, a significant relationship between new equity financing ands value was not demonstrated.

Chawala and Srinivasan, (1987) studied the impact of dividend and retention on share price. They took 18 chemicals and 13 sugar companies and estimated cross-sectional relationship for the years 1969 and 1973. The required data were collected from the official directory of Bombay stock exchange. They used two stage least square techniques for estimation.

1. To estimate a model to explain share price dividend and retained earnings relationship
2. To test the dividends retained earnings hypothesis.
3. To examine the structural changes in the estimated relations over time.

To explain above-mentioned objectives, they used simultaneous equation model as developed by friends and Puckett (1964). They used two stage least square techniques for estimation. They also used earnings price ration instead of lagged

price earnings ratio, i.e., $(P/E)_{t=1}$. The model in its unspecified form was as follows;

1. Price Function

   $P_1 = f[D_t, R_t, (P/E)^1_{t=1}]$

2. Dividend Supply Function

   $D_1 = g[E_1, D_{t-1}, (P/E)^1_{t=1}]$

3. Identity

   $E_t = D_t + R_t$

Where,

P = Market rice 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

From the result of their two stage least square estimation, they founds that in case of chemical industry the estimated coefficients had the correct sign ands the coefficient of determination of all the equation were very high. Thus, it implies that the stock price and dividend supply variation can be explained by their independent variables. But in case of sugar industry they founds that the sigh for the retained earnings I negatives in both years. So they left sugar industry for further analysis. For chemical industry, they observed that the coefficient of dividend was very high as compared to retained earnings. They also founds that coefficient of dividend was significant at one percent level in both years, whereas coefficient of retained earnings was significant at ten percent level in 1969 and at one percent level in 1973.

Finally, they concluded that the dividend hypothesis holds goods in the chemical industry. Both dividend and retained earnings significantly explain the variations in share price in chemical industry.

Walter, (1996) has proposed a model for share valuation. According to him, the dividend policy of the firm affects the value of the shares. His model supports that dividends are relevant. He argues that the choice of dividend policies almost always affect the value of an enterprise. The investment policy of a firm cannot be separated from its dividend policy; according to him both are interlinked which is just opposite to Modigliani and Miller approach. Water's model show clearly the importance of the relationship between the return on a firm's investment or its internal rate of return(r) and its cost of capital or the required rate of return (k) in determining the dividend policy. As long as the internal rate greater than the cost capital, the share price will be enhanced by retention and will vary inversely with dividend payout. In this way Walter's model is also known as "Optimal theory of dividends."

The basic assumptions of the Walter's model are as follows:

a. The firm finances all investment through retained earning. The external source if funds like debt or new equity capitals are not used.
b. Firm's internal rate of return(r) and cost of capital (k) is constant.
c. All earnings are either distributed as dividend or reinvested internally.
d. There is no change in values of earnings per share (E) and dividend per share (SD). The value of E and D remains constant, although there may be changed in the model for determining the result.
e. The firm has a perpetual or infinite life.

Based on above assumption, formula determining to finds the market price per share is as follows:

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

$$\text{Or, } P = \frac{Div + (r/k)(EPS - Div)}{k}$$

Where,

P= Market Price per Share

Div =Dividend per Share

EPS = Earning Per share

r = Firm's internal rate of return

k = Firm's cost of capital or capitalization

Walter's model shows that there are three probable conditions of the firm for comparing the relationship between r and k.

i) $r > k$ (growth Firm)

If the internal rate of return is greater than const of capital. It is better to retain retained earnings. These firms are able to reinvest earnings at a rate (r), which is higher than the rate expected by shareholder (k). They will be maximizing the value per share is they follow a policy of retaining all earnings for internal investment. The market value per share increases by earnings for internal investment. The market values per share increase by decreasing the dividend in such a condition. The market value per share will be maximum at zero dividends.

ii) $r = k$ (Normal Firm)

If the internal rate of return is equal to cost of capital the dividends payout does not affect the value of share. Such an enterprise can be called as a normal Firm. Whether the earning are retained or distributed, it is a mater of indifference for a normal firm. The market price of share will remain constant for all dividend payout ratios from Zero to 100. There is no optimum dividend policy for such firm. The market value per share is not affected by the payout ratio when r=k.

iii) $r < k$ (Declining firm)

If the internal rate of return(r) is less than cost of capital (k), it indicates that the shareholders can earn a higher return by investing elsewhere. In such case for maximizing the value of shares dividend also should be maximized. By distributing the entire earning as dividend, the value of the shares will be at optimum value. The dividend payout ration would give on optimum dividend policy. The market value per share increase as payout ratio increases when r<k.

2.3 Legal Provision Regarding Dividend Practice in Nepal.

2.3.1 Legal Provisions on Dividend Policy According to Nepalese Company Act, 2063

There are some legal provisions in Company act of Nepal regarding the dividend payment. The responsibility to protect shareholder’s interest is handed to stock

exchange centre by the security exchange act 1983-1984 A.D. Only this is not enough to protect shareholders interest because the attitude of board of directors plays dominant role in public limited companies. In many cases, long-term debt, debentures and preferred stock agreements contain restrictions on the maximum common stock dividend that can be paid by a firm. Such covenants are designed to protect senior claim holders from executive withdrawals by real owners. Dividend is paid only out of certain earnings. In present situation, it is advisable to intact separate shareholders protection act safe guard shareholders right as and interests. Shareholders association of Nepal has been established for the purpose. The responsibilities to undertake required action to protect shareholders interests was given to SEC by security exchange act 1983-1984.

The Act marks some legal provision for dividend payments. Those provisions are as follow:

Section 179 (subsection -1) states that the company can issue the bonus share from its portion of dividend after passing special resolution by the general meeting.

Subsection -2 of section 179 states that company should inform to the office before issuing the bonus share.

Section 182 Subsection -1 of section 182 states that dividend should be distributed within 45 days from the decision except the following circumstances.

a. Incase of any law forbids the distribution of dividend.
b. Incase the right to dividend disputed.
c. Incase dividend can not be distributed within the time limit mentioned about owing to circumstances anyone's control and without any fault on the part of the company. The company can distribute the dividend after taking the prior consent if Nepal Government holds full or partial ownership of the company.
d. Incase dividend are not distributed within the time limit mentioned in the subsection -1 dividend and extra interest should be distributed.

Only the person whose name stands shall be entitled to get dividend. In addition to this, the company Act 2063 makes other provision regarding dividend and interim dividend payments. The company Act -2063 has made a new provision regarding the purchase of its own share, which was prohibited by the previous company act-2053.

Section -61 this section states that no company shall purchase its own shares or supply loans against the security of its own shares. In the following circumstances, the company can purchase its own shares from its retained earnings to be distributed as dividend.

a. If all amount against shares issued by the company is paid.
b. If issued share of public company is registered in security board.
c. If there is provision regarding the purchase of own share in the article of association of respective company.
d. If special resolution is passed by the general meeting of respective company regarding the purchase of its own shares.
e. If loan amount of the company shall not be doubled by its capital and reserve funds after purchasing its own shares.
f. If the purchased own share amount will not exceed by 20% of company's total paid-up capital and general reserve funds.
g. The direction of the office issued by time will not be against.
h. Regarding the purchase of own shares will not be against the directives of the office.
i. Other provisions also have been made in the company Act 2063 regarding the purchase of its own share.

2.3.2 Legal Provisions on Dividend Policy According to Bank and Financial Institution act 2063

According to Bank and financial institution act 2063, some legal provisions are provided for the dividend payment

These provisions may be seen as under:
Section 42 Dividends and sub section of this section are as follows.

Sub section (1) dividends are shall be distributed among the share holders with in 45 days from the date decision to distribute them.

Sub section (2) in case dividends are not distributed with in the limit mentioned in sub section (1), this dividend shall be done by adding 10% interest of dividend amount.

Sub section (3) if the shareholders fails to pay the share amount in time or with in registered the company can't pay dividend to those share holders.

To above indicate that Nepalese law prohibits repurchase of stock which is against theory of finance. The reason for this kind of provision isn't known. The above explanation of Nepalese company Act, 1997 is not enough regarding dividend policy. Therefore, it seems reasonable to review the provisions stated about dividend payment in company Act of India.

2.3.3 NRB Directives

2.3.3.1 Minimum capital Reserve to be managed

NRB Directives 01/061/062 has stated the following directives by following NRB act 2058 section 79

- Development bank should manage 6% of primary reserve and 12% of capital reserve of Risk Adjusted Assets.
- Capital reserve ratio should be calculated to identify the measurement of capital reserve fund.

$$Capital\ \mathrm{Re}serve\ Ratio\ \mathrm{X}\frac{\mathrm{Pr}imary\ Capital\ \Gamma\ Additional\ Capital}{Sum\ of\ \ Risk\ \ Adjusted\ \ Assets}$$

- Statement of capital reserve should be send to NRB within Aswin, Poush Chaitra, Ashad of each fiscal year according to NRB directives form no. 1.1 and 1.2 .It should be approved from the internal audit
- If the financial institution is not able to maintain minimum capital reserve, the board of directors should inform within 35 days with the reasons why they are unable to maintain the reserve and the further procedure that are operating to maintain the minimum reserve.

- If there is not minimum capital reserve, that institution will be unable to open new branch, refinancing facilities, granting loan, accepting deposit etc, According to NRB act 2058 section 100 any punishment can be done in the absence of minimum capital reserve.

2.3.3.2 Investment

NRB Directives 08/061/062 has stated the following directives by following NRB act 2058 section 79:

- For the investment in government bond, NRB bond and other institution's shares and debentures, there must be approved from board of directors.
- There is no any restriction for the investment in government bond and NRB debentures.
- Financial institution should invest in the shares of those companies which are listed in security board. If the institution has invested in those companies which are not listed in security board, the institution should keep that fund in investment fund and that fund can't be used at any purpose unless and until it is listed in the security board.

2.3.3.3 Transfer and sale of Promoters shares

NRB Directives 10/061/062 has stated the following directives by following NRB act 2058 section 79:

- For the transfer and sale of promoters shares each and every financial institutions should take permission from NRB. Incase of transfer or sale of promoters share within the shareholder of the same company, it is not necessary to take permission from NRB but such transferred information should be given within 15 days.
- In case of the death of shareholder, it should be transfer to his/her nominee and transfer notice should be given to NRB within 15 days.
- In case of the death of the shareholder the share will be transferring to his/her nominee, other wise it should be transferred to investor of the same company.

- The shares should be either transfer or sale within 3 months from the date of approved given by NRB otherwise the approved given by NRB will be automatically void.
- Under the following conditions the shares cannot be transferred or sale:
  - Persons keeping in the black list or have not complete 3 years who is out of blacklist.
  - Persons appointed as internal or external auditor.
  - Persons appointed as the legal advisor.
  - Persons not paying the tax regularly and has not got PAN number.
  - If the court has approved the person as criminal or corruptor.
  - Brokerage of the share market.
  - Persons not having the qualities and qualification to be promoters shareholders as prescribed by rules and regulation.

2.4 Review of Journals and Articles

There are a few studies in Nepal, which have looked into corporate divided behavior. Some major studies are reviewed as follows:

Pradhan, (1993) in his article he focused on *"Stock Market Behavior in the Year 1992"* was based on the data collected for 17 enterprise from1968 to 1990. his study mainly related on the stock market behavior in Nepal and relation of market equity, market value to book value, price earnings and dividend with liquidity profitability, leverage, assets turnover and interest coverage.

On study he was declared that there is positive relation of liquidity, profitability, turnover ratios, and interest coverage on dividend payout. He also found that dividend per share was positively correlated on market per share and positive relation on dividend per share to market price per share and interest coverage. Liquidity and leverage ratios, Earnings, assets turnover and interest coverage are vary on stock paying on dividend.

Shrestha and Manandhar (1999) conducted empirical study on *"Bonus Share Issue Practices in Nepalese Corporate Firms."* The study is concentrated on factual analysis of the prevailing practices among Nepalese corporate firm regarding the issue of bonus shares.

Besides issue of bonus share is characterized by aphorism and imperfect and under-developed capital market, the study fulfills the research gap and add inputs to financial literatures relating to this topics.

The period of study expends over then years form 1988/1989 to 1997/98. The study covers the bonus share issue by the sample by the sample corporate firms which had issued the bonus share at least once during the study period. There are a total of 36 bonus issues amounting to Rs 951.8 million for the period under study. They used simple statistical tools to analyze and interpret the data. Used statistical tools are percentage frequency distribution and average.

The main objectives of the study are to study and analyze the frequency of bonus share issue and study and analyze the regularity of bonus share issue. Similarly, to identify the most popular bonus share issue ratio. As well as study and analyze the relation of bonus share issue to the size and age of the corporate firms.

The study's selected samples are related to commercial banking, insurance, and finance, trading and service sectors. On the basis of analysis of 12 bonuses issuing corporate firms, following finding were observed on the bonus share issue practices in Nepal.

The most popular bonus ratios prevalent in Nepalese corporate practices are 1:2, and 1:1 and 1:5 but 1:2 ratios overwhelmingly dominated.

The number of bonus issue tended to rise from 1992/93 and enthusiastic increase in number of bonus share issue in the fiscal year 1994/95. There is a trend to raise the additional equity capital by capitalization the reserve and net profit by issuing bonus shares and stocks dividend. In the later years the important of 1:2 bonus decreased and importance of other ratio less then 1:2 increased which are 1: 5 and 1:4 The ratio bonus share is considered high as compared to widely prevalent practice in American corporate forms .

The overall average of bonus issue is noticed amount Nepalese corporate practice during the study period. Nepalese corporate forms are found depend in internal equity rather than external equity for additional capital.

Though capitalizing the retained profit by issuing the bonus share is the prevalent practice. The average growth rate in increase in equity capital between the commercial banking group and non banking group differed widely.
The large corporate firms are found to issue bonus shares more times than small size corporate firms.

Manandhar (2000) conducted a study on "*Bonus Share and Dividend Changes empirical Analysis in Nepalese Context*" to test the lagged structure of dividend and different hypothesis on relationship of dividend payout and other financial factors were tested. He carried out his study based on the data taken from 17 Nepalese corporate firms and covered the period of 1987 to 1998. The conclusions of his study are as follows:

i. There is significant relationship between changed in dividend policy in terms of DPS and change in lagged earnings.
ii. There is relationship between distributed lagged profits and dividends.
iii. In overall there is a positive relationship between in lagged consecutive earnings and dividend per share.
iv. When change in lagged consecutive earnings is greater than zero, in 65% cases, change in DPS.

Shrestha (2003) writes one of those related to dividend published. In 1981, the study presented by him was: *"Public Enterprises: Have They Dividend Paying Ability?"* It gives short glimpse of the dividend performance of some public enterprises of their time in Nepal.

Dr. Shrestha has highlighted following issue in the articles:
The expectation of HMG from the public enterprises are of two things: (1) They should be in a positive of paying minimum dividend (2) Public enterprises should be self supporting in financial matters in future years to come, but non of these two objectives are achieved by public enterprises.

One reason for excessive government causes this inefficiency interferes in day to day affairs. On the other hand, high-ranking officials of HMG appointed as Directors of Board do nothing but simple show their bureaucratic personalities Bureaucracy has been the enemy of efficiency and so led corporation to face losses. Losing corporations are, therefore, not in a position of paying dividends to government.

Another reason is the lack of self-criticism and self-consciousness. Esman has pointed out that the lack of favorable leadership is one biggest constraint to institutional building. Moreover corporate leadership comes, as managers are not ready to have self-criticism. In fact, all so-called managers of corporations have not been able to identify themselves regarding what they can contribute as managers of corporation. So, HMG must be in a position to develop a financial target to corporate investment by imposing financial obligations on corporations.

The articles point irony about government biases that government has not allowed to follow an independent dividend policy and HMG is found to pressurize dividend payment in case of Nepal Bank Ltd. regardless of profit. But, it has allowed Rastriya Banijaya Bank to be relieved from dividend obligation in spite of considerable profit.

He has suggested the need of criteria as:

1. Adopt a criteria guided policy to drain resources from corporation through the medium of dividend payment.
2. Realization by managers about the cost of equity and dividend obligation.

HMG should follow the following criteria to trap the resources through dividend:

1. Proper evaluation of public enterprises on capability of paying dividend through corporate co-ordination committee.
2. Circulating the information to all public enterprises brought the minimum rate of dividend.
3. Imposition of foxed rates of dividend by government to financially sound public enterprises.

4. Specifying performance criteria such as profit target in terms of emphasis, priorities, timing and plans and developing a strategic plan, this is not just a statement of corporation aspiration but must be done to make those aspirations to reality.
5. Identification objectives in corporation Act, company Act or special charter so as to clarity public enterprise managers regarding their financial obligation to pay dividend

Bhattarai, (2005) in his article, "*NEPSE Gained in 2004*" the year 2004 was a good one for the Nepali stock market. It gained Rs. 10,568 in market capitalization and 36.77 points in the NEPSE index between January 2 and December 31 of the year 2004.

All the sectors, except the development banks, gained in the NEPSE index over the period though the gain was very marginal in trading companies, hotel companies and companies that belonged to the other categories.

Though the overall NEPSE index went on tumbling right from the later part of January and reached a lowest point of 194.71 on its weekend close of April 10, it then started gradual northward journey throughout the year except slight weekend wavering in some weeks after late August.

One major reason for the increase in market capitalization was the listing of some big companies such as Lama Bank Ltd., Kumari Bank Ltd., Lumbini Bank Ltd. and a number of finance companies. Also listed was National Hydro, the first power generation company listed in NEPSE. However, only the promoter's shares in this company are listed in the stock exchange as it is still to allot shares issued to the public.

Among the individual scrip, notable revivals were Necon Air (Rs. 20 on January 15 to Rs. 27 on December 31) and Oriental Hotels (Rs. 39 on February 23 to Rs. 46 on December 30).Though they are still far below their paid up value of Rs.100. Similarly significant revival was seen also in Gorakhkali Rubber Udyog (Rs. 22 on January 22 to Rs. 44 on December 27), though it is still for below its paid up value of Rs. 75 One notable loser was Nepal Development Bank (Rs. 119 on

January 2 to Rs. 94 on December 31) which went below the paid up value of Rs. 100 during the year.

Adhikari (2008) studies four-week period from February 4 to March 5, and find that the Nepali stock market experienced considerable volatility. All major indices increased, except for Development Bank (down by 343.5 points), Insurance (down by 31.08 points) and Hotel (down by 5.28 points). The surge of market remained bullish for the first week of the month till February 12 after which the benchmark index, NEPSE, witnessed gradual decline from month's highest peak of 814.43 points to the support level of 751.81 points as on 27 Feb.

2.5 Review of Thesis

Prior to this thesis some students of MBA on the financial aspect have conducted several thesis works. Some of them as are supported to be relevant for this study are presented below.

Bhandari, (2001) conducted a study titled "*Dividend Policy: Comparative Study Between Banks and Insurance Companies."* This study takes in to consideration data of only five years fro 1994/95 through 1998/99 six Companies are taken as sample.

The objectives of her study are:

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

He found that"

- There is no consistency in dividend payment is found in all the sample institutions i.e. NGBL, NIBL, NABIL and EIC which seems to be paying average DPS Rs. 20 every year.
- None of the six sample institution has clearly defined and appropriate dividend policy.

- The institutions don't seem to follow the optimal dividend policy of paying regular dividend as per the shareholder's expectation and interest.

Thapa, (2003) conducted a study on *"Dividend Policy and Practices, A Comparative Study Between Banks and Insurance Companies in Nepal."* The data re collected fro 1996/97 to 2001/01 of three Banks (NIBL, Everest Bank Ltd. And Nepal SBI Bank Ltd and three insurance companies (United insurance company, Everest insurance company and premier insurance company) with the following objectives.

- To study the current practices of dividend policy in joint venture commercial banks and insurance companies.
- To examine the relationship between dividend and market price of the stock.
- To analyze the relationship of financial indicators eg. DPS, EPS, DPR and P/E ratio.
- To analyze the relationship between dividend policy decision of banks and insurance companies.

The analysis is done on the basis of different financial tools, simple regression and correlation analysis.

He found that

- Among the major decision of finance, then majority of respondents give the first importance in investing decision, second in financing and finally gave least importance for dividend decision.
- With respect to factors affecting dividend policy of banks and insurance companies of Nepal, most of the respondents gave first priority to current earning, second priority to liquidity and last priority to past dividend.
- Not a fixed and single policy is being adopted by the banks and insurance companies.
- Majority of the company paid the cash dividend.

Gurung, (2003) conducted a study title *"Dividend Policy of Nepalese Listed Companies: With Reference to Commercial Banks."* The data are analyzed from

1996/97 to 2000/01 of four joint ventures banks i.e. Standard Chartered Bank Ltd, Himalayan Bank Ltd, Nepal Bangladesh Bank Ltd and Nabil Bank Ltd.

The objectives of her study are:

- To assess prevailing dividend policy adopted by listed companies under study.
- To study whether or not dividend influences the liquidity position and stock prices of selective companies.
- To examine whether there is significant difference between DPS, EPS, and DPR of the selected companies.
- To identify the relationship between dividend policy and other financial indicators.

She found that

- The rules and regulations that bind the companies to pay dividend is lacking. This has caused inconsistency and random walk of dividend payment, which is seen in case of NBBL and Nabil Bank.
- Out of four banks, only SCBNL and HBL have paid dividend regularly and consistently where as NBBL and Nabil have not paid dividend regularly.
- The dividend payment trend of these banks is highly fluctuating.

Shrestha, (2004) conducted a study titled *"Dividend Policy and Its Impact on Stock Price, an Empirical Analysis on Joint Venture Banks of Nepal."* The data are collected for the year 1996/97 to 200/01 in case of Nabil Bank, Standard Charted Bank Nepal Ltd. Himalayan Bank Ltd and Nepal Investment Bank Ltd.

The objectives of which are as under:

- To examine and evaluate the dividend policy ad its impact on stock price of joint venture banks of Nepal.
- To study dividend procedure followed by the joint venture banks in the contest to Nepal.
- To find out the relationship of dividend with EPS, DPS, MPS, P/E ration, D/P ratio of sample firm.

He found that

- There is not any consistency in dividend policy in the sample banks.
- The MPS is affected by the financial position and the dividend paid by the bank. In this regard, the MPS of the sample banks is seen to be fluctuated.
- Most of the Nepalese banks from the very past have not profit planning and investment strategy which has imbalanced the whole position of the banks.
- All the D/P ratio of the sample banks in many years are found more than the popular practice.

Gautam, (2004) conducted a study titled *"Dividend Policy of Nepalese Financial Institutions"*. The study takes into consideration data of only five years fro 1998 to 2002. Nine companies are taken as sample.

The main objectives of her study are as follows:

- To study and compare various aspects of dividend polices of Banks, insurance companies and finance companies in Nepal.
- To examine the relationship between dividend and share prices of stocks.
- To analyze the factors affecting the dividend policy decisions of Banks and finance companies.

The analysis is manly done by using different financial tools and simple and multiple regression model.

She concluded that:

- The distribution of dividend has a positive impact on the market price of shares except for one bank (NIBL) where correlation shows a decrease in MPS with an increase dividend paid out.
- Changes in DPS affect the MPS of different companies differently.
- EPS and DPS are positively correlated in all the companies except for EIC where an increase in EPS leads to a decrease in DPS.
- The correlation coefficient is very high for six of nine companies.

- More than one economic parameter determines the economic indicators such as DPS and MPS. For example DPS is affected by EPS, CR and previous year's dividend in different parameters.

Dahal, (2006) conducted a study titled *"Dividend Policy: a Comparative Study of Himalayan Bank Limited, Everest Bank Limited and Bank of Kathmandu Limited."* The data are collected for the year 2001/02to 2005/06 Special Reference to Everest Bank, Himalayan Bank and Bank of Kathmandu.

The main objectives of this study are as follows:

- To identify the type of dividend policy followed by the banks.
- To highlight dividend practice of the banks in Nepal.
- To analyze the relationship between dividend per share with various important variables such as earning per share, net profit, net worth & stock prices.

Followings are the main conclusion of study:

- Dividend practices of the sample companies studied show that there isn't a concrete or stable dividend policy by any of the companies.
- According to this study, some banks do not pay dividend in many years. Further the price of shares on which the dividend is not paid on upward trend.
- There are no legal rules those binding companies to pay dividend when they are running at profit. Not only the companies do not have any clear policy towards dividend decision but also there is no provision in company act.
- These banks follow no specific dividend payment strategy payment of cash and stock dividends are made without wise managerial decision.
- Although total earning after tax is increasing every year, earning per share is highly fluctuating earning per share could not made clear to the public.
- The distribution of dividend has a positive impact on the markets of share for all three commercial banks.
- Changes in DPS affect the MPS of different companies differently.

- The correlation between DPS and market price per share and DPS and net worth are positive for all three sample banks.
- More than one economic parameter determines the economic indicators such as DS and MS. For example DPS is affected by EPS and NP.

Adhikari, (2008) *"Cash Dividend Practices in Nepalese Commercial Banks*," The data are collected for the year 2000/01to 2005/06 Special Reference to Nabil Bank, Himalayan and Standard Chartered.

The objectives of the study are as follows:

- To examine the relationship of dividend with various financial variables
- Such as earning per share, market price per share, net worth, net earning and book value of stock.
- To analyze dividend policy and practice of these banks.
- To recommend possible future guidelines and measures.

Followings are the main conclusion of the study:

- The banks are declaring high dividend return on paid up.
- The relationship between dividends per share with net earning is positive in these samples banks.
- These banks are growth banks.
- There is no uniformity in dividend distribution practices/policy in these banks.
- Change in dividend per share affects the market price per share.
- There is no stable dividend policy/practices adopted by these banks for a long period. i.e. some banks have adopted increasing dividend policy and some have irregularity dividend payment.
- Market price per share (MPS) of these banks have highly fluctuated and traded on high process.
- P/E ratio and dividend yield are inconsistent.

Research Gap

Though, the above mentioned studies are related to dividend behavior and practices in Nepalese context. This study covers the data up to 2008. Since Nepalese economic development is highly affected by various internal and external factor; there may be some changes taken place in the last year (2007/08). It has now become necessary to carry out a fresh study related to dividend pattern in Nepalese companies. This study has tried to analyze the latest data (i.e. till 2007/08) of sample banks.

In this study, the latest studies are also reviewed which are not reviewed in the earlier thesis. It is believed that this study will be different from earlier research.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

"Research methodology still is an unavoidable guideline, which will be given methodology refers to the various sequential steps (along with a rational of each such step) to be adopted by a researcher in studying I problems with certain objective in vies". (*Kothari; 1994:19*)

This study concentrates to the various aspects of dividend policy, Such as the irregularities and bad implementation of it. The basic objective of this study is to analyze the dividend policy of commercial banks in Nepal and is to find out the factors that affect dividend policy. It also tries to find out the relationship between dividend with market price of share, net profits, earnings per share, and net worth of the banks. To accomplish these objectives the study follows the research methodology described in this chapter.

3.2 Research Design

Research design is the plan structure and of investigation. In this study the research design is less descriptive but more prescriptive because the historical secondary data have been employed to analyze the using variables which is related to dividend practices of JVBS. Any research project would be impossible without a research design clearly conceived by researcher.

3.3 Sources of Data

Mainly the study is conducted on the basis of secondary data. The data relating to the dividend policy are directly obtained from concerned banks. The supplementary data and information are obtained from annual report of concerned bank. Other information sources have been taped from number of institutions and regulation authorities like Rastra Bank, Security exchange Board, Ministry of Finance and National Planning commission etc. If the study required, primary data

may be the personal interview with staffs of concerned banks financials reports and some selected holders.

3.4 Population and Sample

There are many banks whose shares are traded actively in stock market. Hence it is not possible to study all of them regarding the study topic. Therefore sampling will be done selecting from population. Among 26 commercial banks only following three banks are selected as sample.

The samples to be selected are as following:

a) Himalayan Bank Limited
b) Everest Bank Limited
c) Bank of Kathmandu Limited

Profiles and major calculation can be seen of these sample banks see in appendix

3.5 Method of Analysis

Various financial and statistical tools have been used in this study. The analysis of data will be done according to pattern of data available. Financial tools and simple regression analysis will do mainly the analysis. The relationship between different variables related to study topic would be drawn out using financial and statistical tools. The various calculated results obtained through financial and statistical tools are tabulated under different headings. Then, they are compared with each other to interprets the result

3.6 Financial Tools

a) Earning Per Share (EPS)

EPS calculations made over the years indicate whether the banks earning power on per share basis have changed over the period or not. EPS is calculated by dividing the net profit after taxes by the total no. of the common shares outstanding.

$$EPS\ X \frac{\text{Net profit after taxes}}{\text{no. of common shares outstanding}}$$

b) Dividend Per share (DPS)

DPS indicates the part of earning distributed to the shareholders on per share basis. It is calculated by dividing the total dividend to equity shareholders by the total no. of equity shares.

$$\text{DPS X} \frac{\text{Total dividend to ordinary share holders}}{\text{No. of ordinary shares outstanding}}$$

c) Dividend Payout Ration (DPR)

This ration shows that what percentage of the profit is distributed as dividend and what percentage is retained as reserve and surplus for growth of the banks. It is calculated by the diving the DPS by the EPS.

$$DPS \text{ X} \frac{DPS}{EPS}$$

d) Price Earning Ratio

This ratio reflects the price currently paid by the market for each rupee of currently reported earning per share (EPS). It is calculated by dividing the market value per share (MVPS) by earning per share (EPS).

$$P/E \text{ ratio X} \frac{\text{Market val ue per share (MVPS)}}{\text{Earning per share(EPS)}}$$

e) Dividend Yield

This dividend yield reflects the percentage relationship between dividends per share ad market value per share. It calculated by dividing the cash dividends per share (DPS) by the market value per share (MVPS).

$$\text{Dividend Yield X} \frac{\text{Dividend per share (DPS)}}{\text{Market value per share(MVPS)}}$$

f) Market value per share to book value per share ratio

This ration indicates the price the market is paying for the price that is reported from the net worth of the banks, or in other words, it is the price of the outsiders are paying for each rupee reported by the balance sheet of the banks. It is calculated by dividing the market value per share (MVPS) by the Book Value Per share (BVPS)

$$X \frac{\text{Market value per share (MVPS)}}{\text{Book Value per share (BVPS)}}$$

g) Return on Net Worth

Net worth refers to the owner's claim in the assets of a bank. It can be found by subtracting total liabilities from the total assets (excluding intangible assets accumulated losses). This ration indicates how well the banks used the resource of the owner. It is calculated by dividing net profit after taxes by net worth. The formula is used as follows.

$$RONW \; X \frac{Net \text{ Profit}}{\text{Net worth}}$$

3.7 Statistical Tools Used

A brief explanation of statistical tools used in this study is as follows:

a) Simple regression analysis

In this study simple regression analysis has been used to study the influences of independent variables on dependent variables. It helps in studying the effect and the magnitude of the effect of single independent variables on one dependent variables. To determine whether the variable of earning per share is related to dividend decision, the following regression model has been applied.

$$Y \; X a \; \Gamma b X_1$$

Where

Y= Dividend value

a = Intercept

X_1=Earning per share

b = Slope variable or relation

This model has been applied to examine the relationship between the EPS and DPS of the companies in the current fiscal five years from (2003/04 to 2007/08). Similarly the following regression has been applied to determine whether the

variable of net profit, average market price of share, and net worth of the company is related to dividend per share.

$$Y = a + bX_2$$

Where,

Y=Dividend per share

X_2 =Net profits of the company

$$Y = a + bX_3$$

Where,

Y = Market Price per share (closing)

X_3= Dividend per share

$$Y = a + bX_4$$

Where,

Y = Net worth of the company

X_4= Dividend per share

Hence, in obtaining the regression line, we follow the approach that the some of squared deviation be minimum and on this basis work out the values of its constant viz 'a' and 'b' or that is unknown as the intercept and the relation. To determine the values of 'a' and 'b' the following two normal equations are to be solved simultaneously.

$$\sum y = na + b \sum x$$

$$\sum xy = a \sum x + b \sum x^2$$

Where,

'a' and 'b' are unknown.

N=Number of observation in the sample

b) Standard Deviation ($\pm$)

Karl Pearson introduced the standard deviations concept in 1823. It is by for most important and widely used measure of studying dispersion. Standard deviation is

also known as root mean square deviation for the reason that is the square root means of the squared deviations from the arithmetic mean, it is denoted by the small Greek letter Sigma. "The standard deviation measures the absolute dispersion or variability of the distribution, for the greater the amount of dispersion or variability the greater the standard deviations, for the greater will be the magnitude of the deviation of the values from their mean, a small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series; a large standard deviation means just the opposite." (*Gupta; 1991:8-18*) In this study, standard deviation is calculated for selected dependent and independent variables specified in the mode presented above.

$$\text{Standard deviation } (\pm_x) = \sqrt{\frac{x^2}{n} - \left(\frac{x}{n}\right)^2}$$

$$\text{Standard deviation } (\pm_y) = \sqrt{\frac{y^2}{n} - \left(\frac{y}{n}\right)^2}$$

c) Coefficient of correlation (r)

The correlation of coefficient measures the direction of relationship between two sets of figures. It is the square root of the coefficient of determination. "Correlation Analysis is then statistical tool that can be used to describe the degree t which one variable is linearly related to another." (*Levin and Rubin; 1995:613*) correlation can either be positive or it can be negative. If both variables are changing in the same direction, then correlation is said to be positive but when the variations to the two variables take place in the opposite direction, the correlation is termed as negative. In this study, simple coefficient of correlation is use to determine the relationship of different factors with dividend and other variables. The data related to dividend over different years are tabulated and their relationship with each other is drawn out.

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

d) Coefficient of Determination (r^2)

One very convenient and useful way of interpreting the value of coefficient of correlation between two variables is to use square of coefficient of correlation which is called coefficient of determination. One of which happens to be independent and other being dependent variables. Symbolically it called r^2. In other words r^2 measures the percentage total variation in dependent variable explained by independent variables. The coefficient of determination can have value ranging fro 0 to 1. if r^2 is equal to 0.85 that indicates independent variable use in regression model explained 85% of the total variation in the dependent variable a value of one can occur only if the unexplained variation is Zero, which simply means that all the data points in the scattered diagram fall exactly on the regression line. In this study r^2 is calculated for the model prescribed above.

e) Regression Constant (a)

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

f) Regression Coefficient (b)

The regression coefficient of each independent variable indicates the marginal relationship between that variable and value of dependent variable, holding constant the effect of all other independent variables in the coefficient describes how the changes in independent variables affect the values of dependent variable's estimate.

g) Standard Error of Estimate (S.E.E.)

With the help of regression equations perfect predictions practically impossible, Standard Error of Estimate is the ensure of reliability of the estimating equation, indicating the variability of the observed points around the regression line, that is the extent to which observed value differ from their predicted values on the regression line. The standard error of estimate measures the dispersion about on average line; called the regression line, the smaller the value of SEE, the closer

will be the dots to the regression line and the better the estimates based on the equation for this line. If SEE is zero, then there is no variation about the line and the correlation will be perfect. Thus with the help of SEE, it possible for us t ascertain how well and representative the regression line is as a description of the average relation between two series.

$$S.E\ X\frac{\pm_x}{\pm_y}\frac{1Zr^2}{\sqrt{n}}$$

Test of hypothesis

Hypothesis testing begins with an assumption, called a Hypothesis that we make about a population parameter. The method of statistics, which helps in arriving at the correlation from such decision, is called test of hypothesis or hypothesis testing.

Hypothesis Setting

1. H_0: There is no significance different between DPS and EPS of HBL, EBL and BOKL.
   H_1: There is significance different between DPS and EPS of HBL, EBL and BOKL.

2. H_0: There is no significance different between DPS and NP of HBL, EBL and BOKL.
   H_1: There is significance different between DPS and NP of HBL, EBL and BOKL.

3. H_0: There is no significance different between DPS and Pm of HBL, EBL and BOKL.
   H_1: There is significance different between DPS and Pm of HBL, EBL and BOKL.
4. H_0: There is no significance different between DPS and NW of HBL, EBL and BOKL.
   H_1: There is significance different between DPS and NW of HBL, EBL and BOKL.

T-statistics

To test the validity of our assumption, "if sample size is less than 30 t-test is used for applying t-test in the content of small sample, the t value is calculated first and compared with the table value of 't' at a certain level of significance for given degree of freedom. If the calculated value of‘t’ exceeds the table value (say 0.05) we infer that the difference is significant at 5% level " (Kothari; 1996:143) but if’t is less than the concerning table value of the‘t’ the difference is not treated as significant. In the research work, t-value is calculate d between earning per share and dividend per share, net profit and dividend per share, dividend per share and market per share and dividend per share and net worth.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter based on totally secondary data. The basic objectives of the study have already mentioned in the first chapter, “introduction”. So, to achieve these objectives, several analytical tools and techniques are employed which is defined in the second chapter, "Research Methodology". In this chapter the effort has been made to analyse the comparative dividend decision of JVBS in Nepal and the attitude of management towards the optimum dividend decision. This analysis is highly supported by the practices of dividend distribution by JVBS.

4.1 Analysis of Financial Indicator Variables

Earning per Share

Normally the performance and the achievement of business organization are measured in terms of its capacity to generate earning. Higher earning shows higher strength while lower earning shows weaken strength of business organization because the earning of any organization helps so far its growth, expansion and diversification.

The following table shows all the details relating to total earnings, no of shares and earning per share.

Himalayan Bank Ltd

Table 4.1

Total earning, number of share and Earning per Share

Year	Total earning after tax (in Million)	Paid up value per share (in Rs)	Number of share (in Million)	Earning Per Share (in Rs)
2003/04	263.03	100	5.36	49.05
2004/05	308.30	100	6.44	47.91
2005/06	457.45	100	7.72	59.24
2006/07	491.82	100	8.11	60.66
2007/08	635.87	100	10.14	62.74

(Source: Annual Report of HBL)

Average earning per share =Rs 55.92

In fiscal year 2003/04, total earning was Rs 263.03 million, which was increased to last year by Rs 50.89 million. This year HBL had also issued bonus share at the ratio 1:14. Earning per share was Rs. 49.05, which was decreased to last year by Rs 0.4. During the year 2004/05, total earning was Rs 308.30 million, which was increased to last year by Rs 45.27 million. This year HBL had issued bonus share at the ratio 1:5 earning per share was Rs 47.91 which was decreased to last year by 1.14. In the fiscal year 2005/06, total earning was Rs. 457.45 million. This year also HBL has issued bonus share at the ratio 1:5. Earning per share was Rs. 59.24, which was excess by Rs. 11.33 than previous year. In the fiscal year 2006/07, total earning was Rs. 491.82 million. In this year HBL has issued bonus share at the rate of 4:1 bonus share and 15% cash dividend. Earning per share was Rs. 60.66, which was excess by Rs. 1.42 than previous year. In the year 2007/08 HBL was Rs 62.74 earning per share which is 2.08 greater than previous year and Total earning was 635.87 million which 144.05 million more than previous year. This year HBL has issued 4:1 bonus share and 15% cash dividend.

Everest Bank Ltd

Table 4.2

Total earning, number of share and Earning per Share

Year	**Total earning after tax (in Million)**	**Paid up value per share (in Rs)**	**Number of share (in Million)**	**Earning Per Share (in Rs)**
2003/04	143.59	100	3.15	45.58
2004/05	170.79	100	3.15	54.22
2005/06	237.31	100	3.78	62.78
2006/07	296.41	100	3.78	78.40
2007/08	451.22	100	4.91	91.82

(Source: Annual Report of EBL)

Average Earning per share = 66.56

In the fiscal year 2003/04, total earning was Rs. 143.59 million. This year EBL has got success to increase earning than previous year by Rs. 49.4 million.

Earning per share was Rs. 45.58 which was increased to last year by Rs. 15.68. Total shares remain constant. In fiscal year 2004/05, EBL had earned Rs 170.79 million, which was increased to last year by Rs. 8.64 million. During the year 2005/06, total earning was Rs. 237.31 million, which was increased to last year by Rs. 66.52 million. This year EBL had issued bonus share at the ratio 1:5. Even the bank has issued bonus share EPS was Rs. 62.78 which was increased to last year by Rs. 8.56. In the fiscal year 2006/07 total earning was Rs. 296.41 million, which was increased by Rs. 59.1million. This year EPS was Rs. 78.4, which is greater than previous year by 15.62. In the fiscal year total earning was Rs. 451.22 million, which is Rs. 154.81 million more than previous year. In this year EPS was Rs. 91.82 which is greater than previous year by Rs. 13.42. This year EBL has issued 30% bonus shares and 20% of cash dividend.

Since above table shows that total earning of HBL was more than EBL during these five fiscal years, EBL has greater earning per share during these five fiscal years except 2003/04.

Bank of Kathmandu Limited

Table 4.3

Total earning, number of share and Earning per Share

Year	**Total earning after tax (in Million)**	**Paid up value per share (in Rs)**	**Number of share (in Million)**	**Earning Per Share (in Rs)**
2003/04	127.48	100	4.63	27.50
2004/05	139.54	100	4.63	30.10
2005/06	202.44	100	4.63	43.67
2006/07	262.39	100	6.03	43.50
2007/08	361.50	100	6.03	59.94

(Source: Annual Report of BOKL)

Average Earning per share = 40.94

In the fiscal year 2003/04, total earning Rs. 127.48 million, this was increased than previous year by Rs. 45.33 million. Earning per share was increased to last year by Rs. 9.78. In the fiscal year 2004/05 total earning was Rs. 139.54 million. Earning per share was increased to last year by Rs. 9.78. In the fiscal year

2004/05, total earning was Rs. 139.54 million, which was excess by Rs. 12.06 million than previous year. Earning per share was Rs. 30.10, which was increased to last year by Rs. 2.60. During the year 2005/06 BOKL had earning Rs. 202.44, which was increased to last year by Rs. 62.9 million. Therefore earning per share has risen to Rs. 43.67, which was increased by Rs. 13.57 than previous year. This year BOKL has issued 30 % bonus share and 18% cash dividend. During the year 2006/07 BOKL had earning Rs. 262.39, which was increased to last year by Rs. 59.95 million. Therefore earning per share has risen to Rs. 43.50, which was little change than previous year by Rs. 0.17. In the year 2007/08 total earning after tax was Rs. 361.50 which is Rs. 99.11million more than previous year and Earning per share was 59.94 which is Rs. 16.44 more than previous year. This year BOK has issued 40 % bonus share and 2.11% cash dividend.

From the above table it is clear than HBL has higher earning in comparison with EBL and BOKL in all year. HBL was not able to maintain average earning per share from two financial years. EBL was not able to maintain average earning per share for three fiscal years and BOKL was not able to maintain average earning per share for two fiscal years.

Dividend per Share

Table 4.4

Dividend per Share

Year	**HBL**	**EBL**	**BOKL**
2003/04	-	20	10
2004/05	11.58	-	15
2005/06	30	25	18
2006/07	15	10	20
2007/08	25	20	2.11
Average	**16.32**	**15.00**	**13.02**

(Source: Annual Report of HBL, EBL and BOKL)

It is important at this stage to look over the relevant data on dividend for the purpose of my analysis. On investigation in all the years taken for study, I have

taken dividend per share of five years. But, it is found to be fluctuating from year to year. However, average dividend per share of HBL is Rs. 16.32. Average dividend per share of EBL is Rs. 15 and average dividend per share of BOKL is Rs. 13.02. It shows that dividend per share of HBL is higher than EBL and BOKL.

In the fiscal year 2003/04 HBL has paid no dividend because HBL had retained all its earning. In the year 2004/05 HBL has distributed Rs. 11.58 as a dividend. This year also HBL has issued bonus share at the ratio 1:5. During the year 2005/06, dividend per share of HBL was Rs. 30. HBL was not able to maintain average earning per share for three fiscal years. Above figure of HBL clearly shows that the dividend per share is fluctuating not decreasing and increasing continuously. In the year 2006/07 and 2007/08, HBL has paid Rs. 15 and 25 respectively as dividend.

HBL

If we analysis the growth of dividend paid we find difference between the actual dividend paid by bank and the dividend to be paid according to growth rate. In case of HBL, there is not any amount of dividend per share in base year i.e. 2003/04. HBL has paid dividend only four year fiscal years. So I couldn't find the growth rate of dividend per share of HBL.

In the year 2003/04 even EBL has earned more earning than previous year by Rs. 49.4 million, DPS was at Rs. 20. In the year 2004/05, it has not paid any dividend although total earning and earning per share was more than previous year. In the year 2005/06, it has distributed Rs. 25 as dividend even though it had issued bonus share. EBL was not able to declare dividend for financial years 2004/05. In the year 2006/07 it has distributed Rs. 10 as dividend but it has not maintained average divided. In the year 2007/08 EBL has distributed Rs. 20 as dividend which is higher than average dividend which is also greater than previous year.

In the year 2003/04 even it has earned more than previous year, in the financial year 2003/04, it has paid Rs. 10 as a dividend. In the financial year 2004/05 it has declared Rs. 15 as a dividend. In 2005/06 2006/07 and 2007/08 it has paid Rs. 18,

Rs. 20 and Rs.2.11 respectively as a dividend. BOKL was able to maintain average dividend per share for three financial years but not in the year of 2003/04 and year 2007/08.

EBL

If we analysis the growth of dividend paid, we find difference between actual amount of dividend paid by bank and the dividend to be paid according to growth rate.

Dividend in base year 2002/03(D_o) =20

Dividend in final year 2006/07(D_5) =20

No. of years =5 years

Growth rate (g) =?

We know that $D_5 = D_0(1+g)^4$

$20 = 20(1+g)^4$

$(1+g) = \left(\frac{20}{20}\right)^{\frac{1}{4}}$

$g = 1 - 1 \text{ or } 00\%$

According to this formula, there is no growth rate of EBL because there is equal amount paid by bank in base year and fifth year.

Table 4.5

Dividend based on Growth rate and Actual amount

Year	Dividend Payable Based on Growth Rate	Actual dividend Paid
2003/04	20	20
2004/05	20	-
2005/06	20	25
2006/07	20	10
2007/08	20	20

The computed growth rate is followed by the bank in the past year's period for payment of dividend except year 2004/05 and year 2006/07 where as bank has given 10% year 2006/07 and bank has not paid on year 2004/05. It shows that

bank has neither followed the system of paying stable dividend nor constant payout dividend.

BOKL

If we analysis the growth of dividend paid, we find difference between actual amount of dividend paid by bank and the dividend to be paid according to growth rate.

Dividend in base year 2002/03(D_o) =10

Dividend in final year 2006/07(D_5) =2.11

No. of years =5 years

Growth rate (g) =?

We know that $D_5 = D_0(1+g)^4$

$2.11 = 10(1+g)^4$

$(1+g) = \left(\frac{2.11}{10}\right)^{\frac{1}{4}}$

$(1+g) = 0.67$

$g = -0.32$ or -32%

According to this formula the growth rate of BOKL is in negative i.e. (-32%)

Table 4.6

Dividend Based on Growth Rate and Actual Amount

Year	Dividend Payable Based on Growth Rate	Actual dividend Paid
2003/04	10	10
2004/05	6.8	15
2005/06	4.6	18
2006/07	3.14	20
2007/08	2.14	2.11

The computed growth rate of -32% is able to follow by the bank in the past four year's period of payment of dividend in year bank has paid 2.11 on 2.14 of payable base on growth rate. It shows that bank has able to pay dividend in increasing trend except year 2007/08.

In conclusion, due to lack of sustainable strategic dividend policy, the dividend payment policy if these banks are fluctuating, However in aggregate term average dividend per share paid by HBL is higher than EBL and BOKL. Higher dividend per share creates positive attitude of the shareholders towards the bank which consequently help to increase market value of the shares. It is the indicator of better performance of the banks management.

Dividend Payout Ratio

Earning determines the amount of dividend. The greater the earning the more the ability of banks to pay dividend, This ration expresses the amount of dividend as a percentage of earning available for equity shares after meeting all charges. The following table shows the dividend payout ratio of three banks from 2002/03 to 2006/07.

Table 4.7

Dividend Payout Ratio

Year	**HBL**	**EBL**	**BOKL**
2003/04	-	43.88%	36.96%
2004/05	24.17%	-	49.83%
2005/06	50.64%	39.82%	41.22%
2006/07	24.73%	12.75%	45.98%
2007/08	39.85%	21.78%	3.52%
Average	**27.87%**	**23.64%**	**35.50%**

[For the detail calculation, see appendix B2, C2 and D2]

Above table shows the average yearly dividend payout ratio of BOKL (35.50%) is higher than that of HBL (27.87%) and of EBL (23.64%). Highest percentage of dividend payout ratio of HBL is 50.64% in the year 2005/06, 43.88% of EBL in the year 2003/04 and 49.83% of BOKL in the year 2004/05. HBL did not distribute cash dividend to its shareholder in the fiscal year 2003/04. In 2004/05 EBL did not distribute cash dividend to its shareholder. BOKL distributed cash dividend to its shareholder at all years but BOKL was not able to maintain its average dividend payout ratio in the year 2007/08 but HBL was not able to maintain average dividend payout ratio in 2003/04, 2004/05 and 2006/07 and

EBL was not able to maintain its average payout ratio in the year 2004/05, 2006/07 and 2007/08.

Above table shows that dividend payout ratio of BOKL is higher than that of HBL and EBL. On the basis of dividend payout policy, It is clear that all three banks were not able to follow any appreciate dividend payout policy. Thus it is necessary to have a appreciate policy for dividend distribution of the banks. The banks have to know about how much amount is to be allocated for distribution of dividend to shareholders. So it will be balance between company's growth and shareholders interest.

Price earning Ratio

Table 4.8

Price Earning Ratio

Year	HBL	EBL	BOKL
2003/04	17.12	14.93	10.73
2004/05	19.20	16.64	14.29
2005/06	18.57	21.97	19.46
2006/07	28.68	30.99	31.61
2007/08	31.56	34.11	39.21
Average	**23.03**	**23.73**	**23.06**

[For the detail calculation, see appendix B3, C3, and D3]

it is clear form the above that BOKL shows more fluctuation in P/E Ratio than HBL and EBL, BOKL was failed to maintain its average P/E ratio (23.06 times) in all the year except 2006/07 and 2007/08. Incase of HBL, it was failed to maintain, its average P/E ratio (23.03 times) from 2003/04 to 2005/06. Similarly EBL was not able to maintain its average P/E ratio (23.73 times) from 2003/04 to 2005/06.

This presentation helps my study be clarifying the relationship between earning per share and market price per share, so, above analysis helps to judge the investors expectations about the banks performance and also the market appraisal

of the banks performance. The higher P/E ratio indicates the favorable condition for the owner. So in this regard, the performance of EBL for the last five years is better than other two banks.

Market value per share to Book Value per share

Table 4.9

Market value per share to Book Value per share

Year	HBL (Times)	EBL (Times)	BOKL (Times)
2003/04	3.40	3.96	1.35
2004/05	3.84	3.96	2.01
2005/06	4.81	6.34	3.68
2006/07	6.57	8.30	8.44
2007/08	7.98	9.73	10.56
Average	**5.32**	**6.46**	**5.21**

[For the detail calculation, see appendix B4, C4, and D4]

The above table shows the market value per share to book value per share of HBL, EBL and BOKL respectively. Market value per share to book value per share means to evaluate net present value of share of HBL, EBL and BOKL was 5.32, 6.46 and 5.21 respectively. It shows that EBL has the highest market value per share to book value per share as compared to the other two banks. HBL was able to maintain its average ratio in the year 2006/07 and 2007/08, EBL was able to maintain its average ratio from 2006/07 and 2007/08, and BOKL was able to maintain its average Ratio from 2006/07 and 2007/08. Above analysis helps to conclude that in terms of market value to Book value per share ratio, EBL performance is better than HBL and BOKL because it ratio is increasing slowly.

Dividend Yield Ratio

Table 4.10

Dividend Yield Ratio

Year	HBL	EBL	BOKL
2003/04	-	2.94%	3.39%
2004/05	1.26%	-	3.49%
2005/06	2.73%	1.81%	2.12%
2006/07	0.86%	0.41%	1.45%
2007/08	1.26%	0.64%	0.09%
Average	**1.22%**	**1.03%**	**2.11%**

[For the detail calculation, see appendix B5, C5, and D5]

Dividend yield ratio highly influences the market value per share because a change in dividend per share can bring effective change in the market value of that share. Therefore, before allocation of dividend to the shareholders the impact on market scenario and price fluctuation is to be studied and evaluated for the long run survival of the bank.

Above table shows average dividend yield ratio of BOKL (2.11%) is higher than that of HBL (1.22%) and EBL (1.03%). HBL failed to maintain its average dividend yield ratio in the fiscal year 2003/04, and 2006/07, whereas BOKL failed to maintain its average dividend yield ratio in 2006/07 and 2007/08. In aggregate, BOKL is more efficient than HBL and EBL for distribution of dividend on the basis of market price per share.

The relationship between dividend yield ratio and market price per share is positive. If there is high dividend yield ratio the market price of share is also increased, low dividend yield ratio makes market price per share decrease. So, high dividend yield ratio is better for banks. Therefore, with high dividend yield ratio BOKL is more successful than EBL ad HBL.

4.2 Analysis of Means, Standard Deviation and Correlation Matrix

This study has already described dividend practices between HBL, EBL and BOKL with the help of financial tools which have given accurate picture. But more elaborate ad extensive research is considered as better to make the analysis more research oriented. Thus dividend payment as followed by HBL, EBL and BOKL can better explain through the use of statistical tool provide meaningful relationship among the various interrelated variables. So first of all it is useful to determine the degree of correlation between dividend and variables that used in the regression analysis and the means and standard deviations of all the variables use in the regression analysis. The mean, standard deviation and zero order correlation co-efficient of HBL. EBL and BOKL are presented in Table 4.11. The detail calculation of Mean, Standard deviation and correlation are calculated on appendixes.

Table 4.11

Means, Standard Deviations and Correlation of Dividend per Share with Earning per Share, Net Profit, Market price per share and Net Worth

Bank	Variables	Case	Mean	Correlation with					
				S.D.	DPS	EPS	NP	MPS	NW
HBL	DPS	5	16.32	10.52	1.00	0.58	0.58	0.24	0.17
	EPS	5	55.99	6.18	-	-	-	-	-
	NP	5	431.29	133.89	-	-	-	-	-
	Pm	5	1316	458.41	-	-	-	-	-
	NW	5	1858.33	425.61	-	-	-	-	-
EBL	DPS	5	15	8.94	1.00	0.023	0.071	0.033	0.03
	EPS	5	66.56	16.65	-	-	-	-	-
	NP	5	259.88	109.47	-	-	-	-	-
	Pm	5	1698.20	939.77	-	-	-	-	-
	NW	5	948.69	366.94	-	-	-	-	-
BOKL	DPS	5	13.02	6.41	1.00	0.18	0.19	0.25	0.67
	EPS	5	40.94	11.60	-	-	-	-	-
	NP	5	218.67	86.20	-	-	-	-	-
	Pm	5	1060	746.93	-	-	-	-	
	NW	5	1081.44	133.37	-	-	-	-	-

Note,

"DPS" represents dividend per share

"EPS" represents earning per share

"NP" represents net profit

"Pm" represents market price per share

"NW" represents net worth

Above table shows that average value of dividend per share, Net profit and Net worth of HBL is higher than EBL and BOKL, Earning per share and market price per share of EBL is higher than that of HBL and BOKL.

It is clear from above correlation matrix that market price per share is positively correlated with earning per share and net profit of , market price per share and net worth in HBL, EBL and BOKL. Dividend per share is highly positively correlated with earning per share and market price per share in HBL, net profit and net worth in BOKL.

To sum up, the payment of dividend depends upon the net profit after tax and EPS. On the other hand, the prices of Nepalese stocks and net worth of the banks depend upon the dividend payment. This result suggests the high net profit after tax and earning per share might be able to increase dividend per share and high dividend per share might be able to increase the stock prices and net worth of the sampled companies.

4.3 Simple Regression Analysis

Simple regression analysis is used as a tool of determining the strength of relationship between two variables. The analysis used to describe the average relationship between two variables is known as simple linear regression analysis. It is a statistical device by which we can estimate or predict the value of one variable when the value of other variable is known. Regression lies are expressed in terms of algebraic relations i.e. $y = a + bx$ where is a dependent variable and x is an independent variable, similarly, a is the intercept variable when independent variables is zero. In other words, it is better to understand that a (constant) indicates the mean or average effect on dependent variable of all the variables omitted from the model. Like wise, regression coefficient (b) describes how changes in independent variables affect the value of dependent variables.

Standard Error of Estimate (SEE) measures the accuracy of the estimated figures. To test the validity of our assumption, if the sample size (n) is less than 30, t-test is used. If the calculated value of't' exceeds the table value say (0.005). We infer that the difference is significant at 5% level of significance. But if 't' is less than the concerning table value the difference is not treated as significant.

Under stated table present the usual simple linear relationship between dividend per share and market price per share, market price per share and net profit, market price per share and net worth, market price per share and earning per share. The major output of simple regression model of the sample banks based on the data is given below. Table 4.12 represents the relationship between market price per share and earning per share.

Table 4.12

Simple regression results of dividend per share on earning per share

(DPS = a+b EPS)

Banks	**Sample Size**		**Regression Coefficient**			
		a	**b**	**S.E.**	**R^2**	**t-value**
HBL	5	0.70	0.28	0.49	0.58	0.57
EBL	5	-0.65	0.24	0.24	0.023	1
BOKL	5	-2.12	0.37	0.22	0.18	1.68

[For the detail calculation, see on appendix B6, C6 and D6]

Note:-

- DPS and EPS represents dividend per share and earning per share respectively
- Table value of t at 5% level of significance from (5+5+5-3=12) 12 degree of freedom is 2.179.

With respect to the above regression results of dividend per share on earning per share, beta coefficient is positive in three the sampled companies. In case of HBL, beta coefficient (0.28) indicates that one rupees increase in earning per share leads to the average about less than Rs.0.28 increase in dividend per share holding other variables constant. While in case of EBL, beta coefficient (0.24) indicates that one rupee increase in earning per share leads to the average about

Rs. 0.24 increase in dividend per share holding other variables constant. Similarly in BOKL, beta coefficient (0.37) indicates that one rupee increase in earning per share leads to the average about Rs. 0.37 increase in dividend per share holding other variables constant. Hence from the above analysis, BOKL is the strongest bank for paying the dividend in excess amount if there is increased one rupee in earning per share among the three. The (R^2) is high in HBL .In case of HBL, value of R^2 is present (0.58) indicates that 57.76% of dividend variation explained by earning variables. In EBL, value of R^2 (0.023) indicates that 2.25% of market price variation explained by earning variables. While in case of BOKL, Value of R2 (0.18) indicates that 17.64% of dividend variation explained by earning variables. The result of beta coefficient is statistically not significant at 5 percent level of significance HBL EBL and BOKL because calculated value of t is less than tabulated value of t (2.179).

Similarly, table 4.13 represents the relationship between dividend per share and net profit.

Table 4.13

Simple regression results of dividend per share on net profit

(DPS= a+b NP)

Banks	**Sample Size**		**Regression Coefficient**			
		a	**b**	**S.E.**	**R^2**	**t-value**
HBL	5	1.02	0.04	0.02	0.58	2
EBL	5	-2.02	0.07	0.035	0.071	2
BOKL	5	-3.71	0.08	0.028	0.19	2.85

[For the detail calculation, see appendix B7, C7 and D7]

Note:-

- DPS and NP represents dividend per share and net profit respectively.
- Table value of t at 5%level of significance of (5+5+5-3=12)12 is degree of freedom is 2.179.

According to above regression results of Dividend per share on net profit, beta coefficient is positive in HBL, EBL and BOKL. Incase of HBL, beta coefficient (0.04) indicates that one rupee increase in net profit leads to the average about Rs 0.04 increase in Dividend per share holding other variable constant. While in case of EBL, beta coefficient (0.07) indicates that one rupee increase in net profit

leads to the average about Rs. 0.07 increase in dividend per share holding other variables constant. Similarly in BOKL, beta coefficient (0.08) indicates that one rupee increase in net profit leads to the average about Rs. 0.08 increase in dividend per share holding other variables constant. Hence from the above analysis, BOKL is the strongest bank than HBL and EBL if one rupee of net profit will increase among three banks. Among three banks HBL has highest value of (R^2). In case of HBL the value of (R^2) (0.58) indicates that 57.76% of Dividend per share variation can explained by net profit variables. In case of EBL the value of (R^2) (0.071) indicates that 7.29% of Dividend per share variation can explained by net profit variables. While in case of BOKL, the value of R^2 (0.19) indicates that 19.36% of dividend variation can explained by net profit variables. This result is not statistically significance at 5% level of significance in EBL and HBL because calculated value of t is less than tabulated value of t (2.179) at 5 % level of significance. But the result of BOKL is statistically significant at 5 percent level of significance because of having calculated value of t more than that of tabulated value (2.17).

Similarly, table 4.14 is also presenting the relationship between market price per share and dividend per share.

Table 4.14

Simple regression results of market price per share on dividend per share

(Pm = a + b DPS)

Banks	Sample Size		Regression Coefficient			
		a	b	S.E.	R^2	t-value
HBL	5	-686.46	122.70	16.96	0.24	7.23
EBL	5	-778.66	165.12	46.15	0.033	3.58
BOKL	5	-579.72	125.92	45.45	0.25	2.46

[For the detail calculation, see appendix B8, C8 and D8]

Note:-

- Pm and DPS represents market price per share and dividend per share respectively
- Table value of t at 5%level of significance of (5+5+5-3=12)12 is degree of freedom is 2.179.

On the basis of above regression results of market price per share on dividend per share, beta coefficient (b) is positive in HBL, EBL and BOKL. Incase of HBL, beta coefficient (122.70) indicates that one rupee increase in dividend per share leads to the average about Rs 122.70 increase in market price per share holding other variable constant. While in case of EBL, beta coefficient (165.12) indicates that one rupee increase in dividend per share leads to the average about Rs. 165.12 increase in market price per share holding other variables constant. Similarly in BOKL, beta coefficient (125.92) indicates that one rupee increase in earning per share leads to the average about Rs. 125.92 increase in market price per share holding other variables constant. From the above table it is clear that of one rupee of dividend per share is increased in three banks at the same time EBL market price per share will increase higher than other two banks. The value of R2 in case of BOKL is higher than that of EBL and HBL. In case of HBL the value of (R^2) (0.24) indicates that 24.01% of market price per share variation can explained by dividend variables. In case of EBL the value of (R^2) (0.033) indicates that 3.4% of market price per share variation can explained by dividend variables. While in case of BOKL, value of R^2 (0.25) indicates that only 25% of market price per share variation is explained by dividend variable. In case of EBL, HBL and BOKL, this result is statistically significant at 5 percent level of significance because calculated value of t is higher than tabulated value of 't' (2.179).

Similarly, table 4.15 shows relationship between dividend per share and net worth.

Table 4.15

Simple regression results of net worth on dividend per share

(NW= a + b DPS)

Banks	Sample Size		Regression Coefficient			
		a	b	S.E.	R^2	t-value
HBL	5	-1021.90	176.53	36.86	0.17	4.79
EBL	5	-463.14	94.12	18.04	0.03	5.21
BOKL	5	-416.95	115.07	5.41	0.67	21.27

[For the detail calculation, see appendix B9, C9 and D9]

Note:-

- Pm and NW represents market price per share and net worth respectively
- Table value of t at 5% level of significance of (5+5+5-3=12)12 is degree of freedom is 2.179.

As for the regression result of net worth on market price per share are concerned, beta coefficient (b) is positive in HBL, EBL and BOKL. Incase of HBL, beta coefficient (176.53) indicates that one rupee increase in dividend per share leads to the average about Rs 176.53 increase in net worth holding other variable constant. While in case of EBL, beta coefficient (94.12) indicates that one rupee increase in dividend per share leads to the average about Rs. 94.12 increase in net worth holding other variables constant. In case of BOKL, bet coefficient (115.07) indicates that one rupee increase in dividend per share leads to the average about Rs. 115.07 increase in net worth remaining other variables constant, hence it might be concluded that increase in one rupee of dividend per share in three banks, result increase in net worth of HBL is higher than of HBL, BOKL. The value of R^2 for BOKL is higher than that of HBL and EBL. In case of the HBL, value of R^2 (0.17) indicates that only 16.81% of net worth variation is explained by dividend variables. While in case of EBL, value R^2 (0.03) indicates that only 3.24% of net worth variation is explained by dividend variables similarly, in case of BOKL, value of R^2 (0.67) indicates tat only 67.24% of net worth is explained by dividend variables. However, this result is statistically significant at 5% level of significance since calculated value of 't' is more than tabulated value of 't' (2.179) in case of all banks.

According to above analysis, it can clearly be observed that beta coefficient (b) is positive in these three banks. It shows that there is positive relationship between dividend and other variables. While analyzing the significant of the test, it is found that test of regression coefficient (b) are significant at 5% level of significance in all the regression equations describe above of market price per share and net worth on Dividend per share, it found that the test of regression coefficient (b) are not significant at 5% level of significance in Dividend per share on Earning per share and net profit. But the test of regression coefficient (b)

is significant of Dividend per share on Net profit in case of BOKL. However, from the above analysis of regression results it is obvious that the coefficient of determination (R^2) is high in case of dividend per share on earning per share and Dividend per share on net profit in HBL, and market price per share on dividend per share in BOKL. It means regression results have satisfactory explained dividend per share variation by earning per share and net profit variation. But this result is not statistically significant at 5 $ level of significance because calculated value of 't' is less than tabulated value of 't' except in case of BOKL of dividend per share on Net profit. Similarly coefficient to determination (R^2) is quite low in case of dividend per share on earning per share, net worth on dividend per share and market price per share on dividend per share in EBL.

It means regression results have not satisfactory explained dividend per share variation by earning per share variation and net profit variation by dividend per share variation. This result is also not statistically significant because calculated value of 't' is low as compare to table value at 5% level of significance. However, there is positive relationship between dividend per share with earning per share, net profit, market price per share and net worth.

4.4 Test of Hypothesis

Hypothesis First:

Null Hypothesis (H_0): $\sigma_1 X \sigma_2 X \sigma_3$ i.e., there is no significant difference in EPS of HBL, EBL and BOKL.

Alternative Hypothesis (H_1): $\sigma_1 \mid \sigma_2 \mid \sigma_3$ i.e., there is significant difference in EPS of HBL, EBL and BOKL.

Table 4.16

Earning Per Share

Year / Bank	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	49.05	47.91	59.24	60.66	62.71
EBL	45.58	54.22	62.78	78.40	91.82
BOKL	27.50	30.10	43.67	43.50	59.94

For the computation of Test Statistic “F”, detail calculation is done on appendixE1

Total Sum of Square (T.S.S) =3906.83

Sum of Square due to Bank (SSB) =1656.87

Sum of square due to error (SSE) =2249.96

S.N	Source of Variation (SV)	Sum of Square	D.F	Mean Sum of square (MSS)	F-test
1	Due to Banks (Between Rows)	1656.87	2	828.44	$F = \frac{828.44}{187.50}$ = 4.42
2	Due to Error	2249.96	12	187.50	
3	Total	3906.83	14		

Critical Value: the tabulated value of F at 5% level of significant for 2 and 12 d.f is 3.89

Decision: since calculated value of F (4.42) is greater than tabulated value of $F_{0.05}$ H_0 is rejected and hence the alternative hypothesis H_1 is accepted. Therefore we conclude that there is significant difference in EPS between concerned banks.

Hypothesis Second:

Null Hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3$ i.e., there is no significant difference in DPS of HBL, EBL and BOKL.

Alternative Hypothesis (H_1): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e., there is significant difference in DPS of HBL, EBL and BOKL.

Table 4.17

Dividend Per Share

Year Bank	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	-	11.58	30	15	25
EBL	20	-	25	10	20
BOKL	10	15	18	20	2.11

For the computation of Test Statistic “F”, detail calculation is done on appendixE2

Total Sum of Square (T.S.S) =1186.12

Sum of Square due to Bank (SSB) =27.49

Sum of square due to error (SSE) = 1158.63

S.N	Source of Variation (SV)	Sum of Square	D.F	Mean Sum of square (MSS)	F-test
1	Due to Banks (Between Rows)	27.49	2	13.75	$F = \frac{27.49}{96.55}$ = 0.14
2	Due to Error	1158.63	12	96.55	
3	Total	1186.12	14		

Critical Value: the tabulated value of F at 5% level of significant for 2 and 12 d.f is 3.89

Decision: since calculated value of F (0.14) is less than tabulated value of $F_{0.05}$ H_0 is accepted and hence the alternative hypothesis H_1 is rejected. Therefore we conclude that there is no significant difference in DPS between concerned banks.

Hypothesis Third:

Null Hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3$ i.e., there is no significant difference in MPS of HBL, EBL and BOKL.

Alternative Hypothesis (H_1): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e., there is significant difference in MPS of HBL, EBL and BOKL.

Table 4.18

Market Price Per Share

Year / Bank	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	840	920	1100	1740	1980
EBL	680	870	1379	2430	3132
BOKL	295	430	850	1375	2350

For the computation of Test Statistic “F”, detail calculation is done on appendixE3

Total Sum of Square (T.S.S) = 9287638.93

Sum of Square due to Bank (SSB) =1031520.13

Sum of square due to error (SSE) = 8256118.80

S.N	Source of Variation (SV)	Sum of Square	D.F	Mean Sum of square (MSS)	F-test
1	Due to Banks (Between Rows)	1031520.13	2	515760.07	$F = \frac{515760.07}{688009.9} = 0.75$
2	Due to Error	8256118.80	12	688009.9	
3	Total	9287638.93	14		

Critical Value: the tabulated value of F at 5% level of significant for 2 and 12 d.f is 3.89

Decision: since calculated value of F (0.75) is less than tabulated value of $F_{0.05}$ H_0 is accepted and hence the alternative hypothesis H_1 is rejected. Therefore we conclude that there is no significant difference in MPS between concerned banks.

Hypothesis Fourth:

Null Hypothesis (H_0): $«_1 = «_2 = «_3$ i.e., there is no significant difference in Net worth of HBL, EBL and BOKL.

Alternative Hypothesis (H_1): $«_1 \neq «_2 \neq «_3$ i.e., there is significant difference in Net worth of HBL, EBL and BOKL.

Table 4.19

Net Worth

Year Bank	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
HBL	1063.10	1324.16	1541.76	1766.18	2154.65
EBL	472.82	540.29	692.59	822.79	1106.6
BOKL	892.49	1012.37	990.21	1069.34	981.97

For the computation of Test Statistic “F”, detail calculation is done on appendixE4

Total Sum of Square (T.S.S) = 4082213.88

Sum of Square due to Bank (SSB) =2414342.21

Sum of square due to error (SSE) =1667871.67

S.N	Source of Variation (SV)	Sum of Square	D.F	Mean Sum of square (MSS)	F-test
1	Due to Banks (Between Rows)	2414342.21	2	1207171.10	$F \text{ X} \frac{1207171.10}{138989.31} = 8.69$
2	Due to Error	1667871.67	12	138989.31	
3	Total	4082213.88	14		

Critical Value: the tabulated value of F at 5% level of significant for 2 and 12 d.f is 3.89

Decision: since calculated value of F (8.69) is greater than tabulated value of $F_{0.05}$ H_0 is rejected and hence the alternative hypothesis H_1 is accepted. Therefore we conclude that there is significant difference in Net worth between concerned banks.

4.5 Main Findings

1. Average earning per share of EBL is the highest amount among the three banks. Earning per share of EBL is in increasing trend but HBL and BOKL has fluctuated trend in these five periods.
2. Average dividend per share of HBL is the highest among the three banks and BOKL shows lowest value of dividend per share.
3. On the basis of dividend payout ratio BOKL is paying higher percentage of its earning as dividend among the three. In an average of five different years. BOKL shows highest percentage of dividend payout.
4. Average price earning ration of EBL is the highest among the three banks. HBL shows the lowest ratio. The highest price earning ratio indicates the favorable condition for the owner. Therefore, in this regard the performance of EBL for the last five year is the best among the three banks.
5. Average market value per share to book value per share ratio of EBL is the highest among three banks. Higher ratio indicates that there is greater chance of higher capital gain to EBL shareholder.
6. On the basis of dividend yield ratio, BOKL is the most efficient among three banks for the distribution of dividend on the basis of market price per share.

7. Dividend per share is positively correlated with earning per share, net profit, market price per share and net worth in case of HBL, EBL and BOKL. It means higher the earning per share, net profit, market price per share and net worth, higher will be the dividend per share and vice-versa.
8. In case of regression analysis of dividend per share on earning per share. Beta coefficient is positive in all banks. Among them HBL might be able to pay higher dividend per share if one rupee of earning per share is increased in all of them at the same time.
9. With respect to regression analysis of dividend per share on net profit beta coefficient is positive in all banks. It indicates if one rupee increase in net profit at the same time dividend per share of HBL, EBL and BOKL are increased by Rs. 0.04, Rs. 0.07 and 0.08 respectively.
10. As for the simple regression analysis of market price per share on dividend per share was concerned, beta coefficient is positive in EBL, HBL and BOKL. This indicates banks at the same time market price per share of HBL is increased by Rs. 122.70, market price of EBL is increased by Rs. 165.12 and market price of BOKL is increased by Rs. 125.92.
11. According to simple regression analysis of net worth on dividend per share beta coefficient is positive among these banks. This shows that if one rupee dividend per share will increase in these banks at the same time, net worth of HBL, EBL and BOKL might be increased by Rs. 176.53, Rs.94.12 and Rs. 115.07 respectively.
12. The coefficient of determination (R^2) is higher in case of dividend per share on earning per share and market price per share on dividend per share in HBL. It means regression results have satisfactory explained dividend per share variation by earning per share variation and market price per share variation by dividend per share variation.
13. The coefficient of determination (R^2) is quite low in case of dividend per share on earning per share, dividend per share on net profit, market price per share on dividend per share and net worth on dividend per share in EBL it means regression results have not satisfactory explained dividend per share variation on earning per share, net profit, market price per share and net worth variation.
14. There is not stable dividend paid by three banks over the five years. They are paying fluctuated dividend. Similarly, there are not any criteria to adopt payout ratio therefore it clearly exists that there is not a long term vision in the context of dividend decision.

15. While considering the three banks, market price is considerably higher than net worth. In some case, market price of share is more than two times higher than net worth. This clearly shown that investors do not have adequate knowledge about how to evaluate value of shares before investing on it.
16. The pattern of dividend payout ratio of these banks demonstrated the conservative dividend policy followed by the banks. Relationship between the earnings, dividend payment and growth and expansion programmed of the companies did not exist. Practices of low dividend payout without having growth and diversification schemes leads to have check on maximization of the shareholders wealth. In this way dividend policy followed by the banks should not appropriate because this type of dividend policy have not any rule and criteria.
17. The test of hypothesis carried out shows out that there is a significant difference between EPS and NW of all three commercial banks but there is no significant difference in the DPS and MPS of these three commercial banks.

CHAPTER V
SUMMARY, CONCLUSION AND RECOMMENDATION

Most of the things about dividend decision and a brief introduction of this study have been already presented in the first chapter. Besides, the reviews of literature with possible review of ideas theories and research findings have also been presented in second chapter. Moreover, research methodology is presented in third chapter. All the available data are presented and analyzed in the fourth chapter relating to dividend policy in these sample banks.

In the concluding chapter an attempt has been made first to present summary, conclusion and recommendation.

5.1 Summary

Dividend paid out by a company serves as a simple and comprehensive signal of management's interpretation of a firm's recent performance and its future prospects. Dividend policy is therefore a very delicate balancing between keeping the shareholders happy and fulfilling the financial needs of the company. If a firm is unable to pay satisfactory dividends to its shareholders then it will face difficulties in raising equity capital from the capital markets which it needs in the future. On the other hand if it distributes dividend at the expense of future expansions and investment then it would be jeopardizing its future prospects by loosing out on potential investment opportunities. Thus dividend policy for any firm is a balancing act between instant gratification for shareholders and potential future investment.

Dividend paying banks have been selected for the study so that references can be made about implication of dividend we can see the unclear practices on distribution of dividend in Nepalese companies. Shareholders have high expectation that market price of share will be significantly higher than net worth which is fulfill in these sample banks. However, the dividend is paid only in profitable years end in most of the years. Instability of dividend and inconsistent payout ratio is the most applied phenomena of Nepalese dividend distribution

practices. But the companies invested by foreigners (JVBS) are paying dividend more attractively than the companies promoted by indigenous promoters. However, JVBS are also not guided by an appropriate dividend policy. This will actually affect the market price, goodwill of all such banks in the long run. The theoretical statement of the study was that dividend decision should depend upon earning per share and net profit. Similarly, prices of stock and net worth should depend upon dividend decision.

At the first stage, while seeing the analysis part, different financial indicators tools of these banks shows that average dividend per share of HBL is the highest among the three banks, which indicates that HBL is paying higher dividend to its shareholders. On the average earning per share EBL is the most successful among the three banks. On the basis of average dividend payout ratio, BOKL is paying higher portion of dividend of it's earning as dividend.

Similarly, average price earning ratio of EBL is also highest than EBL and BOKL, which means EBL has better performance for enhanced the wealth of shareholders. Moreover, on the basis of market value pre share to book value per share, EBL performance is better because increasing trend of market value per share is higher in EBL. On the basis of dividend yield ratio BOKL is more efficient for distribution of dividend on the basis of market value per share.

At second stage, dividend per share is positively correlated with earning per share, net profit, market price per share and net worth in all of these three banks.

At the third stage, simple regression analysis is used to interpret the results. As far the simple regression of dividend per share on earning per share, beta coefficient is positive in all of these three sample banks. The positive sign for beta coefficient of earning per share indicates that dividend per share increase with higher earning per share remaining other variables constant.

With respect to regression analysis dividend per share on net profit, beta coefficient is positive in these banks. Positive beta coefficient indicates that increase in net profit results increase in dividend per share.

As far the simple regression of market price per share on dividend per share concerned, beta coefficient is positive in HBL, EBL and BOKL. This result indicates that increase in dividend per share results increase in market price per share.

With respect to simple regression of net worth on dividend per share, beta coefficient is also positive in all banks this shows that increase in dividend per share results increase in net worth of these banks.

With respect to hypothesis setting, there is no significant difference in DPS and MPS but there is significant difference in EPS and NW of the sample companies.

From the above analysis the study found that there is not a consistent dividend policy in any of the three sectors analyzed, pay out of dividend seems to be a totally random act decided upon by the whims of the board of directors of the companies. This study not only shows a developing capital markets but also the lack of knowledge of the investors.

5.2 Conclusion of the Study

The study was unable to find a concrete dividend policy for any one of the three commercial banks studied and basically dividend payout was decide by the board of directors on a year to year basis. This dividend payout decision is probably base financial performance of the company in the previous year. Because of lock of dividend policies in any of the companies, the results of the analysis show some very strange behaviors, the financial performance indicate of the companies studied.

The analysis performed on the financial data of the three commercial banks chosen has failed to establish a concrete relation between dividends polices and practices in Nepal. There appear to be slight general trends but no set of rules apply to all the companies. Moreover, there was a few surprising results that seemed to defy economic logic. By analyzing the financial and statistical indicator

of all the three banks, the following conclusions have been drawn regarding the prevalent dividend payout practices of the public listed companies of Nepal.

- Dividend practices of the sample companies studied show that there isn't a concrete or stable dividend policy by any of the companies. Hence the decision on distribution of dividends seems to be made on flexible manner.
- According to this study, some banks do not pay dividend in some years. Further the price of shares on which the dividend is paid fluctuating trend.
- There are no legal rules those binding companies to pay dividend when they are running at profit. Not only the companies do not have any clear policy towards dividend decision but also there is no provision in company act.
- These banks follow no specific dividend payment strategy payment of cash and stock dividends are made without wise managerial decision.
- Although total earning after tax is increasing every year, earning per share is highly fluctuating earning per share could not made clear to the public.
- The distribution of dividend has a positive impact on the markets of share for all three commercial banks.
- Changes in DPS affect the MPS of different companies differently.
- The correlation between DPS and market price per share and DPS and net worth are positive for all three sample banks.
- MPS is much higher that net worth per share for these banks. This indicates that the investors either have a very optimistic view on the future performance of the companies or that they are not investigating the performance indicators of the companies in which they are investing properly.
- Although there seems to a general positive correlation between the various financial indicators such as EPS, DPS, MPS and Net worth, many of the coefficients of correlations are actually insignificant to base any sound conclusions from the result.
- The majority of the investors in the capital markets of Nepal are not economically sound in their judgment to invest in share market. A lot of them invest without looking at even the basic financial indicators of the companies they are investing in.

- There are differences financial position of high dividend paying and low dividend paying companies. Other things remaining same financial position of high dividend paying companies is comparatively better than low dividend paying companies and not paying dividend companies.
- The system of liberal economic polices and capital markets are still a relatively new phenomenon in Nepal and are growing stronger. However it is still not so well developed to be performing in an efficient manner.
- More than one economic parameter determines the economic indicators such as DS and MS. For example DPS is affected by EPS and NP.

5.3 Recommendations

The primary concern of this study is to look in to the dividend policies and practices existing in the relatively immature capital markets economy of Nepal and to draw attention to both the opportunities and threats regarding the current practices. Based on the results of this study, the researcher has come up with recommendations have been separated under different heading to be specific to the group of people who are involved in the roper functioning of the share markets: the shareholders, the company management, the stock brokers and lastly the government of Nepal. This suggestion will be helpful to improve existing condition, these recommendations are explained below.

For the share holders

- They should be aware of their rights as the shareholder.
- They should have sound knowledge about the financial state of the companies they have invested in.
- They should invest in the company which have paid regular dividend for same years.
- They should know the book net worth of the share.
- They should keep track of their investment and be aware of when to sell their shares and when to keep holding on to them.
- Shareholders should attend the annual general meeting regularly and study the annual financial reports to be aware of what happening in the companies in which they have invested their money.

- They should analyze the financial indicators of the company through various ratio analysis techniques.

For the management

- Management should always keep the shareholder's interest at the top priority.
- With regard to dividend policy the management should formulate a policy covering different economical environments and obey to the policy.
- The management should not blame outside influences for bad performances and should be honest to the interest of the shareholders.
- Management should not take unfair advantage of their positions in the company.

For the stock Brokers

- Stock brokers should be aware of the performances of the companies whose shares they trade.
- They should be aware of the prospects of the capital markets.
- They should not artificially prop up the price of the share sand lulled gullible investors in to buying them an inflated prices.
- They should work for the proper growth of the capital market of the country.

For the government.

- The government, once it has decided on the liberal economic policy, it should distance itself from interfering with the running of the public companies.
- It has to have a strong set of laws to prevent shareholders from being cheated of their money by unfair means.
- Government should strict eyes in the practices of the auditors and authenticity of their works.
- The Government should also make laws to protect the rights of the minority shareholders because the minority shareholders are often helpless to find justice even though they know them being cheated out of their proper share of money.

BIBILOGRAPHY

Adhikari, B. (2008), *"Cash Dividend Practices in Nepalese Commercial Banks with Special Reference to Nabil, Himalayan and Standard Chartered"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Adhikari, N. (1997), *"Corporate Dividend Practices in Nepal"*, Unpublished Master's Degree Thesis, Kathmandu: Central Department of Management, Tribhuvan University.

Aryal, H. R. (1997), *"Dividend Policy: Comparative study Between Nepal Arab Bank Limited and Nepal Grind lays Bank Limited"*, Unpublished Master's Degree Thesis, Kathmandu: Central Department of Management, Tribhuvan University.

Basnet, P. (2004), *"Dividend Policy of Listed Companies in Nepal. A Comparative Study of Banking and Insurance Companies*", Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Bhandari, R. (2001), *"Dividend Policy: Comparative Study between Banks and Insurance Companies"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Bhattarai R. (2005), "*NEPSE gained in 2004*" New Business Age, Kathmandu: New Business Pvt. Ltd. Vol. No. 03(11):5.

Bhattarai, M. (2002), "*Dividend Policy and Its Impact on Market Price of Stock"*, An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Bhattarai, R. (2005), "*Split Shares to Benefit Small Investors*", New Business Age, Kathmandu: **New Business Age Pvt. Ltd.**, 4(2): 3-7.

Chawala, D. and Srinivasan G. (1987), "*Impact of Dividend and Retention on Share Price*," An Econometric Study Decision, Vol. 14, No. 3, 1987, PP.137-140.

Dahal, S. (2006), *"Dividend Policy: a Comparative Study of Himalayan Bank Limited, Everest Bank Limited and Bank of Kathmandu Limited"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Dhungana D. R. (2003), *"Dividend Policy: A Comparative Study between Banks and Insurance Companies"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Feldstein, M. and Green, J. (1983), "*Why do Corporations Not Eliminate their Dividends and Increase their Retained Earning*?" The American Economic Review, New York: American Economic association 73 (3):17-25.

Gajurel, D.P. (2006), "*Macroeconomic Influences on Corporate Capital Structure", Prayas (Journal of Management),* Kathmandu: Nepal Commerce Campus, Tribhuvan University.

Gajurel, R. P. (2005), *"A Comparative Study of Dividend Practices of Banks and Finance Companies",* An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Gautam, R. R. (1998), *"Dividend Policy: Comparative Study on Dividend Policy of Grindlays Bank Ltd, Nepal Indosuez Bank Ltd and Nepal Arab Bank Ltd"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Gautam, R.R.and Thapa, Kiran (2000), *"Capital Structure Management"*, Katmandu: Asmita Books Publishers and Distributors

Gautam, S. (2004), *"Dividend Policy of Nepalese Financial Institution"*, Unpublished Master's Degree Thesis, Katmandu: Shankar Dev Campus, Tribhuvan University.

Gitmen, L. J. (1988), "*Principle of Managerial Finance*". (7th Edition) New York: Harper Collins Collage Publisher

Gordon M. J. (1962) "*The Investment, Financing and Valuation of Corporation"*, Journals of Finance, New York: American Finance Association. 11(1):264- 272.

Gov/N (2006), **"***Company Act 2006"*, Kathmandu: Government of Nepal**.**

Gurung, M. (2003), *"Dividend Policy of Nepalese Listed Companies with Reference to Commercial Banks in Nepal"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Jack C. (1990), "*Investment*". New York: Mc Graw Hill, International Edition

Khan, M.Y. and Jain, P.K. (1995), "*Financial Management*". New Delhi: Tata McGraw Hill Publishing Co. Ltd

Levin, R. I. and Rubin, D. S. (1994), "*Statistics of Management*". New Delhi: Prentice Hall of India Pvt. Ltd.

Linter, J. (1956), "*Distribution of Incomes of Corporations among Divides, Retained Earnings and Taxes*", American Economic Review, New York: American Economic Association *Vol*.46, pp. 97-113.

Manandhar, K.D. (2001), "*Bonus Share and Dividend Changes Empirical Analysis in Nepalese Context. Management Dynamics*": A Journal of Management, Kathmandu: Nepal Commerce Campus 2 (1): 15-20.

Miller, M. (1986), *"Behavior Rationality in France: The Case of Dividends*", Journal of Business, Vol. 59, pp. 451-468.

Nepal Rastra Bank (2005) ***"****Unified Directives for Banking and Financial Instututions,****"*** NRB, Kathmandu

Pandey, I.M. (1995), "*Financial Management*". New Delhi: Vikash Publishing House Pvt. Ltd.

Pradhan, R. and Adhikari, N. R. (2004), "*Dividends and Stock Performance in Nepal*", Banaijaya Sansar **,** Association of CDM, TU. 5 (2): 24-35.

Pradhan, R. S. (1993), "*Stock Market Behavior in a Small Capital Market*": A Case of Nepal. The Nepalese management Review, Kathmandu: Tribhuvan university, 9 (1): 20-32

Pradhan, R. S. (2003), "*Effects of Dividend on Common Stock Prices: The Nepalese Evidence*", Research in Nepalese Finance, Kathmandu: Buddha Academic Publishers and Distributors.

Shah, K. (2002), "*Dividend and Its Impact on Stock Price*", An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Sharpe, W.F., Alexander, J.V. & Bailey, J.V. (1998), "*Investment"*, Prentice-Hall of India Private Limited, New Delhi.

Shiller, R. J. (1981), "*Do Stock Price Move too Much to be Justified By Subsequent Changes in Dividends*?", The American Economic Review, New York: American Economic Association 71 (3):423-436

Shrestha, K. L. (2004), *"Dividend Policy and Its Impact on Stock Price: an Empirical Analysis on Joint Venture Banks of Nepal"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Shrestha, M.K. (1992), "*Shareholders' Democracy and Annual General Meeting Feedback"*, Portfolio Analysis, Kathmandu: Nepal Publication.

Smith, D.T. (1977), "*Relief from Double Taxation of Dividend Income*", Harvard Business Review, New York: Harvard Business Publishing Jan-Feb 1977, pp. 90-91.

Thapa, D. (2003), *"Dividend Policy and Practices: A Comparative Study between Banks and Insurance Companies in Nepal"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Timalsina, S. (1997), *"Dividend Policy: A Comparative Study between NGBL and NIBL"*, Unpublished Master's Degree Thesis, Kathmandu: Shankar Dev Campus, Tribhuvan University.

Walter, J. E. (1996), "*Dividend Policy: Its Influence on the Value of the Enterprise*", Journal of Finance, New York: American Finance Association 24(5):280-291.

Weston, J.F. and Copeland T.E. (1992), "*Managerial Finance"*, New York: The Dryden Press.

Annual Reports

Himalayan Bank Limited [2003/04 to2007/08], Annual *Report;* Kathmandu.

Everest Bank Limited [2003/04 to2007/08], Annual *Report;* Kathmandu.

Bank of Kathmandu [2003/04 to2007/08], *Annual Report;* Kathmandu.

Websites:

http://www. Nepalstock.com (Dec 2009)

http://www.investopedia.com (Dec 2009)

http://www.nepalstock.com (Dec 2009)

http://www.sebon.com (Dec 2009)

http://www.nepalnews.com (Dec 2009)

http://www.ekantipur.com (Dec 2009)

http://www.nrb.org.np (Dec 2009)

http://www.bok.com.np(Dec 2009)

http://www.nepalsharemarket.com (Dec 2009)

http://www.everestbankltd.com (Dec 2009)

http://www.himalayanbank.com (Dec 2009)

Appendix –A

For calculation, following Statistical formula is used

1. $\pm_x \times \sqrt{\frac{x^2}{n} - \left(\frac{x}{n}\right)^2}$ or $\pm_x \times \sqrt{\frac{(x - \bar{x})^2}{n}}$ when | $x \times 0$

2. $\pm_y \times \sqrt{\frac{y^2}{n} - \left(\frac{y}{n}\right)^2}$ or $\pm_y \times \sqrt{\frac{(y - \bar{y})^2}{n}}$ when | $y \times 0$

3. $r \times \frac{xy}{n \pm_x \pm_y}$

4. $S.E. \times \frac{\pm_X}{\pm_Y} \frac{\sqrt{1 - r^2}}{\sqrt{n}}$

5. $t \times \frac{b}{S.E}$

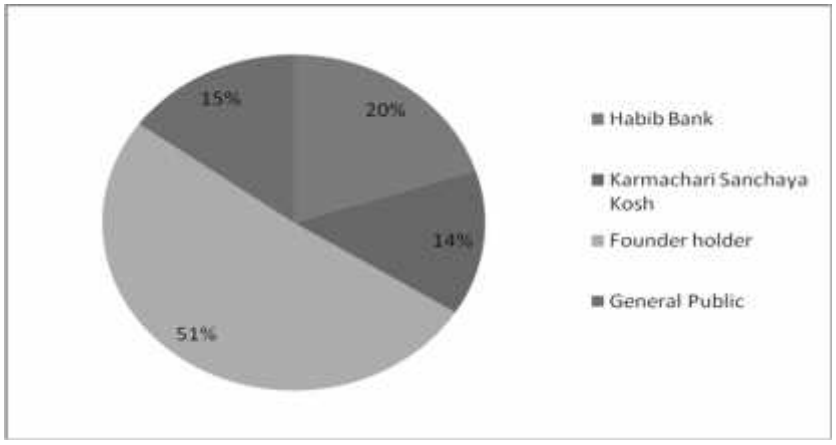
Appendix-B

HIMALAYAN BANK LIMITED

Himalayan Bank Ltd is a joint venture bank with Habib Bank Limited of Pakistan was established 1992 (2048 B. S.) under the Company Act 1964. This is the first Joint venture bank with maximum share holding by the Nepalese private sector, which managed by Nepali chief executive. An authorized capital of the bank has been Rs. 600,000,000 issued capital Rs. 3000,000,000. Its ownership is composed of founder shareholders 51%, Habib bank Ltd, Pakistan, 20% Karmachari Sanchaya Kosh 14%, and Public 15%.

Presently the bank has 17 branches and 32 ATMs in various places of Nepal. The head office is at thamel. The main aim of the bank is to extend professional banking service to various section of the society and contribute in the economic development of the county.

Himalayan Bank



Appendix-B1

Year	DPS	EPS	Net profit (in million)	MPS (in Rs)	Net Worth (in million)	Book Value per share
2003/04	-	49.05	263.03	840	1324.16	246.93
2004/05	11.58	47.91	308.30	920	1541.76	239.59
2005/06	30	59.24	457.45	1100	1766.18	228.72
2006/07	15	60.66	491.82	1740	2146.54	264.74
2007/08	25	62.74	635.87	1980	2513.00	247.95

Appendix-B2

Calculation of dividend payout ratio

Year	DPS	EPS	$DPR \text{ X} \frac{\text{DPS}}{\text{EPS}}$
2003/04	-	49.05	-
2004/05	11.58	47.91	24.17%
2005/06	30	59.24	50.64%
2006/07	15	60.66	24.73%
2007/08	25	62.74	39.85%

Where,

DPS = Dividend Per Share

EPS = Earning Per Share

DPR = Dividend Payout Ratio

Appendix-B3

Calculation of Price Earning Ratio

Year	EPS	MPS (in Rs)	$P/E \text{ Ratio X} \frac{\text{MVPS}}{\text{EPS}}$
2003/04	49.05	840	17.12
2004/05	47.91	920	19.20
2005/06	59.24	1100	18.57
2006/07	60.66	1740	28.68
2007/08	62.74	1980	31.56

Where,

MVPS =Market Value Per Share

P/E Ratio = Price Earning Ratio

Appendix-B4

Calculation of market value per share to book value per share

Year	MPS (in Rs)	BVPS	$\frac{\text{MVPS}}{\text{BVPS}}$
2003/04	840	246.93	3.40
2004/05	920	239.59	3.84
2005/06	1100	228.72	4.81
2006/07	1740	264.74	6.57
2007/08	1980	247.95	7.98

Where,

MVPS =Market Value Per share

BVPS = Book Value Per Share

Appendix-B5

Calculation of Dividend Yield Ratio

Year	DPS	MPS (in Rs)	D/Y Ratio $X\frac{\text{DPS}}{\text{MVPS}}$
2003/04	-	840	-
2004/05	11.58	920	1.26%
2005/06	30	1100	2.73%
2006/07	15	1740	0.86%
2007/08	25	1980	1.26%

Where,

DPS = Dividend Per Share

MVPS = Market Value Per Share

D/Y Ratio = Dividend Yield Ratio

Appendix-B6

Variables use in analysis

Year	X	Y	$x \, X \, x \, Z \, \bar{x}$	$y \, X \, y \, Z \, \bar{y}$	xy	x^2	y^2
2003/04	49.05	0	-6.87	-16.32	112.12	47.20	266.34
2004/05	47.91	11.58	-8.01	-4.74	37.97	64.16	22.47
2005/06	59.24	30	3.32	13.68	45.42	11.02	187.14
2006/07	60.66	15	4.74	-1.32	-6.26	22.47	1.74
2007/08	62.74	25	6.82	8.70	59.33	46.51	75.69
Total	279.6	81.58			248.58	191.36	553.38

Note:

Values of x represent earning per share

Values of y represent dividend per share

Results:

n = 5 a = 0.70

x = 279.60 b = 0.28

xy = 248.58 $\pm_{\varepsilon}$ =6.18

x^2 = 191.36 $\pm_{\psi}$ =10.52

y^2 = 553.38 y = 81.58

$\bar{\varepsilon}$ = 55.92 $\bar{\psi}$ =16.32

Simple regression results of DPS = a + b EPS

=0.70 + 0.28 EPS

Where

DPS = Dividend Per Share

EPS = Earning Per Share

Then,

Coefficient of determination (R^2) = 0.58

Standard Error (S.E) =0.49

$$\text{t-value} = \frac{b}{S.E} = \frac{0.28}{0.49} = 0.57$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\sum x$ ……(i)

$xy = a\sum x + b\sum x^2$ ……(ii)

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

$= \sqrt{\frac{191.36}{5}}$

$= \sqrt{38.27}$

$= 6.18$

$\sigma_y = \sqrt{\frac{\sum (y - \bar{y})^2}{n}}$

$= \sqrt{\frac{553.69}{5}}$

$= \sqrt{110.73}$

$= 10.52$

$r = \frac{\sum xy}{n\sigma x \sigma y}$

$= \frac{248.58}{5 \times 6.18 \times 10.52}$

$= 0.76$

$r^2 = 0.58$

$S.E = \frac{\sigma y}{\sigma x} \frac{\sqrt{1 - r^2}}{\sqrt{n}}$

$= \frac{10.52}{6.18} \times \frac{\sqrt{1 - 0.58}}{\sqrt{5}}$

$= 1.70 \times 0.29 = 0.49$

$y = Na + b\sum x$ ……..(i)

81.58 =5a + b 279.6

a = 16.32 – 55.92b……..(iii)

Substituting the value of (a) in eq (ii)

248.58 = 279.60 a + 191.36 b

248.58 = 279.60(16.32 – 55.92 b) + 191.36 b

248.58 – 4561.95 = -15635.23 b + 191.36 b

-4313.37= -15443.87b

b = 0.28

Substituting the value of b in eq (iii), we get

a = 16.32 – 55.92 x 0.28

= 0.70

Appendix-B7

Variables use in analysis

Year	x	y	$x \times x - \bar{x}$	$y \times y - \bar{y}$	xy	x^2	y^2
2003/04	263.03	0	-168.26	*-16.32*	2746.00	28311.43	266.34
2004/05	308.30	11.58	-122.99	*-4.74*	582.97	15126.54	22.47
2005/06	457.45	30	26.16	*13.68*	357.87	684.35	187.14
2006/07	491.82	15	60.53	*-1.32*	-79.90	3663.88	1.74
2007/08	635.87	25	204.58	*8.68*	1775.75	41852.98	75.34
Total	2156.47	81.58			5382.70	89639.17	553.04

Note:

Values of x represent Net Profit

Values of y represent dividend per share

Results:

n = 5 a = 1.02

x = 2156.47 b = 0.04

xy = 5382.70 $\pm_{\varepsilon}$ = 133.89

x^2 = 89639.17 $\pm_{\psi}$ = 10.52

y^2 = 553.04 y = 81.58

$\bar{\varepsilon}$ = 431.29 $\bar{\psi}$ = 16.32

Simple regression results of DPS = a + b NP

= 1.02 + 0.04 NP

Where

DPS = Dividend Per Share

NP = Net Profit

Then,

Coefficient of determination (r^2) = 0.58

Standard Error (S.E) = 0.02

$$\text{t-value} = \frac{b}{S.E} = \frac{0.04}{0.02} = 2.00$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations are used:

Regression equation of y on x

$y = Na + b\sum x + \varepsilon$ ……..(i)

$xy = a\sum x + b\sum x^2 + \varepsilon$ …….(ii)

$$\pm_x = \sqrt{\frac{\sum(x - \bar{x})^2}{n}} \qquad \pm_y = \sqrt{\frac{\sum(y - \bar{y})^2}{n}}$$

$$= \sqrt{\frac{89639.17}{5}} \qquad = \sqrt{\frac{553.04}{5}}$$

$$= \sqrt{17927.83} \qquad = \sqrt{110.61}$$

$$= 133.89 \qquad = 10.52$$

$$r = \frac{xy}{n \pm x \pm y} \qquad S.E = \frac{\pm y}{\pm x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$$

$$= \frac{5382.70}{5 \mid 133.89 \mid 10.52} \qquad = \frac{10.52}{133.89} \mid \frac{\sqrt{1 - 0.58}}{\sqrt{5}}$$

$= 0.76$ $=0.079 \times 0.26 = 0.02$

$r^2 = 0.58$

$y = Na + b\sum x + \varepsilon$

81.58 = 5a + b 2156.47

16.32 = a + b 431.29

a = 16.32 – b 431.29 …….(iii)

Substituting the value of (a) in eq (ii)

5382.70 = a 2156.47 + b 89639.17

5382.70 = (16.32 – b 431.29) 2156.47 + b 89639.17

5382.70 – 35184.96 = -b 930072.6 + b 89639.17

-29802.27 = -840433.4016 b

b = 0.04

Substituting the value of b in eq (iii), we get

a = 16.32 -0.04 x 431.29

= 1.02

Appendix-B8

Variables use in analysis

Year	x	y	$x \, X \, x \, Z \, \bar{x}$	$y \, X \, y \, Z \, \bar{y}$	xy	x^2	y^2
2003/04	0	840	-16.32	*-476*	7768.32	266.34	226576.00
2004/05	11.58	920	-4.74	*-396*	1877.04	22.47	156816.00
2005/06	30	1100	13.68	*-216*	-2954.88	187.14	46656.00
2006/07	15	1740	-1.32	*424*	-559.68	1.74	179776.00
2007/08	25	1980	8.68	*664*	5763.52	75.34	440896.00
Total	81.58	6580			11894.32	553.04	1050720.00

Note:

Values of x represent dividend per share

Values of y represent Market price Per share

Results:

n = 5 a = -686.46

x = 81.58 b = 122.70

xy = 11894.32 $\pm_{\varepsilon}$ = 10.52

x^2 =553.04 $\pm_{\psi}$ = 458.41

y^2 = 1050720 y = 6580

$\bar{\varepsilon}$ = 16.32 $\bar{\psi}$ = 1316

Simple regression results of Pm = a + b DPS

= -686.46 + 122.70 DPS

Where

DPS = Dividend Per Share

Pm = Market Price Per Share

Then,

Coefficient of determination (R^2) = 0.24

Standard Error (S.E) = 16.96

$$\text{t-value} = \frac{b}{S.E} = \frac{122.70}{16.96} = 7.23$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations are used:

Regression equation of y on x

$$y = Na + b\sum x \quad \ldots\ldots\ldots\ldots..(i)$$

$$xy = a\sum x + b\sum x^2 \quad \ldots\ldots\ldots\ldots.(ii)$$

$$\pm_x = \sqrt{\frac{(x - \bar{x})^2}{n}} \qquad \pm_y = \sqrt{\frac{(y - \bar{y})^2}{n}}$$

$$= \sqrt{\frac{553.04}{5}} \qquad = \sqrt{\frac{1050720}{5}}$$

$$= \sqrt{110.61} \qquad = \sqrt{210144}$$

$$= 10.52 \qquad = 458.41$$

$$r = \frac{xy}{n \pm x \pm y} \qquad S.E = \frac{\pm y}{\pm x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$$

$$= \frac{11894.32}{5 \mid 10.52 \mid 458.14} \qquad = \frac{458.41}{10.52}\frac{\sqrt{1 - 0.24}}{\sqrt{5}}$$

$$= \frac{11894.32}{24112.37} \qquad = 43.57 \text{ x } 0.39$$

$$= 0.49 \qquad = 16.96$$

$r^2 = 0.24$

$$y = Na + b\sum x$$

6580 = 5 a + b 81.52

a = 1316 – 16.32 b……(iii)

Substituting the value of a in eq (ii)

11894.32 = a 81.58 + b 553.04

11894.32 = (1316 – 16.32 b) 81.58 + b 553.04

11894.32 – 107359.3 = - 1331.06 b + b 553.04

-95464.96 = -778.02 b

b = 122.70

Substituting the value of b in eq (iii), we get

a = 1316 – 16.32 x 122.70

= 1316 – 2002.46 = -686.46

Appendix-B9

Variables use in analysis

Year	x	y	$x \, X \, x \, Z \bar{x}$	$y \, X \, y \, Z \bar{y}$	xy	x^2	y^2
2003/04	0	1324.16	-16.32	*-534.17*	8717.65	266.34	285337.59
2004/05	11.58	1541.76	-4.74	*-316.57*	1500.54	22.47	100216.56
2005/06	30	1766.18	13.68	*-92.15*	-1260.61	187.14	8491.62
2006/07	15	2146.54	-1.32	*288.21*	-380.44	1.74	83065.00
2007/08	25	2513	8.68	*654.67*	5682.54	75.34	428592.81
Total	81.58	9291.64			14259.68	553.04	905703.59

Note:

Values of x represent dividend per share

Values of y represent Net Worth

Results:

n = 5 a = -1021.90

x = 81.58 b = 176.53

xy = 14259.68 $\pm_{\varepsilon}$ =10.52

x^2 = 553.04 $\pm_{\psi}$ = 425.61

y^2 = 905703.59 y =9291.64

$\bar{\varepsilon}$ = 16.32 $\bar{\psi}$ =1858.33

Simple regression results of NW = a + b DPS

= -1021.90 +176.53 DPS

Where

NW = Net Worth

DPS = Dividend Per Share

Then,

Coefficient of determination (R^2) = 0.17

Standard Error (S.E) = 36.86

$$\text{t-value} = \frac{b}{S.E} = \frac{-1021.90}{36.86} = -27.72$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

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

$= \sqrt{\frac{553.04}{5}}$

$= \sqrt{110.61}$

= 10.52

$\sigma_y = \sqrt{\frac{\sum (y - \bar{y})^2}{n}}$

$= \sqrt{\frac{905703.59}{5}}$

$= \sqrt{181140.72}$

= 425.61

$r = \frac{\sum xy}{n\sigma x\sigma y}$

$= \frac{14259.68}{5 \times 10.52 \times 425.61}$

$= \frac{14259.68}{34729.77}$

= 0.41

$S.E = \frac{\sigma y}{\sigma x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$

$= \frac{425.61}{10.52} \times \frac{\sqrt{1 - 0.17}}{\sqrt{5}}$

= 40.46 x 0.91

= 36.86

r^2 =0.17

$y = Na + b\sum x$

9291.64 = 5 a + 81.58 b

a = 1858.33 – 16.32 b……(iii)

Substituting the value of (a) in eq (ii)

14259.68 = a x 81.58 + b 553.04

14259.68 = (1858.33 – 16.32 b) 81.58 + b 553.04

14259.68 - 151602 = -1331.06 b + 553.04 b

-137342.72 = -778.02 b

b = 176.53

Substituting the value of b in eq (iii), we get

a = 1858.33 – 16.32 x 176.53

= 1569.98 – 2880.23 = -1021.90

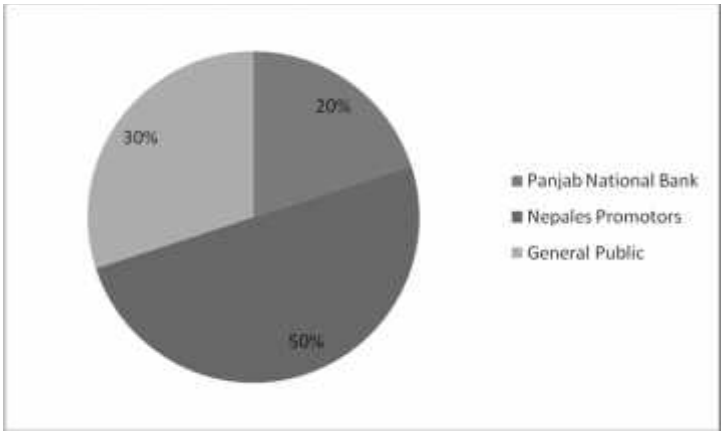
Appendix-C

EVEREST BANK LIMITED

As a sequel to the policy of NG to open the banking sector for private and foreign participation starting from mid eighties, Everest Bank Limited was established in 1993 under the company ACT 1964 with an objective of carrying out commercial banking activities under the commercial bank act 1974. United Bank of India Ltd under technical services agreement signed between it and Nepali promotes was managing over the management to Punjab National bank Ltd, India. It was composed by which holds 20% equity on the bank's share capital, Nepalese promoters 50% and general public 30% hold the balance equity of the bank.

The bank has got an authorized capital Rs. 400, 000, 000 issued capital Rs. 264, 000, 000 and paid up capital Rs. 220, 858, 600. Presently the bank has 26 branches. Head office is at New Baneshwor. The main aim of EBL is to extend professional banking service to various section of the society and they're of contribution in the economic development of the country.

Everest Bank Limited



Appendix-C1

Year	DPS	EPS	Net profit (in million)	MPS (in Rs)	Net Worth (in million)	Book Value per share
2003/04	20	45.58	143.58	680	540.29	171.52
2004/05	-	54.22	170.79	870	692.59	219.87
2005/06	25	62.78	237.31	1379	822.79	217.67
2006/07	10	78.42	296.41	2430	1106.60	292.75
2007/08	20	91.82	451.22	3132	1581.20	321.77

Appendix-C2

Calculation of Dividend Payout Ratio

Year	DPS	EPS	$DPR \text{ X} \frac{\text{DPS}}{\text{EPS}}$
2003/04	20	45.58	43.88%
2004/05	-	54.22	-
2005/06	25	62.78	39.82%
2006/07	10	78.4	12.75%
2007/08	20	91.82	21.78%

Where,

DPS = Dividend Per Share

EPS = Earning Per Share

DPR = Dividend Payout Ratio

Appendix-C3

Calculation of Price Earning Ratio

Year	EPS	MPS (in Rs)	$P/E \text{ Ratio X} \frac{\text{MVPS}}{\text{EPS}}$
2003/04	45.58	680	14.93
2004/05	54.22	870	16.64
2005/06	62.78	1379	21.97
2006/07	78.42	2430	30.99
2007/08	91.82	3132	34.11

Where,

MVPS =Market Value Per Share

P/E Ratio = Price Earning Ratio

EPS = Earning Per Ratio

Appendix-C4

Calculation of market value per share to Book Value per share

Year	MPS (in Rs)	BVPS	$\frac{\text{MVPS}}{\text{BVPS}}$
2003/04	680	171.52	3.96
2004/05	870	219.87	3.96
2005/06	1379	217.67	6.34
2006/07	2430	292.75	8.30
2007/08	3132	321.77	9.73

Where,

MVPS =Market Value Per share

BVPS = Book Value Per Share

Appendix-C5

Calculation of Dividend Yield Ratio

Year	DPS	MPS (in Rs)	D/Y Ratio X$\frac{\text{DPS}}{\text{MVPS}}$
2003/04	20	680	2.29%
2004/05	-	870	-
2005/06	25	1379	1.81%
2006/07	10	2430	0.41%
2007/08	20	3132	0.64%

Where,

DPS = Dividend Per Share

MVPS = Market Value Per Share

D/Y Ratio = Dividend Yield Ratio

Appendix-C6

Variables use in analysis

Year	x	y	$x - \bar{x}$	$y - \bar{y}$	xy	x^2	y^2
2003/04	45.58	20	-20.98	5	-104.90	440.16	25.00
2004/05	54.22	0	-12.34	-15	185.10	152.28	225.00
2005/06	62.78	25	-3.78	10	-37.80	14.29	100.00
2006/07	78.42	10	11.86	-5	-59.30	140.66	25.00
2007/08	91.82	20	25.26	5	126.30	638.07	25.00
Total	332.82	75			109.40	1385.45	400.00

Note:

Values of x represent earning per share

Values of y represent dividend per share

Results:

n = 5 a = -0.65

x = 332.82 b = 0.24

xy = 109.40 $\pm_{\varepsilon}$ = 16.65

x^2 = 1385.45 $\pm_{\psi}$ = 8.94

y^2 = 400 y = 75

$\bar{\varepsilon}$ = 66.56 $\bar{\psi}$ = 15

Simple regression results of DPS = a + b EPS

= -0.65 + 0.24 EPS

Where

DPS = Dividend Per Share

EPS = Earning Per Share

Then,

Coefficient of determination (R^2) = 0.023

Standard Error (S.E) = 0.24

$$\text{t-value} = \frac{b}{S.E} = \frac{0.24}{0.24} = 1$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

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

$= \sqrt{\frac{1385.45}{5}}$

$= \sqrt{277.09}$

= 16.65

$\sigma_y = \sqrt{\frac{\sum (y - \bar{y})^2}{n}}$

$= \sqrt{\frac{400}{5}}$

$= \sqrt{80}$

= 8.94

$r = \frac{xy}{n\sigma x\sigma y}$

$= \frac{109.40}{5 \times 16.65 \times 8.94}$

$= \frac{109.40}{744.26}$

= 0.15

$S.E = \frac{\sigma y}{\sigma x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$

$= \frac{8.94}{16.65} \times \frac{\sqrt{1 - 0.023}}{\sqrt{5}}$

= 0.54 x 0.44

= 0.24

r^2 =0.023

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

a =15 - 66.56 b =-0.65

b = $\frac{4882.90}{-20768.38}$ = 0.24

[The values of a, b, r, and S.E. are calculated as same as in Appendix B6]

Appendix-C7

Variables use in analysis

Year	x	y	$x \times x - \bar{x}$	$y \times y - \bar{y}$	xy	x^2	y^2
2003/04	143.58	20	-116.28	5	-581.40	13521.04	25.00
2004/05	170.79	0	-89.07	-15	1336.05	7933.46	225.00
2005/06	237.31	25	-22.55	10	-225.50	508.50	100.00
2006/07	296.41	10	36.55	-5	-182.75	1335.90	25.00
2007/08	451.22	20	191.36	5	956.80	36618.65	25.00
Total	1299.31	75			1303.20	59917.56	400.00

Note:

Values of x represent Net Profit

Values of y represent dividend per share

Results:

n = 5 a = -2.02

x = 1299.31 b = 0.07

xy = 1303.20 $\pm_{\varepsilon}$ = 109.47

x^2 = 59917.56 $\pm_{\psi}$ = 8.94

y^2 = 400 y = 75

$\bar{\varepsilon}$ = 259.86 $\bar{\psi}$ = 15

Simple regression results of DPS = a + b NP

= -2.02 + 0.07 NP

Where

DPS = Dividend Per Share

NP = Net Profit

Then,

Coefficient of determination (R^2) = 0.071

Standard Error (S.E) = 0.035

$$\text{t-value} = \frac{b}{S.E} = \frac{0.07}{0.035} = 2$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\Sigma x$ ……..(i)

$xy = a\Sigma x + b\Sigma x^2$ …….(ii)

$\sigma_x = \sqrt{\frac{\Sigma(x - \bar{x})^2}{n}}$

$= \sqrt{\frac{59917.56}{5}}$

$= \sqrt{11983.51}$

= 109.47

$\sigma_y = \sqrt{\frac{\Sigma(y - \bar{y})^2}{n}}$

$= \sqrt{\frac{400}{5}}$

$= \sqrt{80}$

= 8.94

$r = \frac{\Sigma xy}{n\sigma x\sigma y}$

$= \frac{1303.20}{5 | 109.47 | 8.94}$

$= \frac{1303.20}{4893.31}$

= 0.27

$S.E = \frac{\sigma y}{\sigma x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$

$= \frac{8.94}{109.47} | \frac{\sqrt{1 - 0.071}}{\sqrt{5}}$

= 0.082 x 0.43

= 0.035

r^2 =0.071

$y = Na + b\Sigma x$ ……..(i)

$xy = a\Sigma x + b\Sigma x^2$ …….(ii)

a =15-259.86 b =-2.02

b = $\frac{18186.45}{277723.74}$ = 0.07

[The values of a, b, r, and S.E. are calculated as same as in Appendix B7]

Appendix-C8

Variables use in analysis

Year	x	y	$x \, X \, x \, Z \bar{x}$	$y \, X \, y \, Z \bar{y}$	xy	x^2	y^2
2003/04	20	680	5	-1018.2	-5091.00	25.00	1036731.24
2004/05	0	870	-15	-828.2	12423.00	225.00	685915.24
2005/06	25	1379	10	-319.2	-3192.00	100.00	101888.64
2006/07	10	2430	-5	731.8	-3659.00	25.00	535531.24
2007/08	20	3132	5	1433.8	7169.00	25.00	2055782.44
Total	75	8491			7650	400	4415848.80

Note:

Values of x represent dividend per share

Values of y represent Market price Per share

Results:

n = 5	a = -778.66
x = 75	b = 165.12
xy = 7650	$\pm_{\varepsilon}$ = 8.94
x^2 = 400	$\pm_{\psi}$ = 939.77
y^2 = 4415848.80	y = 8491
$\bar{\varepsilon}$ = 15	$\bar{\psi}$ = 1698.20

Simple regression results of Pm = a + b DPS

= -778.66 + 165.12 DPS

Where

DPS = Dividend per Share

Pm = Market Price Per Share

Then,

Coefficient of determination (R^2) =0.033

Standard Error (S.E) = 46.15

$$\text{t-value} = \frac{b}{S.E} = \frac{165.12}{46.15} = 3.58$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\Sigma x$ ……..(i)

$xy = a\Sigma x + b\Sigma x^2$ …….(ii)

$\sigma_x = \sqrt{\frac{\Sigma(x - \bar{x})^2}{n}}$

$= \sqrt{\frac{400}{5}}$

$= \sqrt{80}$

= 8.94

$\sigma_y = \sqrt{\frac{\Sigma(y - \bar{y})^2}{n}}$

$= \sqrt{\frac{4415848.80}{5}}$

$= \sqrt{883169.76}$

= 939.77

$r = \frac{xy}{n\sigma x\sigma y}$

$= \frac{8491}{5 \times 8.94 \times 939.71}$

$= \frac{8491}{42007.72}$

= 0.18

$S.E = \frac{\sigma y}{\sigma x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$

$= \frac{939.77}{8.94} \times \frac{\sqrt{1 - 0.033}}{\sqrt{5}}$

= 105.12 x 0.44

= 46.15

r^2 =0.033

$y = Na + b\Sigma x$ ……..(i)

$xy = a\Sigma x + b\Sigma x^2$ …….(ii)

a =1698.20 – 15b =-778.66

b = $\frac{\Sigma 119715}{-725}$ = 165.12

[The values of a, b, r, and S.E. are calculated as same as in Appendix B8]

Appendix-C9

Variables use in analysis

Year	x	y	$x \, X \, x \, Z \, \bar{x}$	$y \, X \, y \, Z \, \bar{y}$	xy	x^2	y^2
2003/04	20	540.29	5	-408.4	-2042.00	25.00	166790.56
2004/05	0	692.59	-15	-256.1	3841.50	225.00	65587.21
2005/06	25	822.79	10	-125.9	-1259.00	100.00	15850.81
2006/07	10	1106.6	-5	157.91	-789.55	25.00	24935.57
2007/08	20	1581.2	5	632.51	3162.55	25.00	400068.90
Total	75	4743.47	0	0.02	2913.50	400.00	673233.05

Note:

Values of x represent dividend per share

Values of y represent Net Worth

Results:

n = 5 a = -463.14

x = 75 b = 94.12

xy = 2913.50 $\pm_{\varepsilon}$ = 8.94

x^2 = 400 $\pm_{\psi}$ = 366.94

y^2 = 673233.05 y= 4743.47

$\bar{\varepsilon}$ = 15 $\bar{\psi}$ = 948.69

Simple regression results of NW = a + b DPS

=-463.14 + 94.12 DPS

Where

NW = Net Worth

DPS = Dividend Per Share

Then,

Coefficient of determination (R^2) = 0.03

Standard Error (S.E) = 18.04

$$\text{t-value} = \frac{b}{S.E} = \frac{94.12}{18.04} = 5.21$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

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

$= \sqrt{\frac{400}{5}}$

$= \sqrt{80}$

$= 8.94$

$\sigma_y = \sqrt{\frac{\sum (y - \bar{y})^2}{n}}$

$= \sqrt{\frac{673233.05}{5}}$

$= \sqrt{134646.61}$

$= 366.94$

$r = \frac{\sum xy}{n\sigma x\sigma y}$

$= \frac{2913.50}{5 \times 8.94 \times 366.94}$

$= \frac{2913.50}{16402.22}$

$= 0.18$

$S.E = \frac{\sigma y}{\sigma x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$

$= \frac{366.94}{8.94} \times \frac{\sqrt{1 - 0.03}}{\sqrt{5}}$

$= 41.04 \times 0.43$

$= 18.04$

$r^2 = 0.03$

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

a =948.69 – 15b =-463.14

b = $\frac{68238.55}{725}$ = 94.12

[The values of a, b, r, and S.E. are calculated as same as in Appendix B9]

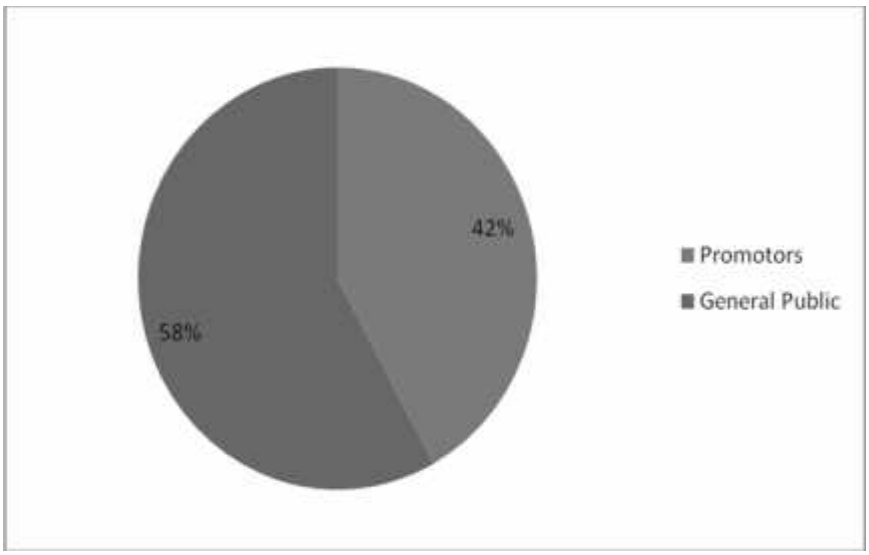
Appendix-D

BANK OF KATMANDU LIMITED

Bank of Katmandu was incorporated in 2051 B.S. under the company Act 1964. The bank was established with the support of the SIAM Commercial Bank, Thailand. The SIAM commercial Bank held 42 percent shares, and remaining 58 percent held by the Nepali promoters. Nepali promoters include founder members and general public. The bank's authorized capital was Rs. 240,000,000 and issued capital was Rs. 600, 000, 000.

The bank has expanded its branch network covering all the five development regions. At the end of the reporting period, Bank of Kathmandu (BOK), with its network of 17 branches and 6 service counters, is committed in providing consistent service together with new and innovative products to all its valued customers in addition to the 250 BOK Money Transfer agents providing remittance services. All the branches & service counters are under a single network facilitating central accounting and anywhere branch banking facility. To make optimum utilization of its central database system and to maintain the pace of growth, the bank is planning to further extend its network inside Kathmandu Valley and the Eastern region in the coming year. The head office is at Kamalpokhari.

Bank of Kathmandu Limited



Appendix-D1

Year	DPS	EPS	Net profit (in million)	MPS (in Rs)	Net Worth (in million)	Book Value per share
2003/04	10	27.50	127.48	295	1012.37	218.38
2004/05	15	30.10	139.54	430	990.21	213.60
2005/06	18	43.67	202.44	850	1069.34	230.67
2006/07	20	43.50	262.39	1375	993.25	164.68
2007/08	2.11	59.94	361.50	2350	1342.05	222.51

Appendix-D2

Year	DPS	EPS	$DPR \text{ X} \frac{\text{DPS}}{\text{EPS}}$
2003/04	10	27.50	36.96%
2004/05	15	30.10	49.83%
2005/06	18	43.67	41.22%
2006/07	20	43.5	45.98%
2007/08	2.11	59.94	3.52%

Where,

DPS = Dividend Per Share

EPS = Earning Per Share

DPR = Dividend Payout Ratio

Appendix-D3

Calculation of Price Earning Ratio

Year	EPS	MPS (in Rs)	$P/E \text{ Ratio X} \frac{\text{MVPS}}{\text{EPS}}$
2003/04	27.50	295	10.73
2004/05	30.10	430	14.29
2005/06	43.67	850	19.46
2006/07	43.50	1375	31.61
2007/08	59.94	2350	39.21

Where,

MVPS =Market Value Per Share

P/E Ratio = Price Earning Ratio

EPS = Earning Per Ratio

Appendix-D4

Calculation of market value per share to Book Value per share

Year	MPS (in Rs)	BVPS	$\frac{\text{MVPS}}{\text{BVPS}}$
2003/04	295	218.38	1.35
2004/05	430	213.60	2.01
2005/06	850	230.67	3.68
2006/07	1375	162.81	8.44
2007/08	2350	222.51	10.56

Where,

MVPS =Market Value Per share

BVPS = Book Value Per Share

Appendix-D5

Calculation of Dividend Yield Ratio

Year	DPS	MPS (in Rs)	D/Y Ratio X$\frac{\text{DPS}}{\text{MVPS}}$
2003/04	10	295	3.39%
2004/05	15	430	3.49%
2005/06	18	850	2.12%
2006/07	20	1375	1.45%
2007/08	2.11	2350	0.09%

Where,

DPS = Dividend Per Share

MVPS = Market Value Per Share

D/Y Ratio = Dividend Yield Ratio

Appendix-D6

Variables use in analysis

Year	x	y	$x \times x - \bar{x}$	$y \times y - \bar{y}$	xy	x^2	y^2
2003/04	27.5	10	-13.44	-3.02	40.59	180.63	9.12
2004/05	30.1	15	-10.84	1.98	-21.46	117.51	3.92
2005/06	43.67	18	2.73	4.98	13.60	7.45	24.80
2006/07	43.5	20	2.56	6.98	17.87	6.55	48.72
2007/08	59.94	2.11	19	-10.91	-207.29	361.00	119.03
Total	204.71	65.11			-156.70	673.15	205.59

Note:

Values of x represent earning per share

Values of y represent dividend per share

Results:

n = 5 a = -2.12

x =204.71 b = 0.37

xy = -156.70 $\pm_{\varepsilon}$ = 11.60

x^2 = 673.15 $\pm_{\psi}$ = 6.41

y^2 = 205.59 y =65.11

$\bar{\varepsilon}$ = 40.94 $\bar{\psi}$ =13.02

Simple regression results of DPS = a + b EPS

= -2.12 + 0.37 EPS

Where

DPS = Dividend Per Share

EPS = Earning Per Share

Then,

Coefficient of determination (R^2) = 0.18

Standard Error (S.E) = 0.22

$$\text{t-value} = \frac{b}{S.E} = \frac{0.37}{0.22} = 1.68$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + bx$ ……..(i)

$xy = ax + bx^2$ …….(ii)

$$\sigma_x = \sqrt{\frac{(x - \bar{x})^2}{n}} \qquad \sigma_y = \sqrt{\frac{(y - \bar{y})^2}{n}}$$

$$= \sqrt{\frac{673.15}{5}} \qquad = \sqrt{\frac{205.59}{5}}$$

$$= \sqrt{134.63} \qquad = \sqrt{41.12}$$

$$= 11.60 \qquad = 6.41$$

$$r = \frac{xy}{n\sigma x\sigma y} \qquad S.E = \frac{\sigma y}{\sigma x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$$

$$= \frac{-156.70}{5 \times 11.60 \times 6.41} \qquad = \frac{6.41}{11.60} \times \frac{\sqrt{1 - 0.18}}{\sqrt{5}}$$

$$= \frac{-156.70}{371.78} \qquad = 0.55 \times 0.40$$

$$= -0.42 \qquad = 0.22$$

$r^2 = 0.18$

$y = Na + bx$ ……..(i)

$xy = ax + bx^2$ …….(ii)

a =13.02 – 40.94 b = -2.12

$$b = \frac{-2822.43}{-7708.09} = 0.37$$

[The values of a, b, r, and S.E. are calculated as same as in Appendix B6]

Appendix-D7

Variables use in analysis

Year	x	y	$x \, X \, x \, Z \bar{x}$	$y \, X \, y \, Z \bar{y}$	xy	x^2	y^2
2003/04	127.48	10	-91.19	-3.02	275.39	8315.62	9.12
2004/05	139.54	15	-79.13	1.98	-156.68	6261.56	3.92
2005/06	202.44	18	-16.23	4.98	-80.83	263.41	24.80
2006/07	262.39	20	43.72	6.98	305.17	1911.44	48.72
2007/08	361.5	2.11	142.83	-10.91	-1558.28	20400.41	119.03
Total	1093.4	65.11			-1215.22	37152.43	205.59

Note:

Values of x represent Net Profit

Values of y represent dividend per share

Results:

n = 5 a = -3.71

x = 1093.4 b = 0.08

xy = -1215.22 $\pm_{\varepsilon}$ =86.20

x^2 = 37152.43 $\pm_{\psi}$ =6.41

y^2 = 205.59 y = 65.11

$\bar{\varepsilon}$ = 218.67 $\bar{\psi}$ = 13.02

Simple regression results of DPS = a + b NP

=-3.71 + 0.08 NP

Where

DPS = Dividend Per Share

NP = Net Profit

Then,

Coefficient of determination (R^2) = 0.19

Standard Error (S.E) = 0.028

$$\text{t-value} = \frac{b}{S.E} = \frac{0.08}{0.028} = 2.85$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

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

$= \sqrt{\frac{37152.43}{5}}$

$= \sqrt{7430.49}$

= 86.20

$\pm_y = \sqrt{\frac{\sum(y - \bar{y})^2}{n}}$

$= \sqrt{\frac{205.59}{5}}$

$= \sqrt{41.12}$

= 6.41

$r = \frac{\sum xy}{n \pm x \pm y}$

$= \frac{-1215.22}{5 \mid 86.20 \mid 6.41}$

$= \frac{-1215.22}{2762.71}$

= -0.44

$S.E = \frac{\pm y}{\pm x} \frac{\sqrt{1 - r^2}}{\sqrt{n}}$

$= \frac{6.41}{86.20} \mid \frac{\sqrt{1 - 0.19}}{\sqrt{5}}$

= 0.07 x 0.40

= 0.028

r^2 =0.19

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

a =13.02 – 218.67b = -3.71

b = $\frac{-15452.82}{-201930.4}$ = 0.08

[The values of a, b, r, and S.E. are calculated as same as in Appendix B7]

Appendix-D8

Variables use in analysis

Year	x	y	$x \, X \, x \, Z \bar{x}$	$y \, X \, y \, Z \bar{y}$	xy	x^2	y^2
2003/04	10	295	-3.02	-765	2310.30	9.12	585225.00
2004/05	15	430	1.98	-630	-1247.40	3.92	396900.00
2005/06	18	850	4.98	-210	-1045.80	24.80	44100.00
2006/07	20	1375	6.98	315	2198.70	48.72	99225.00
2007/08	2.11	2350	-10.91	1290	-14073.90	119.03	1664100.00
Total	65.11	5300			-11858.10	205.59	2789550.00

Note:

Values of x represent dividend per share

Values of y represent Market price Per share

Results:

n = 5 a = -579.72

x =65.11 b = 125.92

xy = -11858.10 $\pm_{\varepsilon}$ =6.41

x^2 =205.59 $\pm_{\psi}$ =746.93

y^2 = 2789550 y =5300

$\bar{\varepsilon}$ =13.02 $\bar{\psi}$ =1060

Simple regression results of Pm = a + b DPS

= -579.72 + 125.92 DPS

Where

DPS = Dividend per Share

Pm = Market Price Per Share

Then,

Coefficient of determination (R^2) = 0.25

Standard Error (S.E) = 45.45

$$\text{t-value} = \frac{b}{S.E} = \frac{125.92}{45.45} = 2.46$$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

$$\sigma_x = \sqrt{\frac{\sum (x - \bar{x})^2}{n}} \qquad \sigma_y = \sqrt{\frac{\sum (y - \bar{y})^2}{n}}$$

$$\sqrt{\frac{205.59}{5}} \qquad \sqrt{\frac{2789550}{5}}$$

$$\sqrt{41.12} \qquad \sqrt{557910}$$

= 6.41 = 746.93

$$r = \frac{\sum xy}{n\sigma x\sigma y} \qquad S.E = \frac{\sigma y}{\sigma x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$$

$$\frac{-11858.10}{5 \times 5.46 \times 434.11} \qquad \frac{746.93}{6.41} \times \frac{\sqrt{1 - 0.25}}{\sqrt{5}}$$

$$\frac{-11858.10}{23939.11} \qquad = 116.53 \times 0.39$$

=-0.50 = 45.45

$r^2 = 0.25$

$y = Na + b\sum x$ ……..(i)

$xy = a\sum x + b\sum x^2$ …….(ii)

a =1060 – 13.02 b= -579.72

$$b = \frac{-80874.7}{-642.27} = 125.92$$

[The values of a, b, r, and S.E. are calculated as same as in Appendix B8]

Appendix-D9

Variables use in analysis

Year	x	y	$x \, X \, x \, Z \bar{x}$	$y \, X \, y \, Z \bar{y}$	xy	x^2	y^2
2003/04	10	1012.37	-3.02	-69.07	208.59	9.12	4770.66
2004/05	15	990.21	1.98	-91.23	-180.64	3.92	8322.91
2005/06	18	1069.34	4.98	-12.1	-60.26	24.80	146.41
2006/07	20	993.25	6.98	-88.19	-615.57	48.72	7777.48
2007/08	2.11	1342.05	-10.91	260.61	-2843.26	119.03	67917.57
Total	65.11	5407.2			-3491.12	205.59	88935.04

Note:

Values of x represent dividend per share

Values of y represent Net Worth

Results:

n = 5 a = -416.95

x =65.11 b = 115.07

xy = -3491.12 $\pm_{\varepsilon}$ =6.41

x^2 =205.59 $\pm_{\psi}$ = 133.37

y^2 = 88935.04 y =4946

$\bar{\varepsilon}$ = 13.02 $\bar{\psi}$ = 1081.44

Simple regression results of NW = a + b DPS

= -416.95 + 115.07 DPS

Where

NW = Net Worth

DPS = Dividend Per Share

Then,

Coefficient of determination (R^2) = 0.67

Standard Error (S.E) = 5.41

t-value $= = \frac{115.07}{5.41} = 21.27$

For the calculation of regression constant (a) and regression Coefficient (b) following two equations is used:

Regression equation of y on x

$y = Na + b\Sigma x$ ……..(i)

$xy = a\Sigma x + b\Sigma x^2$ …….(ii)

$\sigma_x = \sqrt{\frac{\Sigma(x - \bar{x})^2}{n}}$

$= \sqrt{\frac{205.59}{5}}$

$= \sqrt{41.12}$

= 6.41

$\sigma_y = \sqrt{\frac{\Sigma(y - \bar{y})^2}{n}}$

$= \sqrt{\frac{88935.04}{5}}$

$= \sqrt{17787.01}$

= 133.37

$r = \frac{xy}{n\sigma x\sigma y}$

$= \frac{-3491.21}{5 \times 6.41 \times 133.37}$

$= \frac{-3491.21}{4274.51}$

= -0.82

$S.E = \frac{\sigma y}{\sigma x}\frac{\sqrt{1 - r^2}}{\sqrt{n}}$

$= \frac{133.37}{6.41} \times \frac{\sqrt{1 - 0.67}}{\sqrt{5}}$

= 20.81 x 0.26

= 5.41

r^2 =0.67

$y = Na + b\Sigma x$ ……..(i)

$xy = a\Sigma x + b\Sigma x^2$ …….(ii)

a =1081.44 – 13.02 b = -416.95

b = $\frac{-73903.94}{-642.27}$ = 115.07

[The values of a, b, r, and S.E. are calculated as same as in Appendix B9]

Appendix E1

1. Hypothesis test of EPS

Year	ε_1	ε_2	ε_3	$(\varepsilon_1 - \bar{\varepsilon}_1)^2$	$(\varepsilon_2 - \bar{\varepsilon}_2)^2$	$(\varepsilon_3 - \bar{\varepsilon}_3)^2$
2003/04	49.05	45.58	27.5	47.20	440.16	180.63
2004/05	47.91	54.22	30.1	64.16	152.28	117.51
2005/06	59.24	62.78	43.67	11.02	14.29	7.45
2006/07	60.66	78.42	43.5	22.47	140.66	6.55
2007/08	62.74	91.82	59.94	46.51	638.07	361.00
Total	279.60	332.82	204.71	191.36	1385.45	673.15
Mean	55.92	66.56	40.94			

Where

ε_1 = EPS of HBL

ε_2 = EPS of EBL

ε_3 = EPS of BOK

$$\text{Grand Mean } (\bar{\bar{\varepsilon}}) = \frac{279.60 + 332.82 + 204.71}{15} = 54.48$$

Sum of square between sample banks (S.S.B)=

$$n_1(\bar{\varepsilon}_1 - \bar{\bar{\varepsilon}})^2 + n_2(\bar{\varepsilon}_2 - \bar{\bar{\varepsilon}})^2 + n_3(\bar{\varepsilon}_3 - \bar{\bar{\varepsilon}})^2$$

$$= 5(55.92-54.48)^2 + 5(66.56-54.48)^2 + 5(40.94-54.48)^2$$

$$= 1656.87$$

Sum of square within sample banks

$$= \phi(\varepsilon_1 - \bar{\varepsilon}_1)^2 + \phi(\varepsilon_2 - \bar{\varepsilon}_2)^2 + \phi(\varepsilon_3 - \bar{\varepsilon}_3)^2$$

$$= 191.36 + 1385.45 + 673.15$$

$$= 2249.96$$

Appendix E2

2. Hypothesis test of DPS

Year	ε_1	ε_2	ε_3	$(\varepsilon_1 - \bar{\varepsilon}_1)^2$	$(\varepsilon_2 - \bar{\varepsilon}_2)^2$	$(\varepsilon_3 - \bar{\varepsilon}_3)^2$
2003/04	0	20	10	266.34	25.00	9.12
2004/05	11.58	0	15	22.47	225.00	3.92
2005/06	30	25	18	187.14	100.00	24.80
2006/07	15	10	20	1.74	25.00	48.72
2007/08	25	20	2.11	75.34	25.00	119.03
Total	81.58	75	65.11	553.04	400	205.59
Mean	16.32	15.00	13.02			

ε_1 = DPS of HBL

ε_2 = DPS of EBL

ε_3 = DPS of BOK

Grand Mean ($\bar{\bar{\varepsilon}}$) $= \frac{81.58 + 75 + 65.11}{15} = 14.78$

Sum of square between sample banks (S.S.B)=

$$n_1(\bar{\varepsilon}_1 - \bar{\bar{\varepsilon}})^2 + n_2(\bar{\varepsilon}_2 - \bar{\bar{\varepsilon}})^2 + n_3(\bar{\varepsilon}_3 - \bar{\bar{\varepsilon}})^2$$

$=5(16.32 - 14.78)^2 + 5(15 - 14.78)^2 + 5(13.02)^2$

$=27.49$

Sum of square within sample banks

$$= \phi(\varepsilon_1 - \bar{\varepsilon}_1)^2 + \phi(\varepsilon_2 - \bar{\varepsilon}_2)^2 + \phi(\varepsilon_3 - \bar{\varepsilon}_3)^2$$

$= 553.04 + 400 + 205.59$

$= 1158.63$

Appendix E3

3. Hypothesis test of MPS

Year	ε_1	ε_2	ε_3	$\varepsilon_1 - \bar{\varepsilon}_1$	$\varepsilon_2 - \bar{\varepsilon}_2$	$\varepsilon_3 - \bar{\varepsilon}_3$
2003/04	840	680	295	226576.00	1036731.24	585225.00
2004/05	920	870	430	156816.00	685915.24	396900.00
2005/06	1100	1379	850	46656.00	101888.64	44100.00
2006/07	1740	2430	1375	179776.00	535531.24	99225.00
2007/08	1980	3132	2350	440896.00	2055782.44	1664100.00
Total	6580	8491	5300	1050720	4415848.8	2789550
Mean	1316.00	1698.20	1060.00			

ε_1 = MPS of HBL

ε_2 = MPS of EBL

ε_3 = MPS of BOK

Grand Mean ($\bar{\bar{\varepsilon}}$)= $\frac{6580 + 8491 + 5300}{15}$ =1358.07

Sum of square between sample banks (S.S.B)=

$n_1(\bar{\varepsilon}_1 - \bar{\bar{\varepsilon}})^2 + n_2(\bar{\varepsilon}_2 - \bar{\bar{\varepsilon}})^2 + n_3(\bar{\varepsilon}_3 - \bar{\bar{\varepsilon}})^2$

=5(1316-1358.07)^2 +5(1698.20-1358.07)^2 +5(1060-1358.07)^2

=1031520.13

Sum of square within sample banks

$= \phi(\varepsilon_1 - \bar{\varepsilon}_1) + \phi(\varepsilon_2 - \bar{\varepsilon}_2) + \phi(\varepsilon_3 - \bar{\varepsilon}_3)$

= 1050720 + 4415848.80 + 2789550

= 8256118.80

Appendix E4

4. Hypothesis test of Net worth

Year	ε_1	ε_2	ε_3	$\sum(\varepsilon_1 - \bar{\varepsilon}_1)^2$	$\sum(\varepsilon_2 - \bar{\varepsilon}_2)^2$	$\sum(\varepsilon_3 - \bar{\varepsilon}_3)^2$
2003/04	1324.16	540.29	1012.37	285337.59	166790.56	4770.66
2004/05	1541.76	692.59	990.21	100216.56	65587.21	8322.91
2005/06	1766.18	822.79	1069.34	8491.62	15850.81	146.41
2006/07	2146.54	1106.60	993.25	83065.00	24935.57	7777.48
2007/08	2513.00	1581.20	1342.05	428592.81	400068.90	67917.57
Total	9291.64	4743.47	5407.22	905703.59	673233.05	88935.04
Mean	1858.33	948.69	1081.44			

Grand Mean ($\bar{\bar{\varepsilon}}$)$= \frac{9291.64 + 4743.47 + 5407.22}{15} = 1296.16$

Sum of square between sample banks (S.S.B)=

$$n_1(\bar{\varepsilon}_1 - \bar{\bar{\varepsilon}})^2 + n_2(\bar{\varepsilon}_2 - \bar{\bar{\varepsilon}})^2 + n_3(\bar{\varepsilon}_3 - \bar{\bar{\varepsilon}})^2$$

$=5(1858.33 - 1296.16)^2 + 5(948.69 - 1296.16)^2 + 5(1081.44 - 1296.16)^2$

$= 2414342.21$

Sum of square within sample banks

$$= \sum(\varepsilon_1 - \bar{\varepsilon}_1)^2 + \sum(\varepsilon_2 - \bar{\varepsilon}_2)^2 + \sum(\varepsilon_3 - \bar{\varepsilon}_3)^2$$

$= 905703.59 + 673233.05 + 88935.04$

$= 1667871.67$