

**DIVIDEND POLICY AND ITS IMPACT ON MARKET  
PRICE OF THE SHARE  
(CASE STUDY OF COMMERCIAL BANKS)**

**Submitted By:**

**Utsab Makaju**  
Khwopa College  
Dekocho – 5, Bhaktapur  
Exam Roll No.: 6672  
**T.U. Registration No.: 7-1-25-584-98**  
**Campus Roll No.: 17**

**A Thesis Submitted To:**

Office Of Dean  
Faculty of Management  
**Tribhuvan University**  
**Kathmandu, Nepal**

IN THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE  
DEGREE OF MASTERS OF BUSINESS STUDIES (MBS)

**February, 2009**

## ACKNOWLEDGEMENT

I would like to express my sincere appreciation to Khwopa College, faculty of Management, Tribhuvan University for providing me the opportunity to work upon the topic.

I am highly indebted to my respected thesis supervisor Rupak Joshi and Mr. SalikRam Koirala, Head of Research Department of Khwopa College for supervising the thesis work and continuously providing intellectual guidance, valuable suggestion and constructive comments which has given the final shape of this thesis. Further, I would like to express my heartfelt sincere appreciation to the all campus family for their warm co-operation in every step of my research.

I am very much obliged to my friends and family members for their support during the research work whose help and support are really notable. I would like to express my sincere gratitude to all the personnel of the banks for their mild co- operation and also like to thanks the officers of NEPSE, SEBON, SCBNL, HBL, NABIL, EBL and NIBL for their continuous support. Last but not least I really appreciate the support given by my friends Mr.Sunil Thusa, Miss. Amita Rajbhandari, Mr. Shreehari Dahal, and Mr. Ramkrishana Prajapati and a helpful hand of Mr.Rabi Hamal for his computer work while preparing this thesis work.

My best regards and sincere thanks goes to my parents; especially to my father Late Sanu Bahadur Makaju and my brother Mr. Ram Kumar Makaju for encouraging and motivating me for further study. Last but not least, I would like to thanks all the respondents who gave their valuable time and honest answer needed to complete the study.

Date: 2065/12/04.

.....

Utsab Makaju

Researcher

Khwopa College

## DECLARATION

I hereby, declare that the work reported in this thesis entitled **“Dividend Policy and its Impact on Market Price of the Share”** submitted to the office of Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (M.B.S.) under the supervision of Mr. Rupak Joshi and Head of Research Department, Mr. Salik Ram Koirala Khwopa College, Bhaktapur, affiliated to Tribhuvan University.

Date: 2065/12/04

.....

Utsab Makaju  
Researcher  
Khwopa College

## TABLE OF CONTENTS

TITLE PAGE	I
VIVA- VOCE SHEET	II
RECOMMENDATION	III
DECLARATION	IV
ACKNOWLEDGEMENT	V
TABLE OF CONTENTS	VI
LIST OF TABLES	VII
LIST OF FIGURES	VIII
ABBREVIATIONS	IX
<b>Contents</b>	<b>Page</b>

### CHAPTER – I

INTRODUCTION	1
1.1 BACKGROUND OF THE STUDY	1
1.2 STATEMENT OF PROBLEM	4
1.3 OBJECTIVES OF THE STUDY	6
1.4 SIGNIFICANCE OF STUDY	7
1.5 LIMITATION OF THE STUDY	8
1.6 PROFILES OF THE SELECTED COMPANIES	8
1.7 THE CHAPTER PLAN OF THE STUDY	11

### CHAPTER – II

REVIEW OF LITERATURE	12
2.1 CONCEPTUAL FRAMEWORK	12
2.1.1 <i>Dividend</i>	14
2.1.2 <i>The Dividend Process</i>	15
2.1.3 <i>Theory of Dividend</i>	16
2.1.4 <i>Forms of Dividend</i>	17
2.1.5 <i>Dividend Policy</i>	20
2.1.6 <i>Factors in fluencing Dividend Policy</i>	21

2.2.	LEGAL PROVISIONS REGARDING DIVIDEND PRACTICES IN NEPAL	24
2.3	REVIEW OF MAJOR INTERNATIONAL STUDIES	26
2.3.1	<i>Gordan's Study</i>	26
2.3.2	<i>Modigliani and Miller's Study</i>	27
2.3.3	<i>Walter's Study</i>	28
2.4	REVIEW OF MAJOR STUDIES IN NEPAL	29
2.4.1	<i>Review of Books and Journals in Nepalese Perspective</i>	29
2.4.1	(i) <i>Pradhan's Study</i>	29
2.4.1	(ii) <i>Shrestha's Studa</i>	30
2.4.2	<i>Review of Previous Thesis</i>	32
2.4.2	(i) <i>Bishnu Hari Bhattari's Study</i>	32
2.4.2	(ii) <i>Nabaraj Adhikari's Study</i>	32
2.4.2	(iii) <i>Aparna Shrestha's Study</i>	33

### CHAPTER- III

	RESEARCH METHODOLOGY	34
3.1	INTRODUCTION	34
3.2	RESEARCH DESIGN	34
3.3	SOURCE OF DATA	35
3.4	POPULATION AND SAMPLE	35
3.5	TOOLS AND TECHNIQUES OF ANALYSIS	37

### CHAPTER IV

	PRESENTATION AND ANALYSIS OF DATA	47
4.1	ANALYSIS OF FINANCIAL INDICATORS	47
4.1.1	<i>EARNING PER SHARE</i>	47
4.1.2	<i>DIVIDEND PER SHARE</i>	49
4.1.3	<i>DIVIDEND PAYOUT RATIO (DPR)</i>	51
4.1.4	<i>DIVIDEND PERCENT (DP)</i>	53
4.1.5	<i>MARKET PER SHARE (MPS)</i>	54
4.1.6	<i>PRICE EARNING RATIO (P/E RATIO)</i>	55

4.1.7	<i>EARNING YIELD (EY)</i>	56
4.1.8	<i>DIVIDEND YIELD (DY)</i>	58
4.1.9	<i>MARKET PRICE PER SHARE (MPS) TO BOOK VALUE PER SHARE (BVPS)</i>	60
4.1.10	<i>NET WORTH PER SHARE (NWPS)</i>	61
4.2	<b>COMPANY WISE ANALYSIS OF COMMERCIAL BANKS</b>	63
4.2.1	<i>FINANCIAL SITUATION OF SCBNL</i>	63
4.2.2	<i>FINANCIAL SITUATION OF HBL</i>	64
4.2.3	<i>FINANCIAL SITUATION OF NABIL</i>	65
4.2.4	<i>FINANCIAL SITUATION OF EBL</i>	67
4.2.5	<i>FINANCIAL SITUATION OF NIBL</i>	68
4.3	<b>STATISTICAL TOOLS</b>	69
4.3.1	<i>Correlation Analysis</i>	69
4.3.1.1	<i>Correlation between DPS and EPS of concerned Banks</i>	70
4.3.1.2	<i>Correlation between DPS and MPS</i>	71
4.3.1.3	<i>Correlation between EPS and MPS</i>	72
4.3.1.4	<i>Correlation between MPS and DPR</i>	73
4.3.1.5	<i>Correlation between DPS and NWPS</i>	74
4.3.2	<i>Regression Analysis</i>	75
4.3.2.1	<i>Simple Regression Analysis</i>	76
4.3.1.1 (i)	DPS on EPS	76
4.3.1.1 (ii)	MPS on DPS	77
4.3.1.1 (iii)	MPS on EPS	78
4.3.1.1 (iv)	MPS on DPR	80
4.3.1.1 (v)	DPS on NWPS	81
4.3.2.2	<i>Multiple Regression Analysis</i>	82
4.3.2.2 (i)	MPS on EPS and DPS	82
4.3.2.2 (ii)	MPS on EPR and DPR	83
4.4	<b>TEST OF HYPOTHESIS</b>	85
4.4.1	<i>First ANOVA TEST on DPS</i>	85
4.4.2	<i>Second ANOVA TEST on MPS</i>	86

4.4.3	<i>Third ANOVA TEST on EPS</i>	88
4.4.4	<i>Fourth ANOVA TEST on DPR</i>	89
4.4.5	<i>Fifth ANOVA TEST on PE Ratio</i>	91
4.5	PRIMARY DATA ANALYSIS	92

## CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATION	97
5.1 SUMMARY	97
5.2 CONCLUSION	102
5.3 RECOMENDATION	103
BIBILOGRAPHY	
APPENDIX	

## LIST OF TABLES

LIST OF LICENSED COMMERCIAL BANK	36
EPS OF CONCERNED BANKS	47
DPS OF CONCERNED BANKS	49
DPR OF CONCERNED BANKS	51
DP OF CONCERNED BANKS	53
MPS OF CONCERNED BANKS	54
P/E RATIO OF CONCERNED BANKS	55
EY OF CONCERNED BANKS	57
DY OF CONCERNED BANKS	58
MPS TO BVPS OF CONCERNED BANKS	60
NWPS OF CONCERNED BANKS	62
FINANCIAL SITUATION OF SCBNL	63
FINANCIAL SITUATION OF HBL	64
FINANCIAL SITUATION OF NABIL	65
FINANCIAL SITUATION OF EBL	67
FINANCIAL SITUATION OF NIBL	68
CORRELATION BETWEEN DPS AND EPS	70
CORRELATION BETWEEN DPS AND MPS	71
CORRELATION BETWEEN EPS AND MPS	72
CORRELATION BETWEEN MPS AND DPR	73
CORRELATION BETWEEN DPS AND NWPS	74
SIMPLE REGRESSION ANALYSIS DPS ON EPS	76
SIMPLE REGRESSION ANALYSIS MPS ON DPS	77
SIMPLE REGRESSION ANALYSIS MPS ON EPS	78
SIMPLE REGRESSION ANALYSIS MPS ON DPR	80
SIMPLE REGRESSION ANALYSIS DPS ON NWPS	81
MULTIPAL REGRESSION ANALYSIS MPS ON EPS AND DPS	82

MULTIPAL REGRESSION ANALYSIS MPS ON MPS ON P/E RATIO AND DPR	83
FIRST ANOVA TEST ON DPS OF FIVE BANKS	85
SECOND ANOVA TEST ON MPS OF FIVE BANKS	86
THIRD ANOVA TEST ON EPS OF FIVE BANKS	88
FOURTH ANOVA TEST ON DPR OF FIVE BANKS	89
FIFTH ANOVA TEST ON P/E RATIO OF FIVE BANKS	91

## **LIST OF FIGURES**

EPS OF CONCERN BANKS	48
DPS OF CONCERN BANKS	50
DPR OF CONCERN BANKS	51
DP OF CONCERN BANKS	53
MPS OF CONCERN BANKS	54
P/E RATIO OF CONCERN BANKS	56
EY OF CONCERN BANKS	57
DY OF CONCERN BANKS	59
MPS TO BVPS OF CONCERN BANKS	60
NWPS OF CONCERN BANKS	62

### **Abbreviations used in the Study**

a	:	Regression Constant
AM	:	Arithmetic Mean
ANOVA	:	Analysis of Variance
b	:	Regression Constant
BVPS	:	Book Value Per Share
CA	:	Current Assets
CF	:	Correction Factors
CI	:	Current Liabilities
CR	:	Current Ratio
CV	:	Coefficient Of Variation
DF	:	Degree Of Freedom
DPR	:	Dividend Payout Ratio
DPS	:	Dividend per Share
DY	:	Dividend Yield
EBL	:	Everest Bank Limited
EPS	:	Earning Per Share
EY	:	Earning Yield
FY	:	Fiscal Year
HBL	:	Himalayan Bank Limited
Ltd.	:	Limited
MPS	:	Market Price Per Share
MSC	:	Mean Sum of Squares of Variations between Banks
MSE	:	Mean Sum of Squares of Variations Due to Errors
MSR	:	Mean Sum of Squares of Variations between Years
NABIL	:	NABIL Bank Limited
NIBL	:	Nepal Investment Bank Limited
No.	:	Number
NRB	:	Nepal Rastra Bank
NWPS	:	Net Worth Per Share
P/E Ratio	:	Price Earning Ratio
Rs.	:	Nepalese Rupees
r	:	Correlation Coefficient
$r^2$	:	Coefficient of Determination
SCBNL	:	Standard Chartered Bank Limited
SD	:	Standard Deviation
S.N.	:	Serial Number
SEBON	:	Security Board of
T. U.	:	Tribhuvan University
&	:	And
i.e.	:	That is

# CHAPTER-I

## INTRODUCTION

### 1.1 Background of the study

In spite of being located between the two huge economic giants, Nepal is enlisted in the list of the least developed countries of the world. Majority people of the country are engaged in their day to day survival. Due to the complex geographical structure, the agriculture based economy has been weakened. Various factors like landlocked situation, lack of optimum resources mobilization, lack of education, lack of entrepreneurship, lack of institutional cultural, government policies, political instability and violence etc. are responsible regarding peace and development of Nepal. There are some positive sides as well. After the restoration of democracy in 1990, the universal echo of economic liberalization, Nepal has implemented liberal economic policy. As a result, many companies are established in different sectors such as industrial, tourism, transportation, trade and mostly in the financial sector whose contribution in economy, have great significant. Nepal is a country trying to develop its economy through global trend and of course with country suited economic liberalization. Development in the financial terms is the efficient flow and generation of the funds in the most productive sectors.

Among these circumstances, capital market and its extensions also play great roles. Capital market generates and liquidates the security as per the requirement. But unfortunately, Nepalese capital market has no efficient communication network even today. It has made capital market less efficient and effective resulting in the risk. Even though, it is hoped that Nepalese capital market will be moving towards efficiency in the day to come. In the capital market, all firms operate in order to generate earnings. Shareholders make investment in equity capital with the expectation of making earnings either directly in the form of dividend or indirectly in the form of capital gain in future. The sole objective of each and every business is to maximize the shareholder's wealth; the fundamental guide line of every managerial decision is to increase the value of shares. Contrary to the past sole trading and partnership types of business concerned, nowadays owners of almost all the business entities are the numerous shareholders who hold limited obligation to

the face value of the shares they own. Financial management is the heart of the management and the number of decisions is made by the financial decision-maker in order to run the company smoothly. Generally, three types of decisions namely the investment decision, financing decision and dividend decision are pronounced as major functions of the finance executive. Among these major financial decisions, dividend decision is the most controversial one, which requires a lot of expertise knowledge as well as the intuition power in such decision-making. Once a company makes a profit, it should decide; what should be done with the profit. It could continue to retain the profit within the company, or it could pay out the profit of owners the company in the form of dividend. Dividends are payments made to the stockholders from a firm's earnings in return to their investment, whether those earnings were generated in the current period or in previous periods and policy refers to the decision about how much earnings, at what form should be distributed to the shareholders and the amount to be retained or reinvested in the firm. The objective of the dividend policy should be maximized shareholders' wealth position.

The price of share is highly influenced by the company's dividend policy and the dividend decision its self is also affected by other financial variables as well. The expected dividend of a company paying higher dividends is higher; eventually the share price of the company goes up. But contradictorily, a company paying higher cash dividends can suffer from the scarcity of funds or financing the corporate growth, as a result the share price comes down. Dividend policy may affect the areas such as financial structure of the firm, funds flow, stock prices, investors' satisfaction, growth of the firm etc. Like other major decisions of the firm, i.e. investment and financing decision, the dividend decision has major role in any organization. It remains a source of controversy despite years of theoretical and empirical research, including one aspect of dividend policy: the linkage between dividend policy and stock price risk (*Allen and Rachim, 1996*). Paying large dividends reduces risk and thus influenced stock price (*Gordon, 1963*) and is a proxy for future earning (*Baskin, 1989*). A number of theoretical mechanism have been suggested that cause dividend yield and payout ratios to vary inversely with common stock volatility. These are duration effect, rate of return effect, arbitrage pricing effect and information effect. Duration effect implies that high dividend yield

provides more near term cash flow. If dividend is stable high dividend stocks will have a shorter duration. Gordon Growth Model can be used predict that high-dividend will be less sensitive to fluctuations in discount rates and thus ought to display lower price volatility.

Agency cost argument, as developed by *Jensen and Meckling* (1976) proposed that dividend payments reduced cost and increase cash flow, that is payment of dividends motivates managers to discard cash rather than investing at below the cost of capital or wasting it on organizational inefficiencies (*Rozeff, 1982* and *Eastebrook* 1984). Some authors have stressed the importance of information content of dividend (*Asquith and Mullin*, 1983; *Born, Moster and officer* 1983). *Miller and Rock* (1985) suggested that dividend announcement provide the missing pieces of information about the firm and allows the market to estimate the firm's current earnings. Investor may have greater confidence that reported earnings reflect economic profit when announcements are accompanied by ample dividends. If investor is more certain in their opinions, they may react less to questionable sources of information and their expectation of value may be insulated from irrational influence.

Rate of return effect, as discussed by *Gordon* (1963), is that a firm with low payout and low dividend yield may tend to be valued more in terms of future investment opportunities (*Donaldson*, 1961). Consequently, its stock price may be more sensitive to changing estimates rates of return over distant time period. Thus expanding firms although may have lower payout ratio and dividend yield, exhibit price stability. This may be because dividend yields and payout ratio serves as proxies for the amount of projected growth opportunities. If forecasts of profits from growth opportunities are less reliable than forecasts of returns on assets in place, firms with low payout and low dividend yield may have greater price volatility. According to duration effect and arbitrage effect, the dividend yield and not the payout ratio is the relevant measure. The rate of return effect implies that both dividend yield and payout ratio matters. Dividend policy may serve as a proxy for growth and investment opportunities. Both the duration effect and the rate of return effect assume differentials in the timing of underlying cash flow of the business. If the relationship between risk and dividend policy remains after controlling for

growth, this would suggest evidence of either the arbitrage or information effect.

Most of the previous research works regarding dividend policy were commenced on the context of well-grown stock market, so their findings may or may not represent the Nepalese scenario because our share market is in premature stage. The root of stock market in Nepal was the establishment of security exchange counter in 1984, which is modernized to its new dimensions after 1990 after its transition into Nepal Stock Exchange Limited.

In context of Nepal, most of the public enterprises are operating in loss. In such situation it is not possible to distribute dividend. Such enterprises mainly focus on minimizing their loss. There are few companies which pay dividend. But after the establishment of Joint Venture companies<sup>1</sup>, there is a new trend of distributing dividends. Dividend distribution trend has not only attracted the investors but has also made the management conscious about the policy regarding the payment of dividend.

The present research work attempts to analyze the dividend behavior of the joint venture and other major commercial banks. It is intended to explore the effect of dividend decision in stock price behavior as well as the study of dividend behavior against various determinants. It is intended to justify the dividend decision adopted by the bank and to relate them on the ground of similar fiscal period.

## **1.2 Statement of Problem**

Dividend policy, being the most controversial type of decision making, is a taste of greater expertise. Dividend decision has its reflection on the stock prices in stock market. A peripheral library surfing shows a few studies carried upon the dividend issue as well as the issue of stock prices behavior.

Many empirical studies have been carried out in the developed capital market to analyze the relationship between dividend and stock prices like *Lintner* (1956), *Modigliani and Miller* (1961), *Gordon* (1964), *Walter* (1966), *Van Horne* and *McDonald* (1971), *Chawla and Shrinivasan* (1987). However, no conclusive relationship exists between the amount paid out as dividend and the

---

<sup>1</sup> NRB (1997), Economic report 1996-97, Research and Publication Dept.

market price of share. There is still a controversy concerning the relationship between dividend and market price of shares.

There is no controversy that when a firm got much earning, then the shareholders would expect much dividend. But, earnings are also treated as financing sources for the firm. If the firm retains the earnings, its repercussion can be seen in many factors such as decreased leverage ratio, expansion of activities and increase in profit in succeeding years where as if the firm pays dividends, it may need to raise capital through capital market which may dilutes the ownership control of the existing shareholders. On condition the firm takes loan or raises debenture, it will affect on risk characteristics of the firm. Therefore, there are many dimensions to be considered on dividend theories, policies and practices.

The capital market is an important part of corporate development of a country. Even though the capital market is in the early stage of development in Nepal, Nepalese investors have heavily made investment on newly established companies, especially in the financial sector. This trend will remain to continue until the investors are satisfied by the decision made by the management of these companies. Dividend is the most inspiring aspect for the investment in the share various companies for an investor. Even if dividends affected the firm's value, unless management knows exactly how they affect value, there is no much that they can do to increase the shareholders' wealth. So, it is necessary for the management to understand how the dividend policy affects the market value of the firm or market price of the stock or the wealth position of the shareholders.

The present research work is directed towards the exploration of the dividend as well as the stock price behavior of the leading public sector commercial banks. The research work will try to solve the following set of questions.

- i. What is the impact of dividend policy on the market price of the stock?
- ii. What is the relationship between the factors affecting dividend and valuation of the firm?
- iii. What are the reasons behind stock price increasing after the announcement of dividend?

- iv. Is there any consistency in earning per share (EPS), dividend per share (DPS), market price per share (MPS) and Dividend payout ratio (DPR)?
- v. Is there any uniformity between the firms in regards to financial indicators and variables?

### **1.3 Objectives of the Study**

This research work attempts to accomplish the objective of analyzing the dividend policy behavior in the context to Nepalese commercial banks. The major accomplishment of this study will be the exploration of the fact dealing about how far the stock prices of the leading commercial banks are affected by the dividend policies adopted by such banks in different fiscal periods. Furthermore, the objective of this research is to find some relationships taking MPS and DPS as dependent variable each.

For the efficient management of any organization, examination of the relationship between dividend and market price of share may become an important guideline in setting suitable dividend policy. Major focus of this study is to trace the impact of dividend policy adopted by the company of the market price of the share as well as the overall value of the firm. This study also provides relevant and pertinent literature for future research on the area of dividend policy of managerial finance.

The major objective of the study to obtain in-depth knowledge about the impact of dividend policy adopted by the firm to its market price of share as well as the overall valuation of the firm. Some of the important objectives of the study can be listed as follows.

- i. To highlight various aspects of dividend policies and prevailing practices in selected firms.
- ii. To analyze the variables such as profit, dividend, retained earnings, growth rate and other relevant variables to show relationship between the value and other ingredients affecting it.
- iii. To provide feedback to the policy makers and executives working in various commercial banks chosen for the study based on findings of analysis.

- iv. To analyze the impact of dividend on market price of stock after announcing dividend
- v. To provide suggestions and recommendations based on major finding.

#### **1.4 Significance of Study**

As dividend is one of the factors in every organization and dividend policy decision is one of the most important decisions. This might serve to be important information for these respective firms taken as sample. People are attracted to invest in shares for the purpose of getting more return as well as to maximize their wealth. So the dividend policy has become an effective way to attract new investors, to keep present investors happy and to maintain goodwill of the company. When any new company floats shares through capital market, very big congregation gathers to apply for owner's certificate. It indicates people's expectation on higher return of investment in shares. The major significance of the studies is as follows:

- i. The study helps to the management and policy maker in setting and making a suitable dividend policy.
- ii. The dividend policy of the banking sector plays vital role for socio-economy development in the nation, that is way the study of dividend policy of these sector is needed so far as possible.
- iii. To raise public awareness about dividend policy and market price of share relation in other to help them for rational decision of their investment.
- iv. In the Nepalese context people are investing hit – or – miss in shares because due to the lack of enough knowledge. Therefore, the important part is necessary to establish clear cut conceptions about the return resulting from investing in the stocks for the investors.

## **1.5 Limitations of the Study**

This study has been carried out within certain limitations, which are as follows.

- i. The study is based specially on secondary data, like annual report of selected banks, journals, published as well as unpublished thesis work, economic survey published by Nepal Government, Ministry of Finance, financial reports published by Nepal Stock Exchange, newspapers, magazine and Internet etc.
- ii. The study covered only five commercial banks for five years period i.e. fiscal year (2002/03 to 2006/07).
- iii. The balance sheet, profit and loss account and accompanying notes have been basically considered as the subject matters of the study and they are assumed to be correct and true.
- iv. Absence of any write-ups of objectives, policies and strategies regarding dividend policy of the selected companies may limit the study
- v. The interview while doing survey is assumed that they have not any biasness with the researcher.

## **1.6 Profiles of the Selected Companies**

Although, 25 commercial banks are actively working in the nation in the sector of up liftment of financial sector, only 5 commercial banks have been taken as sample of the study.

### **i. Standard Chartered Bank Nepal Ltd.**

Standard Chartered Bank Nepal Ltd. Earlier named as Nepal Grind lays Bank Ltd. was established in year 1985 A. D. (2042 B. S.) as a second joint venture bank in Nepal and it has incorporate since 1987 A. D. On July 2000, Standard Chartered Bank concluded the acquisition of ANZ Grind lays Bank from the Australia and New Zealand banking group Ltd. with the acquisition, 50% share of Nepal Grind lays bank ltd. (NGBL) previously owned by AZN Grind lays are now owned by Standard Chartered Grind lays Bank limited leading to the name change of the bank to Standard Chartered Banks Nepal Ltd. with the

effective from July 2001<sup>2</sup>. The equity composition of Standard Chartered Bank Nepal Ltd. is as follows.

Standard Chartered Bank Nepal Ltd. 50%: Promoters

Nepal Bank Ltd. 33%

General Public 17%

The bank focuses mainly on corporate consumer and commercial banking, providing service for international firm as well as embassies, aid agencies, airlines, hotels and Government Corporation.

## **ii. Nabil Bank Ltd.**

Nepal Arab Bank Ltd. (NABIL) is the first joint-venture commercial bank in Nepal, which was incorporate in 1984 A. D. (2041 B. S.). It was listed in the Nepal stock exchange in the year 1986 A. D. (2042 B.S.) Dubai bank limited, Dubai (Later acquired by Emirates bank international Ltd., Dubai) was the first join partner to NABIL. Currently, NB (international) Ltd., Ireland is the foreign partner. NABIL bank Ltd. had the official name Arab bank Ltd. till 31<sup>st</sup> December 2001<sup>3</sup>. The equity composition of Nepal Arab bank Ltd. is as follows.

NB (NB International, Ireland) 50%

Nepal Industrial Development Corporation (NIDC) 10%

Rastriya Beema Sasthan 9.67%

Nepal Stock Exchange 0.33%

General Public 30%

## **iii. Everest Bank Ltd.**

Everest Bank limited (EBL) started its operations in 1994 with a view and objective of extending professionalized and efficient banking services to various segments of the society. EBL joined hands with Punjab National Bank (PNB) India as its joint venture partner in 1997. The bank is providing its services through a wide network of 25 branches across the nation and 250 correspondents across the globe. All the major branches of the bank are connected through anywhere branch banking system, a facility which enables a customer to do banking truncations from any of the branches irrespective of their having account of their having accounts in other branch. Everest Bank Ltd. was established in 1992 A. D. (2051 B.S.) it is second Nepal-Indo joint

---

<sup>2</sup> [www.standardchartered.com.np](http://www.standardchartered.com.np)

<sup>3</sup> [www.nabilbankltd.com.np](http://www.nabilbankltd.com.np)

venture bank in our country. It is joint venture commercial bank with foreign partner Punjab National bank<sup>4</sup>. The equity composition of Everest bank Ltd. as follows.

Nepalese promoters 50%

Punjab National bank 20%

General Public 30%

EBL is playing a pivotal role in facilitating remittance to and from across globe. Being the first Nepalese bank to open a representative office in Delhi, India, the Nepalese in India can open account in Nepalese in India can open account in Nepal from the designated branches of Punjab National bank and remit their savings economically through banking channels to Nepal.

**iv. Nepal Investment Banks Ltd.**

Nepal Investment Bank Ltd. previously known as Indosuez Bank Ltd. was established in 1986 A. D. (2042 B.S.) as a joint-venture between Nepalese and French partner. The Banque Indosuez Paris is its foreign joint venture partner. The bank is managed by its foreign in accordance with joint venture and technical service agreement signed between its and Nepalese promoters. The name of bank has been changed to Nepal Investment Bank Ltd. upon approval of banks annual general meeting, Nepal Rastra Bank and company registrars' office with following shareholders structure.

Banque Indosuez 50%

Rastriya Banijya Bank 15%

Rastriya Beema Sanathan 15%

General Public 20%

**v. Himalayan Bank Ltd.**

Himalayan Bank Ltd. was established in 1992 A.D. (2049 B.S.), under the company act 2031. It is joint venture bank with foreign partner Habib Bank Ltd. of Pakistan. This is the first joint venture bank by Nepalese Chief executive. The equity composition of Himalayan Bank Ltd. is as follows.

Nepal promoters 50%

Habib Bank Ltd. Pakistan 20%

Employees' public 15%

General public 15%

---

<sup>4</sup> [www.everestbankltd.com.np](http://www.everestbankltd.com.np)

## **1.7 The chapter plan of the study**

The study contains five chapters. The introduction, literature review, research methodology, presentation and analysis of data, summary, conclusion and recommendation are the major chapters included under this study.

### *Chapter One: Introduction*

The first chapter, introduction, deals with general introduction, focus of the study, statement of the problem, objectives of the study, importance/significance of the study, organization's under study and limitations of the study.

### *Chapter Two: Review of Literature*

The second chapter, literature review deals with different literatures, which are closely related to this study. It provides information about the various aspects of the dividend. The various practices done regarding the dividend policy in Nepal is also reviewed under this chapter.

### *Chapter Three: Research Methodology*

The third chapter, research methodology deals with the detail research methods that are planned for conducting this study.

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

The fourth chapter, presentation and analysis of data are concerned with the application of defined research method on the collected data and information. The generated results after the application of research method on data are analyzed and interpreted in this chapter.

### *Chapter 5: Summary, Conclusion and Recommendation*

The fifth chapter, summary, conclusion and recommendation part deals with the summary and conclusion of the analysis. Brief conclusions from the analysis are drawn and necessary recommendations are made through this chapter.

## CHAPTER-II

### **Review of Literature**

The present research aims to analyze the impact of dividend policy on market price of the shares of joint venture commercial banks, which are Nepal SBI Bank Limited, Nepal Arab Bank Limited, Nepal Bangladesh Bank Limited, Everest Bank Ltd. and Himalayan Bank Ltd. For this purpose, it needs to review related literatures in this concerned area which will help researcher to get the clear cut ideas, opinions and other concepts. What other has said? What other has done? And what other has written? These all and other related questions are reviewed which has provided useful inputs in this research work this chapter emphasizes about the literatures which were concerned in this connections. Therefore, in this chapter conceptual frameworks given by different authors and intellectuals of this area, book, journals research work and previous thesis related to dividend, dividend policy and impact of dividend policy are reviewed. Moreover, rules regarding to dividend policy are reviewed and an attempts has been made to present them properly.

#### **2.1 Conceptual Framework**

Dividend is a periodic payment made to the stockholders to compensate them for the use of and risk of their investment funds. In other words, it is that portion of the earning which is distributed by firm. "Dividend refers to that portion of a firm's net earning, which are paid out to the shareholders."<sup>5</sup> Dividends are generally paid in the form of cash. So the payment of dividend reduces the cash balance of the company as well as the amount of retained earnings. In theory of finance, dividend decision plays a very crucial role. Dividend decision however is still a crucial as well as controversial area of managerial finance. It is more technical area of finance in the since that it is complex on having numerous implications for the firm. Dividend policy may affect the area such as financial structure of the firm flow of funds corporate liquidity, stock prices investors' satisfaction, growth of the firm etc. Like other

---

<sup>5</sup> Khan, M Y & K Jain P K "Dividend Policy Decision" Financial Management Text and Problems Second Edition, (New Delhi Tata McGraw- Hill Publishing Company Ltd 1992) P 543

major decision, the dividend decision has major role in all businesses organization.

Dividend policy is the policy of any firm organization/company regarding the division of its profit between shareholders as dividend policy includes all aspects related to the payment of dividend. There is inverse relationship between cash dividend and the amount retained. In other words, if the company pays more dividends to its shareholders, there will be fewer amounts refrained for making investment and Vice-versa. "Dividend policy determines the division of earning between payments to stockholders and reinvestment in the firm. Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute the cash flows that accrue to stockholder.<sup>6</sup> Thus the dividend payout reduces the amount of earning retained in the firm and affect total amount of internal financing.

Dividend decision is one of three major decision of managerial finance. The firm has to choose between distributing profit as dividend to the shareholders or reinvesting the profit into the business for more profitable opportunities. It is better to pay the dividend if the payment will lead to the wealth maximization. If not it is better to retain them for financial investment. Thus the relationship between dividend and value of the firm is considered as the criterion for decision making.

Shareholders of a company always aim to maximize their wealth. The shareholders wealth includes not only the market price of the stock but also the current dividend the company pays to them. But the dividend payout reduces the total amount of financing. Thus the dividend policy should be concerned with the well-being of the shareholders, which can be partially measured, by dividend received but more accurately measured in terms of the marked value of the stock.

Most of the shareholders want to maximize their wealth in two forms i. e. capital gain and cash dividend. Capital gain is the profit resulting from sale of the common stock where as dividend is the share in profit of the company. The shareholders in one hand they also expect an increase in market price of the share and in the other hand they also expect distribution of firms earning in

---

<sup>6</sup> Weston, J Fred & Copeland Thomas E "Dividend Policy", Managerial Finance Ninth Edition (USA The Dryen Press, 1990) P 657

the forms of dividend. From the firm having stable image in the market the investors expect regular dividend. Thus this priority takes over the desire to retain earning for financial expansion and growth, shareholders expectation can be fulfilled either through capital gain or dividends.

Since dividend would be more attractive to stockholder one might think that there would be a tendency for corporation to increase distribution dividends but one might equally pressure that gross dividend would be reduced. Somewhat with an increase in net after tax dividends still available to stockholders and increase in retained earnings for the corporation.<sup>7</sup> It is thus very important to maintain balance between the shareholders interest and corporate growth resulting from internal financing is amount retained. Financial Management is therefore concerned with the activities of the corporation that affect the well being of stockholders. That well being can be partially measured by the dividend received but more accurate measure is the market value of stock.<sup>8</sup> Thus dividend decision is one of the central and major decision area related to the policies seeking to maximize the value of firms common stock as well as the wealth of shareholders.

### **2.1.1 Dividend:**

Dividend refers to the part of earnings made by the firm that is distributed to the shareholders as return of their investment over equity share whether those earnings were generated in the current period or in previous periods. In other words, it is the rewards to shareholders for bearing the risk of uncertainty (Ghimire, 2002:8). Once a company makes a profit, it should decide on what to do with the profit. It could continue to retain the profit within the company, or it could pay out the profit to the owners of the company in the form of dividend. Every firm prefers to make somewhat rational balance between these two alternatives. The firm adopts different approaches to distribute dividend according to their objectives. Given the objective of maximization at shareholders wealth, the firm should use net profits for paying dividends to the shareholders. Conversely, the firm should retain profit to finance the investment opportunities if the objective is to expand the business ( Bhurtel, 2002:16).

---

<sup>7</sup> Throp Smith Dan, Relief from Double Taxation of Dividend Income. Harvard Business Review (January-February 1977), PP 90-91

<sup>8</sup> Dean William, H. Finance (Illinois, The Dryden Press, 1973) , P 01

At the end of each year, every publicly traded company has to decide whether to return cash to its stockholders and, if yes, how much in the form of dividends. The owner of a private company has to make a similar decision about how much cash he plans to withdraw from the business, and how much to reinvest. This is the dividend decision, and we begin this study by providing some background on three aspects of dividend policy. One is a purely procedural question about how dividends are set and paid out to stockholders. The second is an examination of widely used measures of how much a firm pays in the dividends. The third is an empirical examination of some patterns that firms follow in dividend policy. Having laid this groundwork, we look at three schools of thought on dividend policy. The dividend irrelevance school believes that dividends do not really matter, because they do not affect firm value. This argument is based upon two assumptions. The first is that there is no tax disadvantage to an investor to receiving dividends, and the second is that firms can raise funds in capital markets for new investments without bearing significant issuance costs. The proponents of the second school feel that dividends are bad for the average stockholder because of the tax disadvantage they create, which results in lower value. Finally, there are those in a third group who argue that dividends are clearly good because stockholders (or at least some of them) like them. Although dividends have traditionally been considered the primary approach for publicly traded firms to return cash or assets to their stockholders, they comprise only one of many ways available to the firm to accomplish this objective. In particular, firms can return cash to stockholders through equity repurchases, where the cash is used to buy back outstanding stock in the firm and reduce the number of shares outstanding. In addition, firms can return some of their assets to their stockholders in the form of spin offs and split offs.

### **2.1.2 The Dividend Process**

Firms in the United States generally pay dividends every quarter, whereas firms in other countries typically pay dividends on a semi-annual or annual basis. Let us look at the time line associated with dividend payment and define different types of dividends.

#### *The Dividend Payment Time Line*

Dividends in publicly traded firms are usually set by the board of directors and paid out to stockholders a few weeks later. There are several key dates

between the times the board declares the dividend until the dividend is actually paid.

- a) The first date of note is the **dividend declaration date**, the date on which the board of directors declares the dollar dividend that will be paid for that quarter. This date is important because by announcing its intent to increase, decrease, or maintain dividend, the firm conveys information to financial markets. Thus, if the firm changes its dividends, this is the date on which the market reaction to the change is most likely to occur.
- b) The next date of note is the **ex-dividend date**, at which time investors have to have bought the stock in order to receive the dividend. Since the dividend is not received by investors buying stock after the ex-dividend date, the stock price will generally fall on that day to reflect that loss.
- c) At the close of the business a few days after the ex-dividend date, the company closes its stock transfer books and makes up a list of the shareholders to date on the **holder of-record date**. These shareholders will receive the dividends. There should be generally being no price effect on this date.
- d) The final step involves mailing out the dividend checks on the **dividend payment date**. In most cases, the payment date is two to three weeks after the holder of record.

### 2.1.3 Theory of Dividend

There are two fundamental theories of dividend:

#### a. Residual Theory

Under residual theory of dividends retained earnings are determined first then amount of dividend then amount of payment is determined automatically. “One school of thought, the residual theory of dividend, suggests that the dividend paid by a firm should be viewed as a residual amount left after all acceptable investment opportunities have been undertaken”<sup>9</sup>. Thus, according to this theory, dividend policy is a residual from investment policy. It is residue since shareholders get dividends only when there exists balance after paying fixed obligations and investing in profitable sector or expansion. If the firm has return earnings left over after financing all acceptable investment opportunities, these earnings, then, will be distributed to stockholders

---

<sup>9</sup> Gitman; 7<sup>th</sup> edition, 9.5

in the form of cash dividend. If not, there will be no dividend due to flotation costs; it assumes that the internally generated funds are comparatively cheaper than the funds obtained from the external sources. The theory is based on the premise that investor prefers to have the firm retain and reinvest earnings exceeds the rate of return the investor could, himself, obtain on other investment of comparable risk. The dividend under a residual dividend policy equals the amount left over from earnings after equity investment. If equity investment equals earnings, then no dividend are paid and new shares are sold to cover any equal investment not covered by earnings. If there are no any investment opportunities, then cent percent earnings are distributed to shareholders. Dividend is therefore merely a residual remaining after all equity investment needs are fulfilled.

Thus under this policy, dividend policy is influenced by (a) the company's investment opportunities and (b) the availability internally generated capital where dividends are paid only all acceptable investment opportunities have been financed. Hence, according to this concept, dividend policy is totally passive in nature. "When we treat dividend policy as strictly a financing decision, the payment of cash dividend is a passive residual"<sup>10</sup>.

**b. Wealth maximization Theory**

Under wealth maximization theory, larger dividends are announced and distributed to shareholders in order to (or in hope with) maximize the wealth of the stockholders. Basically, it is beneficial for those companies which are just established and to those companies it will be beneficial whose financial are in decreasing trends. The main purpose of the wealth maximization theory of dividend is to make assure to the stockholder that they are interesting in the firm, when has not better marker value.

**2.1.4 Forms of Dividend:**

The usual practice is to pay dividend in cash. Other options for distributing earnings are also available to the company, which are as follows:

---

<sup>10</sup> C. Van Horn; 1993, pp 327

### **i. Cash Dividend**

The portion of earning paid in form of cash to the investors in proportion to their share of the company is known as cash dividend. After the payment of dividend to the shareholders both the total assets and net worth of the company decreases by the amount equal to the cash dividend. For the payment of dividend, company should sustain adequate balance of cash. In case of insufficiency in cash balance for the payment of dividend, funds to be borrowed for this purpose are difficult. Thus, a company should regularly perform cash planning for maintaining a stable dividend policy. In context of Nepal, cash dividend is the most popular form of dividend and is mostly adopted by many companies/firms/financial institutions. However it can be said that the volume of cash dividend depends on the earning of the organization, attitude of management, situation of the market, cost of external financing etc.

The objectives of Cash Dividends are as follows:

- To distributor the earning to shareholder, as they held the proportion of the share.
- To build on image in the capital market as to create favorable condition to raise the fund at the needs.
- To make distribution easy and to account easily.

### **ii. Stock Dividends/Bonus Share with stock Splits**

Stock dividend refers to the payment of additional stock to the shareholders. "A stock dividend is paid in additional shares of the stock instead of in cash and simply involves a book-keeping transfer from retained earning to the capital stock account."<sup>11</sup> A stock dividend represents a distribution of shares in addition to the cash dividend to the existing shareholders. This has the effect of increasing the number of outstanding shares of the company. The declarations of the bonus shares will increase to paid up shares capital and reduce the reserve and surplus of the company. The total net worth is not affected by the bonus issue. In fact, it represents nothing more than re-capitalization of

---

<sup>11</sup> **Weston, J. Fred & Copeland, Thomas E.**, "Dividend Policy", *Managerial Finance Ninth Edition*, The Dryen Press, USA, 1990 pp. 680.

the owner's equity portion, i.e. the reserve and surplus. It is simply an accounting transfer from retained earnings to capital stock.

There are a number of reasons why a company declares a stock dividend. The following are the reasons;

- To increase share capital
- To provide tax benefit to the shareholders. Receipts of stock dividend are not a taxable income but cash dividend is taxable income.
- To conserve cash in the organization. A company having less liquidity pays a stock dividend to conserve cash.
- To provide psychological value to the shareholders
- To decrease the share price at a taxable range

### **iii. Scrip Dividend**

A scrip dividend is issued when a company has been suffering from a cash problem and does not permit the cash dividend, but has earned profit. A dividend paid in promissory notes is called a scrip dividend. A scrip is a form of promissory notes promising to pay the holder at a specified later date. Under this form of dividend, a company issues and distributes transferable promissory notes to shareholders, which may be interest-bearing or non-interest-bearing. The use of a scrip dividend is desirable only when corporations have really earned profit and have only to wait for the conversion of other current assets into cash. Therefore, in order to overcome the temporary shortage of cash, sometimes a company uses scrip dividends.

### **iv. Property Dividend**

It is also known by the name of liquidating dividends. It involves a payment of assets/property in any form other than cash. Such a form of dividend may be followed whenever there are assets that are no longer necessary in the operation of the business or in extraordinary circumstances. Companies' own products and the securities of subsidiaries are examples that have been paid as property dividends.

### **v. Optional Dividend**

The optional dividend is, in fact, not a kind of dividend but simply a choice of dividend given to the shareholders to accept either cash or stock dividend. But the shareholders consider the comparative value of a stock dividend with the amount of optional cash. "If the two are very nearly the same, as it often the

case, the cash option may be a convenience to selling either whole or fraction of shares he does not wish to keep."<sup>12</sup> If the cash dividend is subject to income taxes over and above the limit he prefers to have stock dividend.

**vi. Bond Dividend**

This type of dividend is distributed to the shareholders in the form of bond. It helps to postpone the payment of cash. In other words, company declares dividend in the form of its own bond with a view to avoid cash outflows. They are issued rarely. They are long-term enough to fall beyond the current liability group. The stockholders become secured creditors if the bond carries lien on assets.

But none of these types except cash and stock dividend have been practiced in Nepalese corporations although they have ample scope for application. So for in this study, the term dividend generally refers to cash dividend.

**2.1.5 Dividend Policy**

The policy, which decides on how much of the earnings a firm should retain for reinvestment and how much it should pay to shareholders, as dividend is known as dividend policy. It is the third major decision of a firm, which aims at maximization of shareholders wealth. Dividend policy determines the division of earnings between reinvestment in the firm and payments to shareholders. Retained earnings are one of the significant for financing corporate growth, but dividends refer to the cash flow that accrues to shareholders (Weston & Copeland, 1991:657). Stability or regularity of dividends is considered as a desirable policy by the management of companies. Three of the more commonly used dividend policies are:

**i. Constant dividend policy**

Constant dividend policy is based on the payment of affixed Rupees Dividend in each year/period. A number of companies follow the policy of paying fixed amount per share as dividend every year, without considering the fluctuation in the earnings of the company. The 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 may be increased.

---

<sup>12</sup> **W.C. Waring, Jr.**, "Fractional Shares Under Stock Dividend Declaration", *Harvard Law Review*, Boston, Jan, 1931, pp. 404.

**ii. Constant payout ratio**

The ratio of dividend to earning is known as payout ratio. When fixed percentage of earning is paid as dividend in every year, the policy is called constant payout ratio. Since earning fluctuates, following this policy necessarily means that the Rs. Amount of dividends will floated. It ensures that dividends are paid when profits are earned and avoid when it incurs losses, Regardless of the desire of the shareholders.

**iii. Low regular Dividend plus Extra**

The low regular dividend plus extra policy is a compromise between the first tow. It gives the firm flexibility, but it leaves investors somewhat uncertain about what their dividend income will be. If a firm's earnings are quite volatile, however, this policy may be best policy.

**2.1.6 Factors Influencing Dividend Policy**

While establishing a dividend policy in any organization, various factors should be taken into consideration. Dividend is that decision, which is influenced by many internal as well as external factors. Management has to consider both economic and non-economic factors before establishing any dividend policy. In practice, the financial executives consider the following factors when approaching a dividend decision.

**i. Stability of Earnings**

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

**ii. Profit Rate**

The expected rate of returns on assets determines the relative attractiveness of paying out earnings in form of dividend to the shareholders who will use them elsewhere or using them in the present venture.

**iii. Past Dividends**

A firm with record of past dividend payments strive to maintain the same in the future. Dividends are habit forming. If the market does not receive its

expected dosage, the stock price will suffer. The majority of firms surveyed indicated they would maintain their current dividend payments even if they were operating at a net loss for an interim period.<sup>13</sup> Furthermore, Baker, Farrelly and Edelman (1985) find that managers strongly agree with the statement that a firm should attempt to maintain and persistent record of dividend payments.

**iv. Liquidity Position**

One of the major factors to be considered in making the dividend decisions is the availability of cash or liquidity position of a company. As dividend symbolize a cash outflow, the greater the cash position and overall liquidity of a company, the greater its ability to pay a dividend regularly. Even a company that is growing and profitable may not be liquid, for its funds may go into investment opportunities, fixed assets and permanent current assets. Thus, even if a firm has a record of earning, it may not be able to pay cash dividends because of its liquidity position. Indeed, a growing firm even a very profitable one typically has a pressing need for funds. In such a situation the firm may elect not to pay cash dividend.

**v. Need to Repay Debt**

When a firm has issued debt to finance expansion or to substitute for other form of financing, it is faced with two alternatives. It can refund the debt at maturity by replacing it with another form of security or it can make provision of paying off debt. If the decision is to retire the debt, this will generally require the retention of earning.<sup>14</sup> In such case also the dividend decision will be effected.

**vi. Restrictions in Debt Contracts**

Debt contracts, especially when long-term debt is involved, often confine a firm's ability to pay cash dividends. In other words the protective covenants in bond indenture or loan agreement often include a restriction on payment of dividends. The restriction is employed by the lenders to conserve the company's ability to service debt. Generally it is articulated as maximum percentage of earnings. Similarly preferred stock agreements generally state that no cash dividends can be paid on the common stock until all accrued

---

<sup>13</sup> Jensen, Gerald R. & Johnson, James M., "The Dynamics of Corporate Dividend Reductions", *Financial Management*, Vol. 24, No. 4, Winter 1995, pp. 32

<sup>14</sup> Weston, J. Fred & Copeland, Thomas E., "Dividend Policy", *Managerial Finance Ninth Edition*, The Dryen Press, USA, 1990, pp. 659.

preferred dividends have been paid. These types of limitations persuade the dividend policy of the firm.

**vii. Tax of Shareholders**

The tax position of the corporation's owners greatly influences the desire for dividends. For example, a corporation closely held by a few tax payers in high income tax brackets is likely to pay a relatively low dividend. The owners are interested in taking their income in the form of capital gains rather than as dividends which are subject to higher personal income tax rates. However, the stockholders of a large widely held corporation may be interested in a high dividend payout.<sup>15</sup>

**viii. Rate of Asset Expansion**

There is need of more financing if a firm is growing rapidly. The greater the future need of funds, the more likely the firm is to retain its earning rather than pay them out in form of dividends. But if earnings are paid out as dividend and are subjected to high personal income tax rates only portion of them will be available for reinvestment.

**ix. Access to the Capital Market**

A large and well-established firm with a record of profitability and stability of earning has easy access to capital markets and other forms of external financing. In contrast a small and new firm is riskier for potential investors. Its ability to raise equity or debt funds from capital market is restricted. So it must retain more earning to finance its operation. Thus a well-established firm have higher payout ratio than that of a new or small firm.

**x. Legal Restrictions**

Legal rules constrain dividend payment on certain conditions as follows:

- a. Capital impairment rule states that dividend should not be paid out of paid-up capital, which causes adverse effect on security of creditors and preference shareholders.
- b. The firm should not pay cash dividend greater than the current net profit plus accumulated balance of retained earning. Accumulated loss should be recouped out of current earnings. This rule is violated by some of Nepalese companies due to management intention and government intervention.

---

<sup>15</sup> Ibid, pp. 661

- c. Insolvent firms i.e. liabilities exceeding assets or unable to pay bills are prohibited for paying cash dividend to protect creditors of the firm.
- d. If the firm has retained earning to provide opportunity to shareholders for capital gain and thereby evade tax liability of income, under such condition the firm may be forced to pay dividends.

**xi. Control**

With a liberal dividend policy, there may be need of raising fresh capital in future. If the current shareholders cannot or do not subscribe the new shares, new stockholders can dilute their controlling interest in the firm. Thus shareholders who are very sensitive to a potential loss of control prefer a low dividend payout policy.

**xii. Inflation**

Inflation also play decisive role in dividend decision. In price rise, the company may have to retain high percentage of earning because of inadequate funds generated from depreciation to replace equipments.

## **2.2 Legal Provisions Regarding Dividend Practices in Nepal**

There are no clear-cut legal provisions regarding dividend policy in Nepal. Commercial Bank Act, 2031 has made some provision for distributing dividend. According to this section, before providing the whole expenses by the bank for preliminary expenses, loss incurred in last year, capital reserve, risk beard fund and reserve fund the bank shall not be declare and distribute the dividend to shareholders.

Similarly, Company Act-1997 has made some legal provisions regarding dividend payment. These provisions are as under:

- Section 2 (M) states that bonus shares (stock dividends) means shares issued in the form of additional shares to shareholders by capitalizing the surplus from the profits or the reserve fund of a company. The term also denotes an increase in the paid up values of the shares after capitalizing surplus or reserve funds.
- Section 47 has prohibited company from purchasing its own shares. This section states that no company shall purchase its own shares or supply loans against the security of its own shares.

- Section 137 Bonus Shares and Sub Section (1) states that the company must inform the Office before issuing bonus shares, under Sub Section (1), this may be done only according to a special resolution passed by the general meeting.
- Section 140: Dividends and Sub Sections of this Section are as follows:
  - ❖ Sub Section (1): Except in the following circumstances, dividends shall be distributed among the shareholders within 45 days from the date of decision to distribute them,
    - In case any law forbids the distribution of dividends.
    - In case the right to dividend is disputed.
    - In case dividends cannot be distributed within the time-limit Mentioned above owing to circumstances beyond anyone's control and without any fault on the part of the company.
  - ❖ Sub Section (2): In case dividends are not distributed within the time-limit mentioned in Sub Section (1), this shall be done by adding interest at the prescribed rate.
  - ❖ Sub Section (3): Only the person whose name stands registered in the register of existing shareholder at the time of declaring the dividend shall be entitled to it.

Similarly, following are the major Government's decision regarding dividend payment by the government corporation dated June 14, 1998.

- I) Dividend should be paid in profitable year. Even though there are cumulative losses, dividend is to be paid if cash flow is sufficient to distribute dividend.
- ii) In case of unaudited accounts, interim dividend should be paid on the basis of provisional financial statement.
- iii) Decision regarding distribution of annual net profit shall not be made without prior acceptance of Ministry of Finance. All incentives, except those to be paid by law, shall not be distributed unless the amount of dividend is not paid to government.
- iv) Concerned BOD and top management will be held responsible for implementation of these dividend policies.

- v) Ministry of Finance will make necessary arrangements regarding fixation of dividend percentage coordinating all concerned corporation and ministries.

## **2.3 Review of Major International Studies**

Various studies have been made concerning the dividends and stock prices. Some of the major international studies on the relating to dividends and shares are stated as below. This study draws heavily from these studies to carry it out.

### **2.3.1 Gordon's Study**

Myron Gordon has developed another popular and important model relating to the stock valuation using the dividend capitalization approach<sup>16</sup>. Gordon concludes that dividend policy does affect the value of shares even when the return on investment and required rate of return are equal. He explains that investors are not indifferent between current dividend and retention of earnings with the prospect of future dividends, capital gain and both. The conclusion of this study is that investors have a strong preference for present dividends to future capital gains under the condition of uncertainty. It is assumed that current dividend is less risky than the expected capital gain. His argument stresses that an increase in dividend payout ratio leads to increase in the stock price for the reason that investors consider the dividend yield ( $D_1/P_0$ ) is less risky than the expected capital gain.<sup>17</sup>

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

---

<sup>16</sup> **Gordon, Myron J.**, "The Investment Financing and Valuation of Corporation", *Homewood III Richard D. Irwin*, 1962.

<sup>17</sup> **Pradhan, S.**, "Basics of Financial Management", *Educational Enterprises (P.) Ltd.*, Kathmandu, 1962, pp.683.

Basic assumptions of this model are as follows.<sup>18</sup>

- i. The firm uses equity capital only.
- ii. Internal rate of return ( $r$ ) and cost of capital ( $k_e$ ) are constant.
- iii. The firm and its stream of earnings are perpetual.
- iv. There is no tax on corporate income.
- v. The retention ratio ( $b$ ) once decided upon is constant. Thus the growth rate, ( $g = br$ ) is constant forever.
- vi. ' $k_e$ ' must be greater than  $g$  ( $br$ ) to get meaningful value.
- vii. The source of financing for new investment is only retained earning. No external financing is available.

### 2.3.2 Modigliani and Miller's Study

In their 1961 article, Modigliani and Miller<sup>19</sup>, for the first time in the history of finance, advocated that dividend policy does not affect the value of the firm, i.e., dividend policy has no effect on the share price of the firm. They argued that the value of the firm depends on the firm's earnings which depend on its investment policy. Therefore, as per MM Theory, a firm's value is independent of dividend policy.

According to MM, dividend policy of a firm is irrelevant, as it does not affect the wealth of the shareholders. They argue that the value of the firm depends on the earning power of the firm's assets or its investment policy. Thus, when the investment policy is given, the dividend decision - splitting the earnings into packages of retentions and dividends does not influence the value of equity shares. In other words, the division of earnings between dividend and retained earning is irrelevant from shareholders viewpoint.

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 a residual decision and dividends are passive residual.

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

---

<sup>18</sup> Francis, Jack Clark, "Investments: Analysis and Management", McGraw Hill, 1972, pp. 352

<sup>19</sup> Miller, Merton H. and Modigliani, France "Dividend Policy, Growth and Valuation of the Shares" *Journal of Business*, XXIV, Oct. 1961, pp. 411-433.

- i. The firms operate in perfect capital market where all investors are rational. Information is freely available to all. Securities are infinitely divisible and no investor is large enough to influence the market price of securities.
- ii. There are no flotation costs. The securities can be purchased and sold without payment of any commission or brokerage etc.
- iii. Taxes do not exist.
- iv. The firm has a definite (fixed) investment policy, which is not subject to change.
- v. Risk of uncertainty does not exist. Investors are also able to forecast future prices and dividends with certainty, and one discount rate is appropriate for all securities and all time periods. Thus  $r = k = kt$  for all time.

### 2.3.3 Walter's Study

James E. Walter conducted a study on dividend and stock prices in 1966<sup>20</sup>. He proposed a model for share valuation. According to him, the dividend policy of the firm affects the value of the shares. So, the dividends are relevant. He argues that the choice of dividend policies always affect the value of enterprise.

His study shows clearly the importance of the relationship between internal rate of return (R) and its cost of capital (K) in determining the dividend policy.

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

- i. The firm finances all investment through retained earning. The external funds (i.e. debt, new equity) are not used for new investment.
- ii. All earning on the firm's investment (R) and the cost of capital (k) are constant.
- iii. All earnings are either distributed as dividend or reinvested internally.
- iv. The values of EPS and DPS are assumed to remain constant forever in determining a given value.
- v. The firm has a perpetual or infinite life.

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

---

<sup>20</sup> **Walter, James E**, "Dividend Policies and Common Stock Prices", *Journal of Finance*, Volume 11, March, 1966, pp. 29-41.

## **2.4 Review of Major Studies in Nepal**

Nepalese capital market is in the early stage of development. There are only few studies done in this field. Due to the lack of information and expertise, no sufficient studies done in this field. Due to the lack of information and expertise, no sufficient studies have been carried out in regards to the dividend policy. However, recent developments in the field of capital markets have shown some rays of the future. Some of the studies done in the field of dividend policy and stock prices have been reviewed hereunder

### **2.4.1 Review of Books and Journals in Nepalese Perspective**

Nepalese capital market is in the early stage of development. There are only few studies done in this field. Due to the lack of information and expertise, no sufficient studies have been carried out in regards to the dividend policy. However, recent developments in the field of capital markets have shown some rays of hope for the future. Some of the studies done in the field of dividend policy and stock prices have been reviewed hereunder.

#### **i. Pradhan's Study:**

Dr. R.S. Pradhan has conducted a study on "**Small Market Behaviour in A Small Capital Market: A case of Nepal**"<sup>21</sup> in 1993. It is pertinent to put forth here because he has analyzed various ratios related to dividend and market price of shares. The study was based on the pooled – cross sectional data of 17 enterprises covering the year from 1986 to 1990.

The objectives of this study were as follows:

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

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

- a. Stocks with larger ratio of dividend per share to market price per share have higher liquidity. Liquidity position of stocks paying lower dividends is also more inconsistent as compared to stocks paying higher dividends.
- b. Stocks with larger ratio of dividend per share to market price per share have lower leverage ratios. So, leverage ratios of stocks paying smaller

---

<sup>21</sup> **Pradhan, R. S.**, " Stock Market Behaviour in a Small Market: A case of Nepal ", *The Nepalese Management Review*, Vol. IX, Summer 1993, pp. 23-43.

dividends were also more variable as compared to stocks paying higher dividends.

- c. Stocks with larger ratio of dividend per share to market price per share also have higher earnings. But these earning ratios of stocks paying larger dividends were also more variable as compared to stocks paying smaller dividends.
- d. Positive relationship is observed between the ratio of dividend per share to market price per share and turnover ratios. Stocks with larger ratio of dividend per share to market price per share also have higher turnover ratios. Turnover ratios of stocks paying larger dividends are also more variable than that of stocks paying smaller dividends.
- e. There is also a positive relationship between the ratio of dividend per share to market price per share and interest coverage. Stocks with higher ratio of dividend per share to market price per share also have higher interest coverage. Interest coverage of stocks paying larger dividends was also more variable as compared to stocks paying smaller dividends.
- f. So, in conclusion, it indicates positive relationship of dividend per share to market price per share with liquidity, profitability, assets turnover and interest coverage; and negative relationship with leverage.

## ii. Shrestha's Study:

Dr. M. K. Shrestha has written an article about "**Public Enterprises: Have They Dividend Paying Ability?**"<sup>22</sup>, which was published in the book '**PRASHASAN**' (30<sup>th</sup> Issue) in March 1981. It gives short glimpse of the dividend performance of some public enterprises of that time in Nepal. Dr. Shrestha has focused the following issues in the article.

HMG wants two things from the public enterprises:

- (i) They should be in a position to pay minimum dividend,
- (ii) Public enterprises should be self-supporting in financial matters in future years to come.

But these both objectives are not achieved by public enterprises.

- a. One reason for this inefficiency is caused by excessive governmental interference over daily affairs even though there is provision of

---

<sup>22</sup> **Shrestha, M.K.**, "Public Enterprises: Have They Dividend Paying Ability?", *PRASHASAN, The Nepalese Journal of Public Administration (30<sup>th</sup> Issue), March, 1981.*

government interference only for policy matters. On the other hand, high-ranking officials of HMG appointed as directors of board do nothing but simply show their bureaucratic personalities, Bureaucracy has been the enemy of efficiency and thus led corporation to face losses. Losing corporations are, therefore, not in a position of paying dividends to government.

- b. Another reason of this is the lack of self-criticism and self-consciousness. Esman<sup>23</sup> has pointed out that lack of favorable leadership is one of the biggest constraints to institution building. Moreover corporate leadership comes, as managers are not ready to have self-criticisms. In fact, all so called managers of corporations have not been able to identify themselves regarding what they can contribute as managers of corporations. So Government must be in a position to develop a financial target on corporate investment by imposing financial obligation on corporations.
- c. The article points out the irony of government biasness that government has not allowed banks to adopt an independent dividend policy and HMG is found to have pressurized on dividend payment in case of Nepal Bank Limited regardless of profit. But, it has allowed Rastriya Banijya Bank to be relieved from dividend obligation despite considerable profit.
- d. The improvement suggested by authors are:
  - i. Adopt a criteria-guided policy to drain resources from corporations through the medium of dividend payment.
  - ii. Realization by managers about cost of equity capital and dividend obligation.

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

- i. Proper evaluation of public enterprises interns of capability of paying dividend through corporation coordination committee.
- ii. Imposition of fixed rate of dividend by government on financially sound public enterprises.
- iii. Circulating the information about minimum rate of dividend to all public enterprises.

---

<sup>23</sup> **Esman, Milton J.**, "The Institution Building Concept: An Interim Appraisal", *Pittsburgh Inter University Research Programme in Institution Building, 1967, pp. 44.*

- iv. Specifying performance targets in terms of profit, priorities on timings and plans and development of strategic plans that bridges the gap between aspiration and reality.
- v. Identification of corporation objectives in Corporations Act, Company Act or special charters so as to clarify public enterprise managers regarding their financial obligation to pay dividend to HMG.

#### **2.4.2 Review of Previous Thesis**

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

##### **i. Bishnu Hari Bhattarai's Study**

The study of dividend decision and its impact on the stock valuation was carried out by Bishnu Hari Bhattarai, in 1996 using 10 companies of various sectors<sup>24</sup>. The basic objective of the study was to identify the relationship between dividend and the stock price. The major objectives of this study can be stated as follows: Highlight various aspects of dividend policies and practices in Nepal.

- a. Analyze the variables such as profit, dividend, retained earning, growth rate and relevant variables to show the relationship between the value and other ingredients affecting it.
- b. Provide feedback to the policy makers and executive working in various companies chosen for study based on the findings of the analysis.

##### **ii. Nabaraj Adhikari's Study**

The study has covered the period from 1990 to 1996 with total observations of 47 in financial sector and 30 non-financial sectors<sup>25</sup>. This study has used both primary and secondary data. The major objective of this study was to assess corporate dividend practices in Nepal. The specific objectives were as follows:

- i. To analyze the properties of portfolios formed on dividends.

---

<sup>24</sup> **Bhattarai, Bishnu Hari**, "Dividend Decision and Its Impact on Stock Valuation", *Unpublished Master's Thesis, Tribhuvan University, Shanker Dev Campus, Kathmandu, 1996.*

<sup>25</sup> **Adhikari, Nabaraj**, "Corporate Dividend Practices in Nepal", *Unpublished Master's Thesis, Tribhuvan University, Central Department of Management, Kathmandu, 1999.*

- ii. To examine the relationship between dividends and stock prices.
- iii. To survey the opinions of financial executives on corporate dividend practices.

The major conclusions of this research study were as follows:

It is observed that there are differences in financial position of high dividend paying and low dividend paying companies. Other things remaining the same, financial position of high dividend paying companies is comparatively better than that of low dividend paying companies.

**iii. Aparna Sharma's Study**

The latest study on the topic of, "Impact of dividend policy on market price of the share" has been carried out by Aparna Sharma in 2003<sup>26</sup>. The study has covered the period from 1997 to 2001 with total observation of 5 main commercial banks. This study is based specially on secondary data. The major objective of this study is to obtain broad knowledge about the impact of dividend policy adopted by the firm to its market price of shares as well as the overall valuation of the firm. The specific objectives of this study were as follows:

- i. To highlight various aspects of dividend policies and practices in Nepal.
- ii. To provide feedback to the policy maker and executives working in various commercial banks chosen for study based on findings of analysis.
- iii. To analyze the relevant variable to show relationship between the value and other ingredients affecting it.

---

<sup>26</sup> **Sharma, Aparna**, "Impact of Dividend Policy on Market Price of the Share", *Unpublished Master's Thesis, Tribhuvan University, Nepal Commerce Campus, Kathamandu, 2003.*

## **Chapter III**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This highlights the methodology adopted in the process of present study. It also focuses about sources and limitations of the data, which are used in the present study. Research work requires a scientific methodology of the study. Research methodology indicates the methods and processes employed in the entire aspects of the study. In other words, research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objective(s) in view (Kothari, 1978:19) 'Research Methodology' is a way for systematically solving the research problem. In other words, research methodology indicates the methods and processes employed in the entire aspects of the study. "Research methodology" refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objects in view. So, it is the methods, steps, and guidelines, which are to be followed in analysis, and it is a way of presenting the collected data with meaningful analysis.

#### **3.2 Research Design**

Research design is a conceptual structure within which a research is conducted. Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research question and to control variance (Wolf & Pant. 2002:74). The research design refers to the conceptual structure within which the research is conducted (Kothari, 1978:22). A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Selltiz, 1962,:50). Fred N. Krelinges has defined it in his book *Foundation of Behavioral Research* as "Research Design is the plan. Structure and strategy of investigation concerned so as to obtain answers to research. It is purposeful scheme of action proposed to be carried out in a sequence during the process of research. Research design helps researcher to enable him to keep track of action and to know whether he was moving in the right direction to achieve his goal.

This study is designed so as to find out the impact on the market price of Common Stock of a company when dividend is paid to shareholders and also how the market price responds when dividend is not paid to the shareholders. In other words, the study is closely related to the dividend policy and its impact on the share - price and wealth position of the shareholders. Therefore, the descriptive as well as the analytical approach are adopted here. To make the analysis more effective, financial statements, Statistical tools and testing models are also used.

### **3.3 Source of Data**

The research is based on the secondary data which has been downloaded from the official web site of Nepal Stock Exchange Limited i.e. [www.nepalstock.com](http://www.nepalstock.com). Besides the research may include the Annual Reports of the banks under study, Economic Report published by Nepal Rastra Bank, the stock price for the whole year listed in the Nepal Stock Exchange (NEPSE), Economic Survey published from HMG Ministry of Finance. Final Status Report published from World Bank, Financial Reports published by Nepal Stock Exchange and Securities Exchange Board, financial and other relevant data regarding the dividend policies and practices of the Bank. Besides this the data are also collected from various newspapers, magazines and journals published by the concerned agencies.

### **3.4 Population and Sample**

There are more than hundred companies that have shares trading actively in stock market; hence it does not seem reasonable to study all the companies regarding the study topic. Due to the limited time and resource factors too, it is not possible to study all of them; so sampling will be done. There should be no confusion with parameters and size of the companies since the topic is not related to comparison of sizes, but the dividend policy and its effect on market price of shares or simply, the valuation of shares.

The study is concerned with banking industry. Presently altogether 25 commercial banks (including government owned, private and joint venture) are operating in Nepal. Due to time and resource factors, it is not possible to study all of them regarding the list as follow.

### List of Licensed Commercial Bank

S. No.	Name	Estd (BS)
1	Nepal Bank Ltd.	1994
2	Rastriya Banijya Bank	2022
3	Nabil Bank Ltd. (Prey. Nepal Arab Bank Ltd.)	2041
4	Nepal Investment Bank Ltd. (Prev. Nepal Indosuez Bank Ltd.)	2042
5	Standard Chartered Bank Nepal Ltd. (Prev. Nepal Grind lays Bank Ltd.)	2043
6	Himalayan Bank Ltd	2049
7	Nepal SBI Bank Ltd.	2050
8	Nepal Bangladesh Bank Ltd.	2050
9	Everest Bank Ltd.	2051
10	Bank of Katmandu Ltd.	2051
11	Nepal Credit & Commercial Bank Ltd. (Previous Nepal Bank of Ceylon)	2053
12	Nepal Industrial & Commercial Bank Ltd.	2055
13	Lumbini Bank Ltd.	2055
14	Machhapuchhre Bank Ltd.	2057
15	Kumari bank Ltd.	2056
16	Laxmi Bank Ltd.	2053
17	Siddhartha Bank Ltd.	2058
18	Prime Bank Ltd.	2063
19	Citizens' Bank Ltd.	2063
20	Bank of Asia Ltd.	2063
21	Global Bank Ltd.	2063
22	Sunrise Bank Ltd.	2063
23	Development Credit Bank Ltd.	2064
24	Nepal Merchant Bank Ltd.	2064
25	Agriculture Development Bank Ltd. (became Commercial Bank)	2064

Out of above listed commercial banks that are operating their activities in Nepal. The following major 5 commercial banks have been selected for the study.

Standard Chartered Bank Nepal Ltd. (Previously Nepal Grindlaya Bank Ltd.)

Everest Bank Ltd.

Nabil Bank Ltd.(Nepal Arab Bank Ltd.

Himalayan Bank Ltd.

Nepal Investment Bank Ltd. (Previously Nepal Indosuez Bank Ltd.)

The samples so selected are the major leading joint venture bank in Nepal which are actively declaring dividend in most of the fiscal years. They have the history of dividend declaration. The trends and practices of declaration of dividend of the bank and its impact on stock price can request overall trend of dividend declaration of joint venture banks of a small country like Nepal.

### **3.5 Tools and Techniques of Analysis**

Data collected from various sources have been properly organized, analyzed and presented in appropriate tables and formats. Such tables and formats are subjected to interpretation and explanation as necessary. Specific financial tools and statistical tools are used to analyze variables. Mainly, the analysis has been done using following tools and methods:

#### **3.5.1 Financial Tools:**

Financial tools are those, which help to study the financial position of the firms. The financial tools used in this study are as follows.

##### **3.5.1.1 Earning Per Share (EPS)**

Earning per share refers the rupee amount earned per share of common stock outstanding. It measures the profitability of the shareholders investment. The earning per share shows the profitability of the banks on a per share basis. The higher earning indicates the better achievements in terms of profitability of the banks by mobilizing their funds and vice versa. In other words, the earning per share indicates the strength and weakness of the bank.

Earning per Share is computed to know the earning capacity and to make comparison between concerned banks. This ratio can be computed by dividing the earning available to common shareholders by the total number of common stocks outstanding. Thus,

$$\text{EPS} = \frac{\text{Earning Available to common stockholders}}{\text{Number of common stock Outstanding}}$$

##### **3.5.1.2 Dividend per Share (DPS)**

Dividend per share indicates the rupee earnings distributed to common stockholders per share held by them. It measures the dividend distribution to each equity shareholders. Dividend per share shows the portion of earning distribution to the shareholders on per share basis. Generally, the portion of earning distribution to the shareholders is on per share basis. Generally, the higher DPS creates positive attitude of the shareholders toward the bank is common stock, which consequently helps to increase the market value of the shares. And it also works as the indicator of better performance of the bank management.

It is calculated by dividing the total dividend distributed to equity shareholders by the total number of equity shares outstanding. Thus,

$$\text{DPS} = \frac{\text{Total Amount of Dividend Paid to Ordinary Shareholders}}{\text{Number of Ordinary Shares Outstanding}}$$

### 3.5.1.3 Dividend Percent (DP)

Dividend percent is the ratio of dividend per share to the paid - up price per ordinary share. It can be calculated as:

$$DP = \frac{\text{Dividend Per share}}{\text{Paid-up Price Per share}}$$

### 3.5.1.4. Dividend Payout Ratio (DPR)

It is the proportion of earning paid in the form of dividend. This ration shows what percentage profit is distributed as dividend and what percentage is retained as reserve and surplus for the growth of the banks. The dividend payout ratio of bank depends upon the earnings made by the bank. Higher earning enhances the ability to pay more dividends and vice versa.

There is an inverse relationship between dividends and retained earnings. The higher the dividend payout ratio, the lower will be the proportion of retained earnings and vice versa. The capacity of internal financing of the firm is checked by the retention ratio.

It is calculated as the percentage of the profit that is distributed as dividend. This ratio is calculated by dividing dividend per share by the earning per share by the earning per share. Thus,

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

$$\begin{aligned} \text{And, Retention Ratio} &= (1 - \text{Dividend payout ratio}) \\ &= (1 - DPR) \end{aligned}$$

### 3.5.1.5 Price Earning Ratio (P/E Ratio) / Earning Multiplier

Price -earning ratio is also called the earnings multiplier. Price-earning ratio is the ratio between market price per share and earning per share. In other words, this represents the between market price per share and earning per share. In other words, this represents the amount which investors are willing to pay for each rupee of the firm's earnings

The P/E ratio measures investor's expectation and market appraisal of the performance of the firm. The higher P/E ratio implies the market share price of a stock given the earning per share and the greater confidence of investor in the firm's future. This ratio is computed by dividing earning per share to market price per share. Thus,

$$P/E \text{ Ratio} = \frac{\text{Market Price Per Share}}{\text{Earning Per Share}}$$

### 3.5.1.6 Earning Yield

The Ratio shows the relationship between dividend per share and market value per share. It is calculating by dividing dividend per share by Market value per share. It gives some idea of how much an investor is earning for his money. The share with higher earnings yield is worth buying. It is calculated as:

$$\text{Earning Yield} = \frac{\text{Earning per share}}{\text{Market price per share}}$$

### 3.5.1.7 Dividend Yield (DY)

Dividend yield is a percentage of dividends per share on market price per share. It measures the dividend in relation to market value of share. So dividend yield is the dividend received by the investors as a percentage of market prices in the stock market.

This ratio highly influences the market price per share because a small change in dividend per share can bring effective change in the market value of the share. The share with higher dividend yields is worth buying. Thus the price of higher dividend yields increase sharply in the market. Dividend has important guidance to commit funds for the buying of shares in the secondary market. This ratio is calculated by dividing dividend per share by market price of the stock. Thus,

$$\text{DY} = \frac{\text{Dividend per share}}{\text{Market price per share}}$$

### 3.5.1.8 Mark Price per Share (MPS) to Book Value per Share (BVPS)

This Ratio measures the market the market situation per share in the competitive open market with respect to book value per share of joint venture banks. This ratio indicates the price that the market is paying for the share that is reported from the net worth of the banks.

This is important to compare the market share prices of different stocks on the basis of the book value per share. It shows the market share price of a stock as a percentage of book value per share and effect of later on the former. The higher ratios represent to conclude that the better performance of joint venture banks in terms of market price per share to book value per share. This ratio can be derived by dividing market price per share by book value per share. Thus,

$$\text{MPS to BVPS Ratio} = \frac{\text{Market price per share}}{\text{Book value per share}}$$

### 3.5.1.9 Net Worth Per Share

It is rupee value per share. It is calculated by dividing book value of net worth by total number of share outstanding.

$$\text{NWPS} = \frac{\text{Net worth}}{\text{No. of share outstanding}}$$

### 3.5.2 Statistical Tools

Besides the financial tools, various statistical tools have been used to conduct this stud. The result of analysis has been properly tabulated, compared, analyzed and interpreted. In this study, the following statistical tools are used to analyze the relationship between dividend and other variables.

#### 3.5.2.1 Arithmetic Mean or Average ( $\bar{X}$ )

An average is the value, which represents a group of values. It depicts the characteristic of the whole group. It is an envoy of the entire mass of homogeneous data. Generally the average value lies somewhere in between the two extremes, i.e. the largest and the smallest items.

#### 3.5.2.2 Standard Deviation

Karl Pearson first introduced the concept of standard deviation in 1983. Standard deviation is the positive square roots of the arithmetic average of the squares of all the deviations measured form the arithmetic average of the series. The standard deviation measures the absolute dispersion. The greater the amount of dispersion the greater the standard derivation, I.e. greater will be the magnitude of the deviations of the values form their mean.

$$\text{Standard Deviation } (\delta) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}}$$

Where, N = Number of items in the series,  $\bar{X}$  = Mean and X = Variables

#### 3.5.2.3 Coefficient of Variation (C.V.)

It is the measurement of the relative dispersion developed by Karl Pearson. It is used to compare the variability of two or more series. The series with higher coefficient of variation is said to be more variable, less consistent, less coefficient of variation is said homogenous. On the contrary the series with less coefficient of variation is said to be less variable, more consistent, more uniform, more stable and more homogenous. It is denoted by C.V. and is obtained by dividing the standard deviation by arithmetic mean.

$$C V = \frac{SD \times 100}{\bar{x}}$$

#### 3.5.2.4 Coefficient of Correlation (r)

The correlation analysis is the technique used to measure the closeness of the relationship between the variables. It helps us in determining the degree of relations between two or more variables. It describes not only the magnitude of correlation but also its direction. The coefficient of correlation is a number, which indicates to what extent two variables are related with each other and to what extent variations in one leads to the variations in the other.

$$r = \frac{Cov(X,Y)}{\sigma_x \sigma_y}$$

The value of coefficient of correlation always lies between H. A. value of -1 indicates a perfect negative relationship between the variables and a value of +1 indicates a perfect positive relationship. A value of zero Indicates that there is no relation among the variables. The zero correlation coefficient means the variables are uncorrelated. The closer r is to +1, the close relationship between the variables and closer r is to zero (0), the less close relationship. The algebraic sign of the correlation coefficient indicates the direction of the relationship between two variables, whether direct or inverse, while the numerical value of the coefficient is concerned with the strength, or closeness of the relationship between two variables.

Thus, in this study, the degree of relationship between market price and other relevant financial indicators such as dividend per share, dividend payout ratio etc is measured by the correlation coefficient.

Under this study .the correlation between the following variables are analyzed.

- a) Dividend per Share and Earning Per Share
- b) Dividend per Share and Market Price per Share
- c) Earning per Share and Market Price per Share
- d) Market Price per Share and Dividend Payout Ratio

e) Dividend per Share and Net Worth Per Share

### 3.5.2.5 Probable Error [PE (r)]

Probable error of correlation coefficient, usually denoted by PE(r) is an old measure of testing the reliability of an observed value of correlation coefficient in so far as it depends upon the condition of random sampling.

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

Where, r = Correlation coefficient between x and y

N = the number of pairs of observations

If the value of r is less than the probable error [i.e.  $r < PE(r)$ ]; there is no significant relation between X and Y.

If the value of r is greater than 6 times of the probable error [i.e.  $r > 6PE(r)$ ]; there is most significant relation between X and Y.

If  $PE(r) < r < 6PE(r)$ ; there is moderate relation between X and Y.

In this study; probable error has been calculated to determine the reliability of the value of coefficient of DPS and MPS, DPS and EPS, DPS and NWPS and EPS and MPS.

### 3.5.2.6 Coefficient of Determination ( $r^2$ )

The coefficient of determination is the primary way to measure the extent, or strength, of the association that exists between two variables, x and y. It refers to a measure of the total variance in a dependent variable that is explained by its linear relationship to an independent variable. The coefficient of determination is denoted by  $R^2$  and the value lays between zero and unity, the closer to unity and the greater the explanatory power. A value of one can occur only if the unexplained variation is zero which simply means that all the data points in the scatter diagram fall exactly on the regression line. The  $R^2$  is always a positive number. It can't tell whether the relationship between the two variables is positive or negative. The  $R^2$  is defined as the ratio of explained variance to the total variance. Thus,

$$\text{Coefficient of determination } (r^2) = \frac{\text{Explained Variance}}{\text{Total Variance}}$$

Or

$$r^2 = 1 - \frac{\text{Unexplained Variance}}{\text{Total Variance}}$$

### 3.5.2.7 Regression Analysis

Francis Galton was the first person to introduce the concept of regression. Regression refers to an analysis, which involves the fitting of an equation to a

set of data points, generally by the method of least square. In other words the regression is a statistical method for determining relationships between the variables by the establishment of an approximate functional; relationship between them. It is used to determine that whether the dependent variable is influenced by the given independent variable or not. It is considered as a useful tool for determining the strength of relationship between two (Simple Regression) or more (Multiple Regression) variable. It is also used to predict value of one variable given the value of other variables.

Simple linear regression analysis is used to find the relationship between two variables. In this study, the following simple regressions have been analyzed.

**a. Dividend Per Share on Earning Per Share**

$$Y = a + bX$$

Where,

Y = Market Price per Share

a = Regression Constant

b = Regression Coefficient

x = Earning Per Share

The relationship between dividend Per Share (dependent variable) and earning per share (independent variable) can be explained through this model.

**b. Market Price Per Share on Dividend Per Share**

$$Y = a + bX$$

Where,

Y = Market Price per Share

a = Regression Constant

b = Regression Coefficient

X = Dividend per Share

**c. Market Price Per Share Earning Per Share**

$$Y = a + bX$$

Where,

Y = Market Price per Share

a = Regression Constant

b = Regression Coefficient

X = Earning Per Share

**d. Market Price Per Share on Dividend payout Ratio**

$$Y = a + bX$$

Where,

Y = Market Price per Share

a = Regression Constant

b = Regression Coefficient

X = Dividend payout Ratio

**e. Dividend Per Share on Net worth per Share**

$$Y = a + bX$$

Where,

Y = Dividend per Share

a = Regression Constant

b = Regression Coefficient

X = Net worth per Share

- i. Multiple Regression analysis, two or more independent variables are used to estimate the values of dependent variable. It is the extension of simple regression technique. In this study, the following multiple regression analysis have been analyzed.

**a. Market price Per Share on Earning per Share and Dividend per Share**

$$Y = a + b_1X_1 + b_2X_2$$

Where,

Y = Market Price per Share

a = Regression Constant

$b_1, b_2$  = Regression coefficient of 1<sup>st</sup> and 2<sup>nd</sup> variables respectively.

$x_1$  = Earning Per Share

$x_2$  = Dividend per Share

It helps to predict the Market Price per Share on Earning per Share and Dividend Payout Ratio.

**b. Market price Per Share on Price earning ratio and Divided payout ratio**

$$Y = a + b_1X_1 + b_2X_2$$

Where,

Y = Market Price per Share

$a$  = Regression Constant

$b_1$ , = Regression coefficient of 1<sup>st</sup> variables

$b_2$  = Regression coefficient of 2<sup>nd</sup> variables

$x_1$  = Price Earning Ratio

$x_2$  = Dividend payout ratio

This model helps to predict the intercept of Price per Share on Price Earning Ratio and Dividend Per Share.

**a. Regression Constant (a)**

The value of constant is the intercept of the model, when the independent variable(s) is zero: it indicates the average level of dependent variable. 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.

**b. Regression Coefficients ( $b_1, b_2, b_3, \dots$ )**

The regression coefficient of each independent variable shows the relationship between that variable and value of dependent variable, holding the effects of all other independent variables of the regression model constant. In other words, these coefficients explain how changes in independent variables affect the values of dependent variable estimate.

**c. Standard Error of Estimate (S.E.E.)**

Practically, the perfect prediction is not possible with the help of regression equation. Standard Error of Estimate is used to measure the reliability of the estimating equation. It measures the variability, or scatter of the observed values around the regression line. It also measures the reliability of the estimating equation, indicating the variability of the observed values differ from their predicted values on the regression line.

The larger the value of S.E.E., the greater the scattering or dispersion of points around the regression line, conversely, if S.E.E. is equal to zero, then, there is no variation about the line and the correlation will be perfect. So, we expect the Estimating equation to be a 'perfect' estimator of the dependent variable. In that case, all the data points would lie directly on the regression line and no points would be scattered around it. Similarly, the smaller the S.E.E., the closer will be the dots to the regression line and

the better the estimates based on the equation for this line. Thus, with the help of standard error of estimate, it is possible for ascertaining how well and representative the regression line is as a description of the average relationship between two series

## CHAPTER-IV

### PRESENTATION AND ANALYSIS OF DATA

Presentation and analysis of data is the major part of this research study. Using various financial variables and statistical tools discussed in 'Research Methodology', the data are analyzed to achieve the specified objective of the study. This study is highly supported the dividend distribution practice of joint venture commercial banks.

#### 4.1 Analysis of Financial Indicators:

##### 4.1.1 Earning Per Share

Earning per share refers the rupee amount earned per share of common stock outstanding. It measures the profitableness of the shareholders investment. The earning per share shows the profitability of the banks on a per share basis. The higher earning indicates the better achievements of the profitability of the banks by mobilizing their funds and vice versa. The earning per share of the banks under study is tabulated as follows:

Table No. 2

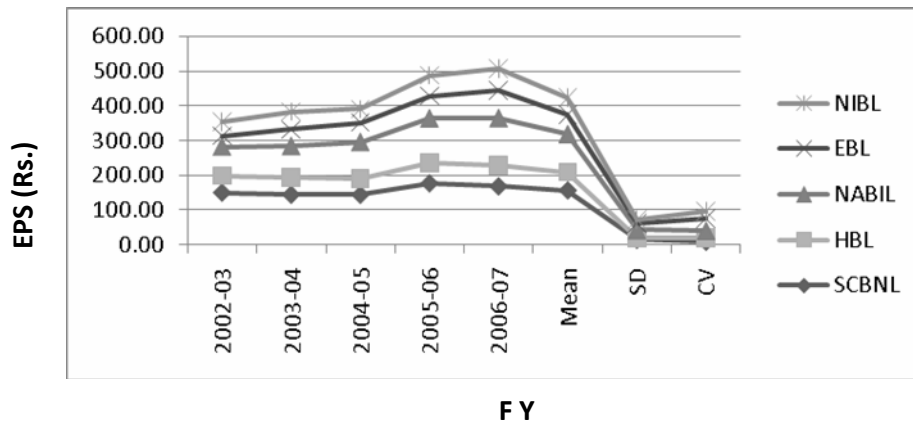
#### Earning Per Share of Concern Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	149.30	49.45	84.66	29.90	39.56
2003-04	143.55	49.05	92.61	45.58	51.70
2004-05	143.14	47.91	105.49	54.22	39.50
2005-06	175.84	59.24	129.21	62.80	59.35
2006-07	167.37	60.66	137.08	78.40	62.57
Mean	155.84	53.26	109.81	54.18	50.54
SD	14.90	6.15	22.73	18.20	10.80
CV	9.56	11.55	20.70	33.60	21.37

Source: Annual Reports of SEBON

Figure No. 1

**Earning Per Share of Concern Banks**



The EPS of SCBNL range between Rs. 175.84 to Rs. 143.14 during the period of study. During this period, the average EPS is Rs. 155.84. The standard deviation of the EPS under the period of study is 14.90. The C. V. of 9.56 indicates that there is a moderate fluctuation of 9.56% in the EPS of SCBNL, during the period of study.

During the period of study, Himalayan Bank Limited (HBL) has an average EPS of Rs. 53.26 with standard deviation of 6.15. The EPS range between Rs. 60.66 to Rs. 49.05. The coefficient of variation shows that there is a fluctuation of 11.55% in EPS of HBL.

The average EPS of NABIL Bank Ltd, during this period of study is Rs. 109.81. It stayed within the range of Rs. 137.08 to Rs. 84.66. The Standard deviation of EPS is 22.73 whereas the coefficient of variation is 20.70. The C. V. indicates a moderate fluctuation in the EPS of the bank

Everest Bank Ltd. has the EPS range between Rs. 78.40 to 29.90 during the period of study. An average of Rs. 54.18 is noted during this period. The standard deviation of the EPS is 18.20. The C.V. of 323.660 indicates that there is a fluctuation of 33.60% in the EPS during the period of study.

Nepal Investment Bank Ltd (NIBL), within the period of study, has an average EPS of Rs. 50.54, ranging between Rs. 62.57 to Rs. 39.50. The standard deviation is 10.80 and the fluctuation of 21.37% in the EPS is seen during this period, which is shown by the coefficient of variation of the bank.

From the above analysis, it can be seen that the average EPS of SCBNL is the highest and that of NIBL is lowest. The EPS range of the bank under study during this period is between Rs. 175.84 and Rs. 29.90. Similarly the standard deviation of NABIL is highest and HBL is the lowest. The coefficient of variation of these banks shows that there is fluctuation in the EPS. If compared, SCBINL has the most consistent EPS among all sample banks.

#### **4.1.2 Dividend Per Share (DPS)**

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

Table No. 3

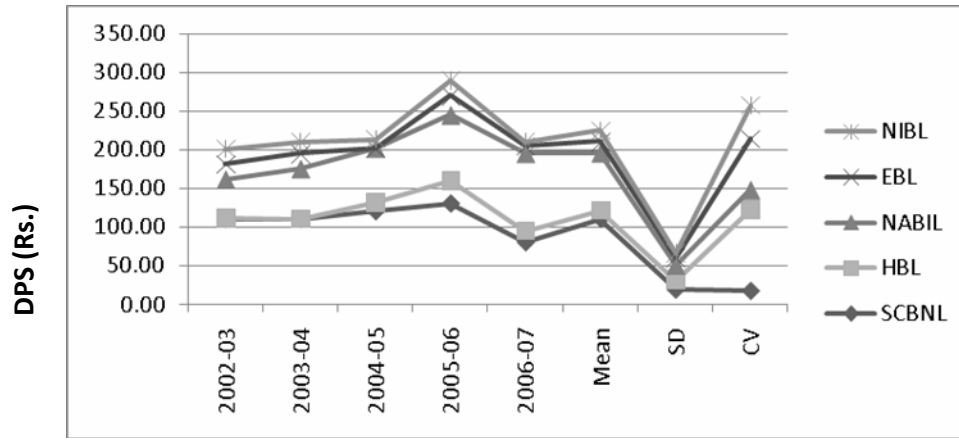
#### **Dividend per Share of Concerned Banks**

<b>Year</b>	<b>SCBNL</b>	<b>HBL</b>	<b>NABIL</b>	<b>EBL</b>	<b>NIBL</b>
2002-03	110.00	1.32	50.00	20.00	20.00
2003-04	110.00	0.00	65.00	20.00	15.00
2004-05	120.00	11.58	70.00	0.00	12.50
2005-06	130.00	30.00	85.00	25.00	20.00
2006-07	80.00	15.00	100.00	10.00	5.00
Mean	110.00	11.58	74.00	15.00	14.50
SD	18.71	12.15	19.17	10.00	6.22
CV	17.01	104.91	25.91	66.67	42.93

Source: Annual Reports of SEBON

Figure No. 2

**Dividend per share of Concerned Banks**



**F Y**

The average DPS of SCBNL is Rs. 110 with the standard deviation of 18.71. The highest and lowest DPS are Rs 130 and Rs 80 respectively. The coefficient of variation is 17.01% which indicates that there is low fluctuation in the DPS of SCBNL during the period of study.

Himalayan Bank Ltd. (HBL) has an average DPS of Rs 11.58. The highest DPS is Rs 30 whereas it has not paid dividend in the years 2003/04. The standard deviation is 12.15 and coefficient of variation is 104.91%. The CV indicates that the DPS of HBL is highly fluctuating.

The average DPS of NABIL Bank Ltd, during the period of study is Rs 74. It is within the range of Rs 100 and Rs 50. The standard deviation of DPS is 19.17 whereas the coefficient of variation of 25.91% indicates the moderate fluctuating nature of DPS in NABIL Ltd.

Everest Bank Ltd. (EBL) paid the highest DPS of Rs. 66.89 whereas it has not paid dividend in the years 2004/05. An average DPS of Rs. 33.67 has been noted during the study period. The standard deviation of the DPS is 26.51. The CV of 81.15% indicates that there is a high fluctuation in the DPS of EBL.

Nepal Investment Bank Ltd. has an average DPS of RS 30.58, ranging between Rs. 50.56 and Rs 7.99 during the period of study. The standard

deviation is 15.19 and the fluctuation of 49.67% in the DPS is seen during this period.

From the above calculation, SCBNL has the highest average DPS and HBL has the lowest. The CV indicates that among the banks under study during the period, SCBNL has the highest consistency in paying dividend whereas the DPS of HBL is highly fluctuating.

#### **4.1.3 Dividend Payout Ratio (DPR)**

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

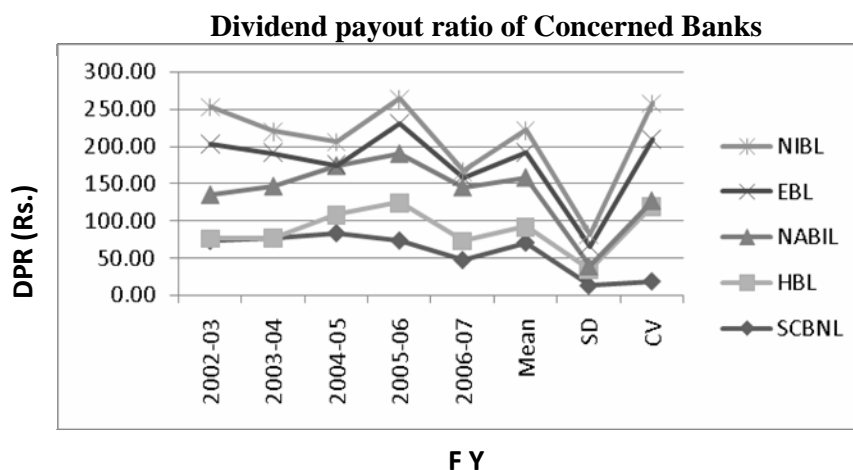
Table No. 4

#### **Dividend payout ratio of Concerned Banks**

<b>Year</b>	<b>SCBNL</b>	<b>HBL</b>	<b>NABIL</b>	<b>EBL</b>	<b>NIBL</b>
2002-03	73.68	2.67	59.06	66.89	50.56
2003-04	76.63	0.00	70.19	43.88	29.01
2004-05	83.83	24.17	66.36	0.00	31.65
2005-06	73.93	50.64	65.78	39.81	33.70
2006-07	47.80	24.73	72.95	12.75	7.99
Mean	71.11	20.44	66.87	32.67	30.58
SD	13.69	20.48	5.25	26.51	15.19
CV	19.26	100.20	7.86	81.15	49.67

Source: Annual Reports of SEBON

Figure No. 3



The average DPR of SCBNL is 71.17%. It means that SCBNL generally pays 71.17% of its net earning as dividend to its shareholders. The standard deviation of DPR is 13.69. The coefficient of variation is 19.24%. This value elucidate that there is only about 19.24% fluctuations in the DPR of the bank over the years.

An average DPR of 20.44% of Himalayan Bank Ltd. indicates that HBL generally pays out 20.44% of its earning as dividend. The standard deviation is 20.48 and CV is 100.20 which indicate that the DPS of HBL widely varies during the period of study.

Nabil Bank Ltd has an average 66.87% during the period of study. It means that it generally pays 66.87% of its earning to its shareholders in form of dividend. The standard deviation of DPR is 5.25 whereas the coefficient of variation of 7.86% indicates the nominal fluctuating nature of DPR in NABIL Bank Ltd.

An average DPR of 32.67% is noted during the study period for Everest Bank Ltd. The standard deviation of the DPR is 26.51. The CV of 81.15% shows a high fluctuation behavior of dividend payment by Everest Bank Ltd.

Nepal Investment Bank Ltd. has an average DPR of 30.58% which indicate that NIBL is generally paying 30.58% of its earning as dividend to its shareholders. The standard deviation of DPR is 15.19. The CV of 49.67% indicates a moderate fluctuation behavior of dividend payment by Nepal Investment Bank Ltd.

The above calculation shows that SCBNL has a high DPR where as HBL has lowest DPR among all banks under study. HBL has highest CV whereas

NABIL has the lowest CV among all banks under study. It shows that NABIL has the uniform dividend payment. Generally there are three categories of Dividend payout Ratio as conservative (0-20%), moderate (21-50%) and Aggressive (51-100%). If we analysis the above data using this criteria, SCBNL has adopted most aggressive dividend policy in 2002/03, 2003/04/, 2004/05 and 2005/06 but moderate dividend policy in 2066/07. HBL has adopted conservative dividend policy in first two years of study period and moderate dividend policy in remaining three years of study period. NABIL has aggressive dividend policy throughout the study of period. EBL has adopted aggressive dividend policy in 2002/03, moderate dividend policy in 2003/04 and 2005/06 and conservative dividend policy in 2004/05 and 2006/07. Nepal investment Bank has adopted moderate dividend policy in first four years and conservative dividend policy in last year of study period.

#### 4.1.4 Dividend Percent (DP)

Dividend percentage (DP) is the ratio of DPS to the paid of price (face value) per share. It is measured in percentage. The dividend percent during the period of study are presented in the following table.

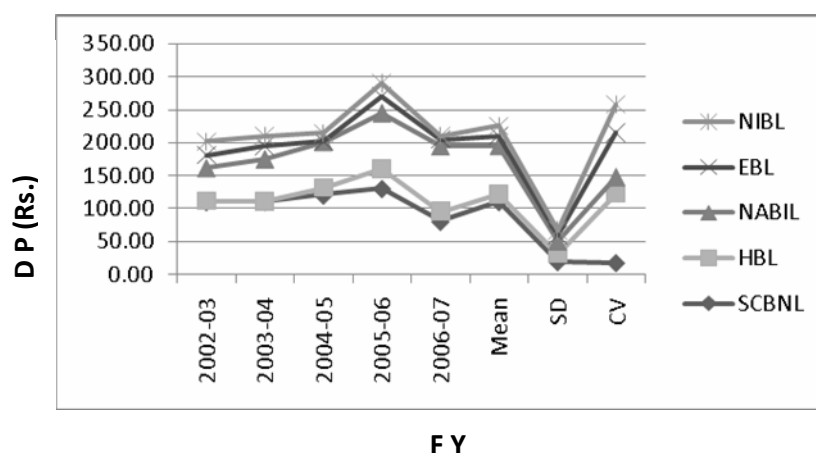
Table No. 5

#### Dividend Percent of Concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	110.00	1.32	50.00	20.00	20.00
2003-04	110.00	0.00	65.00	20.00	15.00
2004-05	120.00	11.58	70.00	0.00	12.50
2005-06	130.00	30.00	85.00	25.00	20.00
2006-07	80.00	15.00	100.00	10.00	5.00
Mean	110.00	11.58	74.00	15.00	14.50
SD	18.71	12.15	19.17	10.00	6.22
CV	17.01	104.91	25.91	66.67	42.93

Source: Annual Reports of SEBON

Figure No. 4

**Dividend Percent of Concerned Banks**

All the banks under study have same paid up price of Rs. 100 per share but the DPS is different. From the above data SCBNL pays the highest percent dividend of the face value of share and NIBL is the lowest. The C. V. indicates that amount the banks under study during the period. SCBNL has the highest consistency in dividend percent whereas the dividend percent of HBL is highly fluctuating.

**4.1.5 Market Price per Share (MPS)**

MPS is the price of share on which shares are traded in the secondary market. The average market price per share of the banks under study is presented in table and in graphical form are as follows:

Table No. 6

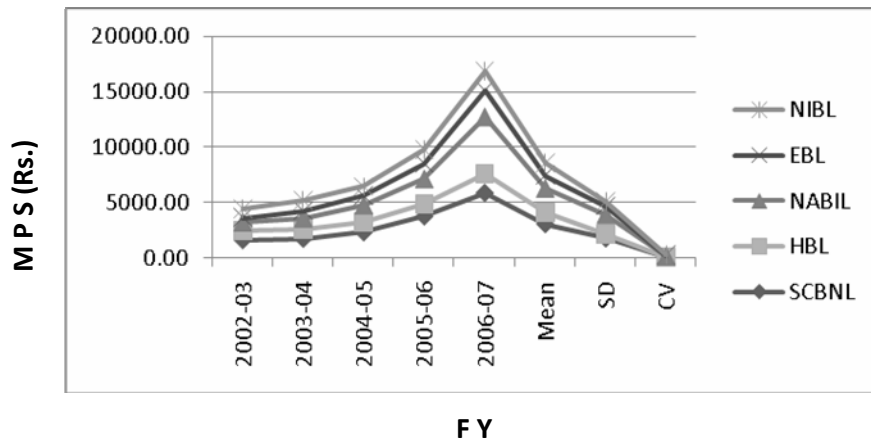
**Market price per share of Concerned Banks**

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	1640.00	836.00	740.00	445.00	795.00
2003-04	1745.00	840.00	1000.00	680.00	940.00
2004-05	2345.00	920.00	1505.00	870.00	800.00
2005-06	3775.00	1100.00	2240.00	1379.00	1260.00
2006-07	5900.00	1740.00	5050.00	2430.00	1729.00
Mean	3081.00	1087.20	2107.00	1160.80	1104.80
SD	1791.05	380.29	1741.80	788.45	396.78
CV	58.13	34.98	82.67	67.92	35.91

Source: Annual Reports of SEBON

Figure No. 5

**Market price per share of Concerned Banks**



The average of closing MPS of Standard Chartered Bank Nepal Ltd (SCBNL) during the period of study is Rs 3081 with standard deviation of 1791.05 and a coefficient of variation of 58.13%.

During the period of study, Himalayan Bank Ltd has an average closing MPS of Rs 1087.20 with standard deviation of 380.29. The coefficient of variation shows that there is a fluctuation of 34.98% in closing MPS of HBL.

The average of closing MPS of NABIL Bank Ltd during this period of study is Rs 2107. It stayed within the range of Rs 5050 and Rs 740. The standard deviation of closing MPS is 1741.80 whereas the coefficient of variation is 82.67%. The CV indicates a huge fluctuation in the closing MPS if the bank.

Everest Bank Ltd has the closing MPS range between Rs 2430 and Rs 445 during the period of study. An average closing MPS of Rs 1160.80 is noted during this period of study. The standard deviation of the closing MPS is 788.45. The CV of 67.92% indicates that there is a moderate fluctuation of 67.92% in the closing MPS of EBL during the period of study.

Nepal Investment Bank Ltd. (NIBL), within the period of studying, has an average closing MPS of 1104.80 ranging between Rs 1729 and Rs 795. The standard deviation is 3296 and the fluctuation of 35.91 in the closing MPS is seen during this period of study.

From the above calculation and data, it can be seen that the average closing MPS of SCBNL is the highest and that of HBL is the lowest. Similarly the standard deviation of SCBNL is the highest whereas HBL is lowest. The coefficient of variation of these banks shows that there is an above moderate level of fluctuation in the MPS.

#### 4.1.6 Price Earning Ratio (P/E Ratio)

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

Table No. 7

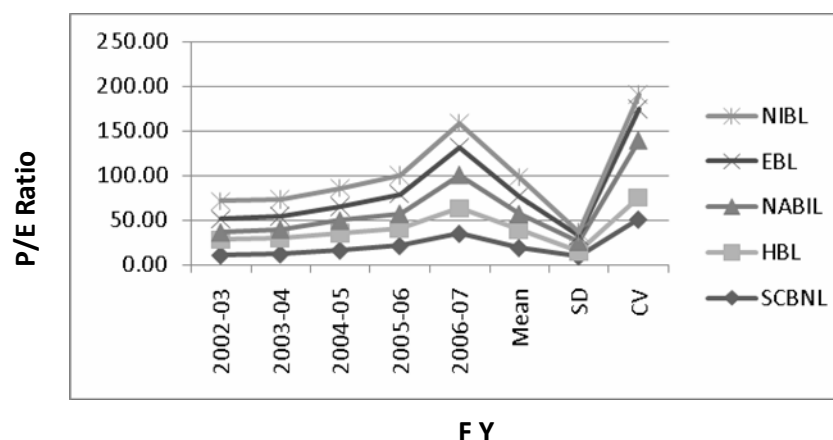
**Price Earning Ratio of Concerned Banks**

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	10.98	16.91	8.74	14.90	20.10
2003-04	12.16	17.12	10.80	14.90	18.18
2004-05	16.38	19.20	14.27	16.00	20.25
2005-06	21.47	18.57	17.34	22.00	21.23
2006-07	35.25	28.69	36.84	31.00	27.63
Mean	19.25	20.10	17.60	19.76	21.48
SD	9.85	4.90	11.25	6.94	3.61
CV	51.17	24.38	63.92	35.12	16.81

Source: Annual Reports of SEBON

Figure No. 6

**Price Earning Ratio of Concerned Banks**



The average P/E Ratio during this period of study is 19.25. It is within the range of 35.25 and 10.98. The standard deviation of P/E Ratio is 9.85 whereas the coefficient of 51.17% indicates the moderate fluctuation nature of P/E Ratio in SCBNL.

Himalayan Bank Ltd (HBL) has an average P/E Ratio of 20.10, ranging between 28.69 and 16.91, during the period of study. The standard deviation is 4.90 and the fluctuation of 24.38% in the P/E Ratio is seen during this period.

NABIL Bank Ltd has an average P/E Ratio of 17.60. The standard deviation is 11.25 and CV is 63.92%. The CV indicates that the P/E Ratio of NABIL Bank Ltd is quite fluctuating.

The average P/E Ratio of EBL is 19.76 with standard deviation of 6.94. The coefficient of variation is 35.12%, which indicates that the bank has the moderate fluctuation in P/E Ratio during the period of study.

Nepal Investment Bank Ltd. has the highest P/E Ratio of in 20.10 in Fiscal Year 2002/03. An average P/E Ratio of 21.48 has been noted during the study period. The standard deviation of the P/E Ratio is 3.61. The CV of 16.81% indicates that there is low fluctuation in the P/E Ratio of NIBL.

From the above calculation, NIBL has the highest average P/E Ratio and NABIL has the lowest. The CV indicates that among the banks under study period, NIBL has the highest consistency in P/E Ratio whereas the P/E Ratio of NABIL is highly fluctuating.

#### **4.1.7 Earning Yield (EY)**

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

Table No. 8

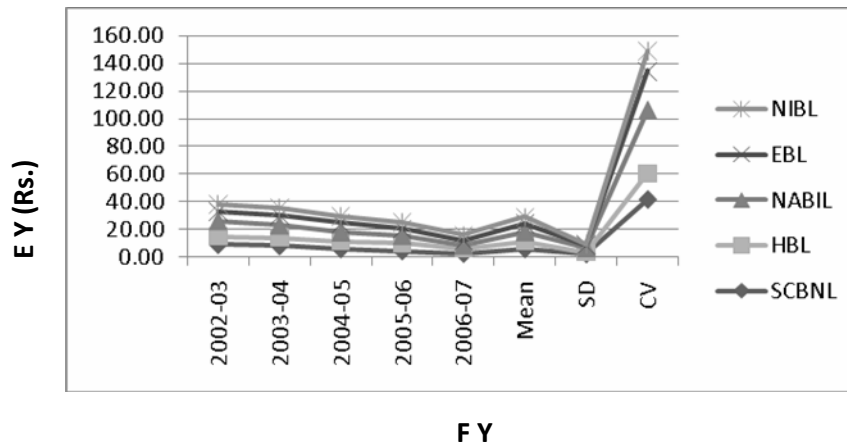
#### **Earning Yield of Concerned Banks**

<b>Year</b>	<b>SCBNL</b>	<b>HBL</b>	<b>NABIL</b>	<b>EBL</b>	<b>NIBL</b>
2002-03	9.10	5.92	11.44	6.72	4.98
2003-04	8.23	5.84	9.26	6.70	5.50
2004-05	6.10	5.21	7.01	6.23	4.94
2005-06	4.66	5.39	5.77	4.55	4.71
2006-07	2.84	3.49	2.71	3.23	3.62
Mean	6.19	5.17	7.24	5.49	4.75
SD	2.56	0.98	3.33	1.54	0.69
CV	41.36	19.06	45.99	28.05	14.62

Source: *Annual Reports of SEBON*

Figure No. 7

**Earning Yield of Concerned Banks**



The average EY of 6.19% with the standard deviation of 2.56 is seen for Standard Chartered Bank Nepal Ltd. (SCBNL). The highest and lowest EY are 9.10% and 2.84% respectively. The coefficient of variation is 41.36%, during the period of study.

Himalayan Bank Ltd (HBL) has an average EY of 5.17%. The standard deviation is 0.98 and the coefficient of variation is 19.06%. The CV indicates that the EY of HBL is less fluctuating.

The average EY of NABIL Bank Ltd, during this period of study is 7.24% within the range of 11.44% and 2.71%. The standard deviation of EY is 3.33 whereas the coefficient of variation of 45.99% which indicates that there is a quite fluctuation in the EY of NABIL.

For Everest Bank Ltd. (EBL) has an average EY of 5.49% was noted during the period of study. The standard deviation of the EY is 1.54. The coefficient of variation of 28.05 indicates that there is a moderate fluctuation in the EY of EBL.

Nepal Investment Bank Ltd has an average EY of 4.75%, ranging between 5.50% and 3.62%, during the period of study. The standard deviation is 0.69 and the fluctuation of 14.62% in the EY is seen during this period.

From the above calculations, NABIL has the highest average EY and NIBL has the lowest. The CV indicates that among the banks under study during the period, HBL has the highest consistency in its earning yield whereas the earning yield of NABIL is highly fluctuating.

#### 4.1.8 Dividend Yield (DY)

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

Table No. 9

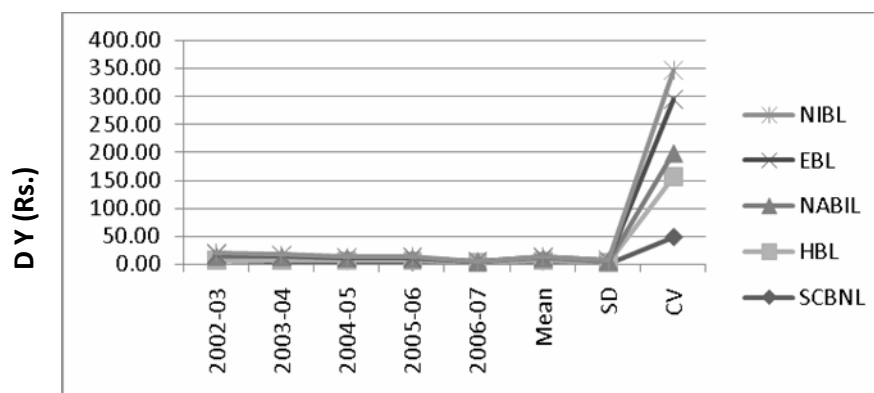
**Dividend Yield of Concerned Banks**

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	6.71	0.16	6.76	4.49	2.52
2003-04	6.30	0.00	6.50	2.94	1.60
2004-05	5.12	1.26	4.65	0.00	1.56
2005-06	3.44	2.73	3.79	1.81	1.59
2006-07	1.36	0.86	1.98	0.41	0.29
Mean	4.59	1.00	4.74	1.93	1.51
SD	2.20	1.09	1.98	1.84	0.79
CV	47.93	109.00	41.77	95.34	52.62

Source: Annual Reports of SEBON

Figure No. 8

**Dividend Yield of Concerned Banks**



FY

The DY of Standard Chartered Bank Nepal Ltd ranges between 6.71% and 1.36% during the period of study. During this period, the average DY is

4.59%. The standard deviation of the DY under the period of study is 2.20. The CV of 47.93 indicates that the fluctuation of in DY of SCBNL is moderate.

During the period of study, Himalayan Bank Ltd. has an average DY of 1.00% with a standard deviation of 1.09. The DY ranges between 2.73% and 0%. The coefficient of variation shows that there is a fluctuation of 109.00% in DY of HBL which indicates that the fluctuation of DY of HBL is huge.

The average DY of NABIL Bank Ltd, during this period of study is 4.74%. It stayed within the range of 6.76% and 1.98%. The standard deviation of DY is 1.98 whereas the coefficient of variation is 41.77%. The CV indicates a moderate fluctuation in the DY of the NABIL Bank.

Everest Bank Ltd. (EBL) has the DY ranges between 4.49% and 0% during the period of study. An average DY of 1.93% is noted during this period. The standard deviation of the DY is 1.84. The CV of 954.34% indicates that there is a fluctuation of 95.34% in the DY of EBL during the period of study, which is significantly high.

Nepal Investment Bank Ltd., within the period of study, has an average DY of 1.51% ranging between 2.52% and 0.29%. The standard deviation is 0.79 and the fluctuation of 52.62% in the DY, shown by coefficient of variation of the bank is moderate.

From the above data and calculations, it can be seen that the average DY of NABIL is the highest and that of HBL is the lowest. The DY range of the banks under study during the period is between 6.76% and 0.00%. Similarly the standard deviation of SCBNL is the highest and NIBL is the lowest. The coefficient of variation of these banks shows a high level of fluctuation in the DY.

#### **4.1.8 Market Price Per Share (MPS) to Book Value Per Share (BVPS)**

This ratio measures the market situation per share in the open market with respect to book value per share. In other words it is the ratio between MPS and BVPS. It compares the price that the market is paying for the share with the value of shares based on net worth of the banks. The higher ratios indicate the better performance in terms of MPS to BVPS. The ratio is presented in the table and graph is as follows:

Table No. 10

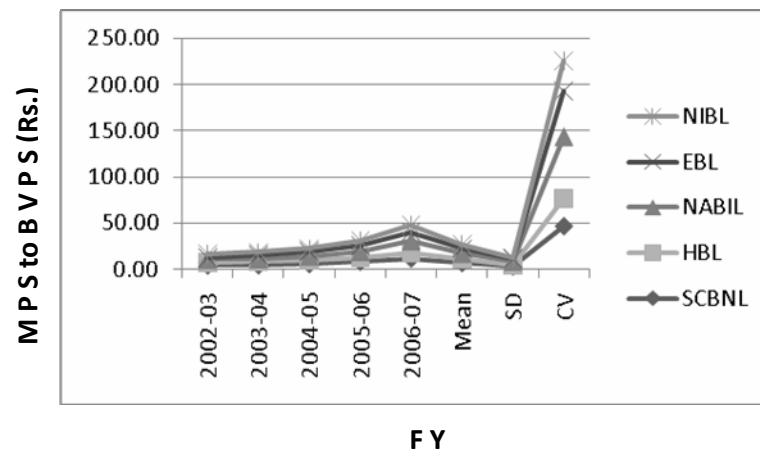
**Market price per share to book value per share of Concerned Banks**

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	4.07	3.37	2.77	2.96	3.68
2003-04	4.37	3.40	3.32	3.96	3.81
2004-05	5.55	3.84	4.46	5.14	4.00
2005-06	8.06	4.81	5.87	7.42	5.26
2006-07	11.52	6.57	12.07	10.48	7.38
Mean	6.71	4.40	5.70	6.00	4.83
SD	3.11	1.35	3.75	3.01	1.56
CV	46.35	30.68	65.79	50.17	32.30

Source: Annual Reports of SEBON

Figure No. 9

**Market price per share to book value per share of Concerned Banks**



The average ratio of MPS to BVPS of SCBNL is 6.71. The standard deviation of the ratio is 3.11. The coefficient of variation is 46.35%. This value elucidate that there is only about 46.35% fluctuations in the ratio of MPS of BVPS of the bank over the years.

An average MPS to BVPS ratio of 4.40 of Himalayan Bank Ltd. is noted during the period of study. The standard deviation is 1.35 and coefficient of variation is 30.68%. The CV indicates that the ratio of MPS to BVPS of HBL is moderately fluctuating during the period of study.

NABIL Bank Ltd. has an average MPS to BVPS ratio of 5.70 during this period of study. The standard deviation of the ratio is 3.75 whereas the coefficient of variation of 65.79% indicates the high fluctuation nature of MPS to BVPS ratio in NABIL Bank Ltd.

An average MPS to BVPS ratio of 6.00 is noted during the study period for Everest Bank Ltd. The standard deviation of the ratio of MPS to BVPS is 3.01. The C. V. 50.17% shows a moderate fluctuation in the ratio between MPS and BVPS during the study period.

Nepal Investment Bank Ltd. (NIBL) has an average MPS to BVPS ratio of 4.83. The standard deviation of this ratio is 1.56. The CV of 32.30% indicates moderate level of variation in ratio of MPS to BVPS to the bank.

The above calculation shows that, the average ratio of MPS to BVPS of SCBL is the highest among the banks under study, while this ratio is lowest for HBL. Further the CV of the ratio of MPS to BVPS shows consistency in the ratio of HBL and wide fluctuation in the ratio of NABIL.

#### **4.1.9 Net Worth Per Share (NWPS)**

The net worth per share is the value per share of total net worth. It is calculated dividing total net worth by total numbers of shares outstanding. The net worth per share of the bank under study is stated in the table and figure is as follows:

Table No. 11

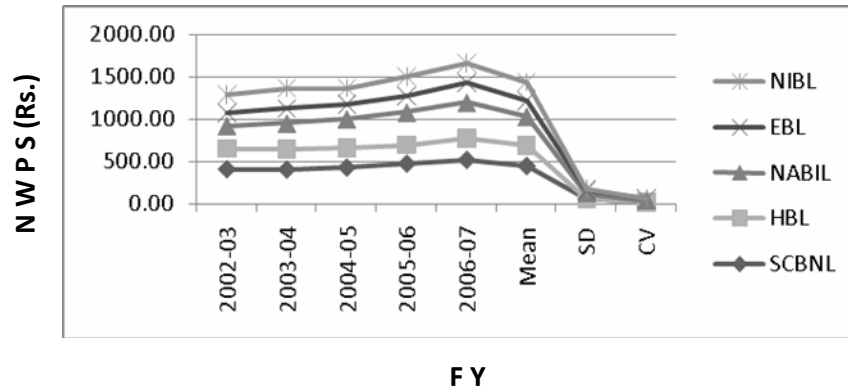
#### **Net worth per share of Concerned Banks**

<b>Year</b>	<b>SCBNL</b>	<b>HBL</b>	<b>NABIL</b>	<b>EBL</b>	<b>NIBL</b>
2002-03	403.16	247.82	267.30	150.10	216.23
2003-04	399.24	246.93	301.37	171.53	246.88
2004-05	422.37	239.59	337.16	169.15	199.83
2005-06	468.22	228.72	381.36	185.87	239.67
2006-07	512.12	264.73	418.39	231.95	234.37
Mean	441.02	245.56	341.12	181.72	227.40
SD	48.27	13.17	60.49	30.83	19.13
CV	10.95	5.36	17.73	16.96	8.41

Source: Annual Reports of SEBON

Figure No. 10

**Net worth per share of Concerned Banks**



The Net worth per share of SCBNL ranges between RS 403.16 and Rs. 399.24 during the period of study. The average NWPS of SCBNL is Rs 441.02 and the standard deviation of NWPS under the period of study is 48.27. The coefficient of variation 10.95% shows the lower fluctuation of NWPS of SCBNL.

During the period of study, Himalayan Bank Ltd has average NWPS is Rs 245.56. It is stayed with the range of Rs 264.73 and Rs 228.72. The standard deviation of NWPS of HBL is 13.17 and coefficient of variation of 5.36% indicates the lowest fluctuation of NWPS of HBL during the period of study.

The NABIL bank ltd. has an average NWPS is Rs 341.12 and its range between Rs 418.39 and Rs 267.30. The standard deviation of NWPS of NABIL is 60.49. The coefficient of variation of 17.73% shows that is pure consistency of NWPS of NABIL bank ltd.

Similarly the average NWPS of EBL is Rs 181.72. The range of NWPS of EBL has RS 231.95 and Rs 150.10. The standard deviation of NWPS of EBL is 30.83 and its CV of 16.96% indicates the fluctuation of NWPS of EBL is under moderate level during the period of study.

In the same way, the average NWPS of NIBL is 227.40 within the range of Rs 246.88 and Rs 199.83. The standard deviation of NWPS is 19.13 and coefficient of variation of NWPS of NIBL is 8.41% which indicates that there is very low fluctuation in NWPS of NIBL during the period of study.

The above data analysis and chart shows the average Net worth per share (NWPS) of the bank under study range between Rs 441.02 (SCBNL) and Rs 341.12 (NABIL), HBL, NIBL, and EBL have the average NWPS of Rs

245.56, Rs 227.40 and Rs 181.72 respectively. Similarly, the CV shows the highest consistency in NWPS of HBL (5.36%) and NIBL (8.41%) whereas the NWPS of NABIL has the highest fluctuating tendency (17.73%) where EBL has CV of 16.96% shows moderate level of fluctuation.

## 4.2 Company wise Analysis of Commercial Banks

### 4.2.1 Financial Situation of SCBNL

Table No. 12

#### Financial Situation of SCBNL

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	143.14	175.84	155.84	14.9	9.56
DPS	80	130	110	18.71	17.01
DP Ratio	47.8	83.83	71.11	13.69	19.26
MPS	1640	59	3081	1791.05	58.13
PE Ratio	10.98	35.25	19.25	9.85	51.17
EY	2.84	9.1	6.19	2.56	41.36
DY	1.36	6.71	4.59	2.2	47.93
NWPS	399.24	512.12	441.02	48.27	10.95

Source: Annual Reports of SCBNL

SCBNL has average EPS of Rs 155.84. Its standard deviation is 14.90 and coefficient of variation of 9.56% indicates the consistency in EPS of this bank. The range of EPS of this bank is between Rs 143.14 and Rs. 175.84. DPS of this bank is range between Rs 80 and Rs 130 and average DPS is 110. Its standard deviation is 18.71 and coefficient of variation of this bank is 17.01% which is very low fluctuation. The DP Ratio of this bank ranged between 47.87% and 83.83% and its average DP ratio is 71.17%. The standard deviation is 13.69 and C.V. of DP ratio is 19.24%. This also shows consistency of DP ratio. The MPS of this bank ranged between Rs 1640 and Rs 5900 and average MPS of Rs 3081. The standard deviation and C.V. is 1791.05 and 58.13% respectively. The price earning ratio is range between 10.98 and 35.25 and its average PE ratio is 19.25. The standard deviation is 9.85 and coefficient of variation of 19.26% is indicating the under moderate fluctuation. Similarly the average earning Yield (EY) is 6.19% which is range between 2.84% and 9.10%. The standard deviation of EY is 2.56 and CV is

41.36%. The dividend Yield (DY) is ranged between 1.36% and 6.71% and average DY under the studying period is 4.59%. The standard deviation is 2.20 with its CV of 47.93% in the same way the net worth per share of SCBNL is range between 441.02 and standard deviation of NWPS is 48.27 with CV of 10.95%.

In the above table we show the consistency in the all financial indicators. The bank paid dividend continues in the period of study. There is positive relationship between DPS and MPS.

#### 4.2.2 Financial Situation of HBL

Table No. 13

##### Financial Situation of HBL

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	47.91	60.66	53.26	6.15	11.55
DPS	0	30	11.58	12.15	104.91
DP Ratio	0	50.64	20.44	20.48	100.2
MPS	836	1740	1087.2	380.29	34.98
PE Ratio	16.91	28.69	20.1	4.9	24.38
EY	3.49	5.92	5.17	0.9854	19.06
DY	0	2.73	1	1.09	109
NWPS	228.72	264.73	245.56	13.17	5.36

Source: *Annual Reports of HBL*

HBL has an average EPS is Rs 53.26 and it is the range between Rs 47.91 and Rs 60.60. The standard deviation of EPS is 6.15 and its CV shows low fluctuation of EPS of HBL which is only 11.55% during the period of study. The DPS is range between Rs 0.00 and Rs 30.00 and average of DPS is Rs 11.58. The standard deviation of DPS is 12.15 with CV 104.91%. The CV is indicating that there is over fluctuation in DPS during the period of study. The average DP is 20.44 with standard deviation of 20.48 and the CV of DPR is 100.20% shows that there is also over fluctuation of DPR.

The MPS is range between Rs 836 and Rs 1740 and average of MPS is Rs 1087.20. The standard deviation of MPS is 380.29 and CV 34.98%. The CV indicates that there is moderate fluctuation in MPS of HBL. The P/E ratio is ranged between 16.91% and 28.69% and its average is 20.10%. The standard deviation and coefficient of variation is 4.90 and 24.38% respectively.

Similarly, the average of earning Yield (EY) is 5.17%. Which range between 3.49% and 5.92%. The standard deviation is 0.98 with the CV of 19.06%. The banks dividend Yield is ranged between 0% and 2.73% with the average of

1%. The standard deviation of DY is 1.09 and its coefficient of variation of 109% is indicating the high fluctuating of DY under the period of study. The NWPS of this bank is ranged between Rs 228.72 and Rs 264.73 and the average of NWPS is Rs 245.56. The standard deviation and C is 13.17 and 5.36% respectively of NWPS of HBL.

By studying above table, we can found that the bank is paying dividend continue but there is high fluctuation in paying dividend. In this table we can see the increase is DPS as well as increasing in MPS during the period of study.

#### 4.2.3 Financial Situation of NABIL Bank Ltd.

Table No. 14

##### Financial Situation of NABIL Bank Ltd

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	84.66	137.08	109.81	22.73	20.7
DPS	50	100	74	19.17	25.91
DP Ratio	59.06	72.95	66.87	5.25	7.86
MPS	740	5050	2107	1741.8	82.67
PE Ratio	8.74	36.84	17.6	11.25	63.92
EY	2.71	11.44	7.24	3.33	45.99
DY	1.98	6.76	4.74	1.98	41.77
NWPS	267.3	418.39	341.12	60.49	17.73

Source: *Annual Reports of NABIL*

The average EPS of NABIL has Rs 109.81 and it is ranged between Rs 84.66 and Rs 137.08. The standard deviation of EPS is 22.73 and CV is 20.70%. The CV indicates the under moderate fluctuation of EPS. The DPS of NABIL is ranged between Rs 50 and Rs 100 with the average of Rs 74 and its standard deviation is 19.17. The CV of 25.91% is say that it is also under moderate fluctuation. The DP ratio of this bank is ranged between 59.06% and 72.954% and its average DP ratio is 66.87%. The standard deviation of DP ratio is 5.25 with the CV of 7.86%. The CV shows the consistency in the DP ratio of the NABIL bank Ltd.

The average MPS of the NABIL is Rs 2107 ranging between Rs 740 to Rs 5050. The standard deviation of MPS is 1741.80 and CV of 82.67% indicate the over fluctuation if MPS of NABIL bank. The average PE ratio is 17.60 and the standard deviation and CV of PE ratio of NABIL bank is 11.25 and 63.92% respectively.

Similarly, the average of earning of earning yield (EY) of NABIL is 7.24% ranged between 2.71% and 11.44%. The standard deviation is 3.33. The CV of EY 45.99% shows that there is moderate fluctuation EY of NABIL bank. The dividend Yield (DY) of NANIL ranged between 1.98% and 6.76% with the average of 4.74%.The standard deviation of DY of this bank is1.98 and its coefficient of variation of 41.77% is also net worth per share is Rs 341.12 and it is ranged between Rs 267.30 and Rs 418.39.The standard deviation of NWPS of NABIL bank Ltd.

In the above table we can see that the relationship of dividend per share (DPS) and MPS is positive. Increasing DPS as well as increasing MPS are vice-versa. But the increasing ratio MPS is greater than the increasing ratio of DPS and same condition is seen in the NWPS.

#### 4.2.4 Financial Situation of EBL

Table No. 15

##### Financial Situation of EBL

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	29.9	78.4	54.18	18.2	33.6
DPS	0	25	15	10	66.67
DP Ratio	0	66.89	32.67	26.51	81.15
MPS	445	2430	116.8	788.45	67.92
PE Ratio	14.9	31	19.76	6.94	35.12
EY	3.23	6.72	5.49	1.54	28.05
DY	0	4.49	1.93	1.84	95.34
NWPS	150.1	231.95	181.72	30.83	16.96

Source: Annual Reports of EBL

The earning per share (EPS) of the Everest Bank Ltd. is ranged between Rs 29.90 and Rs 78.40. Its average is Rs54.18. The standard deviation of EPS is 18.20 and the CV of 33.60% is indicating the under moderate fluctuation of MPS of this bank. The DPS of this bank id ranged between Rs 0 and Rs 25 but its average is Rs 15. The standard deviation of DPS is 10and CV of 66.67% shows the high fluctuation in DPS of EBL. Therefore it is seen in DP ratio and dividend yield also highly fluctuates.

The market price per share (MPS) is stayed within the range of Rs 445 and Rs 2430 and its average of MPS is Rs 788.45 and the CV of 67.92% shows that there is high fluctuation in MPS of EBL during the period of study.

Similarly the PE ratio of EBL is ranged between 14.90 and 31.00. The average of PE ratio is 19.76. The standard deviation of PE ratio is 6.94 and CV is 35.12% which indicates there is moderate fluctuation in PE ratio of EBL. The average earning yield (EY) is 5.49% and its CV of 28.05% shows that the moderate fluctuation in PE ratio of EY. The average DY is 1.93% and standard deviation is 1.84. The CV of 95.34% shows highest fluctuation in DY. The net worth per share (NWPS) is ranged between Rs 150.10 and Rs 231.95. The average of NWPS is Rs 181.72 and the standard deviation of NWPS is Rs 30.83 CV of NWPS is 16.96%.

The Everest Bank Ltd. has not paid the dividend in the year of 2004/05 during the five years period of study, so we find that the banks DPS, DPR and DY very high fluctuate. But the fluctuation of MPS is not directly affected by the dividend payment in the FY 2004/05 the EBL did not paid dividend but there is high market price per share in this year, during the period of study.

#### 4.2.5 Financial Situation of NIBL

Table No. 16

##### Financial Situation of NIBL

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	39.5	62.57	50.54	10.8	21.37
DPS	5	20	14.5	6.22	42.93
DP Ratio	7.99	5056	30.58	15.19	49.67
MPS	795	1729	1104.8	396.78	35.91
PE Ratio	18.18	27.63	21.48	3.61	16.81
EY	3.62	5.5	4.75	0.6946	14.62
DY	0.29	2.52	1.51	0.7946	52.62
NWPS	199.83	24.88	227.4	19.13	8.41

Source: Annual Reports of NIBL

The average EPS of NIBL Bank has Rs 50.54 and it is ranged between Rs 39.50 and Rs 62.57. The standard deviation of EPS is 10.80 and CV is

21.37% which indicates under moderate fluctuation of EPS.. The DPS of NIBL is ranged between Rs 5 and Rs 20 with average of Rs 14.50 and its standard deviation is 6.22. The CV of 42.93% shows that it is under moderate fluctuation. The DP ratio of this bank is ranged between 7.99% and 50.56% and its average DP ratio is 6.22 with the CV of 42.93%. The CV shows that that there is moderate fluctuation in DP ratio of NIBL.

The average MPS of the NIBL is Rs 1104.8 and its ranged between Rs 795 and Rs 1729. The standard deviation of MPS is 396.78 and coefficient of variation is 35.91% which indicates that the moderate fluctuation of MPS of the NIBL Bank. The average of PE ratio is 21.48 and the standard deviation and CV of PE ratio of NIBL BANK IS 3.61 AND 16.81% respectively.

Similarly the average of earning yield (EY) of NIBL is 4.75% ranged between 3.62% and 5.5.0%. The standard deviation is 0.69. The CV of EY 14.62% shows that there is under of low fluctuation in EY of NIBL. The dividend yield (DY) of NIBL ranged between 0.29% and 2.52% with the average of 1.51%.The standard deviation of DY of this bank is0.79 and its coefficient of variation of 52.62% is indicating over moderate fluctuation. The average of net worth per share is Rs 227.40 and it is ranged between Rs 199.83 and Rs 246.88. The standard deviation of NWPS is 19.13 and the CV of NWPS of 8.41% is indicating the consistency of NWPS of NIBL.

By the studying above table we can found that the bank is paying dividend continue but there is moderate fluctuation on paying of dividend. In this table we can see the increase in DPS as well as increasing in MPS during the period of study. So we can conclude that there is positive relationship between dividend per share (DPS) and Market price per share (MPS).

### **4.3 Statistical Tools**

#### **4.3.1 Correlation Analysis**

The correlation coefficient measures the relation between two or more variables. It also measures the extent to which one variable affects the other one. The correlation coefficient lies between +1 and -1. The +1 coefficient indicates that the variables are perfectly positively correlated and -1 coefficient indicates that the variables are perfectly negatively correlated. And if the correlation coefficient is 0, it means that the variables are not related to each other. The negative correlation indicates that increase in value of one

variable leads to decrease in the value of the other and positive correlation indicates that increase in value of one variable leads to increase in the value of the other variable also. The numbers indicate the degree of correlation between the variables.

#### 4.3.1.1 Correlation between DPS and EPS of Concerned Banks

Table No. 17

##### Correlation between DPS and EPS of Concerned Banks

Banks	Coefficient of correlation	Relationship	r <sup>2</sup>	Probable error	Significant/Insignificant
SCBNL	-0.065	Negative	0.004	0.300	Insignificant
HBL	0.747	Positive	0.588	0.133	Not significant / Moderate
NABIL	0.974	Positive	0.949	0.015	Significant
EBL	-0.275	Negative	0.075	0.279	Insignificant
NIBL	-0.385	Negative	0.148	0.257	Not significant / Moderate

Source: Appendix III

In the above table we can see the relationship between EPS and DPS of five concerned joint venture banks. It can be observed that the coefficient of correlation (r) is highest and positive for NABIL (0.974), which indicates higher degree of correlation between EPS and DPS. The correlation coefficient of HBL is 0.747 in positive degree but SCBNL, EBL and NIBL has negative degree of correlation coefficient, which is -0.065, -0.275 and 0.385 respectively.

The coefficient of determination (r<sup>2</sup>) for SCBNL is 0.004, which means that the variation in EPS explains 0.4% variation in DPS, which is considerably low. In case of HBL, EPS explains 55.80% variation in DPS, which is quite considerable. The coefficient of determination of NABIL is 0.949, which indicates that the variation in EPS explain 94.90% variation in DPS which is considerable high than others. But the coefficient of determinant being 0.075 in case of EBL, which indicates that, EPS explains 7.5% variation in DPS which is not considerable. In case of NIBL, EPS explains 14.8% variation in DPS, which is low considerable.

The significance of the relationship between DPS and EPS is measured by calculating probable error of coefficient from the above table; we can calculate

that the relationship between DPS and EPS of SCBNL & EBL is insignificant. Since the coefficient of correlation (r) is smaller than the probable error. In case of HBL & NIBL the relationship between DPS and EPS is moderate significant (or neither significance nor insignificance). Since the coefficient of correlation though greater than PE, is still less than 6PE. But in case of NABIL, there is significant relationship between DPS and EPS as the coefficient of correlation (r) is greater than 6PE.

#### 4.3.1.2 Correlation between MPS and DPS

Table No. 18

##### Correlation between MPS and DPS of Concerned Banks

Banks	Coefficient of correlation	Relationship	r <sup>2</sup>	Probable Error	Significant/Insignificant
SCBNL	-0.582	Negative	0.339	0.199	Not significant / Moderate
HBL	0.428	Positive	0.183	0.246	Not significant / Moderate
NABIL	0.922	Positive	0.850	0.045	Significant
EBL	-0.183	Negative	0.034	0.291	Insignificant
NIBL	-0.633	Negative	0.401	0.181	Not significant / Moderate

Source: Appendix III

The above table shows the relationship between DPS and MPS of five joint venture banks. The coefficient of correlation between DPS and MPS of SCBNL, HBL, NABIL, EBL & NIBL are -0.582, 0.428, 0.922, -0.183 and -0.633 respectively. The correlation of HBL & NABIL shows positive relationship between DPS and MPS but SCBNL, EBL and NIBL shows negative relationship between DPS and MPS. The above figure indicates the higher degree of negative correlation between DPS and MPS in case of SCBNL (-0.582 & NIBL (-0.633) where as strongly higher degree of positive correlation in case of NABIL (0.922). Thus this implies that MPS is not affected only by DPS but other factors also determine the MPS of the joint venture banks. However, the DPS also plays the role to determine the MPS, we can't reject this matter.

The coefficient of determination ( $r^2$ ) is a measure of the degree of linear association or correlation between two variables, one of which is the independent variables and the other is dependent variable. The coefficient of determination between DPS and MPS of the SCBNL is 0.339, which means that the independent variables (DPS) explain 33.90% of the variables in the MPS. Thus, this shows that the variable of DPS has little effect on the variations of MPS in the case of SCBNL. In the same way, in case of HBL, the variation in DPS determines the 18.30% of the variations of MPS. Similarly in case of NABIL, the variation in DPS determines the 85% of the variation in MPS, which is considerably high. The coefficient of determination of EBL has 0.034, which indicate that the variation in DPS determines the 3.4% of the variation in MPS in case of EBL. Finally, the figure 0.4.1 indicates that the variation in DPS determines 40.10% variation in MPS in case of NIBL.

The significance of the relationship between DPS and MPS is measured by calculating probable error of coefficient from the above table; we can conclude that the relationship between DPS and MPS of EBL is insignificant. Since the coefficient of correlation( $r$ ) is smaller than the probable error. In case of ENL the MPS depends heavily on other variables except the DPS. But the relationship between DPS and MPS of SCBNL, HBL & NIBL is moderate significant (or neither significance nor insignificance). Since the coefficient of correlation though greater than PE, is still less than 6PE. But in case of NABIL, there is significant relationship between DPS and EPS as coefficient of correlation( $r$ ) is greater than 6PE.

#### 4.3.1.3 Correlation between MPS and EPS

Table No. 19

#### Correlation between MPS & EPS of Concerned Banks

<b>Banks</b>	<b>Coefficient of correlation</b>	<b>Relationship</b>	<b><math>r^2</math></b>	<b>Probable Error</b>	<b>Significant/Insignificant</b>
SCBNL	0.764	Positive	0.584	0.125	Significant
HBL	0.833	Positive	0.695	0.092	Significant
NABIL	0.877	Positive	0.769	0.069	Significant
EBL	0.943	Positive	0.890	0.033	Significant
NIBL	0.902	Positive	0.813	0.056	Significant

Source: Appendix III

The above table shows the relationship between EPS & MPS of concerned banks. The correlation coefficients( $r$ ) of all banks (SCBNL, HBL, NABIL, and EBL& NIBL) are positive. The correlation between EPS & MPS of EBL is nearly perfect (0.943) whereas correlation between EPS and MPS in case of SCBNL, HBL, NABIL & NIBL are 0.764, 0.833, 0.877 and 0.902 respectively. The positive correlation coefficient of all banks shows that if the EPS increases the MPS also increases and vice-versa.

The coefficient of determination ( $r^2$ ) for SCBNL is 0.584 which means that the variation in EPS explains 58.4% variation in MPS which is considerable. In case of HBL, the coefficient of determination is 0.695, which indicates that the variation in EPS explains 69.5% variation in MPS which is considerable to an extent. Similarly, in case of NABIL the EPS explains 76.9% variation in MPS, which is high considerable. The coefficient of determination of EBL is 0.890, which means that the variation in EPS explains 89% variation in MPS which is very high considerable. Finally, the coefficient of determination being 0.813 in case of NIBL indicates that EPS explains 81.3% variation in MPS, which is high considerable.

In the above table the relationship of all banks (SCBNL, HBL, NABIL, EBL & NIBL) is said to be significant relationship between MPS and EPS as coefficient of correlation ( $r$ ) is greater than 6PE which indicates that the EPS is major factor to determining the MPS.

#### 4.3.1.4 Correlation Coefficient between MPS and DPR

Table No. 20

#### Correlation Coefficient between MPS and DPR of Concerned Banks

Banks	Coefficient of correlation	Relationship	$r^2$	Probable Error	Significant/Insignificant
SCBNL	-0.858	Negative	0.736	0.079	Significant
HBL	0.388	Positive	0.150	0.256	Not significant / Moderate
NABIL	0.684	Positive	0.468	0.160	Not significant / Moderate
EBL	-0.528	Negative	0.278	0.218	Not significant / Moderate
NIBL	-0.824	Negative	0.680	0.096	Significant

Source: Appendix III

The above table shows the relationship between MPS and DPR of five joint venture banks (SCBNL, HBL, NABIL, EBL & NIBL) respectively. The above figure clearly shows positive correlation between MPS and DPR for HBL & NABIL but shows the negative correlation between MPS & DPR for SCBNL, EBL & NIBL. There is high degree of positive correlation (0.684) in case of NABIL and higher degree of negative correlation (-0.858) in case of SCBNL and correlation of HBL, EBL, & NIBL are 0.388, -0.528 and -0.824 respectively.

The coefficients of determination ( $r^2$ ) for SCBNL, HBL, NABIL, EBL & NIBL are 0.736, 0.150, 0.468, 0.278 & 0.680 respectively. The coefficient of determination for SCBNL is 0.736 which indicates that the variation in DPR explains 73.6% variation in MPS, which is high considerable. In case of HBL DPR explains 15% variation in MPS, which is not considerable and in NABIL DPR explains 46.8% variation in MPS, which is considerable. In case of EBL the coefficient of determination is 0.278, which indicates that the variation in DPR explains 27.8% variation in MPS, which is low considerable. Similarly the coefficient of determination for NIBL is 0.680 which indicates that the variation in DPR explains 68% variation in MPS, which is considerable.

As far as significance of relationship is concerned, the relationship between MPS and DPR of SCBNL & NIBL is significant because coefficient of correlation ( $r$ ) is greater than 6PE. But it is hard to define the relationship being significant or insignificant in case of HBL, NABIL & EBL, since coefficient of correlation ( $r$ ) though greater than PE is still less than 6PE. So, we can say that there is moderate relationship between MPS and DPR.

#### 4.3.1.5 Correlation between DPS and NWPS

Table No. 21

##### Correlation between DPS and NWPS of Concerned Banks

Banks	Coefficient of correlation	Relationship	$r^2$	Probable Error	Significant/Insignificant
SCBNL	-0.491	Negative	0.242	0.229	Moderate
HBL	-0.443	Negative	0.197	0.242	Moderate
NABIL	0.684	Positive	0.468	0.160	Significant
EBL	-0.187	Negative	0.035	0.291	Insignificant

NIBL	0.010	Positive	0.000 1	0.302	Insignificant
------	-------	----------	------------	-------	---------------

Source: *Appendix III*

The above table shows the relationship between DPS and NWPS of the five concerned banks. The coefficient of correlation between DPS and NWPS of NABIL & NIBL are 0.991 & 0.010 respectively which indicates positive relationship. The above figure indicates the lower degree of correlation between DPS & NWPS in case of NIBL, whereas the strong & higher degree of positive correlation shows in case of NABIL. The correlation coefficient of SCBNL, HBL & EBL are -0.491, -0.443 & -0.187, which indicates negative relationship.

The coefficient of determination ( $r^2$ ) between DPS and NWPS of SCBNL shows that the variation in DPS explains 24.2% variation in NWPS, which is low considerable. Similarly, the DPS of HBL explains 19.7% variation in NWPS, which is also low considerable. In case of NABIL DPS explains 98.2% variation in NWPS, which is considerable high. The figure 0.035 indicates that the variation in DPS determine 3.5% variation in NWPS in case of EBL. In the same way, the coefficient of determination ( $r^2$ ) of NIBL is 0.0001, which indicates that variation in DPS determine 0.01% variation in NWPS which is very low considerable.

The Significant of relationship between DPS & NWPS is measured by calculating probable error of correlation from the above table. We can conclude the relationship between DPS and NWPS of SCBNL & HBL is moderate (or neither significant nor insignificant) because the correlation coefficient ( $r$ ) though greater than PE is still less than 6PE. But in case of EBL & NIBL the relationship between DPS & NWPS is insignificant because the correlation coefficient ( $r$ ) is less than probable error (PE). In the case of NABIL, the relationship between DPS & NWPS is significant. Since, the correlation coefficient ( $r$ ) is greater than 6PE, which indicates that the dividend per share is major factor of determining the net worth per share.

#### **4.3.2 Regression Analysis**

The regression analysis is used to determine the statistical relationship between two or more variables and to make prediction of one variable on the basic of the others. The regression analysis can either be simple regression or multiple regressions. The table given below shows the regression coefficient between the financial variable.

#### 4.3.2.1 Simple Regression Analysis

##### I. Dependent variable dividend per share (DPS) or Y on independent variable earning per share (EPS) or X: R

Regression Equation,  $Y = a + bx$ .

Table No. 22

##### Simple regression analysis of DPS on EPS of Concerned banks

Banks	Constant 'a'	Reg. Coeff. 'b'	Standard Error (S.E.)	R <sup>2</sup>	't' (Value Calculated)
SCBNL	122.793	-0.082	0.723	0.004	-0.113
HBL	-62.986	1.475	0.758	0.558	1.946
NABIL	-16.210	0.822	0.110	0.949	7.471
EBL	23.178	-0.151	0.305	0.075	-0.495
NIBL	25.728	-0.222	0.307	0.148	-0.723

Source: Appendix III

The above table 22 describes the output of simple analysis between dividends per share Y and earning per share X of the concerned banks.

The regression coefficient (b) of SCBNL, EBL and NIBL is negative i.e. -0.082, -0.151 and 0.222 respectively which indicates that negative relation exists between DPS and EPS i.e. one a rupee increase in EPS leads to an average about Rs. 0.082 decrease in DPS of SCBNL, an average about Rs. 0.151 decrease in DPS of EBL and average about Rs. 0.222 decrease in DPS of NIBL holding other variable constant. The decrease in DPS due to increase in EPS sounds very awkward and ridiculous which means that the DPS of SCBNL, EBL & NIBL doesn't depend on EPS but dividend per share has random walk.

In the case of HBL & NABIL, the regression coefficient (b) is positive i.e. 1.475 and 0.822 respectively. This implies that the one rupee increase in EPS leads to an average increase of Rs. 1.475 in DPS in case of HBL, an average of about Rs.0.822 increase of NABIL. The value of constant (a) is relatively high i.e. 122.793 of SCBNL means that DPS is affected by or depends on several other factors besides EPS.

The coefficient of determination (R<sup>2</sup>) of SCBNL, HBL, NABIL, EBL & NIBL is 0.004, 0.558, 0.949, 0.075 & 0.148 respectively, which means that 0.4%, 55.80%, 94.90%, 7.5% and 14.80% of DPS variation is explained by variation in EPS of SCBNL, HBL, NABIL, EBL & NIBL respectively.

The result would be insignificant when the calculated value of 't' is less or equal to the tabulated value of 't'. Otherwise it is significant. Here, our tabulated value of 't' for two tailed test at 5% level. Significance (where the degree of freedom is 4, is n-1=5-1) is 2.776. The calculated value of SCBNL, HBL, NABIL, EBL & NIBL is -0.113, 1.946, 7.471, -0.495 & 0.723 respectively. In case of NABIL the calculated value of 't' is greater than tabulated value. So, the relationship of DPS & EPS of NABIL is significant. But in the case of SCBNL, HBL, EBL & NIBL the calculated value of 't' is less than tabulated value. So, the results of regression of these banks are Statistically Insignificant. Since, we can conclude that the value of DPS is not dependent in the value of EPS.

## II. Dependent variable Market Price per Share (MPS) Y on independent variable Dividend per Share (DPS) X

Regression Equation,  $Y = a + bx$

Table No. 23

### Simple Regression Analysis for MPS on DPS of Concerned Banks

Banks	Constant 'a'	Reg. Coeff. 'b'	Standard Error (S.E.)	R <sup>2</sup>	't' Value
SCBNL	9213.500	-55.750	44.934	0.339	-1.241
HBL	932.078	13.396	16.334	0.183	0.820
NABIL	-4092.891	83.782	20.297	0.850	4.128
EBL	1377.738	-14.463	44.749	0.034	-0.323
NIBL	1689.758	-40.342	28.492	0.401	-1.416

Source: *Appendix III*

The above figure in table 23 is the output of simple regression analysis between MPS and DPS of the concerned banks. As a regression equation, equation of Y on X is concerned, the regression coefficient or the beta coefficient (b) is positive in case of HBL (13.396), NABIL (83.782) which indicates that one Rupee increase in dividend leads to Rs. 13.396 increase in MPS of HBL, one rupee increase in dividend leads to increase in MPS of NABIL by Rs. 83.782. But as far as SCBNL, EBL & NIBL are concerned the relationship between MPS & DPS is negative as beta coefficient (b) of -55.780, -14.463 & -40.342. This implies that one rupee increase in DPS leads to decrease in MPS by 55.750 of SCBNL, by 14.463 of EBL & by Rs. 40.343 of NIBL.

The coefficient of determination ( $R^2$ ) in case of EBL is 0.034 which is very small. It implies that DPS explain only 3.4% variation in MPS of EBL. In case of NABIL coefficient of determination is 0.850 which is very high among all, which indicates that DPS explain 85% variation in MPS.

The value of constant (a) is relatively high 9213.50 of SCBNL, 932.078 of HBL, 1377.738 of EBL & 1689.758 of NIBL which means that the MPS is affected depends on several other factors besides DPS. In case of SCBNL, HBL & NIBL, Coefficient of determination ( $R^2$ ) is 0.399, 0.183 & 0.401 respectively; which indicates that variation in DPS explain 33.9% variation on MPS of SCBNL, 18.3% variation of MPS of HBL and 40.1% variation on MPS of NIBL.

The standard errors of estimate of SCBNL, HBL, NABIL, EBL & NIBL are 44.934, 16.334, 20.297, 44.749 and 28.492 respectively. These values indicate the probable error in the predicated value for the respective banks.

The tabulated value of 't' at 5% level of significant and 5 degree of freedom is 2.775. The calculated value of SCBNL, HBL, NABIL, EBL and NIBL is -1.241, 0.820, 4.128, -0.323 & -1.416 respectively. The calculated value (t) is less than tabulated 't' value in case of SCBNL, HBL, EBL & NIBL. So, the regression relation between MPS & DPS of these banks is insignificant. Since, we can conclude that the value of MPS is not dependent in the value of DPS of these banks. But in case of NABIL the calculated 't' value is greater than tabulated 't' value. So, the regression relation between MPS & DPS is significant, which indicates that the MPS depends upon the value of DPS.

### III. Dependent variable Market Price per Share (MPS) Y on Independent variables Earning Per Share (EPS) X:

Regression Equation,  $Y = a + bx$

Table No. 24

#### Simple Regression Analysis of MPS on EPS of Concerned Banks

Banks	Constant 'a'	Reg. Coeff. 'b'	Standard Error (S.E.)	$R^2$	't' Value
SCBNL	11234.092	91.858	44.763	0.584	2.052
HBL	-1656.968	51.522	19.721	0.695	2.613
NABIL	-5269.680	67.177	21.278	0.769	3.157
EBL	-1053.367	40.867	8.315	0.890	4.915
NIBL	-570.451	33.150	9.168	0.813	3.616

Source: *Appendix III*

The above table 24 depicts the output of simple regression analysis between Market Price Per Share (MPS) on Earning Price per Share (EPS) of five joint venture banks i.e. SCBNL, HBL, NABIL, EBL & NIBL.

As the above figure helps us to imply that earning per share (EPS) of concerned banks has direct impact on their stock price (MPS) as the regression co-efficient (b) of SCBNL, HBL, NABIL, EBL & NIBL is 91.858, 51.522, 67.177, 40.867 & 33.150 respectively, which implies that one rupee increase in EPS leads to an average of Rs. 91.858, Rs. 51.522, Rs. 67.177, Rs. 40.867 & 33.150 increase in MPS respectively. The value of the constant (a) is negative in case of all banks which indicate that the MPS is not affected by or depend upon EPS.

Coefficients of determination (R<sup>2</sup>) of SCBNL, HBL, NABIL, EBL and NIBL are 0.584, 0.695, 0.769, 0.890 & 0.813 respectively. This means that 58.40% variation in MPS is explained by variation in EPS in case of SCBNL, 69.50% variation in MPS is explained by variation in EPS in case of HBL, 76.90% variation in MPS is explained by variation in case NABIL, 89% or larger variation in MPS is explained by variation in EPS in case of EBL & 81.3% variation in MPS is explained by variation in EPS in case of NIBL.

The standard error of estimated of SCBNL, HBL, NABIL, EBL and NIBL are 44.763, 19.721, 21.278, 8.315 & 9.168 respectively. These values indicate the probable error in the predicated value for the respective banks.

The tabulated value of 't' at 5% level of significant and at 5 degree of freedom is 2.766. The calculated value of 't' of SCBNL, HBL, NABIL, EBL and NIBL is 2.052, 2.613, 3.157, 4.915 and 3.616 respectively. The calculated 't' value is less than tabulated value in case of SCBNL & HBL. So, the relationship of MPS & EPS of these banks is insignificant. But In case of NABIL, EBL & NIBL, the calculated 't' value is greater than tabulated 't' value. So, the relationship between MPS and EPS of these banks is significant. It means that the value of Market Price Per Share is related or depends upon Earning Per Share.

**IV. Dependent Variable Market Price per Share (MPS) Y on Independent Variable Dividend Payout Ratio (DPR) X**

Regression Equation,  $Y = a + bx$

Table No. 25

**Simple regression Analysis of MPS on DPR of Concerned Banks**

<b>Banks</b>	<b>Constant 'a'</b>	<b>Reg. Coeff. 'b'</b>	<b>Standard Error (S.E.)</b>	<b>R<sup>2</sup></b>	<b>'t' Value</b>
SCBNL	11069.159	-112.234	38.766	0.736	-2.895
HBL	940.030	7.199	9.881	0.150	0.729
NABIL	-13064.898	226.893	139.534	0.468	1.626
EBL	1673.232	-15.687	14.586	0.278	-1.075
NIBL	1763.384	-21.535	8.537	0.680	-2.523

Source: *Appendix III*

The above table 25 shows the regression analysis of MPS on DPR among the bank under study. The HBL & NABIL has positive regression relation between MPS & DPR of the bank where as SCBNL, EBL and NIBL has negative relation between MPS & DPR. The regression relations between MPS on DPR of HBL & NABIL indicate that with an increase of Rs. 1 in DPR, the MPS will increase by Rs. 7.199 and Rs. 226.893 respectively, other variable remain constant. In constant SCBNL, EBL & NIBL there will be decrease in MPS of by Rs. 112.234, Rs. 15.687 & Rs. 21.535 respectively with increase in DPR by 1% assuming that the other variable constant.

The standard errors of estimate of SCBNL, HBL, NABIL, EBL & NIBL are 38.766, 9.881, 139.534, 14.586 & 8.537 respectively. These values indicate the probable error in the predicated value for the respectively banks.

The tabulated value of 't' at 5% level of significant and at 5 degree of freedom is 2.776. The calculated values of 't' of SCBNL, HBL, NABIL, EBL & NIBL are -2.895, 0.729, 1.626, -1.075 & -2.523 respectively. The calculated 't' value is less than tabulated 't' value in case of all banks. So, the regression relation between MPS & DPS is insignificant. Since we can conclude that the value of MPS is not dependent in the value of DPR.

**V. Dependent Variable Dividend Per Share (DPS) on Independent Variable Net Worth Per Share (NWPS) X**

Regression Equation,  $Y = a + bx$

Table No. 26

**Simple Regression Analysis of DPS on NWPS of Concerned Banks**

<b>Banks</b>	<b>Constant 'a'</b>	<b>Reg. Coeff. 'b'</b>	<b>Standard Error (S.E.)</b>	<b>R<sup>2</sup></b>	<b>'t' Value</b>
SCBNL	194.000	-0.190	0.195	0.242	-0.0977
HBL	111.999	-0.409	0.477	0.197	-0.857
NABIL	-33.146	0.314	0.024	0.982	12.887
EBL	26.000	-0.061	0.184	0.035	-0.329
NIBL	13.767	0.003	0.188	0.0001	0.017

Source: *Appendix III*

The table 26 shows the regression analysis of DPS on NWPs among the bank under study. The NABIL & NIBL has positive regression relation between DPS & NWPS of the bank whereas SCBNL, HBL & EBL has negative relation between DPS & NWPS. The regression relation between DPS on NWPs of NABIL & NIBL indicate that with an increase of Rs. 1 in NWPS, the DPS will increase by Rs. 0.314, Rs. 0.003 respectively, other variable remain constant. In contrast of SCBNL, HBL & EBL there will be decrease in DPS of by Rs. 0.19, 0.409 & 0.061 respectively with an increase in NWPS by Rs. 1 assuming that the other variable are constant. The value of the constant (a) is relatively high (194.000) of SCBNL, which indicates that the DPS is affected by or depends on several other factor besides NWPS.

The standard errors of estimate of SCBNL, HBL, NABIL, and EBL & NIBL are 0.195, 0.477, 0.024, 0.184 & 0.188 respectively. These values indicate the probable error in the predicated value for the respective banks.

The Coefficient of determination (R<sup>2</sup>) is lowest for NIBL (0.0001) which indicates that 0.01% in DPS is explained by NWPS is variation in DPS of the bank is explained due to the change in value of NWPS of the bank. The values of (R<sup>2</sup>) of SCBNL, HBL, NABIL & EBL are explained due to change in NWPS of respective banks.

The tabulated value 't' at 5% level of significant & at 5 degree of freedom is 2.776. The calculated value of 't' of SCBNL, HBL, NABIL, EBL & NIBL is -0.977, -0.857, 12.877, -0.329 and 0.017 respectively. The calculated 't' value is less than tabulated 't' value in case of all banks except NABIL. So, the regression relation between DPS \$ NWPS is insignificant. Since, we can conclude that the value of DPS is not dependent in the value of NWPS. But in case of NABIL, the calculated 't' value is greater than tabulated 't' value. So, the regression relation between DPS & NWPS of NABIL is significant. Since, we can conclude that the value of DPS depends upon the value of NWPS.

#### 4.3.2.2 Multiple Regression Analysis.

##### 4.3.2.2 (I) Dependent Variable Market Price of Share (MPS) or (X<sub>1</sub>) on Independent Variable Earning Per Share (EPS or X<sub>2</sub> and Dividend per Share (DPS) or (X<sub>3</sub>)

Regression Equation,  $X_1 = a_1 + b_1 X_2 + b_2 X_3$

Table No. 27

##### Multiple Regression Analysis of MPS on EPS & DPS of Concerned Banks

Banks	Reg. Constant (a)	Reg. Coefficient (b <sub>1</sub> )	Reg. Coefficient (b <sub>2</sub> )	S.E.		Multiple Correlation	R <sup>2</sup>
				S <sub>1</sub>	S <sub>2</sub>		
SCBNL	-4948.856	87.656	-51.186	30.876	24.591	0.932	0.869
HBL	-2580.182	71.852	-13.782	30.811	15.602	0.883	-0.780
NABIL	-3305.265	-32.376	121.182	89.951	106.665	0.927	0.859
EBL	-1202.794	41.840	6.447	10.291	18.725	0.946	0.896
NIBL	-20.775	28.403	-21.365	8.494	14.730	0.953	0.909

Source: Appendix IV

The table 27 presented above shows the relationship between MPS , EPS & DPS of Concerned banks.

The regression coefficient (b<sub>1</sub>) is 87.656 for SCBNL, 71.852 for HBL, -32.376 for NABIL, 41.840 for EBL & 28.403 for NIBL. This implies that one rupee increase in EPS leads to Rs. 87.656 increase in MPS in case of SCBNL, if holding the DPS constant. On other hands, the same amount of increase in EPS leads to increase in MPS of HBL by Rs. 71.853. Similarly, the same amount of increase in EPS leads to decrease in MPS of NABIL by Rs. 32.376 when the DPS is constant. Again, in case of EBL, the same amount of increase

in EPS leads increase in MPS by Rs. 41.840, when the DPS is remain constant and finally in same amount of increase in EPS, leads increase in MPS by Rs. 28.403 assuming that DPS held constant. From the above data we can say that EPS effects on MPS. Generally, increase in EPS MPS also increase.

The Regression coefficient ( $b_2$ ) of SCBNL, HBL, NABIL, EBL & NIBL are -51.186, -13.782, 121.182, 6.447 & -21 21.365 respectively. It implies that one rupee increase in DPS leads to a rupees 51.186 decrease in MPS of SCBNL Rs. 13.782 decrease in MPS in case of HBL, Rs. 122.182 increase in MPS of NABIL, Rs. 6.447 increase in MPS of EBL & Rs. 21.365 decrease in MPS of NIBL when the EPS is remain constant.

The multiple correlations of SCBNL, HBL, NABIL, EBL & NIBL are 0.932, 0.883, 0.927, 0.946 & 0.953 respectively. These all are imply positive correlation exists. The coefficient of multiple determinations of SCBNL, HBL, NABIL, EBL & NIBL is 0.869, 0.780, 0.859, 0.896 & 0.909 respectively. Since HBL has the lowest  $R^2$  and NIBL has the highest, it means that the MPS of NIBL are highly affected by joint of EPS & DPS. The  $R^2$  indicates that 86.90%, 78%, 85.90%, 89.6% & 90.90% variation in MPS is due to the joint effect of change in MPS and DPS.

#### 4.3.2.2 (II) Dependent Variable Market Price of Share (MPS) or ( $X_1$ ) on Independent Variable Price Earnings Ratio (PER) or $X_2$ and Dividend Payout Ratio (DPR) or ( $X_3$ )

Regression Equation,  $X_1 = a_1 + b_1 X_2 + b_2 X_3$

Table No. 28

#### Multiple Regression Analysis of MPS on P/E Ratio and DPR of concerned Banks

Banks	Reg. Constant (a)	Reg. Coefficient ( $b_1$ )	Reg. Coefficient (b)	S.E.		Multiple Correlation	$r^2$
				S <sub>1</sub>	S <sub>2</sub>		
SCBNL	-235.570	178.778	-1.750	26.608	19.132	0.944	0.989
HBL	-432.215	72.913	2.642	9.462	2.263	0.986	0.972
NABIL	-26.525	157.730	-9.604	8.415	18.014	0.998	0.997
EBL	-792.500	105.756	-4.182	5.840	1.529	0.998	0.996
NIBL	-118.314	69.969	-9.145	43.479	10.340	0.928	0.860

Source: Appendix IV

The table 28 presented above shows the relationship between MPS, PER & DPR of concerned banks.

The regression coefficient ( $b_1$ ) is 178.77 for SCBNL, 72.913 for HBL, 157.730 for NABIL, 105.756 and 69.969 for EBL & NIBL. This implies that one rupee increase in PER leads to Rs. 178.778 increase in MPS in case of the SCBNL if holding the DPR constant. On other hands, the same amount of increase in PER leads to increase in MPS of HBL by 72.913. Similarly, the same amounts of increase in PER leads to Rs. 157.730 increase in MPS of NABIL when the DPR is remain constant. In the same way, the same amount of increase in PER leads to Rs. 105.765 increase in MPS of EBL when DPR is zero. Finally, in same amount of increase in PER leads increase in MPS by Rs. 69.969 assuming that DPR hold constant. From the above data we can say that PER effects on MPS. Generally, increase in PER the MPS also increase.

The regression coefficients ( $b_2$ ) of SCBNL, HBL, NABIL, EBL & NIBL are -1.750, 2.642, -9.604, -4.182, -9.145 respectively. It implies that one rupee increase in DPR leads to Rs. 1.750 decrease in MPS of SCBNL. The same amount of increase in DPR leads to Rs. 2.642 increase in MPS of HBL. Similarly, the same amount of increase in DPR leads to Rs. 9.604 decrease in MPS of NABIL when PER remain constant. In the same way, the same amount of increase in DPR leads to Rs. 4.182 decrease in MPS of EBL if PER held constant and finally, in same amount of increase in DPR leads to Rs. 9.145 in case of NIBL, when PER remain constant.

The multiple correlation of correlation of SCBNL, HBL, NABIL, EBL & NIBL are 0.944, 0.986, 0.998, 0.028 respectively. These all are imply positive correlation exists. It indicates that higher degree of correlation between MPS, PER & DPR of all banks which are nearly perfect positively correlated. Thus the perfect positive correlation coefficient of all banks show that if the PER & DPR increases the MPS also increase and vice-versa. The coefficient of multiple determinations of SCBNL, HBL, NABIL, EBL & NIBL, are 0.989, 0.972, 0.997, 0.996 and 0.860 respectively. Since NABIL has the highest coefficient of multiple determinations and NIBL has the lowest among all, it indicates that the MPS of NABIL is highly affected by joint effect of PER & DPR and the MPS of NIBL is normally affected by joint effect of PER & DPR. The coefficient multiple determination ( $r^2$ ) indicates that 98.9%,

97.20%, 99.70%, 99.60% & 86% variation in MPS is due to the joint effect of change in PER & DPR.

#### 4.4 Test of Hypothesis

##### F - Test

The following test has been done under two way ANOVA analyses:

##### 1. First ANOVA Test on Dividend per share (DPS) of 5 banks over the 5 years.

Table No. 29

**DPS of Five banks over five years**

Years	Banks				
	SCBNL (A)	HBL (B)	NABIL (C)	EBL (D)	NIBL (E)
2002-03 (1)	110	1.32	50	20	20
2003-04 (2)	110	0.00	65	20	15
2004-05 (3)	120	11.58	70	0	12.50
2005-06 (4)	130	30	85	25	20
2006-07 (5)	80	15	100	10	5

Source: Appendix I

Null Hypothesis:

$H_0: \mu_A = \mu_B = \mu_C = \mu_D = \mu_E$ , There is no significant difference between DPS of SCBNL, HBL, NABIL, EBL and NIBL.

$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$ , There is no significant difference between DPS of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

Alternative hypothesis:

$H_1: \mu_A \neq \mu_B \neq \mu_C \neq \mu_D \neq \mu_E$ , There is significant difference between DPS of SCBNL, HBL, NABIL, EBL and NIBL.

$H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$ , There is significant difference between DPS of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

##### Test of Statistic

Under  $H_0$ ,

$F = \frac{MSC}{MSE}$  Where, MSC = Mean sum of squares of variation between different banks

$F = \frac{MSR}{MSE}$  MSR = Mean sum of squares of variations between different years

MSE = Mean sum of squares of variations due to error

In order to find MSC, MSR and MSE, we need to find SSC, SSR, SST and SSE.

The data are coded by subtracting 20 from each figure.

For Banks: Calculated value ( $F_c$ ) = 54.43 (Source: Appendix V)

For Years: Calculated value ( $F_r$ ) = 1.45 (Source: Appendix V)

For Banks: Tabulated value  $F_{0.05}(4, 16) = 3.01$

For Years: Tabulated value  $F_{0.05}(4, 16) = 3.01$

### Conclusion

For Bank wise: Since calculated value  $F_c(4, 16)$  is greater than tabulated value  $F(4, 16)$  [i.e.  $54.43 > 3.01$ ], it is significant and  $H_0$  (null hypothesis) is rejected and hence  $H_1$  (Alternative hypothesis) is accepted, which means that there is significant difference between DPS of SCBNL, HBL, NABIL, EBL and NIBL.

For Year wise: Since calculated value  $F_r(4, 16)$  is less than tabulated value  $F(4, 16)$  [i.e.  $1.45 < 3.01$ ], it is not significant and  $H_0$  (null hypothesis) is accepted and hence  $H_1$  (Alternative hypothesis) is rejected, which means that there is no significant difference between DPS of year 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07 of the concerned 5 banks.

## **2. Second ANOVA test on Market Price per Share (MPS) of 5 banks over 5 years.**

Table No. 30

### **MPS of five banks over Five Years**

Years	Banks				
	SCBNL (A)	HBL (B)	NABIL (C)	EBL (D)	NIBL (E)
2002-03 (1)	1640	836	740	445	795
2003-04 (2)	1745	840	1000	680	940
2004-05 (3)	2345	920	1505	870	800
2005-06 (4)	3775	1100	2240	1379	1260
2006-07 (5)	5900	1740	5050	2430	1729

Source: Appendix I

Null hypothesis

$H_0: \mu_A = \mu_B = \mu_C = \mu_D = \mu_E$ , There is no significant difference between MPS of SCBNL, HBL, NABIL, EBL and NIBL

$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$ , There is no significant difference between MPS of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

Alternative hypothesis:

$H_1: \mu_A \neq \mu_B \neq \mu_C \neq \mu_D \neq \mu_E$ , There is significant between MPS of SCBNL, HBL, NABIL, EBL and NIBL

$H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$ , There is significant difference between MPS of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

Test of Statistic:

Under  $H_0$ ,

$F = \frac{MSC}{MSE}$  where, MSC = Mean Sum of squares of variations between different banks.

$F = \frac{MSR}{MSE}$  MSR = Mean Sum of squares of variations between different years.

MSE = Mean Sum of squares of variations due to error

In order to find MSC, MSR and MSE we need to find SSC, SSR, SST and SSE.

The data are coded by subtracting 800 from each figure.

For Banks: Calculated value ( $F_c$ ) = 7.62 (Source: Appendix V)

For Year: Calculated value ( $F_r$ ) = 10.12 (Source: Appendix V)

For Banks: Tabulated value  $F_{0.05}(4, 16) = 3.01$

For Years: Tabulated value  $F_{0.05}(4, 16) = 3.01$

Conclusion:

For Bank wise: Since Calculated value  $F_c(4, 16)$  is greater than tabulated value  $F(4, 16)$  (i.e.  $7.62 > 3.01$ ), it is significant and  $H_0$  is rejected and hence  $H_1$  (alternative hypothesis) is accepted, which means that there is significant difference between MPS of SCBNL, HBL, NABIL, EBL and NIBL or MPS of different five concerned banks is not same.

For Year wise: Since calculated value  $F_r(4, 16)$  is greater than tabulated value  $F(4, 16)$  [i.e.  $10.12 > 3.01$ ], it is significant and  $H_0$  (null hypothesis) is rejected and hence  $H_1$  (alternative hypothesis) is accepted, which means that there is significant difference between MPS of year 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07, or the MPS of is not same in the five years during the study period.

### 3. Third ANOVA Test on Earning per Share (EPS) of 5 banks over the 5 years

Table No. 31

EPS of five banks over five years

Years	Banks				
	SCBNL (A)	HBL (B)	NABIL (C)	EBL (D)	NIBL (E)
2002-03 (1)	149.30	49.45	84.66	29.90	39.56
2003-04 (2)	143.55	49.05	92.61	45.58	51.70
2004-05 (3)	143.14	47.91	105.49	54.22	39.50
2005-06 (4)	175.84	59.24	129.21	62.80	59.35
2006-07 (5)	167.37	60.66	137.08	78.40	62.57

Source: Appendix I

Null hypothesis

$H_0: \mu_A = \mu_B = \mu_C = \mu_D = \mu_E$ , There is no significant difference between EPS of SCBNL, HBL, NABIL, EBL and NIBL

$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$ , There is no significant difference between EPS of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

Alternative hypothesis:

$H_1: \mu_A \neq \mu_B \neq \mu_C \neq \mu_D \neq \mu_E$ , There is significant between EPS of SCBNL, HBL, NABIL, EBL and NIBL

$H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$ , There is significant difference between EPS of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

Test of Statistic:

Under  $H_0$ ,

$F = \frac{MSC}{MSE}$  where, MSC = Mean Sum of squares of variations between different banks

$F = \frac{MSR}{MSE}$  MSR = Mean Sum of squares of variations between different years

MSE = Mean Sum of squares of variations due to error

In order to find MSC, MSR and MSE we need to find SSC, SSR, SST and SSE.

The data are coded by subtracting 50 from each figure

For Banks: Calculated value ( $F_c$ ) = 148.06 (Source: Appendix V)

For Years: Calculated value ( $F_r$ ) = 12.52 (Source: Appendix V)

For Banks: Tabulated value  $F_{0.05}(4, 16) = 3.01$

For Years: Tabulated value  $F_{0.05}(4, 16) = 3.01$

Conclusion:

For Bank wise: Since calculated value  $F_c(4, 16)$  is greater than tabulated value  $F(4, 16)$  [i.e.  $148.06 > 3.01$ ], it is significant and  $H_0$  (null hypothesis) is rejected and hence  $H_1$  (alternative hypothesis) is accepted by, which means that is significant difference between EPS of SCBNL, HBL, NABIL, EBL and NIBL, or Earning Per Share of different five concerned banks is not same during the study period.

For Year wise: Since calculated value  $F_r(4, 16)$  is greater than tabulated value  $F(4, 16)$  [i.e.  $12.52 > 3.01$ ], it is significant and  $H_0$  (null hypothesis) is rejected and hence  $H_1$  (alternative hypothesis) is accepted by, which means that is significant difference between EPS of 2002/03, 2003/04, 2004/05, 2005/06, and 2006/07, or the Earning Per Share is not same in the five years during the period of study.

#### 4. Fourth ANOVA Test on Dividend Payout Ratio (DPR) of banks over the 5 year

Table No. 32

##### DPR of five banks over five years

Years	Banks				
	SCBNL (A)	HBL (B)	NABIL (C)	EBL (D)	NIBL (E)
2002-03 (1)	73.68	2.67	59.06	66.89	50.56
2003-04 (2)	76.63	0.00	70.19	43.88	29.01
2004-05 (3)	83.83	24.17	66.36	0.00	31.65
2005-06 (4)	73.93	50.64	65.78	39.81	33.70
2006-07 (5)	47.80	24.73	72.95	12.75	7.99

Source: Appendix I

Null Hypothesis:

$H_0: \mu_A = \mu_B = \mu_C = \mu_D = \mu_E$ , There is no significant difference between DPR of SCBNL, HBL, NABIL, EBL and NIBL.

$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$ , There is no significant difference between DPR of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

Alternative hypothesis:

$H_1: \mu_A \neq \mu_B \neq \mu_C \neq \mu_D \neq \mu_E$ , There is significant difference between DPR of SCBNL, HBL, NABIL, EBL and NIBL.

$H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$ , There is significant difference between DPS of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

### Test of Statistic

Under  $H_0$ ,

$F = \frac{MSC}{MSE}$  Where, MSC = Mean sum of squares of variation between different banks

$F = \frac{MSR}{MSE}$  MSR = Mean sum of squares of variations between different years

MSE = Mean sum of squares of variations due to error

In order to find MSC, MSR and MSE, we need to find SSC, SSR, SST and SSE.

The Data are coded by subtracting 50 from each figure

For Banks: Calculated value ( $F_c$ ) = 8.40 (Source: Appendix V)

For Years: Calculated value ( $F_r$ ) = 0.96 (Source: Appendix V)

For Banks: Tabulated  $F_{0.05}(4, 16) = 3.01$

For Years: Tabulated  $F_{0.05}(4, 16) = 3.01$

### Conclusion:

For Bank wise: Since calculated value  $F_c(4, 16)$  is greater than tabulated value  $F(4, 16)$  [i.e.  $8.40 > 3.01$ ], it is significant and  $H_0$  (null hypothesis) is rejected and hence  $H_1$  (alternative hypothesis) is accepted, which means that there is significant difference between DPR of SCBNL, HBL, NABIL, EBL and NIBL, or Dividend payout ratio of different five concerned banks is not same during the period of study.

For Year wise: Since calculated value  $F_r(4, 16)$  is less than tabulated value  $F(4, 16)$  [i.e.  $0.96 < 3.01$ ], it is not significant  $H_0$  (null hypothesis) is accepted and hence  $H_1$  (alternative hypothesis) is rejected, which means that there is not significant difference between DPR of the year 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07, or the Dividend payout ratio is same in the five during the period of study.

**5. Fifth ANOVA Test on Price Earning Ratio (PE Ratio) of 5 banks over the 5 years.**

Table No. 33

**PE Ratio of five banks over five years**

Years	Banks				
	SCBNL (A)	HBL (B)	NABIL (C)	EBL (D)	NIBL (E)
2002-03 (1)	10.98	16.91	8.74	14.90	20.10
2003-04 (2)	12.16	17.12	10.80	14.90	18.18
2004-05 (3)	16.38	19.20	14.27	16.00	20.25
2005-06 (4)	21.47	18.57	17.34	22.00	21.23
2006-07 (5)	35.25	28.69	36.84	31.00	27.63

Source: Appendix I

Null Hypothesis:

$H_0: \mu_A = \mu_B = \mu_C = \mu_D = \mu_E$ , There is no significant difference between PE Ratio of SCBNL, HBL, NABIL, EBL and NIBL.

$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$ , There is no significant difference between PE Ratio of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

Alternative hypothesis:

$H_1: \mu_A \neq \mu_B \neq \mu_C \neq \mu_D \neq \mu_E$ , There is significant difference between PE Ratio of SCBNL, HBL, NABIL, EBL and NIBL.

$H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$ , There is significant difference between PE Ratio of 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07.

Test of Statistic

Under  $H_0$ ,

$F = \frac{MSC}{MSE}$  Where, MSC = Mean sum of squares of variation between different banks

$F = \frac{MSR}{MSE}$  MSR = Mean sum of squares of variations between different years

MSE = Mean sum of squares of variations due to error

In order to find MSC, MSR and MSE, we need to find SSC, SSR, SST and SSE.

For Banks: Calculated value ( $F_c$ ) = 0.84 (Source: Appendix V)

For Years: Calculated value ( $F_r$ ) = 22.21 (Source: Appendix V)

For Banks: Tabulated value  $F_{0.05}(4, 16) = 3.01$

For Years: Tabulated value  $F_{0.05}(4, 16) = 3.01$

Conclusion:

For Bank wise: Since calculated value  $F_c(4, 16)$  is greater than tabulated value  $F(4, 16)$  [i.e.  $0.84 > 3.01$ ], it is not significant and  $H_0$  (null hypothesis) is accepted and hence  $H_1$  (Alternative hypothesis) is rejected, which means that there is no significant difference between PE Ratio (Price Earning ratio) of SCBNL, HBL, NABIL, EBL and NIBL; or Price Earning Ratio of difference five concerned banks is same during the period of study.

For Year wise: Since calculated value  $F_r(4, 16)$  is greater than tabulated value  $F(4, 16)$  [i.e.  $22.21 > 3.01$ ], it is significant and  $H_0$  (null hypothesis) is rejected and hence  $H_1$  (Alternative hypothesis) accepted, which means that there is significant difference between PE Ratio of the year 2002/03, 2003/04, 2004/05, 2005/06 and 2006/07; or The price Earning ratio is not same in the five during the period of the study.

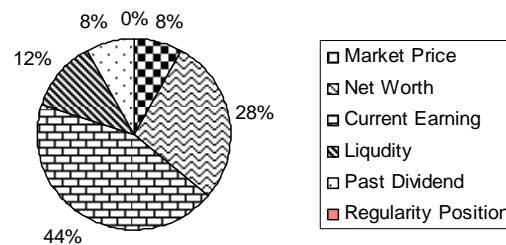
#### 4.5 Primary Data Analysis

This chapter reflects the methodology. To meet the objective of the study to evaluate the management view relating the dividend, a set of questionnaire is used, which consists of twelve questions relating to dividend aspect of the banks. The questionnaire includes the management view relating to the present expectation, types of dividend and their present dividend policy.

The presentation and analysis of primary data are as follows:

##### 1. While forming dividend policy, which factor do you think is most important?

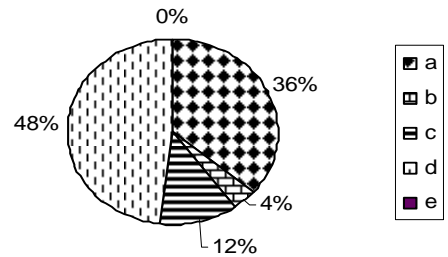
- a. Market price
- b. Net worth
- c. Current earning
- d. Liquidity



44% of the respondents agree that current earning is important factor while forming dividend policy, 28% respondents agree that net worth is the important factor while 12% respondents think liquidity and only 8% respondent consider market price and 8% respondent consider past dividend as important factor while forming dividend policy.

**2. What do you think the major motive of paying cash dividend?**

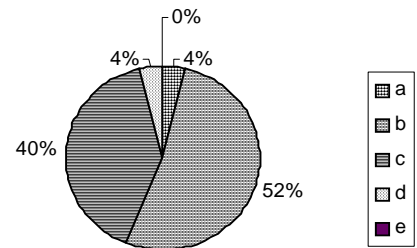
- a. To convey information to shareholders that company is doing good.
- b. To draw attention from the investment community.
- c. To increase the market value of the firm's stock.
- d. To fulfill shareholders expectation
- e. Others (Please specify)



48% of the respondents agree the major motive of paying cash dividend is to fulfill the shareholders expectation, 36% respondents agree the major motive is to convey information to shareholders that company is doing good while 12% respondents think the major motive is to increase the market value of the firm's stock and only the 4% respondents consider the major motive of paying cash dividend is to draw attention from the investment community.

**3. What would you like to suggest with regard to dividend policy in Nepalese Banks?**

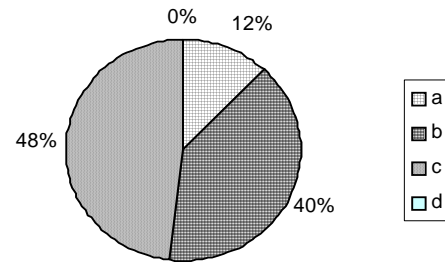
- a. Treatment of dividend as an obligation.
- b. Stability of dividend and unhaphazard payout ratio.
- c. Cash balance for dividend be adequately planned and maintained.
- d. Legislation regarding minimum dividend be enacted.
- e. Others (Please specify)



Majority of respondents (52%) suggest with regard to dividend policy in Nepalese banks is stability of dividend and unhaphazard payout ratio while minority (4%) respondent suggest dividend policy in Nepalese banks is legislation regarding minimum dividend be adequately planned and maintained and only 4% respondent suggest dividend policy in Nepalese banks as a treatment of dividend as an obligation.

**4. What do you suggest if the company has no cash to pay dividend?**

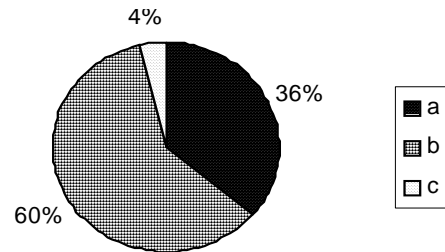
- a. Borrow funds & pay cash dividends
- b. Pay stock dividends
- c. Don't pay cash or stock dividends at all
- d. Others (Please specify)



Majority of respondents (48%) suggest not paying cash or stock dividends at all if the company has no cash to pay dividend while minority respondents (12%) suggest borrowing funds and pay cash dividends and 40% of respondents suggest paying stock dividend if the company has no cash to pay dividend.

**5. Which of the following decision do you think are more important?**

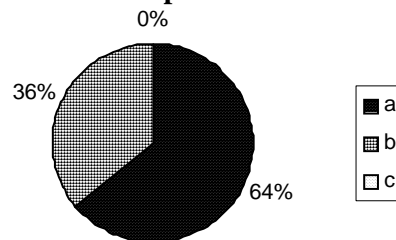
- a. Financing decision
- b. Investment decision
- c. Dividend decision



All the banks under the study give a very few importance for dividend decision only 4% banks seem positive for giving importance for dividend decision. They give first priority to investment decision and then financing decision. 60% under the survey seem too positive for investing decisions and 36% of weight is given to financing decision as an important decision.

**6. How much is your bank concerned with dividend aspect?**

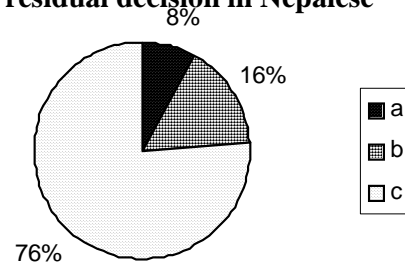
- a. Highly concerned
- b. Concerned
- c. Less concerned



Majority of banks (64%) highly concerned with dividend aspect and some banks (36%) moderately concerned but non-of the banks are less concerned with dividend aspect.

**7. Do you think that dividend is paid as a residual decision in Nepalese Enterprise?**

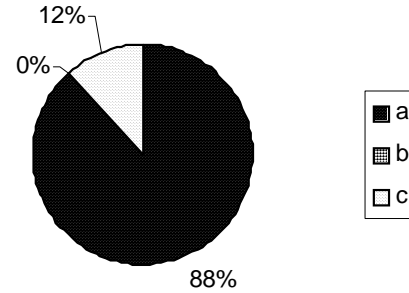
- a. Yes
- b. No
- c. To some extent



The majority of the respondents agree that the dividend is taken as a residual decision paid in Nepalese enterprises.

**8. Do you take into account the shareholders expected return, while forming dividend policy?**

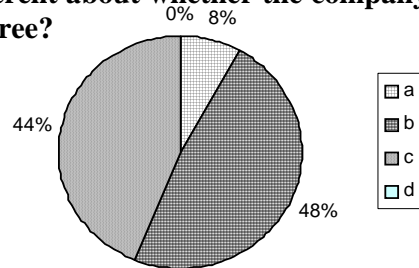
- a. Yes
- b. No
- c. Don't know



The majority of the respondents agree to take into account the shareholders expected return while forming dividend policy.

**9. Nepalese shareholders are indifferent about whether the company pays or does not pay dividend, do you agree?**

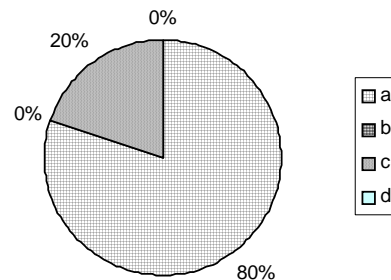
- a. Agree
- b. Moderately agree
- c. Disagree
- d. Don't know



With respect to the statement that Nepalese shareholders are indifferent either the company pays dividend or not, most of the respondents (48%+ 8%=56%) are found agree to support this thesis.

**10. Do you think that company's announcement of earning will help to change market price of share?**

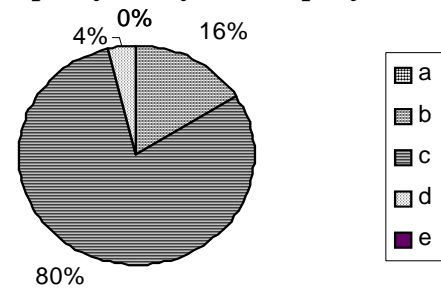
- a. Yes
- b. No
- c. To some extent
- d. Don't know



We can say that company's announcement of earning will help to change the market price of share because majority of respondents (80%) are agree with this view.

**11. Among the various dividend policies, which policy does your company follow?**

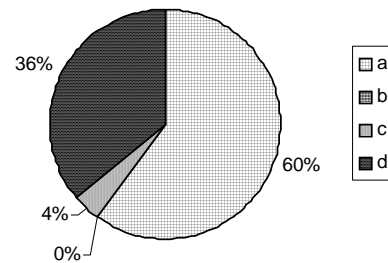
- a. Residual dividend policy
- b. Steady dividend policy
- c. Earning based dividend policy
- d. Fixed plus extra dividend policy
- e. Others (Please specify)



A majority of banks (80%) follow the earning based dividend policy but some banks (16%) follows steady dividend policy and very few banks (4%) follows fixed plus extra dividend policy too.

**12. What kind of dividend does your company distribute?**

- a. Cash dividend
- b. Scrip dividend
- c. Stock dividend
- d. Others (Please specify)



Majority of the banks (60%) distributed the cash dividend and very few (4%) of banks distributed stock dividend while about 36% of banks distribute both cash and stock dividend as well.

## CHAPRER 5

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

This chapter focuses on summarizing the study held with the Conclusions and some recommendations of the basis of findings. For this purpose, the chapter has been divided onto three parts as: Summary, Conclusion and Recommendation.

#### **5.1 Summary**

Dividends are payments made to stockholders from a firm's earnings on return to their investment, whether those earnings were generated in the current period or in previous periods and policy refers to the decision about how much earning, at what form should be distributed. Thus, dividend policy is to determine the amount of earnings to be distributed of shareholders and the amount to be retained or reinvested on the firm.

Dividend policy decision is one of the three major decisions of financial management. The dividend policy decision affects on the operation and prosperity of the organization because it has the power to influence other two decisions of the organization i.e. capital structure decision and investment decision. An investor expects two types of return namely capital gain and divided by investing in equity capital or ordinary share. So, payment of dividend to shareholders is an effective way to attract new investors and maintain present investors. It is important to have clearly defined and effectively managed dividend policy so as to fulfill the shareholder's expectations and corporate growth.

Paying dividend can be taken as an important tool to attract new investors. Besides this dividend paying ability reflects the financial position of the organization in the market. Due to the division of earnings between dividend payout and retention ratio to market price of the share may also be affected. This is also crucial for the organization. So, the funds that could not be used due to the lack of investment opportunities would be better as dividend, since shareholders have investment opportunities elsewhere.

Dividend paying banks have been analyzed to show the implication of dividend policy they adopted in their market price per share. Even if market price is governed by various factors, this study is made to analyze one of the important factor i.e. Dividend.

This paper attempts to determine the impact of dividend policy on stock price. The study covers five leading private banks (SCBNL, HBL, NABIL, EBL, and NIBL) and only for the last five fiscal years from 2002/03 to 2006/07. To make the research more reliable, different types of analysis have been conducted to find out appropriate relationship between market price and other various which affect dividend. The available secondary data have been analyzed using various financial and statistical tools. So, the reliability of the conclusions of this study is determined on the accuracy of secondary data. It is found from the study that banks are paying dividend but there is no consistency in dividend distribution in all sample banks observed. The research shows that none of the banks have well defined and appropriate policy regarding dividend payment. They do not seem to follow the optimum dividend policy of paying regular dividend as per share holders' expectations.

### **Major Findings from Secondary Data**

From the analysis of financial and statistical variables, especially mean, standard deviation, coefficient of variation, correlation & regression analysis following findings have been drawn,

1. The average earning per share (EPS) of the bank under study shows a positive result. But the coefficient of variation indicates that EPS of the banks are not stable. The C.V. range between 33.60% and 9.56%. Among the banks under study, SCBNL has the highest average EPS with lowest fluctuation.
2. The average dividend per share (DPS) of the banks under study shows a positive result except HBL and EBL. But the coefficient of variation indicates that DPS of the banks are not stable. The CV range between 104.91% and 17.01%. Among the bank under study, SCBNL has the highest average DPS (Rs 110) with lowest fluctuation. The HBL has average DPS is Rs 11.58 and its fluctuation is 104.91% which is greater fluctuation. So we can conclude that HBL has the lowest average DPS with highest fluctuation in DPS. Since the paid up capital per share is Rs

100, the analysis of dividend percent also depicts the same result as that of DPS.

3. The analysis of DPR also shows that the DPR of the banks are quite unstable except that of SCBNL and NABIL. The fluctuation range between 100.20% and 7.86%. Among the banks under study, SCBNL has the highest average DPR and lower fluctuation in the DPR. The result also shows that, HBL has the lowest average DRR but highest fluctuation as indicated by highest CV.
4. The average MPS of the banks under the study indicate high level of fluctuation. SCBNL has the highest average MPS while NIBL has lowest. Among the banks under study, the MPS of NABIL is highly fluctuating and that of NIBNL is the most stable.
5. The average price earning ratio of the banks ranges between 21.48% and 17.60%. The coefficient of variation indicates the PE ratios of the banks are not stable. The CV ranges between 63.92% and 16.81%. Among the bank under study, NIBL has the highest average P/E ratio. But there is not a big gap between P/E ratio overtime for any stock. The highest fluctuation shows in the NABIL and the lowest in case of NIBL.
6. The average earning Yield (EY) of the concerned banks ranges between 7.24% and 4.75% which do not derivate from the average EY of the concerned banks. But the CV indicates that the EY of the banks under the study are not stable. The CV ranges between 45.99% and 14.62%. The NABIL has the highest average EY and highest fluctuation in EY. The lowest EY was found in case of NIBL and its fluctuation is lowest among all banks under the study.
7. The average dividend Yield (DY) ranges between 4.59% and 1.00% and the coefficient of variation indicates that DY of the banks is not stable. The CV ranges between 109.00% and 41.77%. Among the banks under study SCBNL has the highest average DY with the lowest fluctuation and its lower in case of HBL with the highest fluctuation.
8. The average ratio between MPS and BVPS is nearly is similar in all the sample banks ranging 6.71 and 4.40, but the fluctuation in this ratio range between 65.79% and 30.68%. Among the banks under the study SCBNL has the highest average MPS to BVPS with lowest fluctuation.

9. The average NWPS of SCBNL, HBL, NABIL, EBL and NIBL has Rs 441.02, Rs 245.56, Rs 341.12, Rs 181.72 and 227.40 respectively and CV is 10.95%, 5.36%, and 17.73%, 16.96% and 8.41% respectively. SCBNL has the highest NWPS and EBL has lowest. The fluctuation in NWPS is highest in case of NABIL and lowest in case of HBL.

By using the major statistical tools i.e. Correlation and regression, following findings have been drawn.

1. The correlation between dividend per share (DPS) and earning per share (EPS) of HBL and NABIL has positive. But DPS of SCBNL, EBL and NIBL are negatively correlated with EPS. The correlation of SCBNL and EBL has insignificant and moderate significant in case of HBL and NIBL but NABIL have significant relationship between DPS and EPS.
2. The MPS of HBL and NABIL has positive correlation with their respective DPS. But MPS of SCBNL, EBL, and NIBL are negatively correlated with DPS. The correlation of SCBNL, HBL and NIBL has moderate significant and it is insignificant of EBL whereas significant for NABIL.
3. The analysis of correlation between EPS and MPS help us to conclude that the all banks chosen for study have positive relationship. The relationships between EPS and MPS of all banks under the study are significant.
4. The correlation coefficient between MPS and DPR positive for HBL and NABIL. But it is negatively correlated in case of SCBNL, EBL and NIBL. HBL, NABIL and EBL it is difficult to say the correlation is significant or not. So we can say that there is moderate significant or insignificant relation between MPS and DPR and SCBNL and NIBL has significant relationship.
5. The correlation coefficient of NABIL & NIBL has positive relationship between DPS & NWPS. But its relationship is negative in case of SCBNL, HBL, & EBL. This relationship is significant for NABIL, insignificant for EBL& NIBL and moderate significant in case of SCBNL & HBL.
6. The regression analysis of DPS on EPS shows the regression coefficient(b) is positive for HBL and NABIL and it is negative for SCBNL , EBL and NIBL. The relationship is significant for NABIL and insignificant for SCBNL, HBL, EBL and NIBL.

7. The regression coefficient (b) of the regression analysis of MPS on DPS is positive for HBL and NABIL. This regression coefficient (b) for relation of MPS on DPS is negative for SCBNL, EBL and NIBL. The relationship is significant for NABIL and insignificant for SCBNL, HBL, and EBL & NIBL.
8. The regression coefficient (b) of the regression analysis of MPS on EPS of all banks under study is positive. The relation is significant for NABIL, EBL and NIBL and insignificant for SCBNL & HBL.
9. The regression coefficient (b) of the regression analysis of MPS on DPR is positive for HBL & NABIL and it is negative for SCBNL, EBL and NIBL. The relation is insignificant for all banks under study.
10. The regression analysis of DPS on NWPS is positive for NABIL and NIBL and it is negative for SCBNL, HBL and EBL. The relationship is significant for NABIL and insignificant for SCBNL, HBL, EBL and NIBL.
11. The multiple regression analysis of MPS on EPS and DPS shows that EBL has positive regression coefficient for both EPS and DPS. For SCBNL and HBL the regression coefficient (b) is positive for EPS and negative for DPS. For NABIL, the regression coefficient (b) is negative for EPS and positive for DPS whereas the regression coefficient (b) is positive for EPS and negative for DPS.
12. The multiple regression analysis of MPS on PER and DPR shows that HBL has positive regression coefficient for both PER and DPR. For SCBNL, NABIL, EBL and NIBL the regression coefficient (b) is positive for PER and negative for DPR.
13. Test of first hypothesis helps us to conclude that Dividend Per Share of different five banks(i.e. SCBNL,HBL, NABIL, EBL NIBL) are statistically different at 5% level of significant and this test also shows that the DPS of different years are not significant different at 5% level of significant.
14. Test of second hypothesis helps us to conclude that market price per share of different five banks under the study are statistically different at 5% level of significant and this test also shows that the MPS of different years are significant different at 5% level of significant.

15. Test of third hypothesis helps us to conclude that earning per share (EPS) of different five banks under the study are statistically different at 5% level of significant and this test also shows that the EPS of different years are significant different at 5% level of significant.
16. The fourth test t of hypothesis helps us to conclude that dividend pay out ratio “(DPR) of five different banks under the study are different at 5% level of significant and this also shows that DPR of different years are not significant different at 5% level of significant.
17. Test of fifth hypothesis helps us to concluded that price earning ratio (PER) of different five banks under the study are not significant different at 5% level of significance and this test also shows that PER of different years are significant different at 5% level of significant.

## **5.2 Conclusion**

The results of this analysis are strong enough to establish the relationship between dividend policy and market price of the share of Nepalese listed banks. However the analysis cannot give the wholesome conclusion of present dividend payment scenario. After analyzing the financial and statistical indicators of all the sample banks chosen for the study, following conclusion are drawn.

1. Dividend practices of all sample banks are neither stable nor constantly growing. Dividends are distributed as an ad-hoc or situational basis.
2. The market price per share is affected by the dividend related financial variable i.e. DPS, DP, DY and DPR either positively or negatively. The nature of effect is different for different banks. In the case of same banks, there exist positive relation between dividend and market price per share, while for other exist negative relation. Besides this the market price per share largely depends upon the dividend, which has been shown by the coefficient of multiple determinations.
3. The study of the importance of cash dividend on the market price of share revealed that generally dividend per share has positive impact on market price of share in all banks.
4. Beside dividend, other factors also effects the market price per share i.e. earning per share, net worth per share, price earning ratio, earning per bonus share, information value of dividend decision etc. their effect is also different for different banks.

5. Market price per share (MPS) to book value per share (BVPS) ratio is greater than 1 for all banks in all FY under study. In other word MPS of listed banks is higher than the BVPS. This indicates that the investors are not looking at BVPS but only the transaction price of share which shows the lack of consciousness and knowledge in shareholders.
6. Dividend per share is affected by the earning per share, retention ratio and net worth per share differently in different banks.
7. The situation of capital market of Nepal is improving day by day. As a result, the capital market seems to be more efficient than previous years. But it is reality that the capital market of Nepal is still immature.
8. Due to inadequate time period, only few numbers of banks have been taken as sample. Hence, if large samples are taken from the whole population the result might have produced more accurate and absolute results.
9. Dividend policy of the banks is not uniform. There is no strategy of calculating growth in the dividends paid by the banks, which depicts that the dividend policy of the commercial banks are not stable and consistent. There is fluctuation in the dividend payment even if the banks are making profit regularly. The dividend payout ratio also does not show any stability and coordination with other variables. There is large fluctuation in dividend in each year. There is no certain criterion for paying dividend. From this we can conclude that there is no long-term vision regarding the dividend policy.
10. There seems lack of consistent in dividend pay practices of sample banks. This may be due to lack of legal obligation that abides the companies to pay dividend when they are running at profit. There is not clear provision in company ACT 2053, commercial banks ACT2053, and their regulating acts regarding the dividend policy.

### **5.3 Recommendations**

Based on the major findings of this study, some recommendations have been made so as to overcome shortfalls regarding the issue of dividend of the banking sector.

1. The uniformity and regularity in dividend payment practices should be adopted by the companies. In many cases, a small amount of dividend is paid without considering what is adequate or desired by the investors. But

all respondents say that they should take into account the shareholders expected return, while forming dividend policy. The financial institution should consider the shareholder expectation as far as possible.

2. The commercial banks should have long term policy/strategy regarding the adoption of suitable dividend policy.
3. The shareholder should be taken into confidence while there is a pressure in the dividend practice.
4. Government, Nepal Rastra Bank, Security Exchange Board of Nepal and Nepal Stock Exchange should be conscious in discouraging market imperfection in dividend payment practices.
5. Even if the net earning has been increased the dividend per share has widely fluctuated. There seems to be the need of relating DPS with the long term trend of EPS. Distribution of bonus share should be pre-evaluated.
6. Most of the banks seem to ignore the dividend expectation of the minority shareholders. These needs an organization as a pressure group to promote and protect shareholder rights as regards dividend.
7. The organization formed by conscious shareholders like Shareholder's Association of Nepal should be encouraged to work against the management ignorance.
8. The Activities, policies and the financial information should be transparent and within the reach of the shareholders.
9. In short, to develop a long-term dividend policy the directors should aim to strike a balance between the desire of shareholders and the means of the concerned company.
10. While making dividend decision, a minor mistake may lead the bank to serious crisis. Due to this reason it is advised to adopt optimum dividend decision based on the following criteria.
  - Optimum retention for excellent expansion and modernization of bank.
  - Optimum dividend so as to maximize shareholders wealth through increase in market price per share i.e. net present value of shareholders.
  - Stable or consistency in the dividend payment.

Finally, it is realized that there is a necessity of legal provisions and rules for prescribing certain policy regarding the dividend payment in the banking sector. For this purpose, the concerned authorities i.e. Nepal Government,

Nepal Rastra Bank, Security Board of Nepal and Nepal Stock Exchange should be conscious about the formulation and implication of rules regarding dividend payment. This will help to regularize the dividend policy of the financial sectors in Nepal.

## Bibliography

### Books:

Abrol, P.N. (1993); **Dictionary of Accounting**, Anmol Publications, New Delhi.

Dangol, R. M. (1995); **Financial Management Theory and Practice**, Third Edition, Taleju Prakashan, Bhotahity Kathmandu.

Dean, W. H. (1973); **Finance**, The Dryden Press, Illinois.

Joshi, P. R. (2001); **Research Methodology**, Buddha Academic Publishers and Distributors Pvt. Ltd., Kathmandu.

Kothari, C.R. (1990); **Research Methodology, Methods & Techniques**, Second Edition, Wishwa Prakashan, New Delhi.

Krelinger, F.N. (1983); **Foundation of Behavioural Research**, Surjeet Publications, New Delhi.

Pradhan, S. (1962); **Basic of Financial Management**, Educational Enterprises Pvt. Ltd., Kathmandu.

Shrestha, S. and Silwal, D.P. (2000); **Statistical Methods in Management**, Teleju Prakashan, Kathmandu.

Van Horne, J. C.; **Financial Management and Policy**, Seventh and Eleventh Edition, Prentice Hall of India Pvt. Ltd, New Delhi.

Weston, J. F. and Brigham, E. F.; **Essential of Management Finance**, 9<sup>th</sup> Edition, The Dryden Press.

Weston, J. F. and Copeland, Thomas E. (1990); **Managerial Finance**, Ninth Edition, The Dryden Press, USA.

### Dissertations:

Acharya, M. B. (2001); **"Dividend Policy and Practices in Commercial Banks, A Comparative study of Nepal SBI Bank Ltd and Nepal Bangladesh Bank Ltd."**, a master's degree dissertation submitted to Tribhuvan University, Central Department of Management.

Adhikari, N. (1999); **"Corporate Dividend Practices in Nepal"**, a master's degree dissertation submitted to Tribhuvan University, Central Department of Management.

Bhattarai, B. H. (1996); **"Dividend Decision and Its Impact on Stock Valuation, A comparative study of 10 companies"**, a master's degree dissertation submitted to Tribhuvan University, Shanker Dev Campus.

Khatriwada, N. Pd. (2001); **"A Study of Impact of Dividend and Earning Announcement on Shareholders Return and Stock Prices in Nepal"**, a

master's degree dissertation submitted to Tribhuvan University, Shanker Dev Campus.

Sharma, A. (2003); "**Impact of Dividend Policy on Market Price of the Shares**", a master's degree dissertation submitted to Tribhuvan University, Nepal Commerce Campus.

Sharma, S. P. (2005); "**A study on Financial Performance of Commercial Banks (Nepal SBI Bank Limited, Nepal Bangladesh Bank Limited and Everest Bank Limited)**", a master's degree dissertation submitted to Tribhuvan University, Shanker Dev Campus.

#### **Journals:**

Chawla, Deepak and Shrinivasan, G., "**Impact of Dividend and Retention on Share Price – An Economic Study**", Decision, Vol. 14 No. 3, July-September 1987.

Gordan, Myron J., "**The Investment Financing and Valuation of Corporation**", Homewood III Richard D. Irwin, 1962.

Jensen, Gerald R. and Johnson, James M., "**The Dynamics of Corporate of Dividend Reduction**", Financial Management, Vol. 24, No. 4, Winter 1995.

Miller, Merton H. and Modigliani, France, "**Dividend Policy, Growth and Valuation of the Shares**", Journal of Business, XXIV, Oct. 1961.

Pradhan, R. S., "**Stock Market Behavior in a Small Market: A case of Nepal**", The Nepalese Management Review, Vol. IX, Summer 1993.

Shrestha, M. K., "**Public Enterprises: Have They Dividend Paying Ability**", PRASHASAN, The Nepalese Journal of Public Administration (30<sup>th</sup> Issue), March 1981.

Van Horne, James C. and McDonald, John G., "**Dividend Policy and New Equity Financing**", Journal of Finance, May 1971.

Walter, James E., "**Dividend Policies and Common Stock Prices**", Journal of Finance", Vol. 11, March 1966.

#### **Other Publications:**

Company Act, 1997.

Endi Consultants Research Group Kathmandu, Nepal, "**Nepalese Company Act-1997**" Nepal for Profitable Investment, Shree Star Printing Press, Baghbazar, Kathmandu.

Nabil Bank Limited, **Annual Report to Shareholders** (From 1997/98 to 2001/02).

Nepal Commercial Bank Act, 1978.

Nepal SBI Bank Limited, **Annual Report to Shareholders** (From 1997/98 to 2001/02).

**Web Sites:**

[www.edunepal.com.np](http://www.edunepal.com.np)

For various journals and reports.

[www.fncci.org.np](http://www.fncci.org.np)

Federation of Nepal Chamber of  
Commerce and Industry

[www.mof.org.np](http://www.mof.org.np)

Ministry of Finance

[www.nabilbankltd.com.np](http://www.nabilbankltd.com.np)

NABIL Bank Ltd.

[www.nepalstock.com.np](http://www.nepalstock.com.np)

Nepal Stock Exchange

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

Nepal Rastra Bank

[www.sebonp.com](http://www.sebonp.com)

Securities Board of Nepal

## Appendix – I

### Earning per share of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	149.30	49.45	84.66	29.90	39.56
2003-04	143.55	49.05	92.61	45.58	51.70
2004-05	143.14	47.91	105.49	54.22	39.50
2005-06	175.84	59.24	129.21	62.80	59.35
2006-07	167.37	60.66	137.08	78.40	62.57
Mean	155.84	53.26	109.81	54.18	50.54
SD	14.90	6.15	22.73	18.20	10.80
<b>Dividend per share of concerned Banks</b>				3.60	21.37

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	110.00	1.32	50.00	20.00	20.00
2003-04	110.00	0.00	65.00	20.00	15.00
2004-05	120.00	11.58	70.00	0.00	12.50
2005-06	130.00	30.00	85.00	25.00	20.00
2006-07	80.00	15.00	100.00	10.00	5.00
Mean	110.00	11.58	74.00	15.00	14.50
SD	18.71	12.15	19.17	10.00	6.22

### Dividend Payout Ratio of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	73.68	2.67	59.06	66.89	50.56
2003-04	76.63	0.00	70.19	43.88	29.01
2004-05	83.83	24.17	66.36	0.00	31.65
2005-06	73.93	50.64	65.78	39.81	33.70
2006-07	47.80	24.73	72.95	12.75	7.99
Mean	71.11	20.44	66.87	32.67	30.58
SD	13.69	20.48	5.25	26.51	15.19
CV	19.26	100.20	7.86	81.15	49.67

### Dividend Percent of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	110.00	1.32	50.00	20.00	20.00
2003-04	110.00	0.00	65.00	20.00	15.00
2004-05	120.00	11.58	70.00	0.00	12.50
2005-06	130.00	30.00	85.00	25.00	20.00
2006-07	80.00	15.00	100.00	10.00	5.00
Mean	110.00	11.58	74.00	15.00	14.50
SD	18.71	12.15	19.17	10.00	6.22
CV	17.01	104.91	25.91	66.67	42.93

### Market Price per Share of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	1640.00	836.00	740.00	445.00	795.00
2003-04	1745.00	840.00	1000.00	680.00	940.00
2004-05	2345.00	920.00	1505.00	870.00	800.00
2005-06	3775.00	1100.00	2240.00	1379.00	1260.00
2006-07	5900.00	1740.00	5050.00	2430.00	1729.00
Mean	3081.00	1087.20	2107.00	1160.80	1104.80
SD	1791.05	380.29	1741.80	788.45	396.78
CV	58.13	34.98	82.67	67.92	35.91

### Price Earning Ratio of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	10.98	16.91	8.74	14.90	20.10
2003-04	12.16	17.12	10.80	14.90	18.18
2004-05	16.38	19.20	14.27	16.00	20.25
2005-06	21.47	18.57	17.34	22.00	21.23
2006-07	35.25	28.69	36.84	31.00	27.63
Mean	19.25	20.10	17.60	19.76	21.48
SD	9.85	4.90	11.25	6.94	3.61
CV	51.17	24.38	63.92	35.12	16.81

### Earning Yield of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	9.10	5.92	11.44	6.72	4.98
2003-04	8.23	5.84	9.26	6.70	5.50
2004-05	6.10	5.21	7.01	6.23	4.94
2005-06	4.66	5.39	5.77	4.55	4.71
2006-07	2.84	3.49	2.71	3.23	3.62
Mean	6.19	5.17	7.24	5.49	4.75
SD	2.56	0.98	3.33	1.54	0.69
CV	41.36	19.06	45.99	28.05	14.62

### Dividend Yield of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	6.71	0.16	6.76	4.49	2.52
2003-04	6.30	0.00	6.50	2.94	1.60
2004-05	5.12	1.26	4.65	0.00	1.56
2005-06	3.44	2.73	3.79	1.81	1.59
2006-07	1.36	0.86	1.98	0.41	0.29
Mean	4.59	1.00	4.74	1.93	1.51
SD	2.20	1.09	1.98	1.84	0.79
CV	47.93	109.00	41.77	95.34	52.62

### Market Price per Share to Book Value per Share of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	4.07	3.37	2.77	2.96	3.68
2003-04	4.37	3.40	3.32	3.96	3.81
2004-05	5.55	3.84	4.46	5.14	4.00
2005-06	8.06	4.81	5.87	7.42	5.26
2006-07	11.52	6.57	12.07	10.48	7.38
Mean	6.71	4.40	5.70	6.00	4.83
SD	3.11	1.35	3.75	3.01	1.56
CV	46.35	30.68	65.79	50.17	32.30

### Net worth per Share of concerned Banks

Year	SCBNL	HBL	NABIL	EBL	NIBL
2002-03	403.16	247.82	267.30	150.10	216.23
2003-04	399.24	246.93	301.37	171.53	246.88
2004-05	422.37	239.59	337.16	169.15	199.83
2005-06	468.22	228.72	381.36	185.87	239.67
2006-07	512.12	264.73	418.39	231.95	234.37
Mean	441.02	245.56	341.12	181.72	227.40
SD	48.27	13.17	60.49	30.83	19.13
CV	10.95	5.36	17.73	16.96	8.41

## Appendix – II

### Company wise Analysis

#### Financial Situation of SCBNL

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	143.14	175.84	155.84	14.9	9.56
DPS	80	130	110	18.71	17.01
DP Ratio	47.8	83.83	71.11	13.69	19.26
MPS	1640	59	3081	1791.05	58.13
PE Ratio	10.98	35.25	19.25	9.85	51.17
EY	2.84	9.1	6.19	2.56	41.36
DY	1.36	6.71	4.59	2.2	47.93
NWPS	399.24	512.12	441.02	48.27	10.95

#### Financial Situation of HBL

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	47.91	60.66	53.26	6.15	11.55
DPS	0	30	11.58	12.15	104.91
DP Ratio	0	50.64	20.44	20.48	100.2
MPS	836	1740	1087.2	380.29	34.98
PE Ratio	16.91	28.69	20.1	4.9	24.38
EY	3.49	5.92	5.17	0.9854	19.06
DY	0	2.73	1	1.09	109
NWPS	228.72	264.73	245.56	13.17	5.36

#### Financial Situation of NABIL

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	84.66	137.08	109.81	22.73	20.7
DPS	50	100	74	19.17	25.91
DP Ratio	59.06	72.95	66.87	5.25	7.86
MPS	740	5050	2107	1741.8	82.67
PE Ratio	8.74	36.84	17.6	11.25	63.92
EY	2.71	11.44	7.24	3.33	45.99
DY	1.98	6.76	4.74	1.98	41.77
NWPS	267.3	418.39	341.12	60.49	17.73

#### Financial Situation of EBL

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	29.9	78.4	54.18	18.2	33.6
DPS	0	25	15	10	66.67
DP Ratio	0	66.89	32.67	26.51	81.15
MPS	445	2430	116.8	788.45	67.92
PE Ratio	14.9	31	19.76	6.94	35.12
EY	3.23	6.72	5.49	1.54	28.05
DY	0	4.49	1.93	1.84	95.34
NWPS	150.1	231.95	181.72	30.83	16.96

**Financial Situation of NIBL**

Variables	Minimum	Maximum	Mean	S.D.	C.V.
EPS	39.5	62.57	50.54	10.8	21.37
DPS	5	20	14.5	6.22	42.93
DP Ratio	7.99	5056	30.58	15.19	49.67
MPS	795	1729	1104.8	396.78	35.91
PE Ratio	18.18	27.63	21.48	3.61	16.81
EY	3.62	5.5	4.75	0.6946	14.62
DY	0.29	2.52	1.51	0.7946	52.62
NWPS	199.83	24.88	227.4	19.13	8.41

## Appendix – III

### CORRELATION AND REGRESSION ANALYSIS

#### 1. ANALYSIS OF DPS ON EPS

##### SCBL

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.065(a)	.004	-.328	21.55625

a Predictors: (Constant), EPS

##### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	122.793	113.140		1.085	.357
	EPS	-.082	.723	-.065	-.113	.917

a Dependent Variable: DPS

##### HBL

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.747(a)	.558	.411	9.32682

a Predictors: (Constant), EPS

##### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-66.986	40.590		-1.650	.197
	EPS	1.475	.758	.747	1.946	.147

a Dependent Variable: DPS

##### NABIL

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.974(a)	.949	.932	4.99958

a Predictors: (Constant), EPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-16.210	12.281		-1.320	.279
	EPS	.822	.110	.974	7.471	.005

a Dependent Variable: DPS

**EBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.275(a)	.075	-.233	11.10297

a Predictors: (Constant), EPS

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.178	17.260		1.343	.272
	EPS	-.151	.305	-.275	-.495	.655

a Dependent Variable: DPS

**NIBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.385(a)	.148	-.135	6.63304

a Predictors: (Constant), EPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	25.728	15.807		1.628	.202
	EPS	-.222	.307	-.385	-.723	.522

a Dependent Variable: DPS

## 2. Analysis of MPS on DPS

### SCBNL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.582(a)	.339	.119	1681.28745

a Predictors: (Constant), DPS

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9213.500	4999.635		1.843	.163
	DPS	-55.750	44.934	-.582	-1.241	.303

a Dependent Variable: MPS

### HBL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.428(a)	.183	-.089	396.87967

a Predictors: (Constant), DPS

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	932.078	259.386		3.593	.037
	DPS	13.396	16.334	.428	.820	.472

a Dependent Variable: MPS

### NABIL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.922(a)	.850	.800	778.21384

a Predictors: (Constant), DPS

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4092.891	1541.801		-2.655	.077
	DPS	83.782	20.297	.922	4.128	.026

a Dependent Variable: MPS

**EBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.183(a)	.034	-.288	894.97062

a Predictors: (Constant), DPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1377.738	781.499		1.763	.176
	DPS	-14.463	44.749	-.183	-.323	.768

a Dependent Variable: MPS

**NIBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.633(a)	.401	.201	354.72650

a Predictors: (Constant), DPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1689.758	442.549		3.818	.032
	DPS	-40.342	28.492	-.633	-1.416	.252

a Dependent Variable: MPS

**3. Analysis of MPS on EPS****SCBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764(a)	.584	.445	1333.95278

a Predictors: (Constant), EPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-11234.092	7001.382		-1.605	.207
	EPS	91.858	44.763	.764	2.052	.133

a Dependent Variable: MPS

## HBL

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.833(a)	.695	.593	242.64308

a Predictors: (Constant), EPS

### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1656.968	1055.971		-1.569	.215
	EPS	51.522	19.721	.833	2.613	.080

a Dependent Variable: MPS

## NABIL

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.877(a)	.769	.692	967.38884

a Predictors: (Constant), EPS

### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5269.680	2376.231		-2.218	.113
	EPS	67.177	21.278	.877	3.157	.051

a Dependent Variable: MPS

## EBL

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943(a)	.890	.853	302.60737

a Predictors: (Constant), EPS

### Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1053.367	470.403		-2.239	.111
	EPS	40.867	8.315	.943	4.915	.016

a Dependent Variable: MPS

## NIBL

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902(a)	.813	.751	197.92828

a Predictors: (Constant), EPS

### Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-570.451	471.675		-1.209	.313
	EPS	33.150	9.168	.902	3.616	.036

a Dependent Variable: MPS

## 4. Analysis of MPS on DPR

## SCBNL

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.858(a)	.736	.649	1061.76610

a Predictors: (Constant), DPR

### Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11069.159	2799.695		3.954	.029
	DPR	-112.234	38.766	-.858	-2.895	.063

a Dependent Variable: MPS

## HBL

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388(a)	.150	-.133	404.76670

a Predictors: (Constant), DPR

### Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	940.030	271.237		3.466	.040
	DPR	7.199	9.881	.388	.729	.519

a Dependent Variable: MPS

**NABIL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684(a)	.468	.291	1466.32475

a Predictors: (Constant), DPR

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-13064.898	9353.387		-1.397	.257
	DPR	226.893	139.534	.684	1.626	.202

a Dependent Variable: MPS

**EBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.528(a)	.278	.038	773.44513

a Predictors: (Constant), DPR

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1673.232	588.783		2.842	.066
	DPR	-15.687	14.586	-.528	-1.075	.361

a Dependent Variable: MPS

**NIBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.824(a)	.680	.573	259.33956

a Predictors: (Constant), DPR

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1763.384	285.679		6.173	.009
	DPR	-21.535	8.537	-.824	-2.523	.086

a Dependent Variable: MPS

## 5. Analysis of DPS ON NWPS

### SCBNL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.491(a)	.242	-.011	18.81334

a Predictors: (Constant), NWPS

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	194.000	86.347		2.247	.110
	NWPS	-.190	.195	-.491	-.977	.400

a Dependent Variable: DPS

### HBL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.443(a)	.197	-.071	12.57440

a Predictors: (Constant), NWPS

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	111.999	117.369		.954	.410
	NWPS	-.409	.477	-.443	-.857	.455

a Dependent Variable: DPS

### NABIL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.991(a)	.982	.976	2.94872

a Predictors: (Constant), NWPS

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-33.146	8.418		-3.937	.029
	NWPS	.314	.024	.991	12.887	.001

a Dependent Variable: DPS

**EBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.187(a)	.035	-.287	11.34413

a Predictors: (Constant), NWPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	26.000	33.815		.769	.498
	NWPS	-.061	.184	-.187	-.329	.764

a Dependent Variable: DPS

**NIBL****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.010(a)	.000	-.333	7.18760

a Predictors: (Constant), NWPS

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.767	42.845		.321	.769
	NWPS	.003	.188	.010	.017	.987

a Dependent Variable: DPS

## Appendix IV

### MULTIPLE REGRESSION ANALYSIS

#### 1. MULTIPLE REGRESSION ANALYSIS OF MPS ON EPS AND DPS

##### SCBNL

###### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.932(a)	.869	.737	918.15345

a Predictors: (Constant), DPS, EPS

###### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4948.856	5686.928		-.870	.476
	EPS	87.656	30.876	.729	2.839	.105
	DPS	-51.186	24.591	-.535	-2.081	.173

a Dependent Variable: MPS

##### HBL

###### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.883(a)	.780	.561	252.04742

a Predictors: (Constant), DPS, EPS

###### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2580.182	1515.084		-1.703	.231
	EPS	71.852	30.811	1.162	2.332	.145
	DPS	-13.782	15.602	-.440	-.883	.470

a Dependent Variable: MPS

##### NABIL

###### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.927(a)	.859	.719	923.66754

a Predictors: (Constant), DPS, EPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3305.265	2852.604		-1.159	.366
	EPS	-32.376	89.951	-.423	-.360	.753
	DPS	121.182	106.665	1.334	1.136	.374

a Dependent Variable: MPS

EBL

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.946(a)	.896	.791	360.09868

a Predictors: (Constant), DPS, EPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1202.794	708.311		-1.698	.232
	EPS	41.840	10.291	.966	4.066	.056
	DPS	6.447	18.725	.082	.344	.763

a Dependent Variable: MPS

NIBL

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.953(a)	.909	.818	169.22867

a Predictors: (Constant), DPS, EPS

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-20.775	553.401		-.038	.973
	EPS	28.403	8.494	.773	3.344	.079
	DPS	-21.365	14.730	-.335	-1.450	.284

a Dependent Variable: MPS

## 2. MULTIPLE REGRESSION ANALYSIS OF MPS ON PER AND DPR

### SCBNL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994(a)	.989	.978	267.83929

a Predictors: (Constant), DPR, PER

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-235.570	1824.727		-.129	.909
	PER	178.778	26.608	.983	6.719	.021
	DPR	-1.750	19.132	-.013	-.091	.935

a Dependent Variable: MPS

### HBL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986(a)	.972	.945	89.48764

a Predictors: (Constant), DPR, PER

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-432.215	187.908		-2.300	.148
	PER	72.913	9.462	.939	7.706	.016
	DPR	2.642	2.263	.142	1.167	.363

a Dependent Variable: MPS

### NABIL

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.998(a)	.997	.994	135.11628

a Predictors: (Constant), DPR, PER

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-26.525	1107.576		-.024	.983
	PER	157.730	8.415	1.019	18.743	.003
	DPR	-9.604	18.014	-.029	-.533	.647

a Dependent Variable: MPS

### EBL

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.998(a)	.996	.991	73.74297

a Predictors: (Constant), DPR, PER

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-792.500	147.263		-5.382	.033
	PER	105.765	5.840	.931	18.111	.003
	DPR	-4.182	1.529	-.141	-2.735	.112

a Dependent Variable: MPS

**NIBL**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928(a)	.860	.721	209.66949

a Predictors: (Constant), DPR, PER

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-118.314	1191.881		-.099	.930
	PER	69.969	43.479	.637	1.609	.249
	DPR	-9.145	10.340	-.350	-.884	.470

a Dependent Variable: MPS

**Variables Entered/Removed(b)**

Model	Variables Entered	Variables Removed	Method
1	DPR, PER(a)	.	Enter

a All requested variables entered.

b Dependent Variable: MPS

**ANOVA (b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	541828.207	2	270914.104	6.163	.140(a)
	Residual	87922.593	2	43961.296		
	Total	629750.800	4			

a Predictors: (Constant), DPR, PER

b Dependent Variable: MPS

## APPENDIX V

### (i) First ANOVA Test on DPS

#### Calculation for MSC, MSR and MSE

Years	Banks					Row Total (Tr)	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>	X <sub>3</sub> <sup>2</sup>	X <sub>4</sub> <sup>2</sup>	X <sub>5</sub> <sup>2</sup>
	SCBN L (x <sub>1</sub> )	HBL (x <sub>2</sub> )	NAB IL (x <sub>3</sub> )	EBL (x <sub>4</sub> )	NIBL (x <sub>5</sub> )						
2002/03	90	- 18.68	30	0	0	101.32	8100	348.94	900	0	0
2003/04	90	- 20	45	0	- 5	110	8100	400	2025	0	25
2004/05	100	- 8.42	50	- 20	- 7.5	114.08	10,000	70.90	2500	400	56.25
2005/06	110	10	65	5	0	190	12,100	100	4225	25	0
2006/07	60	- 5	80	- 10	- 15	110	3600	25	6400	100	225
Column Total (Tc)	450	- 42.10	270	- 25	- 27.5	625.40	41,900	944.84	16,050	525	306.25
							∑X <sub>1</sub> <sup>2</sup>	∑X <sub>2</sub> <sup>2</sup>	∑X <sub>3</sub> <sup>2</sup>	∑X <sub>4</sub> <sup>2</sup>	∑X <sub>5</sub> <sup>2</sup>

Now, T = General Total = 625.40

$$\sum Tc = \sum Tr = 625.40 \text{ and } n = 25$$

$$\text{Correlation Factor (CF)} = \frac{T^2}{n} = \frac{(625.40)^2}{25} = 15,645$$

$$\begin{aligned} \text{R. S. S.} &= \text{Row Sum of Squares} = \sum X_1^2 + \sum X_2^2 + \sum X_3^2 + \sum X_4^2 + \sum X_5^2 \\ &= 41,900 + 944.84 + 16050 + 525 + 306.25 = 59,726.09 \end{aligned}$$

$$\text{SST} = \text{RSS} - \text{CF} = 59,726.09 - 15,645 = 44,081.09$$

$$\begin{aligned} \text{SSC} &= \frac{\sum Tc^2}{n} - \text{CF} = \frac{(450)^2}{5} + \frac{(-42.10)^2}{5} + \frac{(270)^2}{5} + \frac{(-25)^2}{5} + \frac{(-27.5)^2}{5} - 15,645 \\ &= 40,065.73 \end{aligned}$$

$$\begin{aligned} \text{SSR} &= \frac{\sum Tr^2}{n} - \text{CF} = \frac{(101.32)^2}{5} + \frac{(110)^2}{5} + \frac{(114.08)^2}{5} + \frac{(190)^2}{5} + \frac{(110)^2}{5} - 15,645 \\ &= 1070.99 \end{aligned}$$

$$\therefore \text{SSE} = \text{SST} - \text{SSC} - \text{SSR}$$

$$= 44,081.09 - 40,065.73 - 1070.9$$

$$= 29944.37$$

Two-way ANOVA Table

Source of Variation	Sum of Square (S.S.)	d.f.	Mean Sum of Square (MSS)	F-ratio
Between Banks	SSC = 40065.73	C-1=5-1 = 4	$MSC = \frac{SSC}{C-1} = \frac{40065.73}{4} = 10016.43$	$F_c(4,16) = \frac{MSC}{MSE} = \frac{10016.43}{184.02} = 54.43$
Between Years	SSR = 1070.99	r-1 = 5-1 = 4	$MSR = \frac{SSR}{r-1} = \frac{1070.99}{4} = 267.75$	$F_c(4,16) = \frac{MSR}{MSE} = \frac{267.75}{184.02} = 1.45$
Residual or Error	SSE = 2944.37	(r-1)(C-1) = (5-1)(5-1) = 16	$MSR = \frac{SSE}{(r-1)(C-1)} = \frac{2944.37}{16} = 184.02$	
Total	SST = 44081.09	n-1 = 25-1 = 24		

(ii) Second ANOVA Test on MPS

Calculation for MSC, MSR and MSE

Years	Banks					Row Total (Tr)	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>	X <sub>3</sub> <sup>2</sup>	X <sub>4</sub> <sup>2</sup>	X <sub>5</sub> <sup>2</sup>
	SCB NL (x <sub>1</sub> )	HBL (x <sub>2</sub> )	NABI L (x <sub>3</sub> )	EBL (x <sub>4</sub> )	NIB L (x <sub>5</sub> )						
2002/03	840	36	-60	-355	-5	456	705,600	1,296	3,600	126,025	25
2003/04	945	40	200	-120	140	1,205	893,025	1,600	40,000	14,400	19,600
2004/05	1,545	120	705	70	0	2,440	23,87,025	14,400	497,025	4,900	0
2005/06	2,975	300	1,440	579	460	5,754	88,50,625	90,000	20,73,6000	335,241	211,600
2006/07	5,100	940	4,250	1,630	929	12,849	2,60,10,000	8,83,600	1,80,6250	26,56,900	863,041
Column Total (Tc)	11,405	1,436	6,535	1,804	1,524	22,704	3,88,46,275	990,896	2,06,76,725	31,37,466	10,94,266
							ΣX <sub>1</sub> <sup>2</sup>	ΣX <sub>2</sub> <sup>2</sup>	ΣX <sub>3</sub> <sup>2</sup>	ΣX <sub>4</sub> <sup>2</sup>	ΣX <sub>5</sub> <sup>2</sup>

Now, T = Grand Total = 22,704

$$\sum Tc = \sum tr = 22,704 \text{ and } n = 25$$

$$\text{Correlation Factor (C.F.)} = \frac{T^2}{n} = \frac{(22704)^2}{25} = 2,06,18,8664.64$$

R.S.S. = Row sum of square

$$= \sum X_1^2 + \sum X_2^2 + \sum X_3^2 + \sum X_4^2 + \sum X_5^2 = 388,46,275 + 990,896 + 2,06,76,725 + 31,37,466 + 10,94,266 = 6,47,45,628$$

$$SST = RSS - C.F = 647,45,628 - 206,18,864.64 = 441,26,763.36$$

$$SSC = \frac{\sum Tc^2}{n} - C.F. = \frac{(11405)^2}{5} + \frac{(1436)^2}{5} + \frac{(6535)^2}{5} + \frac{(1804)^2}{5} + \frac{(1524)^2}{5} - 206,$$

$$18,864.64 = 154,65,002.96$$

$$SSR = \frac{\sum T_c^2}{nr} - C.F. = \frac{(456)^2}{5} + \frac{(1205)^2}{5} + \frac{(2440)^2}{5} + \frac{(15754)^2}{5} + \frac{(12,849)^2}{5} - 206, 18,$$

$$864.64 = 205, 44, 910.96$$

$$SSE = SST - SSC - SSR$$

$$= 441, 26, 763.36 - 154, 65, 002.96 - 205, 44, 910.96$$

$$= 81, 16, 849.44$$

Two-way ANOVA Table

Source of Variation	Sum of Square (S.S.)	d.f.	Mean Sum of Square (MSS)	F-ratio
Between Banks	SSC = 154,65,002.96	C-1=5-1 = 4	MSC = $\frac{SSC}{C-1} = \frac{154,65,002.96}{4} = 38,66,250.74$	Fc (4,16) = $\frac{MSC}{MSE} = \frac{38,66,250.74}{507,303.09}$
Between Years	SSR = 205,44,910.96	r-1 = 5-1 = 4	MSR = $\frac{SSR}{r-1} = \frac{205,44,910.96}{4} = 51,36,227.74$	=7.62 Fc (4,16) = $\frac{MSR}{MSE}$
Error	SSE = 81,16,849.44	(r-1)(C-1) = (5-1)(5-1) = 16	MSE = $\frac{SSE}{(r-1)(C-1)} = \frac{81,16,849.44}{16} = 184.02$	= $\frac{51,36,227.74}{507,303.09} = 10.12$
Total	SST = 441,26,763.36	n-1 = 25-1 = 24		

(iii) Third ANOVA Test on EPS

Calculation for MSC, MSR and MSE

Years	Banks					Row Total (Tr)	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>	X <sub>3</sub> <sup>2</sup>	X <sub>4</sub> <sup>2</sup>	X <sub>5</sub> <sup>2</sup>
	SCB NL (x <sub>1</sub> )	HBL (x <sub>2</sub> )	NAB IL (x <sub>3</sub> )	EB L (x <sub>4</sub> )	NIB L (x <sub>5</sub> )						
2002/03	99.3	-0.55	34.66	-20.10	10.44	102.87	9860.49	0.30	1201.31	4040.01	108.99
2003/04	93.55	-0.955	42.61	-4.42	1.70	132.49	8751.60	0.90	1815.61	19.54	2.89
2004/05	93.14	-2.09	55.49	4.22	-10.50	140.26	8675.06	4.37	3079.14	17.81	110.25
2005/06	125.84	9.24	79.21	12.80	9.35	236.44	15,835.70	85.38	6274.22	163.84	87.42
2006/07	117.37	10.66	87.08	28.40	12.57	256.08	13775.72	113.63	7582.93	806.56	158.00
Column Total (Tc)	529.20	16.31	299.05	20.90	2.68	868.14	56,898.57	204.58	19,953.21	1411.76	467.55
							∑X <sub>1</sub> <sup>2</sup>	∑X <sub>2</sub> <sup>2</sup>	∑X <sub>3</sub> <sup>2</sup>	∑X <sub>4</sub> <sup>2</sup>	∑X <sub>5</sub> <sup>2</sup>

Now, T = Grand Total = 868.14

$$\sum T_c = \sum tr = 868.14 \text{ and } n = 25$$

$$\text{Correlation Factor (C.F.)} = \frac{r^2}{n} = \frac{(869.14)^2}{25} = 30,146.68$$

$$\begin{aligned} \text{R.S.S.} &= \text{Row sum of square} = \sum X_1^2 + \sum X_2^2 + \sum X_3^2 + \sum X_4^2 + \sum X_5^2 \\ &= 56,898.57 + 204.58 + 19,953.21 + 1411.76 + 467.55 = \\ &78,935.67 \end{aligned}$$

$$\text{SST} = \text{RSS} - \text{C.F.} = 78,935.67 - 30,146.68 = 48,788.99$$

$$\text{SSC} = \frac{\sum r_c^2}{nc} - \text{C.F.} = \frac{(529.20)^2}{5} + \frac{(16.31)^2}{5} + \frac{(299.05)^2}{5} + \frac{(20.9)^2}{5} + \frac{(2.86)^2}{5} -$$

$$30146.68 = 43,892.03$$

$$\text{SSR} = \frac{\sum r_r^2}{nr} - \text{C.F.} = \frac{(102.87)^2}{5} + \frac{(132.49)^2}{5} + \frac{(140.26)^2}{5} + \frac{(236.44)^2}{5} + \frac{(256.05)^2}{5} -$$

$$30146.68 = 3711.23$$

$$\text{SSE} = \text{SST} - \text{SSC} - \text{SSR}$$

$$= 48,788.99 - 43,892.03 - 3711.23$$

$$= 1185.73$$

Two –way ANOVA Table

Source of Variation	Sum of Square (S.S.)	d.f.	Mean Sum of Square (MSS)	F-ratio
Between Banks	SSC = 43892.03	C-1=5-1 = 4	$MSC = \frac{SSC}{C-1} = \frac{43892.03}{4} = 10973.01$	$F_c(4,16) = \frac{MSC}{MSE} = \frac{10973.01}{74.11} = 148.06$
Between Years	SSR = 3711.23	r-1 = 5-1 = 4	$MSR = \frac{SSR}{r-1} = \frac{3711.23}{4} = 927.81$	$F_c(4,16) = \frac{MSR}{MSE} = \frac{927.81}{74.11} = 12.52$
Residual on Error	SSE = 1185.73	(r-1)(C-1) = (5-1)(5-1) = 16	$MSE = \frac{SSE}{(r-1)(C-1)} = \frac{1185.73}{16} = 74.108$	
Total	SST = 48,788.99	n-1 = 25-1 = 24		

(iv) Fourth ANOVA Test on DPR

Calculation for MSC, MSR and MSE

Years	Banks					Row Total (Tr)	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>	X <sub>3</sub> <sup>2</sup>	X <sub>4</sub> <sup>2</sup>	X <sub>5</sub> <sup>2</sup>
	SCBN L (x <sub>1</sub> )	HBL (x <sub>2</sub> )	NABI L (x <sub>3</sub> )	EBL (x <sub>4</sub> )	NIBL (x <sub>5</sub> )						
2002/03	23.68	-47.33	9.06	16.89	0.56	2.86	560.74	2240.13	82.08	285.27	0.31
2003/04	26.63	-50.00	20.19	-6.12	-20.99	-30.29	709.16	2500.00	407.64	37.45	440.58
2004/05	33.83	-25.83	16.36	-50.00	-18.35	-43.99	114.47	667.19	267.65	2500.00	336.72
2005/06	23.93	0.64	15.78	-10.19	-16.30	13.86	572.64	0.41	249.01	103.84	265.69
2006/07	-2.20	-25.27	22.95	-37.25	-42.01	-83.78	4.84	638.57	526.70	1387.56	1764.84
Column Total (Tc)	105.87	-147.79	84.34	-86.67	-97.09	-141.34	2991.85	6046.30	1533.08	4314.12	2808.14
							$\sum X_1^2$	$\sum X_2^2$	$\sum X_3^2$	$\sum X_4^2$	$\sum X_5^2$

Now, T = Grand Total = - 141.34,  $\sum tc = \sum Tr = - 141.34$  and n = 25

$$\text{Correlation factor (CF)} = \frac{T^2}{n} = \frac{(-141.34)^2}{25} = 799.08$$

$$\begin{aligned} \text{R.R.S.} &= \text{Row Sum of Squares} = \sum X_1^2 + \sum X_2^2 + \sum X_3^2 + \sum X_4^2 + \sum X_5^2 \\ &= 2991.85 + 6046.30 + 533.08 + 4314.12 + 2808.14 = \\ &17693.43 \end{aligned}$$

$$\text{SST} = \text{RSS} - \text{C.F} = 17693.43 - 799.08 = 16894.41$$

$$\begin{aligned} \text{SSC} &= \frac{\sum T_c^2}{nc} - \text{C.F.} = \frac{(105.87)^2}{5} + \frac{(-147.79)^2}{5} + \frac{(184.34)^2}{5} + \frac{(-86.67)^2}{5} + \frac{(-97.09)^2}{5} - \\ &799.08 = 10621.27 \end{aligned}$$

$$\begin{aligned} \text{SSR} &= \frac{\sum T_r^2}{rc} - \text{C.F.} = \frac{(2.36)^2}{5} + \frac{(-30.29)^2}{5} + \frac{(-43.99)^2}{5} + \frac{(-13.86)^2}{5} + \frac{(-83.78)^2}{5} - \\ &799.08 = 1215.31 \end{aligned}$$

$$\begin{aligned} \text{SSE} &= \text{SST} - \text{SSC} - \text{SSR} \\ &= 16894.41 - 10621.27 - 1215.31 \\ &= 5057.83 \end{aligned}$$

Two – way ANOVA Table

Source of Variation	Sum of Square (S.S.)	d.f.	Mean Sum of Square (MSS)	F-ratio
Between Banks	SSC = 10621.27	C-1=5-1 = 4	$MSC = \frac{SSC}{C-1} = \frac{10621.27}{4} = 2655.32$	$F_c(4,16) = \frac{MSC}{MSE} = \frac{2655.32}{316.11} = 8.40$
Between Years	SSR = 1215.31	r-1 = 5-1 = 4	$MSR = \frac{SSR}{r-1} = \frac{1215.31}{4} = 303.83$	$F_c(4,16) = \frac{MSR}{MSE} = \frac{303.83}{316.11} = 0.96$
Residual on Error	SSE = 5057.83	(r-1) (C-1) = (5-1)(5-1) = 16	$MSE = \frac{SSE}{(r-1)(C-1)} = \frac{5057.83}{16} = 316.11$	
Total	SST = 16894.41	n-1 = 25-1 = 24		

(v) Fifth ANOVA Test on E/P Ratio

Calculation for MSC, MSR and MSE

Years	Banks					Row Total (Tr)	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>	X <sub>3</sub> <sup>2</sup>	X <sub>4</sub> <sup>2</sup>	X <sub>5</sub> <sup>2</sup>
	SCB NL (x <sub>1</sub> )	HBL (x <sub>2</sub> )	NA BIL (x <sub>3</sub> )	EBL (x <sub>4</sub> )	NIB L (x <sub>5</sub> )						
2002/03	10.98	16.91	8.74	14.90	20.10	71.63	120.56	285.95	76.39	222.01	404.01

2003/04	12.16	17.12	10.80	14.90	18.18	73.16	147.86	293.09	116.64	222.01	330.51
2004/05	16.38	19.20	14.27	16.00	20.25	86.10	268.30	368.64	203.63	256.00	410.06
2005/06	21.47	18.57	17.34	22.00	21.23	100.61	460.96	344.84	300.67	484.00	450.71
2006/07	35.25	28.69	36.84	31.00	27.63	159.41	1242.56	823.12	1357.18	961.00	763.42
Column Total (Tc)	96.24	100.19	87.99	98.80	107.39	490.91	2240.24	2115.64	2054.51	2145.02	2358.71
							$\sum X_1^2$	$\sum X_2^2$	$\sum X_3^2$	$\sum X_4^2$	$\sum X_5^2$

Now, T = Grand Total = 490.91  $\sum Tc = \sum tr = 490.91$  and  $n = 25$

$$\text{Correlation Factor (C.F.)} = \frac{T^2}{n} = \frac{(490.91)^2}{25} = 9639.70$$

R.S.S. = Row sum of square

$$= \sum X_1^2 + \sum X_2^2 + \sum X_3^2 + \sum X_4^2 + \sum X_5^2 = 2240.24 + 2115.64 + 2054.51 + 2145.02 + 2358.71 = 10914.12$$

$$\text{SST} = \text{RSS} - \text{C.F.} = 10914.12 - 9639.70 = 1274.42$$

$$\text{SSC} = \frac{\sum Tc^2}{n_c} - \text{C.F.} = \frac{(96.24)^2}{5} + \frac{(100.19)^2}{5} + \frac{(87.99)^2}{5} + \frac{(98.8)^2}{5} + \frac{(107.39)^2}{5} - 9639.70 = 39.63$$

$$\text{SSR} = \frac{\sum tr^2}{n_r} - \text{C.F.} = \frac{(71.63)^2}{5} + \frac{(73.16)^2}{5} + \frac{(86.10)^2}{5} + \frac{(100.61)^2}{5} + \frac{(159.41)^2}{5} - 9639.70 = 1046.37$$

$$\text{SSE} = \text{SST} - \text{SSC} - \text{SSR}$$

$$= 1274.42 - 39.63 - 1046.37$$

$$= 188.42$$

Two-way ANOVA Table

Source of Variation	Sum of Square (S.S.)	d.f.	Mean Sum of Square (MSS)	F-ratio
Between Banks	SSC = 39.63	C-1=5-1 = 4	$MSC = \frac{SSC}{C-1} = \frac{39.63}{4} = 9.91$	$F_c(4,16) = \frac{MSC}{MSE} = \frac{9.91}{11.78}$
Between Years	SSR = 1046.37	r-1 = 5-1 = 4	$MSR = \frac{SSR}{r-1} = \frac{1046.37}{4} = 261.59$	= 0.84 $F_c(4,16) = \frac{MSR}{MSE} = \frac{261.59}{11.78} = 22.21$
Residual or Error	SSE = 188.42	(r-1)(C-1) = (5-1)(5-1) = 16	$MSE = \frac{SSE}{(r-1)(C-1)} = \frac{188.42}{16} = 11.78$	
Total	SST = 1274.42	n-1 = 25-1 = 24		

## Appendix VI

### Primary Data Questionnaire

- 1) While forming dividend policy, which factor do you think is most important?
  - a) Market Price
  - b) Net worth
  - c) Current Earning
  - d) Liquidity
  - e) Past Dividend
  - f) Regularity Position
- 2) What do you think the major motive of paying cash Dividend?
  - a) To convey information to shareholders that company is doing good.
  - b) To draw attention from the investment community.
  - c) To increase the market value of the firm's stock.
  - d) To fulfill shareholders expectation
  - e) Others (please specify) :.....
- 3) What would you like to suggest with regard to dividend policy in Nepalese banks?
  - a) Treatment of dividend as an obligation.
  - b) Stability of dividend and unhaphazard payout ratio.
  - c) Cash balance for dividend be adequately planned and maintained.
  - d) Legislation regarding minimum dividend be enacted.
  - e) Others (please specify) :.....
- 4) What do you suggest if the company has no cash to pay dividend?
  - a) Borrow funds and pay cash dividends
  - b) Pay stock dividends.
  - c) Don't pay cash or stock dividends at all.
  - d) Others (please specify) :.....
- 5) Which of the following decision do you think are more important?
  - a) Financing decisions
  - b) Investment decision
  - c) Dividend decisions
- 6) How much is your bank concerned with dividend aspect?
  - a) Highly concerned
  - b) Less concerned
  - c) Concerned



## A Survey Report

QN	Iteam	NABIL		HBL		SCBNL		EBL		NIBL		Total	
		Respon ses	%	Respon ses	%	Respon ses	%	Respon ses	%	Respon ses	%	Respon ses	%
1	a	1	16.67	-	-	-	-	-	-	1	16.67	2	8
	b	-	-	3	75	2	50	-	-	2	33.33	7	28
	c	1	16.67	1	25	2	50	5	100	2	33.33	11	44
	d	3	50	-	-	-	-	-	-	-	-	3	12
	e	1	16.66	-	-	-	-	-	-	1	16.67	2	8
	f	-	-	-	-	-	-	-	-	-	-	-	-
2	a	4	66.66	-	-	-	-	1	20	4	66.67	9	36
	b	-	-	-	-	1	25	-	-	-	-	1	4
	c	-	-	1	25	1	25	1	20	-	-	3	12
	d	2	33.33	3	75	2	50	3	60	2	33.33	12	48
3	a	-	-	-	-	-	-	1	20	-	-	1	4
	b	1	16.67	2	50	2	50	3	60	5	83.33	13	52
	c	4	66.67	2	50	2	50	1	20	1	16.67	10	40
	d	1	16.66	-	-	-	-	-	-	-	-	1	4
4	a	-	-	-1	-	-	-	1	20	2	33.33	3	12
	b	3	50	2	50	2	50	1	20	2	33.33	10	40
	c	3	50	2	50	2	50	3	60	2	33.34	12	48
5	a	-	-	2	50	2	50	4	80	1	16.67	9	36
	b	5	83.33	2	50	2	50	1	20	5	83.33	15	60
	c	1	16.67	-	-	-	-	-	-	-	-	1	4
6	a	6	100	2	50	2	50	4	80	2	33.33	16	64
	b	-	-	2	50	2	50	1	20	4	66.67	9	36
	c	-	-	-	-	-	-	-	-	-	-	-	-
7	a	-	-	-	-	-	-	1	20	1	16.67	2	8
	b	1	16.67	2	50	1	25	-	-	-	-	4	16
	c	5	83.33	2	50	3	75	4	80	5	83.33	19	76
8	a	4	66.67	4	100	3	75	5	100	6	100	22	88
	b	-	-	-	-	-	-	-	-	-	-	-	-
	c	2	33.33	-	-	1	25	-	-	-	-	3	12
9	a	-	-	-	-	-	-	-	-	2	33.33	2	8
	b	3	50	1	25	3	75	3	60	2	33.33	12	48
	c	3	50	3	75	1	25	2	20	2	33.34	11	44
	d	-	-	-	-	-	-	-	-	-	-	-	-
10	a	5	83.33	3	75	3	75	5	100	4	66.67	20	80
	b	-	-	-	-	-	-	-	-	-	-	-	-
	c	1	16.67	1	25	1	25	-	-	2	33.33	5	20
	d	-	-	-	-	-	-	-	-	-	-	-	-
11	a	-	-	-	-	-	-	-	-	-	-	-	-
	b	1	16.67	1	25	1	25	-	-	1	16.67	4	16
	c	5	83.33	3	75	3	75	5	100	4	66.67	20	80
	d	-	-	-	-	-	-	-	-	1	16.66	1	4
12	a	5	83.33	1	25	2	50	3	60	4	66.67	15	60
	b	-	-	-	-	-	-	-	-	-	-	-	-
	c	-	-	-	-	1	25	-	-	-	-	1	4
	d	1	16.67	3	75	1	25	2	40	2	33.33	9	36

