IMPACT OF DIVIDEND POLICY
ON
MARKET PRICE OF SHARE

(Comparative Study of 10 Nepalese A Class Commercial Banks)

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VIVA VOCE SHEET

We have conducted the viva voce examination of the thesis presented by

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"Impact of Dividend Policy on market price of the share: Comparative Study of 10 Nepalese A Class Commercial Banks" *and found that the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment for the requirement for Master's Degree in Business Studies (M.B.S.)*

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RECOMMENDATION

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"Impact of Dividend Policy on market price of the share: Comparative Study of 10 Nepalese A class Commercial Banks" *has been prepared as approved by this Department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.*

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Declaration

I hereby declare that the work done in this thesis entitled “Impact of Dividend Policy on Market Price of Share: Comparative Study of 10 Nepalese A class Commercial Banks” has submitted to Office of Dean, Faculty of Management, Tribhuvan University is my own original work done for the partial fulfillment as required for the Master Degree in Business Studies under the guidance and supervision of Mr. Depak Singh, Hari Khetan Multiple Campus, Tribhuwan University.

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ABBERVATIONS

AD	:	Anno Domini – abbr. of the Christian Era
ATM	:	Automated Teller Machine
BS	:	Bikram Sambat
BVPS	:	Book Value Per Share
CV	:	Coefficient of Variation
DP	:	Dividend Percent
DPPC	:	Dividend Percent on Paid Up Capital
DPR	:	Dividend Payout Ratio
DPS	:	Dividend Per Share
DY	:	Dividend Yield
EPS	:	Earning Per Share
EY	:	Earning Yield
FY	:	Fiscal Year
Govt.	:	Government
HMG (N) / HMG/N	:	His Majesty Government of Nepal
IFIC	:	International Finance Investment and Commerce Bank Ltd
JVB	:	Joint Venture Bank
MPS	:	Market Price Per Share
NABIL	:	NABIL Bank Ltd. / Nepal Arab Bank Ltd.
NBBL	:	Nepal Bangladesh Bank Ltd.
NEPSE	:	Nepal Stock Exchange
NGBL	:	Nepal Grindlays Bank Ltd.
NIBL	:	Nepal Investment Bank Ltd.
NIDC	:	Nepal Industrial Development Corporation
NRB	:	Nepal Rastra Bank
NSBL	:	Nepal SBI Bank Ltd.
NWPS	:	Net Worth Per Share
PER	:	Price Earning Ratio
R	:	Correlation Coefficient
R^2	:	Coefficient of Multiple Determination
SBI	:	State Bank of India
SCBNL	:	Standard Chartered Bank Nepal Ltd.
SEB	:	Security Board Nepal
SEE	:	Standard Error of Estimate

CHAPTER-I

INTRODUCTION

1.1. General Background of the Study

Banking is the heart of financial sector of any country. The soundness of bank is determined by how well it has channelized the savings of people into the productive investment to yield surplus. Noticing the important role of banking in the economy of country, our government has given primary attention in the development of the banking sector while it performs following two major responsibilities.

- Tapping the public savings to raise the sufficient funds for investment.
- To promote trade and commerce and invigorate the industries for income generation.

Since FY 1983/84 our government has taken significant steps towards financial liberalization. Nepal's Government with the view to expedite the pace of economic development under the structural adjustment program. The liberalization policy of Government of Nepal has encouraged the private sectors to invest in various fields which support the nation's overall economic growth. The liberalization policy has attracted not only native investors but has also proved to be instrumental to motivate the foreign investors to work in a partnership basis with Nepalese.

Though Nepal has no elaborate history of banking, commercial banking industry has remarkably developed in a short span of a last decade. This development has helped to mobilize the internal resources as well as the external funds of foreign investors for the economic development of the nation. Glimpses of liberalization in banking sector can be discern when the then His Majesty's Government of Nepal permitted to establish private commercial banks and foreign investment were allowed and attracted. Consequently in just over four year's period, three

joint venture banks Nepal Arab Bank Ltd (NABIL), and Nepal Indosuez Bank Ltd (Nepal Investment Bank Limited), and Nepal Grindlays Bank Ltd (Standard Chartered Bank Nepal), came into operation in 1984, 1986 and 1987 respectively.

Joint Ventures are those agencies which are established by two or more agencies at different nations to serve a common goal. “A joint venture is a joining force between two or more enterprises for the purpose of carrying out of a specific operation (industrial or commercial investment production or trade)”. The advantages of joint venture banks in Nepal had many consequences apart from performing the role of commercial banks. It introduced new philosophy and modern banking practices in Nepal. The growth of joint venture banks increased dramatically after the restoration of democracy when government adopted much more liberal and market oriented policy. [NRB (1997) Economic Report 1996-97, Research and Publication Department]. The establishment of joint ventures after restoration of democracy in 1990 has been contributing to a gradual development of banking culture with international standards easing consumer demands i.e. issuing credit cards, tele banking, 24 hours banking service etc. This has drawn a major attention from non-business or general public towards commercial banks. Today more people are interested to invest in banking sector than any other sectors.

Business world is a dynamic domain. Everyday it carries a momentum driven by decisions, flow of information, and speculations. Everyone wants to make a wise decision to make profit. Stakeholders browse balance sheets and income statements of company they owe to update themselves. While measuring the performance of any company, Earning Per Share is the one of most used indicators to gauge the performance of company. And Earning Per Share is directly related to the Dividend Policy enacted by the company.

In theory of finance, dividend decision plays a very imperative role. However, Dividend decision is still as controversial as crucial area of managerial finance. A better understanding of the motivation for the dividend decision could shed significant light on stock valuation, since

dividends play a central role in traditional stock valuation models. In such models, stocks have value because they hold the promise of future cash payouts. Dividends constitute the primary cash payment to stockholders or the greater the expected future stream of dividends, the greater the value of the stockholder's share (Carlson, 2001).

It is more technical and sensitive area of finance which makes a complex and numerous implications in the firm. Dividend policy may affect the areas such as financial structure of the firm, flow of funds, stock prices, investor's 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.

In simple terms dividend policy refers to the percentage of earnings it pays in cash to its stockholders. The dividend payout reduces the amount of retained earnings in the firm and affect total amount of internal financing. For expansion of every firm, there should be extra financing. This financing can be made either through the external source on internal. The common external source includes issuance of shares, preferred shares, bonds, debt, and debentures. Whereas the internal sources is the earning retained after the payment of dividend. Thus the amount of internal financing is largely dependent upon the dividend policy adopted by the firm. For the existing firm, it is very necessary to analyze which source is more profitable because the cost of external financing is relatively high as compared to the retained earning due to the extra cost required.

Any firm has two basic objectives, one is the profit maximization and another is the maximization of shareholders wealth. The shareholders of a company always want to maximize their wealth. The shareholders wealth includes not only the market price of the stock but also the current dividend their company pays. But the dividend policy should be concerned with the well being of the shareholders which can be partially measured by dividend announced but more accurately measured in terms of the market value of the stock.

Retained earnings are used for making investment in the favorable investment opportunities which in turn helps to increase the growth rate of the firm. The main

controversy between the shareholders and management is the rate of dividend because shareholders want more dividend and management wants more amount to retain to the company for the investment purpose. Dividend policy decision is the major financial decision of the firm, which determines further capital structure and growth of the firm.

In context of Nepal, most of the public enterprises were operated in loss. In such situation it was not possible to distribute dividend. Such enterprises mainly focused on minimizing their loss. There were few companies who pay dividends. But after the establishment of Joint Venture companies, 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.

1.2 Statement of Problem

Dividend policy is one of the most controversial subjects in finance but it one of the s the most crucial factors to any investor or stakeholders of the company. The investment on shares of the company is thus desirable from the stockholder's point of view. In one hand the payment of dividend makes the investors happy. But on the other hand the payment of dividend decreases the internal financing required for making investment in good opportunities. This could hinder growth of the firm, which in turn affects the value of the stock. There may be various factors that cause fluctuation in share prices. Earnings are also treated as financing sources of the firms. The firm retains the earning; its repercussion can be seen in many factors such as decreased leverage ratio, expansion of activities, and increase in profit in following years. If firm pays dividend it may need to raise capital through capital market, which dilutes the ownership control. In situation when firm takes loans or raises debenture, it will affect on risk characteristics of the firm. Therefore there are many dimensions and factors to be considered on dividend theories, policies and practices.

This study will seek to answer the following questions.

- What are the implications of dividend on market per share?

- What are the relationship of financial indicators DPS, EPS, DPR and P/E ratio and similar factors in sampled banks?

1.3 Objectives of Study

The major objective of the study is to obtain an in-depth knowledge about the impact of the dividend policy adopted by the firm to its market price of the share as well as the related valuation of the firm. The main areas of the study can be listed as follows.

- Highlight various aspects of dividend policies and practices in banking sector.
- To find out the relationship of dividend with EPS, DPS, MPS, P/E ration of sample banks.
- Provide suggestions and feedbacks based on findings of analysis.

Analysis of these variables should shed some light on how a firm determines the amount of dividends to pay stockholders

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1.4 Significance of the Study

Nowadays 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 a 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.

While investing in shares, the investor forgoes opportunity income that he could have earned. In capital market, the return can be earned in two ways:

(i) By means of dividend
(ii) By capital gains i.e. increase in share price.

As dividend is one of the crucial factors in every organization. The dividend is most sensitive element in the area of investment in the common stock. If the market does not receive its expected dosage, stock price will suffer. Dividend announcement also help to solve symmetric information problem between management and shareholders. Besides this, shareholders usually think that dividend is less risky than capital gain and they use the announcement of changes in dividend payment in assessing the value of a security.

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 conceptions about the return resulting from investing in the stocks for the investors.

It is believed that so many persons and parties such as shareholders, management of banks, financial institution, general public (depositors, prospective customers, investors etc.) and other policy making bodies which are concerned with banking (mainly Nepal SBI Bank Limited, Nabil Bank Limited, Standard Charted Bank Limited, Everest Bank Limited, Himalayan Bank Limited, Nepal Investment Bank Limited, Bank Of Kathmandu Limited, Nepal industrial and Commercial Bank Limited, Kumar Bank Limited and Siddhartha Bank Limited) business will be benefited from this study. It is also believed that it will provide valuable inputs for future research scholars.

1.5 Limitations of Study

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

i. This study is based specially on secondary data like annual reports of the banks under review, journals, unpublished as well as published thesis works, other published articles and reports and related materials from various websites.

ii. 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.

iii. The study covers a five-year period, i.e. from FY **2060/65 (2003/2008)**

iv. Cash dividends and Stock dividends are considered in total as dividend.

v. The study covers only ten A class commercial banks of Nepal, which are:

a. Nabil Bank Ltd. (Nepal Arab Bank Ltd.)
b. Standard Charted Bank Nepal Limited
c. Nepal Investment Bank Limited
d. Nepal SBI Bank Limited
e. Himalayan Bank limited
f. Nepal Investment Bank Limited
g. Bank of Kathmandu Limited
h. Nepal Industrial And Commercial Bank limited
i. Kumari Bank Limited
j. Siddhartha Bank Limited

1.6 Organizations Under Study

1.6.1 Nepal Arab Bank Limited (NABIL Bank Limited)

Nepal Arab Bank Limited (NABIL Bank Limited) was incorporated in the year 1984 A.D. (2041 B.S.). It commenced its operation on 12 July 1984 A.D. (2041/3/29 B.S.) as the first joint venture commercial bank in Nepal. It was listed in the Nepal Stock Exchange in the year 1986 A.D. (2042/09/08 B.S.). Dubai Bank Ltd., Dubai (Later acquired by Emirates Bank International Ltd., Dubai) was the first joint venture partner to NABIL. Currently, NB (International) Ltd., Ireland is the foreign partner. NABIL Bank Limited had the official name Nepal Arab Bank Ltd. till 31st December 2001.[1] The equity composition of Nepal Nabil Bank Limited is as follows:

NB (International) Limited, Ireland	-	50%
Nepal Industrial Development Corporation (NIDC)	-	10%
Rastriya Beema Sansthan	-	9.67%
Nepal Stock Exchange Limited	-	0.33%
General Public	-	30%

Nabil Bank is the pioneer in introducing many innovative banking services and marketing concept in banking sector of Nepal. It operates its activities through 26 branches and 2 counters. It is the only bank having presence in the Tribhuvan

[1] *Source: www.nabilbankltd.com.np*

International Airport. Some of the services provided by Nabil Bank Limited are accepting deposits, lending, documentary credit, guarantees, collections, credit cards, tele-banking, safe deposit lockers, fund transfer, ATM etc.

1.6.2 Standard Charted Bank Nepal Limited

Standard Chartered Bank Nepal Limited, formerly known as Nepal Grindlays Bank Limited was incorporated in the year 1985 and has been in operation since 1987. On 31 July 2000, Standard Chartered Bank concluded the acquisition of ANZ Grindlays Bank form the Australia and New Zealand Banking Group Limited. With this acquisition, 50% shares of Nepal Grindlays Bank Ltd. (NGBL) previously owned by ANZ Grindlays are now owned by Standard Chartered Grindlays Bank Ltd. leading to the name change of the Bank to Standard Chartered Bank Nepal Limited with effective from July 16, 2001.[2] The equity composition of Standard Chartered Bank Nepal Ltd. is as follows:

Standard Chartered Grindlays Bank	-	75%
General Public	-	25%

The Bank focuses mainly on corporate, consumer and commercial banking, providing services for international firms, as well as embassies, aid agencies, airlines, hotels and government corporations.

The banking services range includes full trade finance capabilities as well as working capital and medium term loan facilities, remittances, deposit services, credit card and ATM. For international firms, Standard Chartered Bank Nepal Limited specializes in foreign trade, bonding, remittance services and foreign exchange.[3]

1.6.3 Nepal Investment Bank Limited

Nepal Investment Bank Limited, previously Nepal Indosuez Bank Limited, was established in 1986 as a joint venture between Nepalese and French partners. The French partner holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one of the largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessman, has acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Limited.[4]

[2] Source: www.standardchartered.com.np
[3] Ibid
[4] Source: www.nibl.com.np

The name of the Bank has been changed to Nepal Investment Bank Limited upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

A Group of Companies	-	50%
Rastriya Banijya Bank	-	15%
Rastriya Beema Sansthan	-	15%
General Public	-	20%

Nepal Investment Bank Limited offers a wide range of service. Some of them are trade finance, deposits, fund transfer, remittances, export credit, bills purchase, loans and advances, locker facilities, ATM with any branch banking, 365 days banking etc.

1.6.4 Nepal SBI Bank Limited.

Nepal SBI Bank Ltd. (NSBL) is the first Nepal-Indo joint venture commercial bank in the country. It is sponsored by three institutional promoters, namely, State Bank of India, Karmachari Sanchaya Kosh (Employees Provident Fund) and Agricultural Development Bank of Nepal. Nepal SBI Bank Limited became operational on the 8th July 1993 A.D. (2050/03/23 B.S).

The Bank was registered on 2050/1/16 (28 April 1993) in the Department of Industry, HMG/N under the Company Act, 2021 and Commercial Bank Act, 2031. The formal inauguration of Nepal SBI Bank Limited took place on 7th July 1993. It commenced its operations on 2050/3/23 B.S. (8th July, 1993 A.D.). The equity composition of the Bank is as follows:

State Bank of India	-	50%
Employee Provident Fund	-	15%
Agricultural Development Bank of Nepal	-	5%
General Public	-	30%

It has been providing services through its 10 Branches and 3 Extension Counters. The services provided by Nepal SBI Bank Limited include deposits, remittances, various types of loan facilities, letter of credit, bank guarantees, retail financing (house loans, vehicle loans and education loans) etc. It has recently launched 365 days banking services and ATM facility from its New Road branch.

1.6.5 Siddhartha Bank Limited

Siddhartha Bank Limited (SBL) was incepted on 2002. Today it provides full range of commercial banking services through its ten branches in major cities of Nepal and a corporate office in Kamaladi.

Siddhartha bank delivers wide range of banking services like Corporate Banking, Personal and retail banking, Remittance etc. SBL is striving to be in a leading position amongst the banks of its age in terms of profitability, productivity and innovation.

The core structure of its equity is as follows:

Nepalese Corporate House	-11.75%
Promoter Group	-58.25%
Public	- 30%

1.6.6 Nepal Industrial & Commercial Bank Limited

Nepal Industrial & Commercial Bank Limited (NIC Bank) commenced its operation on 21 July 1998 from Biratnagar. Within 10 years of commencing business, the Bank has grown rapidly with 16 branches throughout the country while 2 more are planned to be opened this year.

The Bank is the first commercial Bank in Nepal to have received ISO 9001:2000 certification for quality management system. Furthermore, NIC Bank became the 1st Bank in Nepal to be provided a line of credit by International Finance Corporation (IFC), an arm of World Bank Group under its Global Trade Finance Program, enabling the Bank's Letter of Credit and Guarantee to be accepted/ confirmed by more than 200 banks worldwide.

It provides Consumer Banking services which include home loans, auto loans, personal loans, education loans, travel loans, etc., It also gives institutional and personal deposit products and transaction banking services including debit cards, ATMs, safe deposit lockers, payment services, drafts, remittance, SMS Banking,

Travelers' Cheques,. Further it facilitates corporate banking business including credit products and other banking services which includes also includes corporate transaction banking, trade finance services, foreign exchange and corporate financing solutions including project & infrastructure finance, working capital & term loan credit, structured financing, syndication, cash management and advisory services.

Share Structure of NIC bank is as follows:

The promoter group holds - 65%

Public - 35%

1.6.7 Kumari Bank Limited

Kumari Bank Limited, came into existence as the fifteenth commercial bank of Nepal by starting its banking operations from Chaitra 21, 2057 B.S (April 03, 2001).

Kumari Bank Ltd has been providing wide - range of modern banking services through 16 points of representations located in various urban and semi urban part of the country, 11 outside and 5 inside the valley. The bank is pioneer in providing some of the latest / lucrative banking services like E-Banking and SMS banking services in Nepal Similarly the bank has been providing 365 days banking facilities, extended banking hours till 7 PM in the evening, utility bill payment services, inward and outward remittance services, and various other banking services.

Visa Electron Debit Card, which is accessible in entire VISA linked ATMs (including 18 own ATMs) and POS (Point of Sale) terminals both in Nepal and India, has also added convenience to the customers. The equity structure of the bank is as follows:

Promoter share - 70 %

Public share - 30%.

1.6.8 Himalayan Bank Limited

It was incorporated in 1992 by the distinguished business personalities of Nepal in partnership with Employee Providend Fund and Habib Bank Limited, one of the largest commercial Banks of Pakistan. But the Banks operation was commenced from January 1993 only. It is the first commercial bank of Nepal with maximum share holding by the Nepalese private sector. The bank offers commercial activities, industrial and merchant banking.

It has been providing services through 19 branches and a head office in Thamel. Himalayan Bank Limited engages in all commercial banking activities, including foreign exchange, tele-banking facilities, trade and industry finance, consumer banking, safe deposit lockers, corporate banking with a wide network of agencies and correspondence banking with other major financial institutions in the world. It has been able to stand as a major bank in remittance business.The equity composition of NB Bank Ltd is as follows:

Promoter share holders	-	51%
Habib Bank Ltd, Pakistan	-	20%
Financial Institution (Employees Provident Fund)	-	14%
Nepalese Public Share holders	-	15%

1.6.9 Everest Bank Limited (EBL)

Everest Bank Limited (EBL) was established in 2051 B.S. and started its operation with 1st branch at New Baneswor on 1st Kartik 2051 (1994 A. D.). In the beginning, its joint venture partner was United Bank of India Ltd. But in 2053 B.S. United bank of India Ltd. sold its equity to Punjab National Bank with a view and objective of extending professionalized and efficient banking service to various segments of this society ,EBL joined hands with Punjab National Bank (PNB), India as its joint venture partner. Under the technical service agreement signed between two banks, PNB has been providing to management services and banking experience to EBL. PNB has helped the bank in laying down sound system and procedure. Drawing its strength from its size and operation it is reckoned as one of the fastest growing Commercial Banks.

EBL is to evolve and position the bank as a world class, progressive, cost effective and customer friendly institution providing comprehensive financial and related service, integrating technology and serving various segment of society especially the middle class society. The equity composition of NB Bank Ltd is as follows:

Promoter shareholders	-	50%
Punjab National Bank	-	30%
Nepalese Public Share holders	-	15%

1.6.10 Bank Of Kathmandu (BOK)

Bank of Kathmandu started its operation in March 1995 with the objective to stimulate the Nepalese economy and take it to newer heights. The bank provides wide range of banking services like remittance, corporate banking, retail banking, business banking etc. Today BOK is providing its services to the public through 27 branches in major places and head office in Kamaladi, Kathmandu.

BOK also provides card business to its customers. BOK debit card is accepted at all ATMs associated to SCT Network and merchant locations connected with Point of Sales (POS) terminals to the bank or merchants that display/accept SCT Cards. Visa Electon Card and internet banking are few other services which have been added lately. The equity composition Bank of Kathmandu is as follows:

Promoter share holders	-	42%
Nepalese Public Share holders	-	58%

1.7 Chapter Plan

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.

- 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 under study and limitations and chapter plan of the study.
- 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.
- The third chapter, research methodology deals with the detail research methods that are planned for conducting this study.
- The fourth chapter, presentation and analysis of data is 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.
- 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

Reviewing fundamental aspects of relevant literature and previous studies before doing any analysis always gives better perspective and guidance to any thesis. As this research aims to analyze the impact of dividend policy on market price of the shares of commercial banks, it is attempted to present brief glimpses on the major International Studies of dividend policy as well as findings of the related previous studies. In this chapter conceptual frameworks given by different authors and intellectuals of various books, journals, and previous thesis related to dividend, dividend policy, and impact of dividend policy are reviewed apropos to prevailing law of Dividend Policy in Nepal.

2.1. Conceptual Framework

"A dividend is the cash, stock, or any type of property a corporation distributes to its shareholders. The board of directors may declare a dividend at any time, but dividends are not a legal obligation of the corporation—it is the board's choice. Unlike interest on debt securities, if a corporation does not pay a dividend, there is no violation of a contract and no legal recourse for shareholders."[5] Dividends are generally paid in the form of cash. So that the payment of dividend reduces the cash balance of the company as well as reduces the amount of retained earnings. Dividend policy may affect the area such as financial structure of the firm, flow of funds, corporate liquidity, stock prices, investor's satisfaction, growth of the firm etc.

A dividend policy is a firm's decision about the payment of cash dividends to shareholders. "Dividend Policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute

[5] **Frank J. Fabozzi & Pamela P. Peterson,** "Financial Management & Analysis"- Second Edition, John Wiley & Sons, Inc. -, pp 546

the cash flows that accrue to stockholders."[6] Thus, the dividend payout reduces the amount of retained earnings in the firm and affect total amount of internal financing. The decision depends upon the objective of the management for wealth maximization.

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 internal 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 market 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 expect an increase in market price of the share and in the other hand they also expect distribution of firm's earning in the form of dividend. From the firms having stable image in the market, the investors expect regular dividend. Thus this priority takes over the desire to retain earnings for financial expansion and growth. Thus, shareholders expectation can be fulfilled either through capital gains or dividends.

[6] **Weston, J. Fred & Copeland, Thomas E.**, "Dividend Policy", *Managerial Finance Ninth Edition USA, The Dryen Press, 1990, pp. 657.*

It is thus very important to maintain balance between the shareholders' interest and corporate growth resulting from internal financing i.e. 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."[7] Thus dividend decision is one of the central and major decision area related to the policies seeking to maximize the value of firm's common stock as well as the wealth of the shareholders.

2.2 Forms of Dividend

Depending upon the objectives and policies, they implement, the firm can give various type of dividend to the shareholders. Before adopting any dividend, the firm must ensure the smooth growth of the firm as well as satisfy the expectation of the shareholders. There should be consistency in dividend policy and financial plans, shareholders preference and attitude of the directors.[8] The corporations in Nepal are in the early stage of development due to which they need to pay extensive concentration in the dividend. The empirical observation in case of public limited companies in Nepal shows that only few corporations are paying dividend to the government due to suffering from regular losses and not having risk of ownership transfer.[9] Some of the major forms of dividends, which are adopted by corporations:

2.2.1 Cash Dividend

A cash dividend is a dividend paid for in cash. To be able to pay dividends in cash, companies not only need to have enough profits, but to have enough cash. Even when the company shows large profits retained in its balance

[7] **Dean, William H.,** Finance, *The Dryden Press, Illionois, 1973, pp.1.*
[8] **Bhattarai, Bishnu Hari,** "Dividend Decision and Its Impact on Stock Valuation, A comparative study of 10 companies" *A Masters Degree Dissertation Submitted to T. U., October 1996 pp. 24*
[9] *Ibid pp. 24*

sheet this is not enough to assure cash dividends. 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. 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.

2.2.2 Stock Dividends/Bonus Share

A *stock dividend* is the distribution of additional shares of stock to 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."[10] 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 the owner's equity portion, i.e. the reserve and surplus. It is simply and accounting transfer from retained earnings to capital stock.

2.2.3 Scrip Divided

Scrip Dividend is a dividend involving the distribution of promissory notes that call for some type of payment at a future date, which may be interest bearing or non-interest bearing. Scrip dividends generally signal that a firm is short of cash. The use of scrip dividend is desirable only when corporations have really earned profit and have only to wait for the conversion of other current

[10] **Weston, J. Fred & Copeland, Thomas E.**, "Dividend Policy", *Managerial Finance Ninth Edition, The Dryen Press, USA, 1990 pp. 680.*

assets into cash. Therefore, in order to overcome the temporary shortage of cash, sometimes company uses scrip dividends.

2.2.4 Property Dividend

A property dividend is when a company distributes property to shareholders instead of cash or stock. It involves a payment of assets/property in any form other than cash. Such form of dividend may be followed whenever there are assets that are no longer necessary in the operation of the business or in extra ordinary circumstances. Property dividends can literally take the form of cocoa beans, pencils, gold, silver or any other item with tangible value. Property dividends are recorded at market value on the declaration date.

2.2.5 Optional Dividend

A dividend that is payable either in cash or stock form is an optional dividend. Here the shareholder is allowed to choose which method of payment to take. The shareholder considers the comparative value of 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."[11] If the cash dividend is subject to income taxes over and above the limit he prefers to have stock dividend.

2.2.6 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

[11] **W.C. Waring, Jr.**, "Fractional Shares Under Stock Dividend Declaration", *Harvard Law Review, Boston, Jan, 1931, pp. 404.*

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.

2.3 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.

a. Stability of Earnings

The nature of business has an important bearing on the dividend policy. Firms having stability of earnings may formulate a more consistent dividend policy than those having an uneven flow of incomes because they can predict easily their savings and 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.

b. Age of corporation.

Age of the corporation counts much in deciding the dividend policy. A newly established company may require much of its earnings for expansion and plant improvement and may adopt a rigid dividend

policy while, on the other hand, an older company can formulate a clear cut and more consistent policy regarding dividend.

c. Past Dividends

While formulating the Dividend Policy, the directors must keep in mind the dividend paid in past years. The current rate should be around the average past rate. 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.[12] Furthermore, Baker, Farrelly and Edelman (1985) find that managers strongly agree with the statement that a firm should attempt to maintain a persistent record of dividend payments.

d. Liquidity Position

Availability of cash and sound financial position is also an important factor in dividend decisions. A dividend represents a cash outflow, the greater the funds and the liquidity of the firm the better the ability to pay dividend. The liquidity of a firm depends very much on the investment and financial decisions of the firm which in turn determines the rate of expansion and the manner of financing. If cash position is weak, stock dividend will be distributed and if cash position is good, company can distribute the cash dividend.

e. Need to Repay Debt

[12] **Jensen, Gerald R. & Johnson, James M.**, "The Dynamics of Corporate Dividend Reductions", *Financial Management, Vol. 24, No. 4, Winter 1995, pp. 32*

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.[13] In such case also the dividend decision will be effected.

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

g. 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.[14]

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[13] **Weston, J. Fred & Copeland, Thomas E.**, "Dividend Policy", *Managerial Finance Ninth Edition, The Dryen Press, USA, 1990, pp. 659.*
[14] Ibid, pp. 661

h. Rate of Asset Expansion

If a company is growing rapidly, it retains a part of their profits for strengthening their financial position. The greater the future need of funds, the more likely the firm is to retain it's 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.

i. Access to the Capital Market

Well established and large firms have better access to the capital market than the new Companies and may borrow funds from the external sources if there arises any need. Such Companies may have a better dividend pay-out ratio. Whereas smaller firms have to depend on their internal sources and therefore they will have to build up good reserves by reducing the dividend pay out ratio for meeting any obligation requiring heavy funds.

j. Legal Restrictions

Legal rules constrain dividend payment on certain conditions as follows:

- Dividends can only be paid out of:
  - Current or past profits of the company.
- Payment of dividend out of capital is illegal.
- A company cannot declare dividends unless:
  - It has provided for present as well as all arrears of depreciation.
  - Certain percentage of net profits has been transferred to the reserve of the company.
- Past accumulated profits can be used for declaration of dividends only as per the rules framed by the Company Act.
- 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.

k. Control

Policy of control is another determining factor is so far as dividends are concerned. If the directors want to have control on company, they would not like to add new shareholders and therefore, declare a dividend at low rate. Because by adding new shareholders they fear dilution of control and diversion of policies and programmed of the existing management. So they prefer to meet the needs through retained earning. If the directors do not bother about the control of affairs they will follow a liberal dividend policy. Thus control is an influencing factor in framing the dividend policy.

l. 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.

2.4 Developing Dividend Policies

Even though most firms seem to have a policy of paying stable amount of dividend or a stable dividend payout ratio, this is not only the policy. Stability or regularity of dividends is considered as a desirable policy by the management of most companies. Shareholders also generally prefer stable dividends because all other things beings of the same, stable dividends may have a positive impact on the market price of the share. There are three major types of dividend payout schemes:

2.4.1. Constant Dividend Per Share

According to this form of stable dividend policy, a company follows a policy of paying a certain fixed amount per share as dividend. The fixed dividend

amount would be paid year after year, irrespective of the fluctuation in the earnings. In other words, fluctuations in earnings would not affect the dividend payment. In fact, when a company follows such a dividend policy it will pay dividends to the shareholders even when it suffers losses. It should be clearly noted that this policy does not imply that the dividend per share or dividend rate will never be increase. The dividend per share is increased over the years when the company reaches new levels of earnings and expects to maintain it. Of course, if the increase is expected to be temporary, the annual dividend per share is not changed and remains at the existing level.

It is easy to follow this policy when earnings are stable. If the earnings pattern of a company shows wide fluctuations, it is difficult to maintain such a policy. Investors who have dividends as the only source of their income prefer the constant dividend policy.

2.4.2. Constant Payout Ratio

Constant/target payout ratio is another form of stable dividend policy followed by some companies. The term payout ratio refers to the ratio of dividend to earnings or the percentage share of earnings used to pay dividend. With constant/target payout ratio, a firm pays a constant percentage of net earnings as dividend to the shareholders. In other words, a stable dividend payout ratio implies that the percentage of earnings paid out each year fixed. Thus, amount of dividend will fluctuate in direct proportion to earnings and are likely to be highly volatile in the wake of wide fluctuations in the earrings of the company.

This policy is related to a company's ability to pay dividends. If the company incurs losses, no dividend shall be paid regardless of the desires of shareholders. Internal financing with retained earnings is automatic when this policy is followed. At any given payout ratio the amount of dividends and the additions to retained earnings increase with increased earnings and decrease with decreased earnings. This policy simplifies the dividend decision, and has the advantage of protecting a company against over and under payment of dividend. It ensures that dividends are paid when profits are earned, and avoided when it incurs losses.

2.4.3. Stable Rupee Dividend Plus Extra Dividend (or Low Regular Dividend Plus Extras)

A policy of paying a low regular dividend plus a yearend extra in good years is a compromise between the previous two policies. Under this policy, a firm usually pays fixed dividend to the shareholders and in years of marked prosperity additional or extra dividend is paid over and above the regular dividend. As soon as normal conditions return, the firm cuts the extra dividend and pays the normal dividend per share.

It gives the firm flexibility, but it leaves investors somewhat uncertain about what their dividend income will be. If a firm's earnings and cash flows are quite volatile, however, this policy may well be the best choice.

2.4.4 Legal Provisions Regarding Dividend Practices in Nepal

Dividend Acts and NRB Regulations: Nepalese Perspective

Basel II was implemented by Nepal Rastra Bank during the FY 2064/65. Under Basel II, the NRB has prescribed capital adequacy of 10% in total capital fund and 6% core capital amounted. NRB has directed all the commercial banks to distribute their interim dividends only after the final auditing reports are approved by the central bank. Further it also prevents the commercial banks from declaring dividends and bonus shares if their minimum capital ratios are below 10%.

Some Acts pertaining to dividends governed by Company Act 2006

179. Bonus share:

(1) A company may, by adopting a special resolution in the general meeting, issue bonus shares to its shareholders, out of the amount available for the distribution as dividend.

(2) Where a company is to issue bonus shares pursuant to sub-section (1), the company shall give information thereof to the Office before issuing such shares.

182. Dividend:
(1) Except in the following circumstance, dividend shall be distributed to the shareholders within forty five days of the decision made to provide dividend:
(a) If any law prohibits the distribution of dividend;
(b) If the right to receive dividend is subject to any dispute;
(c) If, in a circumstance beyond control of the company or for any reason, dividend cannot be distributed within the said time limit.

(2) A company fully or partly owned by the Government of Nepal may distribute dividend only after obtaining prior approval of the Government of Nepal; and the Government of Nepal may give necessary directive on the matter of dividend to be distributed by such company.

(3) In the event of failure to distribute a dividend within the time limit as referred to in sub-section (1), the dividend shall be distributed together with the interest thereon at such rate as may be prescribed.

(4) The person whose name is maintained in the shareholder register at the time of declaration of a dividend or his legal heir shall be entitled to such dividend.

(5) A company shall not pay or distribute a dividend in any other manner except out of the amount of profits set aside for the distribution of dividend.

(6) Before paying or declaring a dividend out of the profits for any financial year, a company shall have fully deducted the pre operation expenses, the amount required to be depreciated in accordance with the accounting standards fixed by the competent authority under the prevailing law, any amount required to be paid or set aside out of the profits under the prevailing law or the amount of accumulated loss in previous financial years. Provided, however, that if the prevailing law requires the establishment of a reserve or consolidated fund of any amount prior to distributing dividend, any company which is required to comply with such legal requirement shall not distribute dividend without establishing such reserve or consolidated fund.

(7) Subject to the various provisions contained in this Section, the board of directors of any company may, in the following circumstance, distribute interim dividend out of the profits for the previous financial year:
(a) Where the articles of association contain a provision on the distribution of interim dividend;
(b) Where the annual financial statement for the financial year out of the profits of which year interim dividend is to be distributed has already been certified by the auditor and approved by the board of directors.

(8) No company shall pay or distribute any amount in cash or kind, chargeable on its funds, to its shareholders, except a dividend approved by the general meeting.

(9) The amount of dividend not claimed/received by any shareholder even after the expiry of a period of five years after the date of resolution adopted by the company in its general meeting to distribute dividend shall be credited to the investor protection fund to be established under Section 183.

(10) In crediting the amount as referred to in subsection (9) to the fund as referred to in Section 183, a company shall, prior to the expiry of the period mentioned in that sub-section, publish a notice in a national daily newspaper inviting the concerned to receive the dividend, within the time limit of at least one month.

(11) A company shall credit the amount of a dividend to be distributed to its shareholders pursuant to this Act to a separate account within forty five days after the date of approval by the general meeting and pay the amount of dividend out of that account; and the company shall not use such amount for any other purpose.

Dividend Payments-Mechanics of Cash Dividend Payments

- Declaration Date
- Ex-dividend Date
- Holder of Record Date
- Payment Date

Declaration Date

- this is the date on which the Board of Directors meet and declare the dividend. In their resolution the Board will set the date of record, the date of payment and the amount of the dividend for each share class.
- when CARRIED, this resolution makes the dividend a current liability for the firm.

Date of Record

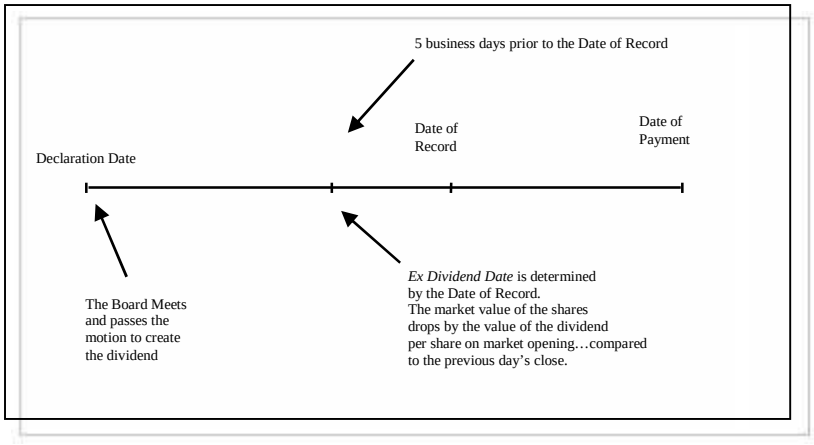
- is the date on which the shareholders register is closed after the trading day and all those who are listed will receive the dividend.

Ex dividend Date

- is the date that the value of the firm's common shares will reflect the dividend payment (ie. fall in value)
- 'ex' means without.
- At the start of trading on the ex-dividend date, the share price will normally open for trading at the previous days close, less the value of the dividend per share. This reflects the fact that purchasers of the stock on the ex-dividend date and beyond WILL NOT receive the declared dividend.

Date of Payment

- is the date the cheques for the dividend are mailed out to the shareholders.



Ex Dividend Date

- The date is not chosen by the board of directors, rather it is determined as a result of the exchanges settlement practices and is a function of the date of record.

2.5. 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.

2.5.1. Gordan's Study[15]

Myron Gordon has developed another popular and important model relating to the stock valuation using the dividend capitalization approach. 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

[15] **Gordon, Myron J.,** "The Investment Financing and Valuation of Corporation", *Homewood III. Richard D. Irwin, 1962.*

in the stock price for the reason that investors consider the dividend yield (D_1/P_o) is less risky than the expected capital gain.[16]

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.

Basic assumptions of this model are as follows.[17]

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 taxes 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.

Gordon's model is also known as GROWTH MODEL. The formula for finding out the market value per share, proposed by Gordon is given below.

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

Where,

P = Price of share/market value per share

E = Earning per share

[16] **Pradhan, S.**, "Basics of Financial Management", *Educational Enterprises (P.) Ltd., Kathmandu, 1962, pp.683.*

[17] **Francis, Jack Clark,** "Investments: Analysis and Management", *McGraw Hill, 1972, pp. 352*

b = Retention ratio/percentage of retained earning

1-b = Dividend payout ratio (i.e., percentage of earning distributed as dividend)

K_e = Capitalization rate/cost of capital

br = g or growth rate in r, (i.e., rate of return on investment of an all equity firm)

1st Case: Growth Firms (r > k)

In the case of growth firm, the value of a share will increase as the retention ratio (b) increases and the value of a share will decrease as the retention ratio (b) decreases. i.e. high dividend corresponding to earnings leads to decrease in share prices and low dividend corresponding to earning leads to increase in share prices. So, dividends and stock prices are negatively correlated in growth firm i.e., r > k firm.

2nd Case: Normal Firms (r = k)

Dividend payout ratio does not affect the value of share in normal firm. In other words, share value remains constant regardless of changes in dividend policies. It means dividend and stock price are free from each other in normal firm i.e., r = k firm.

3rd Case: Decline Firms (r<k)

In case of declining firms, share price tends to enhance with increase in payout ratio (1-b), or decrease in retention ratio (b). So, dividends and stock prices are positively correlated with each other in decline firm i.e., r < k firm.

2.5.2. Modigliani and Miller's Study[18]

In their 1961 article, Modigliani and Miller, 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 it's

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[18] **Miller, Merton H. and Modigliani, France** "Dividend Policy, Growth and Valuation of the Shares" *Journal of Business, XXIV, Oct. 1961, pp. 411-433.*

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:

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.

M-M provides the proof in support of their argument in the following manner.

Step-One

The market price of a share of the firm in the beginning the period is equal to the present value of dividends paid at the end of the period plus the market price of the share at the end of the period.

Symbolically,

$$\frac{D_1 + P_1}{1 + K_e} \quad \text{----------} \quad (1)$$

Where,

P_0 = Current market price of a share (market price at the beginning or at the zero period.)

K_e = The cost of equity capital (Assumed constant)

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

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

Step-Two

Multiply both sides of equation (1) by the number of shares outstanding (n) to obtain the total value of the firm if no new financing exists.

$$np_0 = \frac{n(D_1 + P_1)}{1 + K_e} \quad \text{---------- (2)}$$

Wh

n = no. of outstanding shares at zero period.

Step-Three

If the firm issues (sells) number of new shares (m) to finance the new investment needs of the fund at a price of P_1, the value of the firm at time zero will be:

$$nP_0 = \frac{nD_1 + P_1(n + m) - mP_1}{1 + K_e} \quad \text{---------- (3)}$$

Where,

n = no. of shares at the beginning (no. of outstanding shares at zero period.)

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

Step-Four

If the investment proposals of a firm in a given period of time can be financed either of retained earning or the issuance of new shares or both. Thus the amount of new issued will be,

$mP_1 = I – (E – nD_1)$

Or, $mp_1 = I – E + nD_1$ ---------- (4)

Where,

I = Investment needs

E = Earning available.

Step-Five

By substituting the value of mp_1 from equation (4) to equation (3), we get,

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

or,

$$nP_0 = \frac{nD_1 + nP_1 + mP_1 - I + E - nD_1}{1 + K_e}$$

or,

$$nP_0 = \frac{P_1(n + m) - I + E}{1 + K_e} \quad \text{----------} \quad (5)$$

Conclusions:

Since dividend does not appear directly in expression and E, I, $(n+m)p_1$ and k_e are assumed to be independent of dividend.

In other words, MM concludes that dividend policy is irrelevant and dividend policy has no effect in the value of the firm. A firm that pays dividends will have to raise funds externally to finance its investment plans. MM hold that when the firm pays dividends, external financing offsets its advantage.

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

2.5.3. Walter's Study[19]

James E. Walter conducted a study on dividend and stock prices in 1966. 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.

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

Where,

P = Market value of an equity share (Market price per share)

DPS = Dividend Per Share

EPS = Earning Per Share

r = The rate of return on the firm's investment.

K_e = Cost of capital/capitalization rate

[19] **Walter, James E**, "Dividend Policies and Common Stock Prices", *Journal of Finance, Volume 11, March, 1966, pp. 29-41.*

According to Walter's model, the optimum dividend policy depends on the relationship between the firm's internal rate of return (r) and its cost of capital (k). Walter referred different dividend policy for different types of the firm, which can be summarized as follows.

Growth Firm (r > k)

Growth firms are those firms, which expand rapidly. Because of ample investment opportunities yielding return (r) is higher than the opportunity cost of capital (k). So, firms having r > k is referred as growth firms which are able to reinvest earnings at a rate, which is higher than the rate expected by shareholders. They will maximize the value per share if they follow a policy of retaining all earnings for internal investment. Thus, the correlation between dividend and stock price is negative, and the optimum payout ratio for a growth firm is zero. The market value per share (P), increases, as payout ratio declines when r > k.

Normal Firm (r = k)

If the internal rate of return is equal to cost of capital, the dividend payout does not affect the value of share, i.e. dividends are indifferent from stock prices. In other words, there is no role of dividends on stock prices. Such a firm can be called as a normal firm. Whether the earnings are retained or distributed as dividend, it is a matter of indifference for a normal firm. The market price of share will remain constant for different dividend payout ratio from zero to 100. Thus, there is no unique optimum payout ratio for a normal firm. One dividend policy is good as other and the market value per share is not affected by the payout ratio when r = k.

Declining Firm (r < k)

If the internal rate of return (R) is less than cost of capital (k), it indicates that the shareholders can earn a higher return by investing elsewhere. In such a case for maximizing the value of shares, dividend also should be maximized. By distributing the entire earning as dividend, the value of share will be at

optimum value. In other words, the market value per share of a declining firm with r < k will be maximum when it does not retain earnings at all. The relation between dividends and stock price is positive. The optimum payout ratio for a declining firm is 100 percent and the market value per share increases as payout ratio increases when r < k.

Criticism of Walter's Model:

(i) No external financing:

This model is based on assumption that the investment opportunities of the firm are financed by retained earnings finance the investment opportunities of the firm only no external financing i.e., debt or equity is used for the purpose. When such a situation exists either the firm's investment or its dividend policy or both will be sub-optimum.[20]

(ii) Constant rate of return (R) and opportunity cost of capital (K)

This model assumes that rate of return (R) and opportunity cost of capital or discount rate (k) are constant. In fact, rate of return (R) changes with increase and decrease of investment. i.e., R decreases as more investment occurs and cost of capital (k) changes directly with the risk borne by the firms.

2.5.4. Van Horne and McDonald's Study[21]

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

Empirical tests were performed with year-end 1968 cross sections for two industries, using a well-known valuation model. For there investigation, they employed two samples of firms viz. the 86 electric utilities in the continental U.S. which were included on the COMPUSTAT utility data tape; and 39 companies in the electronics and electric component industries as listed on the COMPUSTAT industrial data tape in 1968.

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[20] **Francis, Jack Clark**, "Investment: Analysis and Management", *MC Graw Hill Book Company. Inc. New York, 1972, pp. 347.*

[21] **Van Horne, James C. and MC-Donald, John G.**, "Dividend Policy and New Equity Financing", *Journal of Finance, May 1971, pp. 507 - 519.*

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

The First Model was,

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

Where,

P_0/E_0 = Closing market price in 1968 divided by average EPS for 1967 &1968.

G = Expected growth rate, measured by the compound annual rate of growth in assets per share for 1960 through 1968

D_0/E_0 = Dividend payout, measured by cash dividend in 1968 divided by earnings in 1968.

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

U = Error term

The Second Model was,

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

Where,

F_a, F_b, F_c, and F_d are dummy variables corresponding to "new issue ratio" (NIR) groups A through D.

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

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

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

Where,

Lev = Financial risk, measured by long term debt plus preferred

stock divided by net worth as of the end of 1968.

OR = Operating risk, measured by the standard error for the regression of operating earnings per share on time for 1960 through 1968, and rest are as in First Model above

By using these models, they compared the result obtained for the firms which both pay dividend and engage in new equity financing with other firms in an industry sample. They concluded that for electric utility firms in 1968, share value was not adversely affected by new equity financing in the presence of cash dividends, except for those firms in the highest new issue group and it made new equity a more costly form of financing than the retention of earnings.[22] They also indicated that the payment of dividend through excessive equity financing reduces share prices. For forms in the electronics-electronic component industry, a significant relationship between new equity financing and value was not demonstrated.

2.5.5. Friend and Puckett's Study[23]

Irwin Friend and Marshall Puckett have conducted a study about the relationship between dividends and stock prices through the regression analysis on the data of 110 firms from five industry samples, viz., chemicals (n=20), electronics (n=20), electric utilities (n=25), foods (n=25), and steels (n=20), in each of two years, 1956 and 1958. The industries were selected to permit a distinction to be made between the results for growth and non-growth industries and to provide a basis for comparison with results by other authors for earlier years. Both cyclical and non-cyclical industries were covered. The periods covered include a boom year for the economy when stock prices leveled off after a substantial rise (1956) and a somewhat depressed year for the economy when stock prices, however, rose strongly (1958).

They used two-regression model of price function and dividend supply function. In price function, dividends, retained earnings & price earnings ratio

[22] Ibid, pp. 517

[23] **Friend, Irwin and Puckett, Marshall**, "Dividends and Stock Prices", *The American Economic Review, Vol. LIV, No. 5, Sept. 1964, pp. 656-682.*

are independent variables, whereas, earnings, last year's dividends and price earning ratio are independent variables in dividend supply function. Symbolically, their price function and dividend supply function can be written as:

Price Function; $P_t = a + b\ D_t + c\ R_t + d\ (E/P)_{t-1}$

Where,

P_t = Per share price at time t D_t = Dividends at time t

R_t = Retained earnings at time t $(E/P)_{t-1}$ = Lagged earnings price ratio

and,

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

Where,

E_t = Earnings per share at time t P_{t-1} = Last year dividend

The followings were the basic assumptions of their study.

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

The regression $P_t = a + b\ D_t + c\ R_t$ presents the usual simple linear relationships between average prices and dividends and retained earnings to show with the data. They found the customary strong dividend and relatively weak retained earnings effect in three of five industries i.e., chemicals, foods, and steels.

By adding lagged earnings price ratio to the above equation, they got the following results.

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

They tested this equation and found the following results.

Dividends have a predominant influence on stock prices in the same three out of five industries but the differences between the dividends and retained earnings coefficients were not quite significant as in the first set of regressions. The dividends and retained earnings coefficients were closer to

each other for all industries in both years except for steels in 1956, and the correlations were higher, again except for steels.

They also calculated the dividend supply equation, i.e.,

$D_t = e + f E_t + g D_{t-1} + h (E/P)_{t-1}$ and derived price equation for four industry groups in 1958. The derived price equation show no significant changes from those obtained from the single equation approach as explained above, reflecting the fact that stock price, or more accurately the price earnings ratio, does not seem to have a significant effect on dividend payout. On the other hand, they noted that, in three of the four cases tested, the retained earnings effect was increased relatively. Moreover, their result suggested that price effects on dividend supply are probably not a serious source of bias in the customary derivation of dividend and retained earnings effects on stock prices, though such a bias might be masked if the distributing effects of short run income movements are sufficiently great.

Further, they used lagged price as a variable instead of lagged earnings price ratio. They found that retained earnings received greater relative weight than dividends in the majority of the cases. The only exceptions were steels and foods in 1958. Chemicals, electronics, and utilities were considered as growth industries and the retained earnings effect was larger than the dividend effect for both years covered. For the other two industries (steels and foods) there no longer seems to be any significant systematic differences between the retained earnings and dividend coefficients.

Similarly, they tested the regression of $P_t = a + b D_t + c R_t$ by using normalized earnings again. They obtained normalized retained earnings by subtracting dividends from normalized earnings. That normalization procedure was based on the period 1950-61. Again, they added prior year's normalized earnings price variable and they compared the result. Comparing the result, they found that there was significant role of normalized earnings and retained earnings but an effect of normalized price earnings ratio was constant. After examining the later equation, they found that the difference between dividend and retained earnings coefficients disappeared. Lastly, they come to a conclusion that management might be able to increase prices somewhat by raising dividends in foods and steel industries. At last, Friend and Puckett concluded that, it is possible that management might be able, at least in some

measure, to increase stock prices in non-growth industries by raising dividends, and in growth industries by greater retention, i.e. smaller (lower) dividends.

2.5.6. Lintner's Study[24]

John Lintner, in 1956 made an important study on corporate dividend policy in the American context. He investigated a partial adjustment model as he tested the dividend patterns of 28 companies. In J. Lintner's study, dividend are 'sticky' in the sense that they are slow to charge and lay behind shifts in earnings by one or more periods. According to J. Lintner, dividend is a function of earnings of that year, existing dividend rate, target payout ratio and speed of adjustment. The followings were the basic objectives of the study.

i. To identify occasions when a change in dividends might well have under active consideration even though no change was made.
ii. To determine the factors, this existed most actively into dividends.

He concluded that a major portion of a firm's dividend could be expressed in the following manner.

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

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

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

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

Where,

DIV_t^* = Firm's desired payment

EPS_t = Earnings

P = Targeted payout ratio

a = Constant relating to dividend growth

b = Adjustment factor relating to the previous period's divided and new desired level of dividends where, $b < 1$.

[24] **Lintner, John**, "Distribution of Incomes of Corporations Among Dividends, Retained Earning, and Taxes", *American Economic Review No. 46, May 1956, pp. 97-113*.

The major findings of this study were as follows:

Firms generally think in terms of proportion of earnings to be paid out.

In order to modify the pattern of dividend, investment opportunities, liquidity position, funds flows are not considered.

Firms generally have target pay out ratios in view while determining change in divided rate or dividend per share.

2.5.7. Deepak Chawla and G. Shrinivasan's Study[25]

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

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

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

1. Price Function,

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

2. Dividend Supply Function,

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

3. Identity

   $E_t = D_t + R_t$

Where,

P = Market price per share.

D = Dividend per share.

R = Retained earning per share.

E = Earning per share.

[25] **Chawla, Deepak and Shrinivasan, G.**, "Impact of Dividend and Retention on Share Price – An Econometric Study", *Decision, Vol.14, No.3, July-September 1987, pp.137-140*

(P/E)$_1$ = Deviation from the sample (average of price earning ratio).

T = Subscript for time

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

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

It was found, from the result of their two stages least square estimation, that the estimated coefficients had the correct sign and the coefficients of determination of all the equations were very high in case of chemical industry. It implies that the stock price and dividend supply variation can be explained by their independent variables. But in case of sugar industry, they found that the sign for retained earnings is negative in both years and left for further analysis of sugar industry. It was observed that the coefficient of dividend was very high as compared to retained earnings for chemical industry. They also found that coefficient of dividend was significant at one percent level in both years whereas coefficient of retained earnings was significant at ten percent level in1969 and one percent level in 1973.

Finally, they concluded that dividend hypothesis holds good in the chemical industry. Both dividend and retained earnings significantly explain the variation in share price in chemical industry. They also stressed that the impact of dividend was more pronounced than that of the retained earnings but the market has started shifting towards more weight for retained earnings.

2.6. Review of Major Studies in Nepal

The review of studies regarding dividend policy and shares can be broadly classified into two categories:

2.6.1. Review of Books and Journals in Nepalese Perspective

Nepalese security market is a young market; NEPSE opened its trading floor on 13th January 1994. So there are relatively very few books or articles related to dividend and market price of stock. Some of them, which are significant in this study, are reviewed in this section.

In a book “Research in Nepalese Finance” by Mr. Radhe Shyam Pradhan;the second reseach topic is of “Effects of Dividends on Common Stock Prices: The Nepalese Evidence.”. The study was based on the pooled – cross sectional data of 29 companies covering the year from 1994 to 1999 with total 93 observations.

The main objective of this study was to measure the relationship between dividend and market price of share.

In the study the basic Model was constructed on the principal theory of Friend and Puckett

$MPS_{it} = a+bDPS_{it}+cRE_{it}+e_{it}$

Where,

MPS_{it}= Market price per share

DPS_{it}= Dividend per share

RE_{it}= Retained earning per share

The above model assumes the following reasonable a priori hypothesis:

DPS >0

RE >0

The study was conducted with secondary data and the models similar to above were tested in linear and logarithmic forms. The empirical results

showed that dividends are relatively more attractive. The retained earning coefficient is negative indicating the absence of its effect on share price which is contradictory to the findings of Friends and Puckett, etc. In the later phase of the study indicated that a one percentage point increase in dividends led on the average to about 0.63 percent increase in share price.

Similarly in the same book the 13th research topic was "A Survey of Dividend Policy and Practices of Nepalese Enterprises." In this chapter Mr. Pradhan surveyed views of 135 managers on dividend policy of large Nepalese enterpises. He distributed a questionnaire to the financial executives of 50 large Nepalese enterprises. Out of 50 enterprises, 36 were from, finance sector and 14 were from non finance sector to observe the corporate dividend policy applied in Nepalese corporate houses.

The questionnaire consisted of 14 closed end questions. The questions were concerned with major aspects of corporate dividend policy.

To test whether the difference in the views of the finance and non finance sector respondents as to major aspects of corporate dividend policy is significant, chi-square values were computed. Similarly, the response to each choice in those questions where choices were given to rank is weighted by the value of rank assigned to it by the respondents, and the weighted arithmetic mean was calculated to find the degree of relationship between the responding groups from the finance and non finance sectors. The median value was calculated to find the level of agreement of respondents with respect to the different observation statements on corporate dividend policy.

Some important conclusions drawn by the studies were as follow:

- The majority of the respondents feel that the major motives for paying cash dividend is to convey the information to shareholders that company is doing good.

- The majority of respondents feel that dividend is not a residual decision.

- Nepalese shareholders are not indifferent towards payment or non payment of dividends.

- Most of the respondents from finance and non finance sector observe that the dividend payout affect the price of a common stock.

In case of motives of stock dividend payment in Nepalese Corporate sector, the majority of the respondents give first priority to conserve cash; the second priority to indicated higher future profits and the third priority to provide high psychological value to shareholders; the fourth priority to 'raise future dividends for shareholders; and the last priority to lower the firm's stock price. However, the informal interview with financial executives on this aspect suggested that the major motive of stock dividend payment is to raise capital base of the company as per legal requirement.

2.6.2. Review of Previous Thesis

Studies of previous thesis done by students of M.B.A. and M.B.S. programme related to dividend and its relation with stock prices in various sectors have been made. Some of them, which are supposed to be relevant for this study have been reviewed and presented in this section.

Binod Kumar Dhungel's Study

The study on "Impact of dividend policy on Market Price of Share" was carried out by Mr. Binod Kumar Dhungel on February 2006.

The specific objectives of this study were as follows:

i. To identify the relationship between market price and other related financial indicator such as earning per share, dividend per share, net worth per share and dividend payout ratio.

ii. To highlight the dividend practices carried out by the sampled joint venture commercial banks in Nepal.

The major findings drawn by the research study are as follows:

i. The market price per share is affected by the dividend
ii. There is no uniformity in dividend distribution policy and practices in the banks.

Smriti Gautam's Study

Ms. Gautam conducted a study on "Dividend Policy of Nepalese Financial Institutions on July 2004. The research was preformed by taking the data of five years from 1998 to 2002 of three commercial banks, three finance companies and three insurance companies.

The major objectives of this study were to find:

i. If there is positive relationship between dividends paid and stock price.
ii. Whether there is any consistency between the dividend policy followed by joint venture banks, insurance companies and finance companies.

The major findings drawn by the research study are as follows:

i. The distribution of dividend has a positive impact on the market price of shares.
ii. There is no significant consistency in dividend policy adopted by banks, insurance companies and finance companies.

CHAPTER-III

RESEARCH METHODOLOGY

3.1. Introduction

This chapter 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 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

The research design is a conceptual structure within which a research is conducted. A research design is a plan for the collection and analysis of data. 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.

"A research design is the specification of methods and procedures for acquiring the information needed. It is the overall operational pattern of framework, of the project the stipulates what information is to be collected from which sources by what procedure. If it is a good design, it will ensure that the information obtained is relevant to the research questions and that it was collected by objective and economic procedures."[26]

"Research Design is the plan, structure and strategy of investigation concerned so as to obtain answers to research questions and to control variances."[27]

The research design of this research basically follows the impact of dividend policy on the market price. In other words, this research is designed so as to find out the impact on the market price of common stock of a company when dividend is paid to the shareholders and also how the market price responds when dividend is not paid to the shareholders. Various analytical and descriptive approaches are used to determine the impact of dividend policy followed by an organization on its market price.

[26] **Poul, E. Green & Donald, S. Tull,** "Research for Marketing Decision."
[27] **Krelinges, F.N.**, "Foundation of Behavioural Research", *Surjeet Publication, New Delhi, 1983.*

3.3. Population and Sample

Today there were 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 study topic. Therefore, sampling will be done selecting from population. The population is as follows:[28]

S.No.	**Names**	**Operation Date (A.D.)**	**Head Office**	**Paid up Capital** *(Rs. In Million)*
1	Nepal Bank Limited	1937/11/15	Kathmandu	380.4
2	Rastriya Banijya Bank	1966/01/23	Kathmandu	1172.30
3	Agriculture Development Bank Ltd.	1968/01/02	Kathmandu	10777.50
4	NABIL Bank Limited	1984/07/16	Kathmandu	965.75
5	Nepal Investment Bank Limited	1986/02/27	Kathmandu	1606.07
6	Standard Chartered Bank Nepal Limited.	1987/01/30	Kathmandu	932.00
7	Himalayan Bank Limited	1993/01/18	Kathmandu	1216.20
8	Nepal SBI Bank Limited	1993/07/07	Kathmandu	874.50
9	Nepal Bangladesh Bank Limited	5/6/1994	Kathmandu	744.10
10	Everest Bank Limited	1994/10/18	Kathmandu	691.40
11	Bank of Kathmandu Limited	1995/03/12	Kathmandu	603.10
12	Nepal Credit and Commerce Bank Limited	1996/10/14	Siddharthanagar,Rupendehi	1399.50
13	Lumbini Bank Limited	1998/07/17	Narayangadh,Chitawan	996.31
14	Nepal Industrial & Commercial Bank Limited	1998/07/21	Biaratnagar,Morang	1140.50
15	Machhapuchhre Bank Limited	2000/10/03	Pokhara, Kaski	1314.64
16	Kumari Bank Limited	2001/04/03	Kathmandu	1078.27
17	Laxmi Bank Limited	2002/04/03	Birgunj, Parsa	1098.10
18	Siddhartha Bank Limited	2002/12/24	Kathmandu	952.20
19	Global Bank Ltd.	2007/01/02	Birgunj, Parsa	1000.00
20	Citizens Bank International Ltd.	2007/6/21	Kathmandu	700.00
21	Prime Commercial Bank Ltd	2007/9/24	Kathmandu	700.00

[28] **List of Registered Commercial Banks,** "Banking and Financial Statistics", *Nepal Rastra Bank, Mid-July 2005, pp. 25* Source : www.nrb.org.np

22	Sunrise Bank Ltd.	2007/10/12	Kathmandu	700.00
23	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu	700.00
24	Development Credit Bank Ltd.	2001/01/23	Kamaladi, Kathmandu	1107.5
25	NMB Bank Ltd.	1996/11/26	Babarmahal, Kathmandu	1000.00

Table 3.1: List of Registered Commercial Banks as on 04.10.2008.

Out of 25 commercial banks that are operating their activities in Nepal, nearly half of them are listed in Nepal Stock Exchange.

The researcher has selected 10 commercial banks for this study. The samples to be selected are as follows:

1. Nabil Bank Ltd.
2. Standard charted Bank Nepal Limited
3. Nepal Investment Bank Limited
4. Himalayan Bank Ltd
5. Nepal SBI Bank Ltd
6. Everest Bank Ltd
7. Bank of Kathmandu Ltd.
8. Nepal Industrial & Commercial Bank Ltd
9. Kumari Bank Ltd
10. Siddhartha Bank Ltd.

Thus for this study,

Population Size : 25

Sample Size : 10

The sample size covers about 40 % of the population size.

3.4. Nature and Source of Data

The research is highly based on the secondary data which may include the Annual Reports of the banks under study, Economic Report published from 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, Financial Status Report published from World Bank, Financial Reports published from Nepal Stock Exchange and Securities Exchange

Board, various kinds of website which are related on dividend policies and financial and other relevant data regarding the dividend policies and practices of the Banks which are published on Newspapers and Magazines.

3.5. Period of the Study

The study is based on five years financial data of the banks under study from 2003/04-2007/08.

3.6. Analysis of Data

3.6.1 Financial Tools

The following financial tools have been used in the present study :

(a) Earning Per Share (EPS)

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 in terms of the 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 banks.

Earning per share is computed to know the earnings 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,

$$EPS = \frac{\text{Earning Available to Common Stockholders}}{\text{Number of Common Stock Outstanding}}$$

(b) 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 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,

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

(c) 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:

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

(d) Dividend Payout Ratio (DPR)

It is the proportion of earning paid in the form of dividend. The dividend payout ratio is the earnings paid to the equity holders from the earnings of a firm in a particular year. This ratio shows what percentage of 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 a 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. Thus,

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

$$\text{And, Retention Ratio} = (1 - \text{Dividend Payout Ratio})$$

$$= (1 - \text{DPR})$$

(e) 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 amount which investors are willing to pay for each rupee of the firm's earnings.

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

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

(f) Earning Yield (EY)

Earning yield is the percentage of earning per share to market price per share in the stock market. In other words, it is a financial ratio relating to earning per share to the market share price at a particular time. It measures the earning in relation to market value of share. It gives some idea of how much an investor is earning for his money. The share with higher earnings yield is worth buying. Earnings yield is informative to compare the market share prices of stocks in the secondary market. It is calculated as:

$$\text{EY Ratio} = \frac{\text{Earning Per Share}}{\text{Market Price Per Share}}$$

(g) 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 price per share in the stock market.

This ratio highly influences the market price per share because a small change in dividend per share can bring effective change in the market value of the share. The 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,

$$\text{DY Ratio} = \frac{\text{Dividend Per Share}}{\text{Market Price Per Share}}$$

(h) Market Price Per Share (MPS) to Book Value Per Share (BVPS)

This ratio measures 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 the 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,

$$\text{MPS to BVPS Ratio} = \frac{\text{Market Price Per Share}}{\text{Book Value Per Share}}$$

(i) Net Worth Per Share

It is a rupee value per share. It is calculated dividing Book Value of Net Worth (or Net Worth) by total numbers of shares outstanding. Thus,

$$\text{Net Worth Per Share} = \frac{\text{Net Worth}}{}$$

No. of Shares

3.6.2 Statistical Tools

Besides the financial tools, various statistical tools have been used to conduct this study. The pattern of available data is a major determinant to analyze the data. So analysis of data will be done according to pattern of available data. 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.

(a) Arithmetic Mean or Average $(\overline{X})$

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. It is calculated as follows:

$$\text{Arithmetic Mean} = \frac{X_1 + X_2 + X_3 + \ldots\ldots\ldots\ldots + X_n}{N}$$

or, $$(\overline{X}) = \frac{X}{N}$$

Where,

X = sum of the sizes of the items

N = number of items

(b) Standard Deviation (±)

Karl Pearson first introduced the concept of standard deviation in 1983. "It is the most usual measure of dispersion and it represents the square root of the variance of a group of numbers, i.e. the square root of the sum of the squared differences between a group of numbers and their arithmetic mean"[29].

[29] **Abrol, P.N.,** "Dictionary of Accounting", *Anmol Publication, New Delhi, 1993, pp. 236*

Standard deviation is the positive square root of the arithmetic average of the squares of all the deviations measured from the arithmetic average of the series. The standard deviation measures the absolute dispersion of a distribution. The greater the amount of dispersion the greater the standard derivation, i.e. greater will be the magnitude of the deviations of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series. It is denoted by a Greek letter **'±'** (Sigma) and is calculated as follows:

Standard Deviation **(σ)** = $\sqrt{\frac{(X - \overline{X})^2}{N}}$

Where,

N = Number of items in the series.

$\overline{X}$ = Mean

X = Variable

(c) 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 uniform, less stable and less 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. Thus,

Coefficient of Variation (C.V.) = $\frac{\text{S.D.}}{\text{Mean}} \times 100 = \frac{\sigma}{(\overline{X})} \times 100$

Where,

∃ = Standard Deviation

$(\overline{X})$ = Mean

(d) Coefficient of Correlation (r)

According to Richard I. Levin, "Correlation analysis is the statistical tools that we can used to describe the degree to which are variable is linearly related to another".[30] 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 relationship 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.

The value of coefficient of correlation always lies between ± 1. 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 between the variables. The zero correlation coefficient means the variables are uncorrelated. The closer r is to +1 or –1, the closer the relationship between the variables and closer r is to zero (o), 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, earning per share, dividend payout ratio etc is measured by the correlation coefficient. The correlation coefficient can be calculated as:

$$r = \frac{Cov(X\ Y)}{\exists_X \exists_Y}$$

or,

$$r = \frac{(X-\overline{X})\ (Y-\overline{Y})}{(N)\ \exists_X \exists_Y}$$

or,

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

Where,

[30] **Levin, Richard I. & Rubin, David S.,** "Statistics for Management", *Prentice Hall of India, New Delhi, 1994, pp. 613*

$\exists_X, \exists_Y$ are the standard deviation of the distributions of X and Y values respectively.

Cov (X,Y) = covariance of X,Y value

$$= \frac{(X-\overline{X})\,(Y-\overline{Y})}{N}$$

$$\exists_X = \sqrt{\frac{1}{N}\ (X - \overline{X})^2} \qquad \exists_Y = \sqrt{\frac{1}{N}\ (Y - \overline{Y})^2}$$

,

Under this study, the correlation between the following variables are analyzed :

a) Market Price Per Share and Earning Per Share
b) Market Price Per Share and Dividend Per Share
c) Market Price Per Share and Dividend Percent
d) Market Price Per Share and Dividend Payout Ratio
e) Market Price Per Share and Price Earning Ratio
f) Market Price Per Share and Earning Yield
g) Market Price Per Share and Dividend Yield
h) Market Price Per Share and 'MPS to BVPS' Ratio
i) Market Price Per Share and Net Worth Per Share
j) Earning Per Share and Dividend Per Share
k) Earning Per Share and Dividend Payout Ratio
l) Dividend Per Share and Dividend Payout Ratio
m) Dividend Per Share and Net Worth Per Share
n) Earning Yield and Dividend Yield

(e) 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. "Coefficient of determination measures only the strength of a linear relationship between two variables."[31] It refers to a measure of the total variance in a dependent variable that is explained by its linear relationship to

[31] Ibid, pp. 617

an independent variable. The coefficient of determination is denoted by R^2 and the value lies between zero and unity. The closer to unity, 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,

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

or, R^2 = 1- $\frac{\text{Unexplained Variance}}{\text{Total Variance}}$

(f) Regression Analysis

Francis Galton was the first person to introduce the concept of regression. Regression refers to an analysis, which is involving 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) variables. 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.

i) Market Price 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

This model has been constructed to examine the relationship between market price per share (dependent variable) and earning per share (independent variable).

ii) 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

This model has been constructed to examine the relationship between market price per share (dependent variable) and dividend per share (independent variable).

iii) 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

This model has been constructed to examine the relationship between market price per share (dependent variable) and dividend payout ratio (independent variable).

This model has been constructed to examine the relationship between dividend per share (dependent variable) and net worth per share (independent variable).

In order to obtain the value of a and b, we have the following two normal equations.

$\phi Y = na + bX$

$\phi XY = a\phi X + b\phi X^2$

Where,

'a' and 'b' are unknown.

n = number of observation in the sample

i) Regression Constant (a)

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

$$a = \frac{(\sum X^2)(\sum Y) - (\sum X)(\sum XY)}{n \sum X^2 - (\sum X)^2}$$

ii) Regression Coefficients (b)

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 variables estimate.

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

iii) 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 equals 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.

$$S.E. = \frac{\exists_X}{\exists_Y} \times \frac{\sqrt{1 - r^2}}{\sqrt{N}}$$

iv) Multiple Regression

In multiple regression analysis two or more independent variable are used to estimate the values of a dependent variable where as is simple or linear regression analysis a single independent variable is used to estimate the values of a dependent The general objectives of multiple regression are:

To derive an equation this provides estimates of the dependent variable from values of the two or more independent variables.

To obtain the measure of error involved in using this regression equation as a basis for estimation.

To obtain the measure of proportion of variance in the dependent variable accounted for or explained by the independent variables.

The Multiple Regression Equation of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS (MPS = a +b_1 DPS_{t-1} + b_2 PE $Ratio_{t-1+}$ b_3 EPS)

4 ELEMENTS OF A MULTIPLE REGRESSION EQUATION

$Y=a + b_1X_1 + b_2X_2 + b_3X_3$

Y is the value of the Dependent variable (Y), what is being predicted or explained

a (Alpha) is the Constant or intercept

b_1 is the Slope (Beta coefficient) for X_1

X_1 First independent variable that is explaining the variance in Y

b_2 is the Slope (Beta coefficient) for X_2

X_2 Second independent variable that is explaining the variance in Y

b_3 is the Slope (Beta coefficient) for X_3

X_3 Third independent variable that is explaining the variance in Y

s.e.b_1 standard error of coefficient b_1

s.e.b_2 standard error of coefficient b_2

s.e.b_3 standard error of coefficient b_3

v) t-statistics

The branch of statistics that helps in arriving at the criterion for avoiding the risk of taking wrong decisions is known as testing of hypothesis. *(Gupta, 1999:1116-1117*)

The t-distribution, commonly called the student's t-distribution, is used when sample size is equal to or less than 30 (termed small sample), the parent population from which the sample is drawn is normal, the population standard deviation is unknown, and the given sample is drawn by normal sampling method. In order to test the significance of an observed sample correlation coefficient, the following procedure is applied.

Null hypothesis: H0: r = 0, i.e. the variables are not correlated in the population the static.

Alternate hypothesis: H1: r ≠ 0, i. e. the variables are correlated in the population the static. *(Joshi, 2001:178-185)*

$$t = \frac{r}{\sqrt{1 - r^2}} \times \sqrt{n-2} \sim t_{n-2}$$

vi) ANOVA

In statistics, **analysis of variance (ANOVA)** is a collection of statistical models, and their associated procedures, in which the observed variance is partitioned into components due to different explanatory variables. In its simplest form ANOVA gives a statistical test of whether the means of several groups are all equal, and therefore generalizes Student's two-sample *t*-test to more than two groups.

One-way ANOVA

In statistics, **one-way analysis of variance** (abbreviated **one-way ANOVA**) is a technique used to compare means of two or more samples (using the F distribution). This technique can be used only for numerical data.

The ANOVA produces an F statistic, the ratio of the variance among the means to the variance within the samples.

- Essentially, the ratio of variance is a comparison of the variance amongst the different groups to the variance amongst all the individuals within those groups. A higher ratio implies significant differences between the groups.

The degrees of freedom for the numerator is I-1, where I is the number of groups (means) The degrees of freedom for the denominator is N - I, where N is the total of all the sample sizes

- One-way ANOVA is used to test for differences among two or more independent groups. Typically, however, the one-way ANOVA is used to test for differences among at least three groups, since the two-group case can be covered by a T-test (Gossett, 1908). When there are only two means to compare, the T-test and the F-test are equivalent; the relation between ANOVA and *t* is given by $F = t^2$.
- One-way ANOVA for repeated measures is used when the subjects are subjected to repeated measures; this means that the same subjects are used for each treatment. Note that this method can be subject to carryover effects.

The F-test

Main article: F-test

The F-test is used for comparisons of the components of the total deviation. For example, in one-way, or single-factor ANOVA, statistical significance is tested for by comparing the F test statistic

The F-Ratio

The relationship between two values of **MS** is conventionally described by a ratio known as **F**, which is defined for the general case as

$$\mathbf{F} = \frac{\mathbf{MS}_{\text{effect}}}{\mathbf{MS}_{\text{error}}}$$

Where $\mathbf{MS}_{\text{effect}}$ is a variance estimate pertaining to the particular fact whose significance you wish to assess (e.g., the differences among the means of several independent samples), and $\mathbf{MS}_{\text{error}}$ is a variance estimate reflecting the amount of sheer, cussed random variability that is present in the situation. For the present

example, $\mathbf{MS}_{\text{effect}}$ would be the same as $\mathbf{MS}_{\mathbf{bg}}$ and $\mathbf{MS}_{\text{error}}$ would be the same as $\mathbf{MS}_{\mathbf{wg}}$. When the null hypothesis is true, the **F**-ratio will tend to be equal to or less than 1.0, within the limits of random variability; and when the null hypothesis is false, the **F**-ratio will tend to be significantly greater than 1.0.

CHAPTER IV
PRESENTATION AND ANALYSIS OF DATA

4.1. Presentation of Financial Variables

Under this heading the financial variables have been presented and analyzed and calculations are done both manually and using the statistical program.

4.1.1. Earning Per Share (EPS)

The earning per share of the banks under study is tabulated as follows:

S.No	Fiscal Year	2060/61	2061/62	2062/63	2063/64	64/65	Mean	SD	CV
	BANKS	2003/04	2004/05	2005/06	2006/07	2007/08			
1	NABIL	92.61	105.49	129.21	137.08	108.10	114.50	18.22	15.91
2	NIBL	51.70	39.50	59.35	62.57	57.87	54.20	9.12	16.82
3	SCBNL	143.55	143.95	175.84	167.46	131.10	152.38	18.57	12.19
4	HBL	49.50	47.91	59.24	60.66	62.74	56.01	6.81	12.15
5	NSBI	14.26	13.29	18.27	37.92	28.33	22.41	10.52	46.92
6	EBL	45.60	54.20	62.80	78.40	91.82	66.56	18.75	28.24
7	BOK	27.50	30.10	43.67	43.50	59.94	40.94	12.97	31.69
8	NICBL	13.65	22.75	16.09	24.10	25.75	20.47	5.54	26.72
9	KBL	9.74	17.58	16.59	22.70	16.86	16.69	4.85	28.79
10	SBL	-8.89	20.08	13.05	15.88	17.29	11.48	11.83	26.72

Table 4.1.1: Earning Per Share of Banks Under Study

The EPS of NABIL range between NPR 92.61 to NPR 137.08 in last 5 years with an average EPS of NPR 114.50, standard deviation of NPR 18.22 and CV of 15.91. The EPS of NABIL showed the increasing trend except the final year of 07/08 in which it dropped to NPR 108.10.

NIBL EPS fluctuated in last five years with a range of NPR 39.50 and 62.57 showing standard deviation of NPR 9.12 and coefficient of variation of 16.82.

The EPS of (SCBNL) climbed steadily in early three years and later it dipped significantly in last two years, EPS ranged between NPR 131.10 to NPR 175.84 in last five years SCBN has the highest EPS of NPR 152.38 among the ten banks. The standard deviation and CV of SCBN is calculated to be 18.57 and 12.19 respectively.

EPS of HBL remained stable with a steady growth in last five years with a slight fall in the year 04/05. The range remained between NPR 47.91 and NPR 62.74. The standard deviation is relatively low of 6.81.

NSBI had an average EPS of NPR 22.41 with a standard deviation of 10.52.83. The range of EPS was between NPR 13.29 to NPR 37.92. The CV shows fluctuation of 46.92% in EPS of NSBI.

EBL had a steady rise of EPS from NPR 45.60 to NPR 91.82 without any hiccups with an average earning of NPR 66.56. BOK matches the consistency in terms of EPS which ranged between NPR 27.50 to 59.94

EPS of NICBL, KBL and SBL fluctuated in last three years. The average EPS stands NPR 20.47, NPR 16.69 and 11.48 respectively for above mentioned bank.

From the above table we can conclude that SCBN and HBL have CV of 12.19 and 12.15; lower among other banks which show the consistency in EPS s during the period of study. The average EPS of SCBN and HBL stood NPR 152.38 and 56.01 respectively

4.1.2. Dividend Per Share (DPS)

The Dividend per share of the banks under study is stated in the table below:

S. No	Fiscal Year	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	SD	CV
	BANKS	2003/04	2004/05	2005/06	2006/07	2007/08			
1	NABIL	65	70	85	140	100	92.00	30.12	32.74
2	NIBL	15	12.5	55.46	30	40.33	30.66	17.92	58.44
3	SCBNL	110	120	140	130	130	126.00	11.40	9.05
4	HBL	20	31.58	35	40	45	34.32	9.48	27.62
5	NSBI	0	0	5	35	0	8.00	15.25	190.60
6	EBL	20	20	25	40	50	31.00	13.42	43.28
7	BOK	10	15	48	20	42.11	27.02	16.97	32.74
8	NICBL	0	30	10.53	21.05	21.05	16.53	11.53	69.75
9	KBL	0	0	21.05	21.05	10.53	10.53	11.53	136.93
10	SBL	0	0	0	15.79	15.79	6.32	11.01	246.43

Table 4.1.2: Dividend Per Share of Banks Under Study

Nabil bank distributed dividend in increasing trend until the last year which saw it decreased to NPR 100. The average mean value of DPS was NPR 92. There is a SD of 30.12 and CV of 32.74 in dividend paid by NABIL for last 5 years.

DPS of NIBL fluctuated considerably from NPR 15 to NPR 55.46 in past 5 years maintaining average DPS of NPR 30.66. SD showed the value of NPR 17.92 and CV of 58.44.

SCBNL maintained healthy DPS with an average DPS of NPR 126 and standard deviation of 11.40. The highest and lowest DPS are NPR 110 and NPR 140 respectively. The coefficient of variation is 9.05%, which indicates that there is less fluctuation in the DPS of SCBNL during the period of study.

HBL had a steady DPS in increasing trend ranging from NPR 20 to NPR 45. The average DPS stands to be 34.32. Similarly, the standard deviation and CV is 9.48 and 27.62 respectively.

NSBI paid dividend twice in last 5 years so it has an average DPS of NPR 8 only. The highest DPS was NPR 5.00. The standard deviation is 15.25 and coefficient of variation is 190.60. The CV indicates that the DPS of NSBI is inconsistent.

EBL has paid the dividend progressively with a range of NPR 20 and NPR 50. The average DPS remained NPR 31. The SD and CV stands to be 13.42 and 43.28 respectively.

BOK has also distributed dividends consistently but DPS fluctuated from lowest NPR 10 to highest NPR 48. The average DPS stands to be 27.02.

NICBL has an average DPS of NPR 16.53, and it ranged from NPR 10.53 and NPR 30, but it did not pay the dividend on 03/04. The standard deviation is 11.53 and the CV of 69.75 for the last period.

KBL paid the dividend in last three years out of 5 years. Its DPS shows decreasing trend in past 5 years. The SD stoods11.53 and CV 136.93 showing inconsistency in DPS. SBL did not pay dividend in first three years and lately it has paid dividend of NPR 15.79.

From the above calculations, SCBNL has the highest average DPS and SBL 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 SBL is highly fluctuating.

In the above table SCBN showed the lowest CV among the banks showing the uniformity in DPS in the past 5 years. The average DPS was calculated to be NPR 126.

4.1.3. Dividend Percent (DP)

Dividend percent is the ratio of DPS to the Paid up capital per Share. It is measured in percentage. The dividend percent during the period of study are presented in the table below.

S. No	Fiscal Year / BANKS	2060/61 / 2003/04	2061/62 / 2004/05	2062/63 / 2005/06	2063/64 / 2006/07	2064/65 / 2007/08	Mean	SD	CV
1	NABIL	65	70	85	140	100	92.00	30.12	32.74
2	NIBL	15	12.5	55.46	30	40.33	30.66	17.92	58.44
3	SCBNL	110	120	140	130	130	126.00	11.40	9.05
4	HBL	20	31.58	35	40	45	34.32	9.48	27.62
5	NSBI	0	0	5	35	0	8.00	15.25	190.60
6	EBL	20	20	25	40	50	31.00	13.42	43.28
7	BOK	10	15	48	20	42.11	27.02	16.97	32.74
8	NICBL	0	30	10.53	21.05	21.05	16.53	11.53	69.75
9	KBL	0	0	21.05	21.05	10.53	10.53	11.53	136.93
10	SBL	0	0	0	15.79	15.79	6.32	11.01	246.43

Table 4.1.3: Dividend Percent of Banks under Study

All the banks under study have the same paid up price of NPR 100 per share but the DPS is different. From the above data, SCBNL pays the highest dividend on the face value of share and SBL the lowest. The CV indicates that among the banks under study during the period, SCBNL has the highest consistency in dividend percent whereas the dividend percent of SBL is least.

4.1.4. Dividend Payout Ratio (DPR)

The DPR of the banks under study are stated in the table as follows:

S. No	Fiscal Year / BANKS	2060/61 2003/04	2061/62 2004/05	2062/63 2005/06	2063/64 2006/07	2064/65 2007/08	Mean	SD	CV
1	NABIL	70.19	66.36	65.78	102.13	92.15	79.32	16.73	21.09
2	NIBL	29.01	31.65	93.45	47.95	69.69	54.35	27.21	50.07
3	SCBNL	76.63	83.83	79.62	77.67	99.16	83.38	9.24	11.08
4	HBL	40.77	65.92	59.08	65.94	69.69	60.28	11.56	19.18
5	NSBI	0	0	27.37	120.94	0	29.66	52.38	176.60
6	EBL	43.86	36.9	39.81	51.02	85.7	51.46	19.86	38.60
7	BOK	36.36	49.83	109.83	45.98	92.11	66.82	32.17	48.15
8	NICBL	0	131.87	65.4	87.34	81.75	73.27	47.79	65.22
9	KBL	0	0	126.88	92.73	62.47	56.42	56.32	99.82
10	SBL	0	0	0	99.43	91.32	38.15	52.32	137.14

Table 4.1.4: Dividend Payout Ratio of Banks under Study

NABIL, SCBNL are two leading banks with high DPR among the 10 above mentioned banks. They have consistently above 65 DPR through out the last 5 years. The average DPR are 79.32 and 83.38 respectively for NABIL and SCBN. Similarly NIBL, HBL, EBL, and BOK all paid dividends in last 5 years. NICBL paid dividend in last 4 years. NSBI and KBL were able to pay dividend in later 3 years only and SBL in last 2 years only.

DPR fluctuated for all the banks during the period of the study showing inconsistency in dividend payment trend.

The lowest CV was 11.08 of SCBNL among the banks which shows the regularity and evenness of DPR and the highest was of NSBI CV with 176.60 showing inconsistency in DPR.

4.1.5. Market Price Per Share (MPS)

The average market price per share of the banks under study is presented in table form as follows:

S. No	Fiscal Year	2060/61	2061/62	2062/63	2063/64	2064/65			

	BANKS	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	SD	C.V
1	NABIL	1000	1505	2240	5050	5275	3,014.00	2,011.83	66.75
2	NIBL	940	800	1260	1729	2450	1,435.80	669.99	78.78
3	SCBNL	1745	2345	3775	5900	6830	4,119.00	2,203.56	53.50
4	HBL	840	920	1100	1740	1,980	1,316.00	512.52	38.95
5	NSBI	307	335	612	1176	1511	788.20	534.05	67.76
6	EBL	680	870	1379	2430	3132	1,698.20	1,050.70	61.87
7	BOK	295	430	850	1375	2350	1,060.00	835.09	78.78
8	NICBL	218	366	496	950	1300	666.00	447.83	67.76
9	KBL	0	369	443	830	1005	529.40	347.16	105.71
10	SBL	0	0	360	778	1090	445.60	482.23	108.22

Table 4.1.5: Market Price Per Share of Banks Under Study

The MPS of NABIL range between NPR 1000/- to NPR 5275/- in last 5 years with an average MPS of NPR 3014, standard deviation of NPR 2011.83 and CV of 66.75. The MPS of NABIL showed the increasing trend through out the last five years

NIBL MPS fluctuated in first three years but steadies in last three years with a range of NPR 800 and NPR 2450 showing standard deviation of NPR 669.99 and coefficient of variation of 78.78. The average MPS stood NPR 669.99.

The MPS of (SCBNL) climbed steadily in last 5 years, MPS ranged between NPR 1745 to NPR 6830 in last five years SCBN has the highest MPS of NPR 6830 among the ten banks. The standard deviation and CV of SCBN is calculated to be Rs 2203.56 and 53.50 respectively.

MPS of HBL remained stable with a steady growth in last five years. The range remained between NPR 840 and NPR 1980. The standard deviation is relatively low of 512.52.

NSBI had an average MPS of NPR 788.20 with a standard deviation of 534.05. The range of MPS was between NPR 307 to NPR 1511. The CV shows fluctuation of 67.76% in MPS of NSBI.

EBL had a steady rise of MPS from NPR 680 to NPR 3132 without any hiccups with an average MPS of NPR1698.20. BOK and NICBL matched the consistency in terms of MPS rise. MPS of KBL and SBL rose in last three years and two years respectively. The average MPS of KBL and SBL stands NPR 529.40, NPR 445.60 respectively.

Based on above analysis, it can be concluded that average MPS of SCBNL is the highest and that of SBL is the lowest. Similarly the standard deviation of SCBNL of NPR 2203.56 is the highest and SBL is the lowest i.e. NPR 347.16.

4.1.6. Price Earning Ratio (P/E Ratio)

The price-earning ratio of the banks under study is presented in table as follows.

S No.	Fiscal Year / BANKS	2060/61 2003/04	2061/62 2004/05	2062/63 2005/06	2063/64 2006/07	2064/65 2007/08	Mean	SD	C.V
1	NABIL	10.79	14.26	17.33	36.83	46.716	25.19	15.71	62.39
2	NIBL	18.18	20.25	21.22	27.63	42.33	25.92	9.83	37.91
3	SCBNL	12.15	16.38	21.46	35.25	61.02	29.25	19.77	67.60
4	HBL	17.12	19.2	18.56	28.69	31.56	23.03	6.60	28.67
5	NSBI	21.52	25.2	33.49	29.88	53.33	32.68	12.40	37.95
6	EBL	14.91	16.05	21.95	30.99	34.11	23.60	8.66	36.71
7	BOK	10.72	14.28	19.46	31.609	46.716	24.56	14.70	59.84
8	NICBL	15.97	16.08	30.807	39.419	49.808	30.42	14.76	48.53
9	KBL	0	20.67	26.7	36.56	59.62	28.71	16.34	97.34
10	SBL	0	0	27.59	48.992443	63.04222094	27.92	28.45	101.87

Table 4.1.6: Price Earning Ratio of Banks Under Study

PE ratio of NABIL fluctuated in last five years from 10.79 to 46.71.The average mean value of P/E RATIO of NABIL was 25.19. There was a SD of 15.71 and CV of 62.39 in P/E ratios by NABIL for last 5 years.

P/E RATIO of NIBL rose consistently from 18.18 in the year 03/04 to 42.33 in yr 07/08. The average P/E RATIO stood 25.92. SD showed the value of 9.83 and CV of 37.91

SCBNL maintained healthy P/E RATIO with an average 29.25 and standard deviation of 19.77. The highest and lowest P/E RATIO were 12.15 and an impressive 61.02 respectively. The coefficient variation of 67.60%, which indicates that the P/E ratio of SCBNL is very volatile during the period of study.

HBL had a steady P/E RATIO in increasing trend ranging from 17.12 to 31.56. The average P/E RATIO stands to be 23.03. Similarly, the standard deviation and CV is 6.60 and 28.67 respectively.

NSBI, EBL, BOK, NICBL all had an notable and steady increase in P/E Ratio with an average of 32.68, 23.60, 24.56 and 30.42 respectively. NSBI had the highest average P/E ratio and SCBN has the highest P/E ratio of 61.02.

4.1.7. Earning Yield (EY)

Earning yield of the banks under study is presented in the table below.

S. NO	Fiscal Year / BANKS	2060/61 2003/04	2061/62 2004/05	2062/63 2005/06	2063/64 2006/07	2064/65 2007/08	Mean	SD	CV
1	NABIL	9.26	7.01	5.76	2.71	2.05	5.36	3.00	56.02
2	NIBL	5.5	4.94	4.71	3.62	2.36	4.23	1.25	29.50
3	SCBNL	8.23	6.1	4.66	2.84	1.92	4.75	2.53	53.26
4	HBL	5.84	5.21	5.39	3.49	3.17	4.62	1.21	26.10
5	NSBI	4.64	3.97	2.99	3.35	1.87	3.36	1.04	31.06
6	EBL	6.71	6.23	4.55	3.23	2.93	4.73	1.71	36.13
7	BOK	9.32	7	5.14	3.16	2.55	5.43	2.79	51.33
8	NICBL	6.26	6.22	3.25	2.54	2.01	4.06	2.04	50.34
9	KBL	0	4.84	3.74	2.73	1.67	2.60	2.19	97.05
10	SBL	0	0	3.63	2.04	1.59	1.45	1.53	105.14

Table 4.1.7: Earning Yield of Banks Under Study

EY of NABIL had a decreasing trend in last five years from 2.05 to 9.26. The average mean value of EY of NABIL was 5.36. There was a SD of 3.00 and CV of 56.02 of EYs by NABIL for last 5 years.

Similarly EY of NIBL, SCBN, and HBL followed NABIL and showed the decline in last five years. The average EY stood 4.23, 4.75, and 4.62, respectively for above mentioned banks

EY of NSBI fluctuated in last five years. It dipped from 4.64 to 2.99 in first three years and in fourth year it bounced back to 3.35 before dropping to 1.87.

EBL, BOK, NICBL all had a dip in EY with an average of 4.73, 5.43, 4.06 respectively. EY dropped for KBL and SBL in later years. BOK has the highest EY and average EY with 9.32 and 5.43.

4.1.8. Dividend Yield (DY)

The dividend yield of the banks under study is presented in the table as below.

S. No.	Fiscal Year	2060/61	2061/62	2062/63	2063/64	2064/65			

	BANKS	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	SD	C.V
1	NABIL	6.50	4.65	3.79	2.77	1.90	3.92	1.78	45.31
2	NIBL	1.6	1.56	4.4	1.74	1.65	2.19	1.24	56.50
3	SCBNL	6.3	5.12	3.71	2.2	1.63	3.79	1.95	51.17
4	HBL	2.38	3.43	3.18	2.30	2.27	2.71	0.55	20.25
5	NSBI	0	0	0.82	2.98	0	0.76	1.29	169.84
6	EBL	2.94	2.3	1.81	1.65	1.55	1.43	0.58	28.11
7	BOK	3.39	3.49	5.65	1.45	1.98	3.19	1.63	51.17
8	NICBL	0	8.2	2.12	2.22	2.01	2.91	3.10	106.47
9	KBL	0	0	4.75	2.54	1.05	1.67	2.14	147.04
10	SBL	0	0	0	2.03	1.45	0.70	0.97	140.08

Table 4.1.8: Dividend Yield of Banks under Study

DY of NABIL had a decreasing trend in last five years from 6.50 to 1.90. The average mean value of DY of NABIL was 3.92. There was a SD of 1.78 and CV of 45.31 of DY of NABIL for last 5 years.

DY of NIBL fluctuated relatively during the period of the study with an average DY of 2.19, SD of 1.24 and CV of 56.50. BOK also had a fluctuating DY with an average of 3.19.

SCBN also had a decreasing trend in dividend yield ranging from 6.3 to 1.63 with an average DY of 3.79. EBL and HBL also followed SCBN and had a dip in DY. In case of HBL DY increased in second year but dropped consistently in later years. NIC, KBL, and SBL showed the decreasing trend in DY too.

4.1.9. Market Price Per Share (MPS) to Book Value Per Share (BVPS)(MPS/BVPS)

The ratios of the banks under study are presented in the table as follows.

S. NO	Fiscal Year / BANKS	2060/61 / 2003/04	2061/62 / 2004/05	2062/63 / 2005/06	2063/64 / 2006/07	2064/65 / 2007/08	Mean	SD	C.V
1	NABIL	3.32	4.465	5.87	12.081	22.63	9.67	7.99	82.63
2	NIBL	3.80	3.34	5.25	7.377	10.97	6.15	3.12	50.78
3	SCBNL	4.37	5.55	8.062	11.52	35.84	13.07	13.02	99.64
4	HBL	3.4	3.83	4.809	6.57	7.70	5.26	1.83	34.76
5	NSBI	2.09	2.10	4.03	6.61	9.41	4.85	3.15	65.01
6	EBL	3.964	3.956	6.33	8.3	13.91	1.43	4.12	56.51
7	BOK	1.35	2.013	3.68	8.44	22.62	7.62	8.83	115.88
8	NICBL	1.75	2.67	3.88	6.83	9.30	4.89	3.12	63.92
9	KBL	0	2.61	2.96	5.58	7.81	3.79	2.34	104.80
10	SBL	0	0	2.98	5.88	8.45	3.46	3.70	107.03

Table 4.1.9: Market Price Per Share to Book Value Per Share of Banks Under Study

MPS/BVPS rose steadily from 3.32 to 22.63 in last five years. The average mean value of MPS/BVPS of NABIL was 9.67. There is a SD of 7.99 and CV of 82.63for last 5 years.

MPS/BVPS of NIBL also increased considerably from 3.80 to 10.97 in past 5 years maintaining average MPS/BVPS of 6.15. SD showed the value of 3.12 and CV of 50.78.

SCBNL maintained healthy MPS/BVPS with an average MPS/BVPS of 13.07 and standard deviation of 13.02. The highest and lowest MPS/BVPS are 4.37 and 35.84 respectively. The coefficient of variation is 99.64%, which indicates that there is big fluctuation in the MPS/BVPS of SCBNL during the period of study.

HBL had a steady MPS/BVPS in increasing trend ranging from 3.4 to 7.70. The average MPS/BVPS stands to be 5.26. Similarly, the standard deviation and CV are 1.83 and 34.76 respectively.

NSBI, EBL, NICBL, KBL and SBL all showed the steady incresi in MPS/BVPS with an average MPS/BVPS of 4.85, 1.43, 7.62, 4.89, 3.79, and 3.46

4.2.10 Net Worth Per Share (NPS)

The Net Worth Per Share of the banks under study are stated in the table as follows:

S. NO	Fiscal Year / BANKS	2060/61 2003/04	2061/62 2004/05	2062/63 2005/06	2063/64 2006/07	2064/65 2007/08	Mean	SD	C.V
1	NABIL	301.00	337	381	418	354	358.20	44.26	12.36
2	NIBL	246.88	239.59	228.72	264.74	276.57	251.30	19.27	7.67
3	SCBNL	399.25	422.38	468.22	512.12	359.98	432.39	59.33	13.72
4	HBL	246.93	239.59	228.72	264.74	247.95	245.59	13.18	5.37
5	NSBI	146.8	159.54	151.78	178.04	160.57	159.35	11.89	7.46
6	EBL	171.52	219.87	217.67	292.75	225.19	225.40	43.39	19.25
7	BOK	218.38	213.6	230.67	164.68	222.51	209.97	26.08	12.42
8	NICBL	134.09	136.84	127.74	139.09	138.09	135.17	4.56	3.37
9	KBL	114.03	141.11	149.22	148.69	128.60	136.33	63.48	57.39
10	SBL	90.75	110.83	120.63	132.28	129.03	116.70	16.72	14.33

Table 4.1.10: Net Worth Per Share of Banks Under Study.

The NPS of NABIL range between NPR 301 to NPR 418 in last 5 years with an average NPS of NPR 358.20, standard deviation of NPR 44.26 and CV of 12.36. The NPS of NABIL showed the fluctuating trend.

NIBL NPS also fluctuated with a range of NPR 228.72 and NPR 276.57 showing standard deviation of NPR 19.27 and coefficient of variation of 7.67. The average NPS stood NPR 251.30. NPS of HBL, SBI, EBL, BOK, and NICBL fluctuated in last 5 years with an average NPS of 245.59, 159.35, 225.40, 209.97, and 135.17 respectively.

The NPS of (SCBNL) climbed steadily in first 4 years, NPS ranged between NPR 359.98 to NPR 399.25. SCBN has the highest average NPS of NPR 432.39 among the ten banks. The standard deviation and CV of SCBN is calculated to be Rs 59.33 and 13.72 respectively. KBL and SBL had a steady NPS in last 5 years.

Based on above analysis, it can be concluded that average NPS of SCBNL is the highest and that of SBL is the lowest.

4.2. Statistical Tools

4.2.1. Correlation Analysis

The correlation coefficient measures the relation between two or more variables. It also measures the extent to which one variable effects 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.

The table given below shows the correlation coefficient (r) between the financial variables. The data used for calculation can be seen in Appendix – B.

Nabil Bank Limited (NABIL)

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS

MPS	0.53	0.86	0.86	0.92	0.97	-0.97	-0.92	0.99	0.67
EPS		0.78		0.45					
DPS				0.90					0.88
EY							0.98		

Table 4.2.1.1: Correlation Coefficient of Nabil Bank Ltd (NABIL)

The above table depicts that the MPS of NABIL has a strong positive correlation with its DPS, DP, DPR, PER, and MPS/BVPS which are 0.86, 0.86, 0.92, 0.97, 0.99, and 0.67. It suggests that MPS is highly influenced by DPS, DP, DPR, and PER and MPS/BVPS. Moderate correlation of 0.53 is found with MPS and EPS. But the relationship of MPS with EY and DY showed high degree of negative correlation. The association of EPS with DPS is high degree of correlation and DPR has low degree of correlation. Further correlation between DPS with DPR and NWPS showed high degree of correlation with 0.90 and 0.88. And the correlation between EY and DY is 0.98 which is highly positive.

Nepal Investment Bank Limited (NIBL)

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	0.65	0.51	0.51	0.46	0.96	-0.97	-0.11	0.99	-0.24
EPS		0.71		0.61					
DPS				0.99					0.34
EY							0.19		

Table 4.2.1.2: Correlation Coefficient of Nepal Investment Bank Ltd (NIBL)

The above table indicates that the MPS of NIBL is high degree of positive correlation with its PER and MPS/BVPS which are 0.96 and 0.99 respectively. But MPS has the negative relationship with EY and DY. However the relationship of EPS with DPS has strong positive correlation and DPR is moderately positively correlated. Similarly DPS has a strong correlation of 0.99 with DPR and lower correlation of 0.34 with NWPS. Also EY and DY have a lower positive correlation of 0.19.

Standard Chartered Bank Ltd (SCBL)

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	-0.01	0.61	0.61	0.60	0.97	-0.97	-0.98	0.95	0.03
EPS		0.59		-0.66					
DPS				0.22					0.41
EY							0.99		

Table 4.2.1.3: Correlation Coefficient of Standard Chartered Bank Ltd (SCBL)

From the above table it is found that the MPS of SCBL has very low negative correlation between its EPS. However very moderate correlation exists between MPS with its DPS, DPR and strong correlation is found with PER, MPS/BVPS. But MPS of SCBN is highly negative with EY and DY. Similarly EPS has moderate negative correlation of -0.66 with DPR. In the other hand the relationship between DPS with DPR and NWPS has very low positive correlation.. Also the EY is highly positively correlated with the DY of .99 which may be due to high earning is followed by high dividend payout.

Himalayan Bank Ltd (HBL)

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	0.86	0.89	0.89	0.70	0.99	-0.98	-0.62	0.99	0.55
EPS		0.85		0.57					
DPS				0.92					0.24
EY							0.56		

Table 4.2.1.4: Correlation Coefficient of Himalayan Bank Ltd (HBL)

The above table depicts that the MPS of HBL has a strong positive correlation with its EPS, DPS, DP, DPR, PER, and MPS/BCPS which are 0.86, 0.89, 0.89, 0.70, 0.99, and 0.99. It suggests that MPS is highly influenced by EPS, DPS, DPR, PER and MPS/BVPS. But the relationship of MPS with EY showed high degree of negative correlation. The association of EPS with DPS and DPS with DPR suggest strong positive correlation. Further correlation between DPS with NWPS and EPS with DPR showed moderately correlated. And the correlation between EY and DY is 0.56 which is moderately positive.

Nepal SBI Bank Ltd (NSBI)

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	0.83	0.39	0.90	0.38	0.85	-0.85	0.38	0.99	-0.43
EPS		0.84		0.82					
DPS				0.99					0.05
EY							-0.05		

Table 4.2.1.5: Correlation Coefficient of Nepal SBI Bank Ltd (NIBL)

The above table indicates that the MPS of NSBI showed high degree of positive correlation with its EPS, DP, PER, and MPS/BVPS which are 0.83, 0.90, 0.85, and 0.99 respectively and low degree of correlation with DPS, DPR, and DY. Further MPS has the negative correlation relationship with EY higher degree and moderately with NWPS. However the relationship of EPS with DPS and DPR showed strong positive correlation. Similarly DPS has a strong correlation of 0.99 with DPR and lower correlation with NWPS i.e. 0.05. Also EY and DY have a low degree of negative correlation of 0.05.

Everest Bank Limited (EBL)

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	0.99	0.97	0.89	0.54	0.99	-0.96	-0.90	0.99	1.00
EPS		0.95		0.46					
DPS				0.71					0.94
EY							0.95		

Table 4.2.1.6: Correlation Coefficient of Everest Bank Limited (EBL)

From the above table it is found that high degree of positive correlation exists between MPS of EBL with its EPS, DPS, DP, PER , MPS/BVPS which are 0.99, 0.97, 0.89, 0.54, 0.99, 0.99 and a perfect correlation with NWPS. But the association of MPS with EY and DY is found to be strong negative correlation. But EPS has strong positive correlation with DPS and moderately positive correlation with DPR. Also the relationships between DPS with DPR and NWPS have high positive correlation. Similarly EY is strongly positively correlated with the DY of 0.95.

Bank of Kathmandu (BOK)

	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	0.97	0.59	0.87	0.23	0.98	-0.89	-0.58	0.97	-0.12
EPS		0.78		0.48					
DPS				0.92					0.42
EY							0.46		

Table 4.2.1.7: Correlation Coefficient of Bank of Kathmandu (BOK)

The above table indicates that the MPS of BOK is strongly positively correlated with its EPS, DP, PER and MPS/BVPS which are 0.97, 0.87, 0.98 and 0.99 respectively. But MPS had the negative correlation of high degree

with EY and moderate degree with DY. However the relationship of EPS with DPS and DPS with DPR are strongly positively correlated. But correlations between EPS with DPR, DPS with NWPS and EY with DY have a low degree of correlation.

Nepal Industrial & Commercial Bank Ltd (NICBL)

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	0.79	0.41	0.34	0.31	0.97	-0.88	-0.20	1.00	0.79
EPS		0.86		0.76					
DPS				0.98					0.90
EY							0.36		

Table 4.2.1.8: Correlation Coefficient of Nepal Industrial & Commercial Bank Ltd (NICBL)

The above table reveals that the MPS of NICBL has a strong positive correlation with EPS, PER, MPS/BVPS, and NWPS which are 0.79, 0.97, 1, 0.79 respectively but negative correlation exists between MPS to EY and DY. Similarly, the EPS has high degree of positive correlation with both of its DPS and DPR and DPS with DPR and NWPS. Also the EY has lower positive correlation with DY of the bank.

Kumari Bank Ltd (KBL)

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	0.74	0.57	0.79	0.52	0.97	0.18	0.27	0.99	0.44
EPS		0.65		0.53					
DPS				0.97					0.71
EY							0.33		

Table 4.2.1.9: Correlation Coefficient of KBL

The above table indicates that the MPS of KBL is strongly positively correlated with its EPS, DP, PER, and MPS/BVPS and NWPS which are 0.74, 0.79, 0.97, and 0.99, respectively. Further the relationship of EPS with DPS and DPR are moderately positively correlated. Similarly DPS has a strong correlation of 0.97 with DPR and similar correlation with NWPS of 0.71. Also EY and DY have a relatively lower positive correlation of 0.33.

Siddhartha Bank Limited

VARIABLES	EPS	DPS	DP	DPR	PER	EY	DY	MPS/BVPS	NWPS
MPS	0.46	0.92	0.95	0.91	0.99	0.47	0.86	1.00	0.88
EPS		0.40		0.40					
DPS				0.99					0.76
EY							0.23		

Table 4.2.1.10: Correlation Coefficient of Siddhartha Bank Ltd (SBL)

The above table indicates that the MPS of SBL has a high degree of positive correlation with its DPS, DP, DPR, PER, DY MPS/BVPS and NWPS which are 0.92, 0.95, 0.91, 0.99,0.86,1.00, and 0.88 respectively; it may suggest that dividends made a positive impact in the market. Further the relationship of EPS with DPS and DPR have low positively correlation. Similarly DPS has a strong correlation of 0.99 with DPR and similar correlation with NWPS. Also EY and DY have a relatively lower positive correlation of 0.23.

4.2.2 Regression Analysis

Regression analysis is known as a useful device to determine the strength of relationship between independent and dependent variables. It is considered to be an important statistical device that helps to predict or forecast the value of dependent variable when the value of independent variable is already known. As this study focuses on the determinants of share price (MPS), MPS may be dependent upon various financial indicators. That is why, it is attempted here to analyze and evaluate the influence of various financial indicators on MPS separately.

4.2.2.1 MPS on EPS

The Regression Equation of MPS on EPS : (MPS = a + b EPS)

S.N.	Name of Banks	Regression Coefficient		SE of b	T value	Tabulated t value	r^2
		Constant (a)	Slope (b)				
1	NABIL	-3,696.01	58.60	54.04	1.08	3.182	0.28
2	SCBN	3,203.94	2.12	21.41	0.10	3.182	0.00
3	NIBL	-1,149.72	47.71	32.28	1.48	3.182	0.42
4	HBL	-2,013.08	58.90	17.53	3.36	3.182	0.79
5	NSBI	-193.45	43.47	14.49	3.00	3.182	0.75
6	EBL	1,043.37	-1.99	15.36	-0.13	3.182	0.01
7	BOK	-1,485.63	62.18	9.63	6.46	3.182	0.93
8	NICBL	-702.26	66.46	28.06	2.37	3.182	0.65
9	KBL	-522.40	62.80	33.66	1.87	3.182	0.54

10	SBL	197.62	30.39	14.67	2.07	3.182	0.59

Table 4.2.3.1: Regression Analysis of MPS on EPS

The above table depicts the major output of simple regression analysis between MPS and EPS of the sampled banks. The regression coefficients (b) of NABIL, SCBN, NIBL, HBL, NSBI, BOK, NICBL, KBL, and SBL are 58.60, 2.12, 47.71, 58.90, 43.47, 62.18, 66.46, 62.80, and 30.39 respectively and are positive. It indicates that one rupee increase/decrease in EPS increases/decreases the MPS by rupees 58.60, 2.12, 47.71, 58.90, 43.47, 62.18, 66.46, 62.80, and 30.39 in respect of NABIL, SCBN, NIBL, HBL, NSBI, BOK, NICBL, KBL, and SBL respectively, however, this estimate may vary by rupees 54.04, 21.41,32.28,17.53,14.49,9.63,28.06,3.66, and 14.67 respectively, as shown by standard error of slope (b). This prediction of MPS is strong for HBL, NSBI, BOK only, moderate for NICBL, KBL, and SBL and very weak for NABIL, SCBN, because the respective coefficients of determination (r^2) are 0.79, 0.75, 0.93, 0.65, 0.54, 0.59, 0.28, and 0.00 respectively. This implies that the variations in MPS is due to influence of the EPS are 79, 75, 93, 65, 54, 59, 28, and 0 percent in respect of HBL, NSBI, BOK, NICBL, KBL, SBL, NABIL, and SCBN respectively, and the remaining variation is explained by other variables or factors.

The t values for NABIL, SCBN, NIBL, NSBI, EBL, NICBL, KBL, and SBL are 1.08, 0.10, 1.48, 3.00, -0.13, 2.37, 1.87, and 2.07 respectively which are below tabulated t value at 5% significance for two tailed i.e. 3.182. So null hypothesis of there is no significant relation between MPS and EPS for above mentioned banks is accepted. But for the banks like HBL, and BOK t values are 3.36 and 6.46 respectively therefore null hypothesis is rejected and alternative hypothesis of there is a significant relation between MPS and EPS is accepted.

4.2.2.2 MPS on DPS

The Regression Equation of MPS on DPS: (MPS = a + b DPS)

S.N.	Name of Banks	Regression Coefficient		SE of b	T value	Tabulated t value	r^2
		Constant (a)	Slope (b)				
1	NABIL	-2,278.15	57.52	19.59	2.94	3.182	0.74
2	SCBN	-10,850.77	118.81	88.01	1.35	3.182	0.38

3	NIBL	849.28	19.13	18.55	1.03	3.182	0.26
4	HBL	-274.25	45.93	13.74	3.34	3.182	0.79
5	NSBI	399.94	29.87	8.48	3.52	3.182	0.81
6	EBL	421.00	21.11	3.21	6.58	3.182	0.94
7	BOK	275.10	29.05	22.94	1.27	3.182	0.35
8	NICBL	400.68	16.05	20.42	0.79	3.182	0.17
9	KBL	458.00	8.48	19.26	0.44	3.182	0.06
10	SBL	113.89	46.70	8.67	5.39	3.182	0.91

Table 4.2.3.2: Regression Analysis of MPS on DPS

The above table depicts the major output of simple regression analysis between MPS and DPS of the sampled banks. The regression coefficients (b) of all banks NABIL, SCBN, NIBL, HBL, NSBI, EBL, BOK, NICBL, KBL, and SBL are 57.52, 118.81, 19.13, 45.93, 29.87, 21.11, 29.05, 16.05, 8.48 and 46.70 respectively and are all positive. It indicates that one rupee increase/decrease in DPS increases/decreases the MPS by rupees 57.52, 118.81, 19.13, 45.93, 29.87, 21.11, 29.05, 16.05, 8.48 and 46.70 respectively for above mentioned banks, however, this estimate may vary by rupees 19.59, 88.01, 18.55, 13.74, 8.48, 3.21, 22.94, 20.42, 19.26, and 8.67 respectively, as shown by standard error of slope (b). This prediction of MPS is strong for HBL, NSBI, EBL, and SBL only; moderate for NABIL and very weak for SCBN, NIBL, BOK, NICBL, and KBL because the respective coefficients of determination (r^2) are 0.79, 0.81, 0.94, 0.91,0.74, 0.38, 0.26, 0.35, 0.17, 0.06 respectively. This also implies that the variations in MPS is due to influence of the DPS are 79, 81, 94, 91, 74, 38, 26, 35, 17, and 6 percent in respect of HBL, NSBI, EBL, SBL, NABIL, SCBN, NIBL, BOK, NICBL and KBL respectively, and the remaining variation is explained by other variables or factors.

The t values for NABIL, SCBN, NIBL, NSBI, NICBL, and KBL are 2.94, 1.35, 1.03, 1.27, 0.79, and 0.44 respectively which are below tabulated t value at 5% significance for two tailed i.e. 3.182. So null hypothesis of there is no significant relation between MPS and DPS for above mentioned banks is accepted. But for the banks like HBL, NSBI, EBL, and SBL t values are 3.34, 3.52, 6.58, and 5.39 respectively therefore null hypothesis is rejected and alternative hypothesis of there is a significant relation between MPS and DPS is accepted.

4.2.2.3 MPS ON DPR

The Regression Equation of MPS on Dividend Payout Ratio: (MPS = a + b Dividend Payout Ratio)

S.N.	Name of Banks	Regression Coefficient		SE of b	T value	Tabulated t value	r^2
		Constant (a)	Slope (b)				
1	NABIL	-5,755.19	110.45	26.72	4.13	3.182	0.85
2	SCBN	-7,876.18	143.86	109.81	1.31	3.182	0.36
3	NIBL	815.63	11.41	12.59	0.91	3.182	0.21
4	HBL	-423.81	28.63	18.07	1.58	3.182	0.46
5	NSBI	321.51	11.36	1.86	6.10	3.182	0.93
6	EBL	332.82	11.13	3.38	3.29	3.182	0.78
7	BOK	232.71	12.36	13.12	0.94	3.182	0.23
8	NICBL	467.48	2.72	5.19	0.53	3.182	0.08
9	KBL	480.05	1.12	3.68	0.31	3.182	0.03
10	SBL	126.45	7.15	1.96	3.65	3.182	0.82

Table 4.2.3.3: Regression Analysis of MPS on DPR

The above table depicts the major output of simple regression analysis between MPS and DPR of the sampled banks. The regression coefficients (b) of all banks NABIL, SCBN, NIBL, HBL, NSBI, EBL, BOK, NICBL, KBL, and SBL are 110.45, 143.86, 11.41, 28.63, 11.36, 2.72, 1.12 and7.15 respectively and all are positive. It indicates that one percent increase/decrease in DPR increases/decreases the MPS by rupees 110.45, 143.86, 11.41, 28.63, 11.36, 2.72, 1.12 and 7.15 respectively for above mentioned banks, however, this estimate may vary by rupees 26.72, 109.81, 12.59, 18.07,1.86, 3.38, 13.12, 5.19, 3.68, and 1.96 respectively, as shown by standard error of slope (b). This prediction of MPS is strong for NABIL, NSBI, EBL, and SBL; weak for SCBN, NIBL, HBL, BOK, and very weak for NICBL, and KBL because the respective coefficients of determination (r^2) are 0.85, 0.93, 0.78, 0.82, 0.36, 0.21, 0.46, 0.23, 0.08, 0.03 respectively. This also implies that the variations in MPS is due to influence of the DPR are 85, 93, 78, 82, 36, 21, 46, 23, 8,

and 3 percent respectively for above mentioned banks, and the remaining variation is explained by other variables or factors.

The t values for SCBN, NIBL, HBL, BOK, NICBL, and KBL are 1.31, 0.91, 1.58, 0.94, 0.53, and 0.31 respectively which are below tabulated t value at 5% significance for two tailed i.e. 3.182. So null hypothesis of there is no significant relation between MPS and DPR for above mentioned banks is accepted. But for the banks like NABIL, NSBI, EBL, and SBL t values are 4.13, 6.10, 3.29, and 3.65 respectively therefore null hypothesis is rejected and alternative hypothesis of there is a significant relation between MPS and DPR is accepted.

4.2..2.4 The Multiple Regression Equation of MPS on DPS_{t-1}, PE $Ratio_{t-1}$ and EPS (MPS = a + b_1 DPS_{t-1} + b_2 PE $Ratio_{t-1+}$ b_3 EPS

Company	Description	a	b1	b2	b3	r2	SEE	F -Ratio	Tab F Value
NABIL	Values	-5087.633	-13.189	178.223	52.743	0.866	1475.573	2.145	
	S.E.	5127.877	101.595	343.009	54.277				
NIBL	Values	-2509.541	8.245	152.73	8..230	0.967	244.238	9.7	
	S.E.	896.298	8.569	39.082	18.051				
SCBNL	Values	-9028.457	44.274	192.334	25.963	0.977	670.331	14.075	
	S.E.	4305.159	44.393	53.304	22.813				
HBL	Values	-530.166	49.574	20.727	-1.308	0.838	412.524	1.725	
	S.E.	4419.414	134.77	76.112	134.549				
NSBI	Values	-2698.391	15.492	162.772	-43.279	0.976	164.239	13.764	
	S.E.	2405.165	6.737	153.154	73.054				
EBL	Values	-1539.726	-95.762	195.759	26.497	1	43.552	775.67	
	S.E.	122.307	20.988	37.729	5.502				
BOK	Values	-624.642	3.272	79.313	6.721	0.999	40.091	578.18	
	S.E.	104.984	1.261	7.792	5.46				
NICBL	Values	-240.173	4.52	35.621	1.697	1	5.364	9292.836	
	S.E.	13.5	0.245	0.485	0.995				
KBL	Values	-169.591	10.201	12.429	24.229	0.94	195.056	5.186	
	S.E.	408.17	16.088	10.722	26.766				
SBL	Values	88.344	-11.415	22.742	3.918	0.915	281.762	3.572	
	S.E.	194.455	37.435	12.367	13.185				

Table 4.2.4.4 Multiple Regression Equation of MPS on DPS_{t-1}, PE $Ratio_{t-1}$ and EPS

Table 4.2.6 shows the regression analysis of MPS on DPS_{t-1}, PE $Ratio_{t-1}$ and EPS of 10 sampled companies. The major results of the analysis have been interpreted briefly as follows:

NABIL:

The slope of regression line of DPS_{t-1} is -13.189 which shows that when other variables are constant, a one rupee increase in DPS_{t-1} leads to a decrease in MPS by 13.189 rupees. In the mean time, the slope of regression line of PE $Ratio_{t-1}$ is 178.223, which indicates that an increase of one rupee in PE $Ratio_{t-1}$ also increases MPS by 178.223 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR 52.743 which shows that an increase of one rupee in EPS will increase MPS by NPR 52.743 assuming other variables remain constant.

The regression constant (a) indicates that if $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS are zero, the minimum value of MPS will be -5087.633, which is practically not possible. The prediction of a, b1, b2, and b3 may deviate by 5127.877, 101.595, 343.009 and 54.277 respectively as suggested by standard errors.. Similarly, the coefficient of determination which shows 86.60 percent changes in MPS is influenced by $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS, and the remaining portion may be due to other factors/variables. The estimated value of MPS obtained by this model may give the deviation of 1475.573. The F-statistics for multiple regressions of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS is 2.145 which is statistically not significant at 5 percent level.

Nepal Investment Bank Limited (NIBL):

The slope of regression line of DPS_{t-1} is 8.245 which shows that when other variables are constant, a one rupee increase in DPS_{t-1} leads to a increase in MPS by 8.245 rupees. In the mean time, the slope of regression line of PE $Ratio_{t-1}$ is 152.73, which indicates that an increase of one rupee in PE $Ratio_{t-1}$ also increases MPS by 152.73 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR 8.230 which shows that an increase of one rupee in EPS will increase MPS by NPR 8.230 assuming other variables remain constant.

The regression constant (a) indicates that if $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS are zero, the minimum value of MPS will be -2509.541, which is practically not

possible. The prediction of a, b1, b2, and b3 may deviate by 89.298, 8.569, 39.082, and 18.051 respectively as suggested by standard errors. Similarly, the coefficient of determination which shows 96.70 percent changes in MPS is influenced by $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS, and the remaining portion may be due to other factors/variables. The estimated value of MPS obtained by this model may give the deviation of 244.238. The F-statistics for multiple regressions of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS is 9.7 which is statistically not significant at 5 percent level.

Standard Chatered Bank Limited (SCBNL):

The slope of regression line of DPS_{t-1} is 44.274 which shows that when other variables are constant, a one rupee increase in DPS_{t-1} leads to a increase in MPS by 44.274 rupees. In the mean time, the slope of regression line of PE $Ratio_{t-1}$ is 192.334, which indicates that an increase of one rupee in PE $Ratio_{t-1}$ also increases MPS by 192.334 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR 18.051 which shows that an increase of one rupee in EPS will increase MPS by NPR 18.051 assuming other variables remain constant.

The regression constant (a) indicates that if $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS are zero, the minimum value of MPS will be -9028.457, which is practically not possible. The prediction of a, b1, b2, and b3 may deviate by 4305.159, 44.393, 53.304, and 22.813 respectively as suggested by standard errors. Similarly, the coefficient of determination which shows 0.977 percent changes in MPS is influenced by $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS, and the remaining portion may be due to other factors/variables. The estimated value of MPS obtained by this model may give the deviation of 670.331. The F-statistics for multiple regressions of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS is 14.075 which is statistically not significant at 5 percent level.

Himalayan Bank Limited (HBL):

The slope of regression line of DPS_{t-1} is 49.574 which shows that when other variables are constant, a one rupee increase in DPS_{t-1} leads to a increase in MPS by 49.574 rupees. In the mean time, the slope of regression line of PE

Ratio$_{t-1}$ is 20.727, which indicates that an increase of one percent in PE Ratio$_{t-1}$ also increases MPS by 20.727 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR -1.308 which shows that an increase of one rupee in EPS will decrease MPS by NPR 1.308 assuming other variables remain constant.

The regression constant (a) indicates that if DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS are zero, the minimum value of MPS will be -9028.457, which is practically not possible. The prediction of a, b1, b2, and b3 may deviate by 4305.159, 44.393, 53.304, and 22.813 respectively as suggested by standard errors. Similarly, the coefficient of determination which shows 0.977 percent changes in MPS is influenced by DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS, and the remaining portion may be due to other factors/variables. The estimated value of MPS obtained by this model may give the deviation of 670.331. The F-statistics for multiple regressions of MPS on DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS is 14.075 which is statistically not significant at 5 percent level.

Nepal SBI (NSBI):

The slope of regression line of DPS$_{t-1}$ is 15.492 which shows that when other variables are constant, a one rupee increase in DPS$_{t-1}$ leads to a increase in MPS by 15.492 rupees. In the mean time, the slope of regression line of PE Ratio$_{t-1}$ is 162.77, which indicates that an increase of one percent in PE Ratio$_{t-1}$ also increases MPS by 162.77 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR -43.279 which shows that an increase of one rupee in EPS will decrease MPS by NPR 43.279 assuming other variables remain constant.

The regression constant (a) indicates that if DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS are zero, the minimum value of MPS will be -2698.391, which is practically not possible. The prediction of a, b1, b2, and b3 may deviate by 2405.165, 3.737, 153.154, and 73.054 respectively as suggested by standard errors. Similarly, the coefficient of determination which shows 0.976 percent changes in MPS is influenced by DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS, and the remaining portion may be due to other factors/variables. The estimated value of MPS obtained by this model may give the deviation of 164.239. The F-statistics for multiple

regressions of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS is 13.764 which is statistically not significant at 5 percent level.

Everest Bank Limited (EBL)

The slope of regression line of DPS_{t-1} is -95.762 which shows that when other variables are constant, a one rupee increase in DPS_{t-1} leads to a decrease in MPS by 95.762 rupees. In the mean time, the slope of regression line of PE $Ratio_{t-1}$ is 195.759, which indicates that an increase of one rupee in PE $Ratio_{t-1}$ also increases MPS by 195.759 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR 26.497 which shows that an increase of one rupee in EPS will increase MPS by NPR 26.497 assuming other variables remain constant.

The regression constant (a) indicates that if $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS are zero, the minimum value of MPS will be -1539.726, which is practically not possible. The prediction of a, b1, b2, and b3 may deviate by 122.307, 20.988, 37.729, AND 5.502 respectively as suggested by standard errors. Similarly, the coefficient of determination is 1which shows 100 percent changes in MPS is influenced by $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS The estimated value of MPS obtained by this model may give the deviation of 43.552. The F-statistics for multiple regressions of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS is 775.67 which is statistically significant at 5 percent level.

Bank Of Kathmandu (BOK)

The slope of regression line of DPS_{t-1} is 3.272 which shows that when other variables are constant, a one rupee increase in DPS_{t-1} leads to a increase in MPS by 3.272 rupees. In the mean time, the slope of regression line of PE $Ratio_{t-1}$ is 79.313, which indicates that an increase of one rupee in PE $Ratio_{t-1}$ also increases MPS by 79.313 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR 6.721 which shows that an increase of one rupee in EPS will increase MPS by NPR 6.721 assuming other variables remain constant.

The regression constant (a) indicates that if $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS are zero, the minimum value of MPS will be -624.642, which is practically not possible. The prediction of a, b1, b2, and b3 may deviate by 104.984, 1.261, 7.792,5.46 respectively as suggested by standard errors. Similarly, the coefficient of determination is 0.99 which shows 99 percent changes in MPS is influenced by $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS The estimated value of MPS obtained by this model may give the deviation of 40.091. The F-statistics for multiple regressions of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS is 578.18 which is statistically significant at 5 percent level.

Nepal Industrial & commercial Bank Limited (NICBL)

The slope of regression line of DPS_{t-1} is 4.52 which shows that when other variables are constant, a one rupee increase in DPS_{t-1} leads to a increase in MPS by 4.52 rupees. In the mean time, the slope of regression line of PE $Ratio_{t-1}$ is 35.621, which indicates that an increase of one rupee in PE $Ratio_{t-1}$ also increases MPS by 35.621 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR 1.697 which shows that an increase of one rupee in EPS will increase MPS by NPR 1.697 assuming other variables remain constant.

The regression constant (a) indicates that if $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS are zero, the minimum value of MPS will be -240.73, which is practically not possible. The prediction of a, b1, b2, and b3 may deviate by 13.5, 0.245, 0.485, and 0.995 respectively as suggested by standard errors. Similarly, the coefficient of determination is 1which shows 100 percent changes in MPS is influenced by $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS The estimated value of MPS obtained by this model may give the deviation of 5.364. The F-statistics for multiple regressions of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS is 9292.836 which is statistically significant at 5 percent level.

Kumari Bank Limited (KBL):

The slope of regression line of DPS_{t-1} is 10.201 which shows that when other variables are constant, a one rupee increase in DPS_{t-1} leads to a increase in

MPS by 10.201 rupees. In the mean time, the slope of regression line of PE Ratio$_{t-1}$ is 12.429, which indicates that an increase of one rupee in PE Ratio$_{t-1}$ also increases MPS by 12.429 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR 24.229 which shows that an increase of one rupee in EPS will increase MPS by NPR 24.229 assuming other variables remain constant.

The regression constant (a) indicates that if DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS are zero, the minimum value of MPS will be -169.591, which is practically not possible. The prediction of a, b1, b2, and b3 may deviate by 408.17, 16.088, 10.722, and 26.766 respectively as suggested by standard errors. Similarly, the coefficient of determination which shows 0.94 percent changes in MPS is influenced by DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS, and the remaining portion may be due to other factors/variables. The estimated value of MPS obtained by this model may give the deviation of 195.056. The F-statistics for multiple regressions of MPS on DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS is 5.186 which is statistically not significant at 5 percent level.

Siddhartha Bank Limited (SBL):

The slope of regression line of DPS$_{t-1}$ is -11.415 which shows that when other variables are constant, a one rupee increase in DPS$_{t-1}$ leads to a decrease in MPS by 11.415 rupees. In the mean time, the slope of regression line of PE Ratio$_{t-1}$ is 22.742, which indicates that an increase of one rupee in PE Ratio$_{t-1}$ also increases MPS by 22.742 rupees if other variables remain constant. Similarly, slope of regression line of EPS is NPR 3.918 which shows that an increase of one rupee in EPS will increase MPS by NPR 3.918 assuming other variables remain constant.

The regression constant (a) indicates that if DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS are zero, the minimum value of MPS will be 88.344. The prediction of a, b1, b2, and b3 may deviate by 194.455, 37.435, 12.367 and 13.185 respectively as suggested by standard errors.. Similarly, the coefficient of determination which shows 91.50 percent changes in MPS is influenced by DPS$_{t-1,}$ PE Ratio$_{t-1}$ and EPS, and the remaining portion may be due to other factors/variables. The estimated value of MPS obtained by this model may

give the deviation of 281.762. The F-statistics for multiple regressions of MPS on $DPS_{t-1,}$ PE $Ratio_{t-1}$ and EPS is 3.572 which is statistically not significant at 5 percent level.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

2 5.1 Summary

This study mainly aimed at ascertaining the impact of dividends in Market Price of Share of 10 commercial banks traded in the Nepalese Stock Market by using secondary data from 2003 to 2008.

The findings indicate that share value is affected by dividend payments as relation between MPS and DPS showed a very strong coefficient of determinant (r^2) greater than 0.75 for 4 banks, and moderately for 3 banks and lowly for 1 bank. The average P/E ratios of all the sampled banks showed high level of P/E ratio which were above 23.60 suggesting that stock market of Nepal was mostly in bullish trend in last 5 years.

The result of correlations shows following findings:

The relationship between MPS and EPS among ten banks of the study demonstrated 6 banks have high degree of correlation, 2 banks have moderate correlation and one bank each have lower correlation and lower negative correlation. Everest Bank has almost perfect correlation (0.99) with MPS and EPS with correlation and SCBN has the lower negative correlation of -0.01.

Similarly the association between MPS and DPS showed; 5 banks have strong correlation, 3 banks have moderate correlation and 2 banks have lower degree of correlation. Here too Everest Bank had the highest correlation of 0.97 while Siddhartha bank maintained low correlation of 0.40.

Again, the relationship between MPS and DP demonstrate that 7 banks have strong correlation, 2 banks have moderate correlation and one bank maintains lower degree of correlation. The highest correlation was found in Siddhartha Bank with 0.95 correlation and NIC maintain the lowest correlation with 0.34.

The study of association of MPS with PE ratio and MPS/BVPS showed very strong correlation for all the banks. And in contrast, relationship of MPS with EY showed low correlation with two banks and high degree of negative correlation with eight banks.

The association of EPS and NWPS underlined that 3 banks have strong correlation, 2 banks have moderate correlation, 2 banks have lower degree of

correlation and 3 banks showed relatively lower negative correlations. Here Everest Bank Limited showed the perfect correlation in the relationship between EPS and NWPS.

Similarly the relationship between EPS and DPS showed; 7 banks have strong correlation, 2 banks with moderate correlation and one with lower degree of correlation. Everest Bank showed the highest degree of correlation with 0.95.

The relationship between DPS and DPR showed strong positive correlation in 9 banks except SCBN which shows low degree of correlation with 0.22.

While considering the simple regression model for MPS on EPS the calculated t values for HBL and BOK are 3.36 and 6.46 respectively showing significant relationship between MPS and EPS. For regression equation of MPS on DPS; HBL, NSBI, EBL, and SBI have higher t values which suggest a significant relation between MPS on DPS.

Further the regression equation of MPS on Dividend Payout Ratio showed only 4 banks with have significant relationship between MPS and DPR. Likewise, in regression equation of MPS on DY only 3 banks showed significant relation.

The regression equation of DPS on EPS and DPS on NPS showed that only one bank each has a higher t value to show the significant relation.

The t-test for all the banks shows that a lot of the statistics are not significant to base any firm conclusion on relationships between different financial indicators.

5.2 Conclusion

Very limited generalizations can be made from the findings of the study, as only 10 banks were considered. Moreover the study was made with 5 years secondary data. Nonetheless, the study shows dividend and earning per share have positive signals in the market as most banks established relatively high positive correlation with market price of share.

Theoretically determination of MPS of any company should be in accordance with their financial performance i.e the key financial indicators like EPS, DPS, DP, DPR, PER, EY, DY, MPS/BVPS, and NWPS should have major influence in the fixation of MPS. But due to the imperfection in Nepalese Capital Market there is no single financial indicator that showed a conspicuous effect in determination of MPS. The degree of interrelationship of MPS with different financial indicators varies from one bank to another and no uniformity in the relationship of MPS with various financial indicators of the sampled banks was established.

Hence, we can conclude that the Nepalese stock market is not efficient enough to determine MPS in accordance with the respective financial performance during the study period. The market price of share in Nepal is not indicative of company's financial performance in Stock market. Due to the market imperfections and dominance of Bull Market in Nepal, the theoretical doctrines might have deviated to the extent.

5.3 Recommendations

The recommendations based on this study are as follows:

1. The Nepal Stock Market (NEPSE, SEBON) should take necessary effective initiatives to control random fluctuation of MPS and establish the system of regular monitoring and evaluation of stock market.
2. In Nepal Stock Market, the trading of stocks is done only for three hours on weekdays which is a short period of time for investors to make transactions. So it needs to increase the trading hours to facilitate the investors; giving them time to make proper decision. Further it also gives time to circulate the market information to different investors during trading hours.
3. There is a necessity of impartial body to analyze strengths and weaknesses of public companies traded in Nepal Stock Exchange, it should publish the journal, magazines regularly which should disclose correct information and suggestions to public investors. This will supplement the investors to take proper investment decision.
4. Investors should be allowed to place their order through internet.
5. Regulator authorities' staff should not be allowed to invest in secondary market because they will get prior information from the particular company which can be used for manipulation. Although Nepal Rastra

Bank has already imposed their staffs not to invest in the secondary market of Financial Sector. Nepal Security Board & Beema Samitee should also have to restrict their staffs not to invest in secondary Market.

6. Nepal Stock Exchange has to increase number of brokers as well as they have decentralized their service by open their outlets in major developed cities Pokhara, Birgunj & Biratnagar.

7. The commercial Banks also should have their long-term/ strategies regarding the adoption of suitable dividend policy and these policies have to be published in their AGM report at least for next five years.

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