

**THE EFFECTS OF DIVIDEND ON STOCK PRICE: EVIDENCE  
FROM NEPALESE COMMERCIAL BANKS**

**A dissertation submitted to the office of the Dean, faculty of management  
in partial fulfillment of the requirement of the master's Degree**

*by*

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## **Certificate of Authorship**

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "**The effects of dividend on stock price: Evidence from Nepalese commercial banks**". The work of this dissertation has not been submitted previously for the purpose of conferral of any degree nor it has been proposed and presented as part of requirements for any other academic purposes

The assistance and cooperation that I have received during the research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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**Report of Research Committee**

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## Approval sheet

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## **Acknowledgements**

I would like to thank our respected supervisor sir Mr. Chinta Mani Gautam for all the valuable guidance, kind support and recommendation throughout the dissertation process. I extend my gratitude to all the friends and family members who helped me to complete my dissertation. Also, I would to thank all the people who helped me directly or indirectly to fulfilling this thesis work.

Sincerely,

Sanket Kandel

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## Abbreviations

CZBIL	-Citizen Bank international limited
DPR	- Dividend payout ratio
DPS	- Dividend per share
DY	- Dividend yield
EBL	- Everest Bank limited
EPS	- Earning per share
HBL	- Himalayan Bank limited
KBL	- Kumari Bank limited
MPS	- Market price per share
NABIL	- Nabil Bank limited
NIBL	- Nepal investment bank limited
NICA	- Nic Asia Bank limited
NRB	- Nepal Rastra Bank
PCBL	- Prime commercial Bank limited
SANIMA	- Sanima Bank limited
SBI	- Nepal State Bank of India
SBL	- Siddhartha Bank limited
SCB	- Standard chartered Bank limited

## **Abstracts**

*The major objective of this study is to examine the effect of dividends on the share price of commercial banks in Nepal. To achieve this objective of the study, a descriptive and analytical research design has been administrated. Twelve commercial banks were taken as a sample to study out of 27 commercial banks. Samples were selected randomly. In order to obtain an adequate sample size sampling calculator developed by Daniel (1999) was used. Along with this, secondary data were used to carry out the research. All the data for the study were collected from the websites of different Banks as well as the Nepal Rastra Bank (NRB) website. Ten-year data has been collected from the fiscal year 2011/2012 to 2020/2021, so the total study period is ten years. Here, MPS is taken as dependent variables while EPS, DPS, DPR and DY are taken as independent variables. All the data collected from different sources have been analyzed using a correlation matrix and multiple panel data regression model namely the fixed-effect model and random effect model. The result of the Hausman test indicates that the random effect model is more relevant in describing the relationship among given variables. The result of the correlation matrix shows that DY is negatively correlated with MPS while all other variables EPS, DPS and DPR are positively correlated with MPS. Similarly, the Random effect model shows a positive significant relationship between DPS with MPS or a positive insignificant relationship with DPR and EPS while it presents a negative significant relationship between DY with MPS. Thus, after analyzing these results it can be concluded that dividend does affect the share price of commercial banks in Nepal.*

*Findings of this study will be useful for investors to take investment decision before investing in any stock. Moreover, it will be also essential for a manager to take a dividend decision and future student can use it as literature for their dissertation. Since this study has been conducted using 12 sample commercial banks and study period is 10 year, in the future other researchers can conduct study using more or other samples as well as using longer study period.*

*Key words: - MPS, EPS, DPS, DPR and Econometric regression model.*

## CHAPTER- I

### INTRODUCTION

#### 1.1 Background of the study

The dividend is the end result of a discretionary decision made through the board of administrators of an organization. Generally, an organization announces dividends as part of income. Corporate dividend coverage is one of the maximum important troubles in present day company finance. The dividend policy guarantees the division of income among payments to stockholders and reinvestment in the organization (Weston et al., 2004).

Studies about dividend policy shows that investors attach a lot of importance to dividend decisions because they have a major impact on the share price of a firm as one of the major financial decisions the directors of the firm are required to make. A couple of researchers have stated that theoretical and empirical insights into dividend decisions. Randy (1979) stated that dividend is the amount out of earning declared by a company to their investors for their investment and their contribution towards the firms. In general, the dividend payment is not an expense to the firm but the sharing or distribution of profits to each of the firm's shareholders according to the ratio of their shareholding in the firm. Usually, a firm issue dividend on the corporate profits, decided by the board of directors of the firm during Annual General Meeting (AGM). The dividend can be distributed either in cash or by the capitalization of profits as a stock dividend (Baral & Pradhan, 2018).

In the context of Nepal, only a few companies are paying dividends but many other companies are not paying the stable dividend. There are some companies which have never paid a dividend to their investors. Dividend on share is an essential indicator that shows the performance of banks and thereby attracts investors. Investors examine the dividend policy of the banks before they decide to invest in the stock market but due to fluctuation in the dividend policy of commercial banks of Nepal, investors are unable to forecast the future cash flow from cash dividends (Bhandari & Pokharel, 2012). It has been perceived that company which has grown their dividend generally experience an

increase in their stock price and those companies which don't pay or lower their dividend, leads to a fall in stock price trend. Hence, it shows dividend affects the stock price of the company but several researchers argue that it is the information on the payment of dividend that affects the stock price. In fact, that dividend works as a simple sufficient signal of management's interpretation of the firm's current performance and its future prospects.

Dividend Policy refers to a company's policy which determines the number of dividend payments and the amounts of retained earnings for reinvesting in new projects. This policy is related to dividing the firm's earnings between payments to shareholders and reinvestment in new opportunities. In incorporating finance, one of the most important decisions is concerned with the answer to this question should the profits of the firm be distributed to the shareholders as a dividend or must be reinvested in new opportunities and if they must be distributed, what proportion of profit must be paid to shareholder and what proportion must be returned to the business (Hashemijoo et al., 2012).

The dividend is a part of an earning which must be distributed among shareholders. The main purpose of financial management is to maximize the wealth of the firm's owners. Dividends are just more than a tool to distribute the surplus profit of the firm. Any significant difference in the rate of distribution may also influence the share price (Arshad et al., 2015).

Kapoor (2009) asserts that the share prices of a firm tend to be reduced whenever there is a reduction in dividend payments. Moreover, Bishop et al.(2000) contend that managers must not only consider the questions of how much of the company's earnings are needed for investment but also need to think about the possible effect of their decisions on share prices.

A dividend policy is an action program that is used by companies to decide how much residual profit must be paid to shareholders in dividends (Ilaboya & Aggreh, 2013). Dividends are company profits given to shareholders according to the size of share ownership in the company. Retained earnings are part of the company's net income held by the company and are not paid as dividends to shareholders (Tastaftiani & Khoiruddin, 2015). The company uses the retained earnings for investment projects because of the company's monetary interests. But, according to Nazir et al.(2012) the company's

maximum income must be paid as dividends rather than retained earnings so as not to be invested in a less profitable project.

The dividend policy is one of the most important financing decisions which take into account the payment to shareholders in return for their investments. It is an outstanding financial indicator of the firm and firms operating in a given industry. As such, the demand for the firm's equity share depends on the dividend policy managed by that firm (Masum, 2014).

According to Baskin(1989), dividend policy is direct cause by the volatility of the common stock price. It is often believed that dividend is an essential factor regulating stock price movement and it provides various important information's to the investors about the company. Actually, dividend policy comprises the decision of whether to pay out earnings or retain them for some other purpose mainly reinvestment in the business (Vishwanath, 2007). Investors consider carefully how their total returns are divided between dividends and retained earnings (Khan, 2009). As such, managers must select the best model of the dividend policy that maximizes the wealth of shareholders and concentrate on the impact of their decision on stock price because an optimal dividend policy can balance between current dividends and future growth so as to maximize the stock price of the firm (Brigham et al., 1999).

Several studies on the impact of dividends on stock price have been carried out in different parts of the world, particularly in developed countries. Most of the earlier studies show the significant role of dividend policy on the stock price. The corporate firm should follow the appropriate dividend policy to maximize the shareholder's value. Dividend policy is considered one of the important and critical variables affecting the share price (Joshi, 2012). Previously many studies have been conducted in Nepal to examine the impact of the dividend on share price (Manandhar, 1998; Pradhan, 2003 and Joshi, 2012). All these different studies carried out in different periods showed a significant positive relationship between dividends on stock price, while there is no study which is conducted by analyzing the data of recent years, so there is a gap in the study concerning the effect of dividends on the share price in the banking sector in Nepal.

Overall, the major objective of this study is to examine the effects of dividends on the share price. Under this research, different variables such as EPS, DPS, DY, DPR and MPS will be studied as independent and dependent variables respectively.

## **1.2 Problem statement**

Dividend decision being one of the important financial decisions of a corporate firm has been still a most debated issue across the world. There are extensive literatures, theories, and models for facilitating dividend decisions. The finance world is receiving new literatures/ models every year from the researchers and academicians either in the new form or expansion of existing models. After the Modigliani-Miller (1961) paradigms on firms' dividend policy and their market values, there have been considerable debates, both in theoretical and empirical researches on the nature of relationship that exists between a firm's choice of dividend policy and its market value. Debates have centered on whether 100% dividend payout ratio or 100% retention ratio or the mix of dividend payout and retention is optimal dividend decision that affect the value of the firm and shareholder's return. Although, there have been substantial research efforts devoted by different scholars in determining what seems to be an optimal dividend policy for firms, yet there is no universally accepted theory throughout the literature explaining the dividend payout and retention choice of firms. But in the last century, several theories have emerged explaining firms' dividend policy and the resultant effects on their market values. These theories include the dividend irrelevance theory which asserts dividends do not really matter because they do not affect the firm value (Modigliani-Miller, 1961); however, the dividend relevance theory which asserts dividend policy affects the value of a firm. The choice of dividend policies almost always affects the value of the firm (Walter, 1963). The dividend policy does affect the value of a share even when rate of return equal to cost of capital (Gordon, 1962).

Several theories concerning the relationship of dividend policies and stock returns have been documented in the financial literature as share price maximization is the central focus in finance. In 1961, Miller and Modigliani (M&M) advanced the Dividend Irrelevance Theory which theorizes that in a perfect world where there is no corporate and personal taxes, no transaction and floatation costs, no single individual who can affect a security's price through his/ her trade, all individuals have similar expectations with respect to a company's future investment and profit, and where a company has a planned



and fixed investment policy Ross et al.(1999), the value of a company and thus its share prices are unaffected by the distribution of dividends. Hence, the value of a company is determined solely by the earning power and the risk of its assets but not by the manner in which it splits its earnings stream between retained earnings and dividends. The dividend irrelevance theory is further supported by many researcher such as (Black & Scholes, 1974) and (Chen et al., 2002).

However, Gordon(1963) asserted that dividend policy does affect value of the firm and market price of shares and thus, dividend is relevance. This relevancy theory is further supported by various empirical studies like Travlos et al.(2001), Baker et al.(2002), Myers and Frank(2004), Dong et al. (2005), Maditinos et al.(2007),These studies conclude that payment of dividend affects share price.

Black and Scholes (1974) found no relationship between dividend policy and stock prices. Their results further explained that dividend policy does not affect the stock prices and it depends on investors' decision to keep either high or low yielding securities; return earned by them in both cases remains the same. However, Joshi(2012) and Pradhan (2003) stated that dividend has a significant effect on a stock price.

Harlina andKhoiruddin(2018) conducted the research on dividend policy and economics variables to stock price volatility, where researchers found that earning per share (EPS) negatively affect the stock price volatility, whereas Singh and Tandon(2019) concluded that EPS is positively correlated with MPS.

Dividend policy is one of the most widely researched topics in the field of corporate finance. But the question of whether dividend policy affects stock price still remains debatable among managers, policymakers and researchers. Every firm operating in a given industry follows some dividend model or dividend policy and it is considered as an indicator of the financial performance of the firm. An increase in dividend payment is seen as a positive indicator whereas a decrease in a dividend payment is seen as a negative indicator on the future earning prospect of the company. Here the question is raised whether or not the dividend policy actually impact on the share price of a firm (Vijayakumar, 2010; Sattar et al., 2017).

There are two different views regarding the dividend policy and stock price. Those who think dividends have more impact in determining share price, argues that shareholder

prefers current return rather than future return and dividend distribution is an indicator of earning capacity in future. The other views are based on the importance of retained earning. They argue that retained earnings are indicators of future investment opportunities. The shareholders can enjoy tax advantage in retained earnings. For tax purpose, retained amount is not treated as income is utilized (Joshi, 2012).

There has been an extensive debate in dividend policy and its effects on the value of a firm. Since in the middle of the last century, many studies have been conducted to examine the impact of dividend policy on the market price of stocks. Some researchers have argued that regular payment of dividends to investors significantly increase the market price of shares (Gordan, 1963). On the other hand, while some others have debated on irrelevance of the dividends (Miller & Scholes, 1978). Others have opined that payment of dividends leads to the reduction in shareholders wealth. Since there was diverse opinion among researchers, in the past about whether or not the dividend policy affects the share price of the company. Hence, this study may encounter the following questions.

- What is the current status of EPS in the Nepalese commercial banks?
- What is current status of DPS in the Nepalese commercial banks?
- What is the current status of DPR in the Nepalese commercial banks?
- What is the current status of DY in the Nepalese commercial banks?
- What is current status of MPS in the Nepalese commercial banks?
- Does dividend influence the market price of commercial banks in Nepal?
- What is the relationship between dividend and stock price?
- Does different indicator such as EPS, DPS, DPR and DY affect the share price of commercial banks in Nepal?

### **1.3 Objective of the study**

The major objective of this study is to examine the effects of dividends on share price of the Nepalese commercial banks. Other specific objectives are outlined as follows.

- To analyze the current status of EPS, DPS, DY, DPR and MPS of commercial banks of Nepal.
- To examine the influence of dividend on the market price of commercial banks.
- To examine the relationship between EPS and MPS

- To examine the relationship between DPS and MPS
- To assess the relationship between DY with MPS
- To analyze the relationship between DPR with MPS

#### **1.4 Rational of the study**

Investment in the capital market is increasingly becoming popular in the context of Nepal. Higher numbers of people are investing their savings in different stocks in the capital market in order to gain some return on their investment. People nowadays are considering different ratios such as dividend distribution capacity of the company, EPS, DPS and price-earnings ratio before investing, and it is believed that among all ratios dividend is most essential. So, this research will be helpful for all those investors who consider the dividend history of the company and how the dividend affects the share price before investing in the equity of the firm. Moreover, this study will also be helpful for the investor who is trying to determine how the market price per share is related to the different financial indicators such as EPS, DPS, DY and DPR.

Additionally, the results could be imperative for the management of different companies to formulate the optimal dividend policy in such a way as to maximize the shareholder's wealth.

Similarly, the results and findings of the study will provide knowledge to the university students about the impact of the dividend on the share price as well as it may be helpful for the future master's degree students who will write the dissertation, which they can use the research as a literature review.

#### **1.5 Limitations of the study**

Despite the research is done with the utmost care and in a meticulous way, many limitations are confront in the research. Some of the main limitations of the study are time constraint, financial problems and lack of research experience. Moreover, the study is based on the secondary and few years data has used for the study. Some of the limitations of the study are listed below.

- The study is limited to data obtained from various sources such as NRB websites, Nepal stock exchange and websites of different commercial banks.
- The sample size is adequate; however, do not contain the entire population of 27 commercial banks.

- The study is focused only to examine the impact of dividend on share price of commercial banks.
- Conducting the research for academic purpose has always limited time, so due to limit time frame, the depth analysis in the subject matter is not possible.

## **1.6Chapter design**

This study has five chapters, which are outlined below as follows.

### **Chapter-I: introduction**

The first chapter of the study is introduction, which highlighted the information of the research area, background of the study, problem of the statement, objectives, rational and limitations of the study.

### **Chapter-II: Review of literature**

The review of the literature is the second chapter of the study, which assured that they are familiar with important research that would be carried out in similar areas by earlier scholars in related areas. It also established that the study links in a chain of research that is developing and emerging knowledge about the concerned field.

### **Chapter-III: Research methodology**

Research methodology is the third chapter of the study that describes the research methodology adopted in carrying out the present research. It will deal with research design, sources of the data, data processing procedure, population and sample, period of the study, method of analysis and financial and statistical tools.

### **Chapter-IV: Data presentation**

Data presentation and analysis is the fourth chapter concerned with the presentation, analysis and interception of the data. The segment where the data required for the study are presented analyzed and interpreted by using the tools and techniques of financial management such as ratio analysis and statistical tools i.e, coefficient of variation, correlation coefficient, and regression analysis in specified form to meet the stated objectives of the study.

**Chapter-V: Summary, Conclusion and Recommendation**

Summary, conclusion and recommendation is the fifth chapter and the final chapter concerned with the suggestive framework that consists with the overall findings, conclusions and recommendation of the study. Besides above chapters, this study paper consist a separate appendix and bibliography for those materials and books which hasused in the process of preparing this thesis report. It also gives important suggestions to the concerned organizations for the better improvement.

At the end of the chapter reference and appendix has been incorporated.

## **CHAPTER- II**

### **LITERATURE REVIEW**

This chapter is concerned with a review of literature relevant to the dividend policy and dividends of commercial banks in Nepal. Every study is very much based on past knowledge. An argument in dividend decisions is a major concern to the different companies. Specifically, the factors affecting dividend decision is a major argument among the companies. In an attempt to answer this argument, academics and practitioners developed a no of theories, which have been subjected to empirical tests. The academic literature has been very helpful to provide clear guidance on practical issues and for this purpose, the literature review section is being carried out, which consists of valid and authentic books and journal articles concerning past studies on dividend policy and the impact or effect of dividends on the market value of a firm.

#### **2.1 Theoretical review of literature**

Dividend theory can be classified into two types which are as follows.

- Dividend relevance theory
- Dividend irrelevance theory

##### **2.1.1 Dividend relevance theory**

The relevance of dividend policy supports the view that dividend policy has a profound impact on the value of a company. There are two theories under this school of thought as Walter model and the Gordon model which are described below.

Walter (1963) considers that dividends are relevant and they do affect the share price. He showed the relationship between the internal rate of return ( $r$ ) and the cost of capital of the firm ( $k$ ), to give a dividend policy that maximizes the shareholders' wealth. Walter's model is based on the following assumptions

- Retained earnings are the only source of finance available to the firm, with no outside debt or additional equity used.
- $r$  and  $k$  are assumed to be constant and thus additional investments made by the firm will not change its risk and return profiles.
- Firm has an infinite life.

- For a given value of the firm, the dividend per share and the earnings per share remain constant.

The model studied the relevance of the dividend policy in three situations: (a)  $r > k_e$ , (b)  $r < k_e$ , and (c)  $r = k_e$ . When the return on investment is greater than its cost of equity capital, the firm can retain the earnings, since it has better and more profitable investment opportunities than the investors. It implies that the return of re-investment of the earnings is higher than what they earn by investing the dividends income. In the second case, the return on investment is less than the cost of equity capital and in such situation the investors will have a better investment opportunity than the firm. This suggests an optimal dividend policy of 100% payout. This policy of a full pay-out ratio will maximize the value of the firm. Finally, when the firm has a rate of return equal to the cost of equity capital, the firm's dividend policy will not affect the value of the firm. Gordon (1962) gave importance to the dividend policy of the firm. Gordon used the dividend capitalization approach to study the effect of the firm's dividend policy on the stock price. Gordon's model is based on the following assumptions:

- No external financing is available for the corporation and retained earnings would be used to finance expansion as well.
- Return on Investment ( $r$ ) and the cost of equity capital ( $k_e$ ) remain constant. Firm has an infinite life.
- The retention ratio remains constant and hence the growth rate is also constant ( $g = br$ ).
- $k > g$  i.e., cost of equity capital is greater than the growth rate.

Gordon concluded that dividend policy of a firm affects its value. The conclusion of the study is that investors give more value to the present dividends rather than future capital gain. This argument insisted that an increase in dividend payout ratio leads to an increase in the stock price for the reason that investors consider the dividend yield ( $D_1/P_0$ ) is less risky than the expected capital gain.

### 2.1.2 Dividend irrelevance theory

Miller and Modigliani (1961) MM theorized that the dividend policy is irrelevant like in the capital structure irrelevance propositions with no taxes or bankruptcy cost. This is

known as the "dividend irrelevance theory". According to them, the dividend policy of a firm is irrelevant since it does not have effect on the price of share of the firms, that it does not affect the shareholder wealth. They expressed that the value of the firm is determined by the earning power of the firm's assets and investment policy and not dividend decisions by splitting the earnings of retention and dividend.

The common assumptions of this theory are as follows

- There is a perfect capital market in which all investors behave rationally.
- Corporate tax does not exist therefore there is no difference between tax rates in capital gains and dividends
- The flotation costs on securities are ignored
- Fixed investment policy
- No risk of uncertainty

Based on these assumptions and using the process of arbitrage Miller and Modigliani have explained the irrelevance of the dividend policy. Firms have two options for utilization of its profit after tax i.e. (i) to retain the earnings and plough back for investment purposes (ii) distribute the earnings as cash dividends. If the firm selects the second option and declares dividend then it will have to raise capital for financing its investment decisions by selling new shares. Here, the arbitrage process will neutralize the increase in the share value due to the cash dividends by the issue of additional shares. This makes the investor indifferent to the dividend earnings and the capital gains since the share value of the firm depends more on the future earnings of the firm than on its dividend policy. Thus, if there are two firms having similar risk and return profiles the market value of their shares will be similar in spite of different payout ratios.

## **2.2 Empirical review of literature**

In the middle of the late 20th century, many researchers conducted research on the impact of dividends and retained earnings on the stock price. Lintner propounded his theory before MM's irrelevance theory, in which the researcher demonstrated that the company's current year dividend depends on its current year earnings and its last year's earnings. While other researchers who conducted and published their research presented different findings as per their study. Friend and Puckett (1964) oppose the dividend irrelevance theory and concluded that dividends had a major impact on the stock price. Similarly,



Chawla and Srinivasan (1987) also said dividends affect the share price. However, Black and Scholes (1974) supported the dividend irrelevance theory, where the result of his study was dividend does not influence the stock price.

Table 1

*Empirical Review of Literature*

Studies	Major findings
Lintner (1956)	Company's current year dividend is depending on its current year earning and its last year dividend. It demonstrated that every company wants to maintain constant rate of dividend even the result is not up to the benchmark. Dividend.
Friend and Puckett (1964)	Dividend has a major impact on stock price while vulnerable retained earnings impact on the stock price.
Black and Hopes (1974)	It is impossible to predict the actual impact of dividend policy on stock price despite the use of the best method such as dividend yield. Changes in share price due to dividend is temporary, it may fade away if there is no expected future earnings.
Chawla and Srinivasan (1987)	The impact of dividend is more pronounced than that of the retained earnings. But the market has started shifting towards more weight for retained earnings.

Lintner (1956) proposed the Lintner's model for corporate dividend policy called the "Lintner's dividend policy model". It proposes that, a company's current year's dividend is dependent on its current year earnings and its last year dividend. Dividends are thus, defined as the weighted average of a company's past earnings. The model theorizes the process in which a publicly-traded company sets its dividend policy. It logically assumes that every company wants to maintain a constant rate of dividend even if the results in a particular period are not up to the benchmark. It assumes that investors will prefer to

receive a particular dividend payout. The Lintner's Formula the Lintner's model can be mathematically expressed as:

$$D_t = D_{t-1} + a_f \times [(E_t \times t_p) - D_{t-1}]$$

where:  $y = t - 1$

$D_t$  = the dividend per share at time  $(t - 1)$ .

$D_{t-1}$  = the dividend per share at time  $(t-1)$ , i.e. last year's dividend per share

$a_f$  = speed of adjustment rate or the partial adjustment coefficient, with 0 less than or equal to  $a_f$  less than or equal to 1.

$E_t$  = is the earnings per share (or free-cash-flow per share) at time  $t$ .

$t_p$  = the target payout ratio on earnings per share (or on free-cash-flow per share), with 0 less than or equal to  $t_p$  less than or equal to 1

Lintner used the above equation to explain the behavior of corporate dividend policy along with other variables explaining the stock prices using aggregate data in most of his tests.

Friend and Puckett (1964) examined the relationships among dividends and stock prices with the usage of regression analysis of a hundred and ten companies from 5 industries during 1956 to 1958. The regression outcomes  $P_t = a + bD_t + CR_t$  exhibited the robust dividends impact and comparatively vulnerable retained earnings impact on 3 of the 5 industries, i.e. chemicals, foods and steels. Again, the study examined regression equation via way of means of including lagged earnings price ratio  $P_t = a + bD_t + CR_t + d(E/P)_{t-1}$ . The end result confirmed that greater than 80% of the variant in stock prices defined via way of means of those 3 independent variables. Dividends have a major impact in stock prices. The observation also exhibits the dividends and retained income coefficients are towards every apart from first set of regression.

Black and Hopes (1974) researched the effect of dividend yield and dividend policy on the common stock price and returns, where the researcher concluded despite the use of the best method such as dividend yield to analyze the effect of dividend policy on share price, it is impossible to tell the actual impact of dividend policy on the stock price. Moreover, a corporation that increases its dividend can predict that this will not affect its stock price. Price may change temporarily based on the change in dividend, because the market may believe that the change indicates something about the probable future courses of change. It is even argued that the temporary impact of dividends on share price may fade away if it is proved that the changes are not made in predicted future earnings.

Moreover, the firms may want to opt for their dividend policy on the basis that changes in dividend policy do not affect the stock price. It is also argued that the financing need of the firm should be done by retained earnings as it is an inexpensive way, rather than distributing dividend to the shareholders.

Chawla and Srinivasan (1987) carried out a study to identify the effect of dividends and retained earnings on stock price in the Indian context. Researchers attempted to test the dividend retained earnings hypothesis and analyze the structural changes in the estimated relations over time. The results showed that in the case of the chemical industry both dividends and retained earnings significantly explain the variations in share price. The impact of dividends is more pronounced than that of retained earnings. But the market has started shifting towards more weight for retained earnings.

### **2.2.1 Literature review on MPS and EPS**

Since many investors are always concerned about the earning of the company before investing in any stocks, the effect of EPS of MPS has been reviewed by analyzing the study of different Authors in different time period. The major finding of all the research shows positive relationship between MPS and EPS.

Table 2

#### *Literature review on MPS and EPS*

Studies	Major findings
Vijaykumar (2010)	EPS has a positive association with MPS
Masum (2014)	EPS has a statistically significant positive impact on share price
Farrukh et al. (2017)	Positive relationship between EPS and MPS
Adesina et al. (2017)	Positive relationship between EPS and MPS
Harlina and Khoiruddin(2018)	Stock price volatility is positively affected by share price volatility
Singh and Tandon (2019)	EPS has a positive impact on MPS

Vijaykumar (2010) researched to examine the extent which some indicators of financial performance influence the stock price. The study uses correlation analysis, factor analysis and multiple linear regressions to analyze the impact of financial performance on the market price of the share. The regression results of the study reveal that variables are taken for the study, i.e., Book value, Earnings per share, Dividend cover, Growth rate and Dividend yield have a positive association with the market price of Ashok Leyland and Dividend per share and Price - Earnings ratio have a negative association with the market price of its equity shares.

Masum (2014) carried out research to find out the impact of dividend policy on the stock price of commercial banks listed on the Dhaka stock exchange. The panel data approach is used to explain the relationship between dividends and stock prices. The major finding of the study is there is a significant negative relation between DY and stock price. ROE and EPS have positive effects on the stock price and PAT has a significant negative effect on the stock market prices of selected commercial banks.

Farrukh et al. (2017) conducted research on the topic impact of dividend policy on shareholder's wealth and firm performance in Pakistan. The major objective of this research is to investigate the influence of dividend policy on a firm's performance and shareholders' wealth. Researcher used hypothesis testing and regression analysis as a methodology. The major finding of this study is dividend policy is positively linked with earnings per share and share price. Moreover, dividend policy is also significantly positively associated with return on equity. This research recommends to designs a dividend policy based on market psychology. Companies should be vigilant enough while paying dividends if they want to increase their share prices. Companies should adopt stable dividend policies because the company which pays stable dividends will have a positive impact on shareholders' wealth and firm's value.

Adesina et al. (2017) examined dividend policy and share price valuation in the Nigerian banks. The study which covered ten years made use of secondary data sourced from published financial statements of major banks in Nigeria, namely; Access Bank, First Bank, United Bank for Africa and Guarantee Trust Bank. The study employed the Ordinary Least Square (OLS) regression model in analyzing the data obtained. Findings from the study show that a significant positive relationship exists between earnings per

share and market price. The study concluded that banks should put in place an efficient and robust dividend policy and leverage the new e-dividend payment initiative for better performance. An amendment should be carried out to Company and Allied Matter Act (CAMA) 2004 as amended to compel any company with a total asset value over N10 billion to be listed on the Nigerian capital market to attract more investors.

Harlina and Khoiruddin (2018) examined the impact of dividend policy and economic variables on stock price volatility. Researchers compared the scenario of two different stock markets of Indonesia and Malaysia. Research is carried out by taking the sample from the companies listed on the Indonesia stock exchange and Malaysia stock exchange in 2016-17 and purposive sampling was used for sample collection. Researchers collected data from 58 companies in Indonesia and 28 firms in Malaysia. The regression analysis has been used to examine the relationship between variables. The research concluded that earning per share has a negative effect on the share price volatility. Moreover, the Exchange rates variables in Indonesia have a negative effect on stock price volatility, the higher the exchange rate, the lower the stock price volatility while the exchange rate in Malaysia has a positive effect. Variable interest rates in Indonesia have a negative effect, but interest rates in the Malaysian State have no effect on stock price volatility.

Singh and Tandon (2019) carried out research to examine the effect of dividend policy on stock price evidence from the Indian market. The researcher collected data from 50 companies listed on the National stock exchange (NSE) from 2008-to 2017. The data have been analyzed by employing multiple panel data regression models namely pooled regression, fixed effect model and the random-effects model. The Hausman test model has been used to suggest the most appropriate regression model. The researchers concluded that the result of the correlation indicates that DY has a negative impact on MPS while other variables such as EPS, DPS, return on earning and RR are positively correlated with MPS. Similarly, regression results show that EPS has a positive impact on MPS, while DY, ROE and PAT have a negative impact on MPS at a 5 per cent or 10 per cent level of significance

### **2.2.2 Literature review on MPS and DY**

It is known that dividend yield is one of the main indicators that impact on the share price of a company. Therefore, while conducting this study effect of dividend yield on market

price per share has been reviewed. The result and finding of all the study stated that divided yield negatively affect the share price or it has a negative relationship with market price per share.

Table 3

*Literature review on MPS and DY*

Studies	Major findings
Hussainey et al. (2011)	Positive relation found between dividend yield and stock price changes.
Hashemijoo et al. (2012)	Significant negative relationship between share price volatility and DY
Zakaria et al. (2012)	DY is insignificant and negatively related to the movement of stock price
Nazir et al. (2012)	Significant negative relationship between DY and MPS
Masum (2014)	DY has insignificant negative relationship with MPS
Hunjra et al. (2014)	Dividend yield is negatively related to stock price
Singh and Tandon (2019)	DY has negative impact on MPS

Hussainey et al. (2011) conducted research to examine the relation between dividend policy and share price changes in the UK stock market. Multiple regression analyses are used to explore the association between share price changes and both dividend yield and dividend payout ratio. A positive relation is found between dividend yield and stock price changes, and a negative relation between dividend payout ratio and stock price changes. In addition, it is shown that a firm's growth rate, debt level, size and earnings explain stock price changes. The research concluded that dividend policy is relevant in determining share price changes for a sample of firms listed on the London Stock Exchange.

Hashemijoo et al. (2012) carried out this study to examine the relationship between dividend policy and share price volatility with a focus on consumer product companies listed in the Malaysian stock market. For this purpose, a sample of 84 companies from 142 consumer product companies listed in the main market of Bursa Malaysia was selected and the relationship between share price volatility with two main measurements of dividend policy, dividend yield and payout, was examined by applying multiple regression for a period of six years from 2005 to 2010. The empirical results of this study showed a significant negative relationship between share price volatility with two main measurements of dividend policy which are dividend yield and dividend payout.

Zakaria et al. (2012) studied the impact of dividend policy on the share price volatility of Malaysian construction and material companies. The objective of this study is to examine the impact of a firm's dividend policy (DY) and dividend payout ratio (DPR) on the share price of the Malaysian listed construction and material companies. The empirical result suggests there is a significant positive relationship between the DPR of a firm and share price volatility. DY is insignificant and negatively related to the movement of stock prices.

Nazir et al. (2012) studied to determine the effect of dividend policy on the volatility of stock prices of the financial sector firms of Pakistan listed on the Karachi Stock Exchange after controlling for earning volatility, assets growth, firm size and leverage. Fixed effect regression analysis was performed to see the impact of dividend policy on the stock price volatility. The results showed that there is a significant negative relationship between dividend yield and price volatility and also between dividend payout and price volatility in KSE listed firms. The study indicates that dividend policy is an important tool in setting share prices in an emerging economy like Pakistan.

Mausum (2014) carried out research to find out the impact of dividend policy on the stock price of commercial banks listed on the Dhaka stock exchange. The panel data approach is used to explain the relationship between dividends and stock prices. The major finding of the study is there is a significant negative relation between DY and stock price. ROE and EPS have positive effects on the stock price and PAT has a significant negative effect on the stock market prices of selected commercial banks.

Hunjra et al. (2014) conducted research to see the effect of dividend yield, dividend payout ratio, return on equity, earnings per share and profit after tax on stock prices in Pakistan. For this purpose, four non-financial sectors (Sugar, Chemical, Food and personal care, and Energy) have been selected. A sample of 63 companies listed on the Karachi stock exchange was analyzed for the period 2006-to 2011. The ordinary least square regression model has been applied to panel data. The results indicate dividend yield and dividend payout ratio which are both measures of dividend policy have a significant impact on the stock price. The dividend yield is negatively related to stock price and the dividend payout ratio is positively related to the stock price which means that these results are against dividend irrelevance theory. This paper shows new insights for policymakers to improve the performance of the Karachi stock exchange.

Singh and Tandon (2019) examined the effect of dividend policy on stock price evidence from the Indian market. The researcher collected data from 50 companies listed on the National stock exchange (NSE) from 2008-to 2017. The data have been analysed by employing multiple panel data regression models namely pooled regression, fixed effect model and the random-effects model. The Hausman test model has been used to suggest the most appropriate regression model. The researchers concluded that the result of the correlation indicates that DY has a negative impact on MPS while other variables such as EPS, DPS, return on earning and RR are positively correlated with MPS. Similarly, regression results show that EPS has a positive impact on MPS, while DY, ROE and PAT have a negative impact on MPS at a 5 per cent or 10 per cent level of significance.

### **2.2.3 Literature review on MPS and DPR**

The dividend payout ratio shows how much a company or firm provides a dividend to its shareholders out of its total earnings. The dividend payout ratio is one of the most important indicators analyzed by investors before investing in the equity share. Hence, it has been reviewed or taken as an independent variable in this study. The result shown by the different articles are varied. Some researcher concluded DPR positively affect share price while other find that it has a negative effect on the share price.



Table 4

*Literature review on MPS and DPR*

Studies	Major findings
Nishat and Irfan (2004)	DPR has significant impact on share price volatility
Ilaboya and Aggreh (2013)	Share price volatility is negatively influenced by a DPR
Hunjra et al. (2014)	DPR is positively related with stock price
Lashgari and Ahmadi (2014)	DPR has a significantly negative impact on share price volatility
Iftikhar et al. (2017)	DPR has a significant positive impact on share price
Sattar et al. (2017)	DPR has a negative impact on next year earning of firm

Nishat and Irfan (2004) attempted to determine the impact of dividend policy on stock price risk in Pakistan. One hundred and sixty listed companies on Karachi Stock Exchange are examined for a period from 1981 to 2000. The empirical prediction is based on a cross-sectional regression analysis of the relationship between stock price volatility and dividend policy after controlling for firm size, earning volatility, leverage and asset growth. The major finding of the study is that dividend policy measures (dividend yield and payout ratio) have a significant impact on the share price volatility.

Ilaboya and Aggreh (2013) investigated the impact of dividend policy on the share price volatility of the companies listed on the Nigerian stock exchange. The researcher used a simple random sampling technique to select the sample from the total observation and 26 samples were selected to carry out the study using data over a period of 8 years from 2004 to 2011. In this study share price volatility was taken as a dependent variable, while dividend yield and dividend payout ratio were taken as independent variables. Regression analysis was a statistical tool used by the researcher to analyze the relationship between independent and dependent variables. The study concluded that dividend yield showed a positive relation with share price volatility whereas dividend payout indicates a negative

and insignificant impact on share price volatility. In the end, researchers recommended that the companies should consider carefully their approach to enhance the shareholders' wealth and along with this, they need to think about the company's financial options to meet the future investment.

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Hunjra et al. (2014) conducted research to see the effect of dividend yield, dividend payout ratio, return on equity, earnings per share and profit after tax on stock prices in Pakistan. For this purpose, four non-financial sectors (Sugar, Chemical, Food and personal care, and Energy) were selected. A sample of 63 companies listed on the Karachi stock exchange was reviewed for the period from 2006-to 2011. The ordinary least square regression model has been applied to panel data. The results demonstrate that dividend yield and dividend payout ratio, which are both measures of dividend policy have a significant impact on the stock price. The dividend yield is negatively related to stock price and the dividend payout ratio is positively related to the stock price which means that these results are against dividend irrelevance theory. This research provides new insights for policymakers to improve the performance of the Karachi stock exchange.

Lashgari and Ahmadi (2014) have studied to observe the effect of dividend policy on share price volatility in the Tehran Stock Exchange. The numbers statistic networks are 470 corporations in Tehran Stock Exchange out of which fifty-one corporations from

those statistic groups all through 2007 to 2012 by limiting the corporations that meet a few Criteria for doing the research. The statistical version used was a multivariable regression model and for checking out compound data (panel) had been used. The result indicated at the error level of 5%, the dividend payout ratio has a substantially bad impact on stock price volatility and the asset increase rate has a substantially fine impact on stock price volatility.

Iftikhar et al. (2014) tested the effect of dividend policy on the stock price of a firm. To examine the effect of dividend policy on the stock prices the banking sector companies have been selected. The 10 years (2005 to 2014) monetary facts of 5 banks have been accumulated from their monetary reviews and websites of the State Bank of Pakistan and Karachi Stock Exchange. Hypothetical statements have been designed to offer a route to examine. The outcomes display that dividend payout and dividend per share have a significant positive effect on stock prices as well as outcomes found that a rational dividend policy performs a vital function in attracting respectable investors and contributes loads to strengthening the capital shape of a firm.

Sattar et al. (2017) investigate the connection between the dividend payout ratio and the profitability of a firm. For this, two primary sectors of Pakistan are selected, energy and fabric and hired the date of 2004–2015. Researchers used the logarithmic regression analysis. The outcomes of logarithmic regression display that there's a negative effect of dividend payout ratio on subsequent year earnings of a firm.

#### **2.2.4 Literature review on MPS and DPS**

Dividend per share can be calculated by dividing the total dividend declared to shareholders by the total number of outstanding shares. It is the most important indicator that is necessary to consider carefully before investing in any stocks. It is often said that a company with a high dividend per share has a high market price per share. Therefore, by considering this it has been taken as one of the independent variables of this study. Under this review, different articles published by different authors have been reviewed carefully; in which some researchers mentioned that there is a positive relationship between DPS with MPS whereas others stated that it has no relationship or negative impact.

Table 5

*Literature review on MPS and DPS*

Studies	Major findings
Hasan et al. (2013)	Positive relationship between DPS and MPPS
Sharif et al. (2018)	DPS has an insignificant relation with share market price
Singh and Tandon (2019)	DPS has no effect on MPPS
Arsal (2021)	DPS does not impact on the value of the company

Hasan et al. (2013) studied to examine the relationship of dividend policy on the share price in the context of Bangladesh. The research is based on secondary data and data were collected from four different industries like Automobile, Cement, Textile and Pharmacy. They collected data from 28 different companies comprising four different sectors for the period of five years from 2005 to 2009. Correlation and regression analysis has been used to analyse the data. F-tests have been performed to test the statistical significance of the parameters at a 1% level of significance. According to the regression model, the major finding of the study is a positive relationship between MPPS and DPS, and MPPS and REPS. Moreover, the result has also shown that highly payout industries have more MPPS than low payout industries. The study has proved that there is a significant effect of dividend policy on MPPS which supports the relevance theory of the dividend policy.

Sharif et al. (2018) investigated the effect of dividend policy on the share price. The primary objective of the study was to see if there exists any relationship between dividend policy and stock prices. Researchers collected data from forty-five non-financial companies listed on the KSE-100 index which have earned and distributed dividends to their stockholders for a period of 12 years. Pooled regression, fixed and random effects have been used to test and analyse data because the nature of the data was the panel. Convenience sampling was used to collect the sample from a whole population. Regression Results showed that Dividend per Share and Retention Ratio has an insignificant relationship with Share Market Prices while dividend Payout Ratio has a significant positive relationship with Share Prices. The researcher used PAT, EPS and

ROE as independent variables. Additionally, the result of the study showed that PAT has insignificant relation to stock price. EPS has a positive significant relation with share price while ROE has a negative insignificant relation with the stock price. Researchers also suggested that firms should pay a regular dividend because it will enhance the share price.

Singh and Tandon (2019) examined the effect of dividend policy on stock price evidence from the Indian market. The researcher collected data from 50 companies listed on the National stock exchange (NSE) from 2008-to 2017. The data have been analysed by employing multiple panel data regression models namely pooled regression, fixed effect model and the random-effects model. The Hausman test model has been used to suggest the most appropriate regression model. The researchers concluded that the result of the correlation indicates that DY has a negative impact on MPS while other variables such as EPS, DPS, return on earning and RR are positively correlated with MPS. Similarly, regression results show that EPS has a positive impact on MPS, while DY, ROE and PAT have a negative impact on MPS at a 5 per cent or 10 per cent level of significance.

Arsal (2021) conducted a study to examine the effect of earnings per share (EPS) and dividend per share (DPS) on the market price of the company listed on the Indonesian stock exchange. The researcher did the study over a period of four years between 2014 and 2017. Data were accumulated from 6 varied food companies, which are listed on the Indonesian share market. In order to determine the relationship of DPS and EPS with the market value of the firm the researcher used multiple regression models. The major finding of the study was the value of the firm is simultaneously affected by an EPS and DPS. The researcher concluded that investors should use or consider EPS analysis before making any decision to invest their money.

### **2.2.5 Literature review of Nepalese article**

While conducting this research, different Nepalese research articles were also reviewed. Where it has been found that different researchers have done their research on a similar topic such as the impact of dividends on the share price in different time periods or using different variables.

Table 6

*Literature review of Nepalese article*

Studies	Major findings
Manandhar (1998)	Dividend per share and return on equity has a positive impact on market capitalization ;however, EPS, P/E ratio, and DY have negative effect
Pradhan (2003)	Significant effect of dividend while very little influence of retained earning so it indicates that Nepalese investors are more interested in dividends
Chhetri (2008)	Positive relationship between dividend and stock price
Joshi (2012)	Impact of dividend is greater than retained earning in Nepal and dividend has a significant effect on share market price
Bhattarai (2016)	Significant positive relationship between share price and dividend payment
Baral and Pradhan (2018)	Significant impact of dividend on the market share price
Lamichhane and Rai (2021)	Positive relationship between dividend and market price per share

Manandhar (1998) studied dividend policy and the value of the firm to identify the determinants of dividend policy in the context of Nepal. The study found that dividend per share and return on equity have a positive impact on market capitalization while earning per share, price-earnings ratio, and dividend yield have a negative impact. It was also found a positive relationship between dividends and market capitalization.

Pradhan (2003) conducted research to examine the effect of dividend payment and retained earnings on the market price of the share in the context of Nepalese companies. The outcome of the study demonstrates the strong dividend and very weak retained earnings effect on the market price of the share. A study reveals the influence of dividends and an absence of retained earnings has an effect on the share price. Dividends were found comparatively more pleasing among Nepalese investors. They were therefore not indifferent toward dividends and retained earnings. The researcher used secondary data to carry out research and required data were taken from Financial Statements of Listed Companies and from Nepal Stock Exchange Ltd. The total population of the study

was 177, while the researcher chooses only 29 as a sample out of the total observation of the study.

Chhetri (2008) asserted that there is variation in the financial position of companies, which pay high and low dividends. The research showed a positive relationship between dividends and stock price. Moreover, the coefficient of the dividend was higher than the coefficient of retained earnings.

Joshi (2012) conducted research on the effects of dividends on stock price in Nepal in order to examine whether or not dividends impact share price, particularly in the banking and non-banking sector. Joshi used descriptive and analytical research design to carry out the research. Moreover, secondary data were used to test this impact. The researcher used a multivariate linear regression analysis to analyze the impact of dividends on the share price. Furthermore, the researcher used current market price (MPS) as a dependent variable, while dividend per share (DPS), Retained Earning per share (REPS), Lagged price Earnings ratio (P/E) and Lagged market price per share (MPS) as an independent variable. The researcher concluded that the impact of dividends is stronger than retained earnings in the case of Nepal and both banking and non-banking sector companies' share price is affected by the dividend.

Bhattarai (2016) carried out research to analyze the impact of dividends on the stock price of commercial banks in Nepal. The researcher employed a causal-comparative causal-comparative research design to conduct research. Moreover, out of the total population, only six commercial banks were taken as a sample and the study was done for a period of seven years starting from 2010 to 2016 data were collected from various sources like annual reports of the bank. Pooled OLS model, fixed effect model and random effect model were used to analyze all the collected data. The researcher used share price as a dependent variable, while dividend per share was taken as an independent variable. The result of the study as per the regression model demonstrates that dividend per share has a positive and statistically significant impact on the share price of a commercial bank, whereas size and profitability have a negligible impact on the share price of a commercial bank. Therefore, the research concluded that the rise in dividend payment can increase the share price of commercial banks in Nepal.

Baral and Pradhan (2018) conducted a study to examine the effect of dividend policy on the share price of a commercial bank in Nepal. Researchers collected data from ten commercial banks for the period of 5 years starting from F/Y 2012/13 to 2016/2017 to carry out the research and they selected the sample banks based on their performance on the Nepal stock exchange that is top gainers and top losers. The major purpose of the study was to examine the relationship between different independent and dependent variables of the study. Here researcher used MPS as an independent variable, while EPS, P/E ratio and DPR were taken as dependent variables. The researcher takes different statistical tools such as ANOVA and Wilcoxon, descriptive statistics, correlation and regression to analyze the different variables and data of the study. The result of the study concluded that variables like EPS and P/E ratio had a positive impact on stock price while DPR had a negative impact on stock price in the case of top gainers commercial banks. However, all the variables such as EPS, P/E and DPR have positive effects on stock price in the case of a top loser bank.

Lamichhane and Rai (2021) carried out research on dividends, earnings and stock price in the case of Nepalese insurance companies. The major objective of the research is to examine the relationship between dividends, earnings and stock prices. Researchers took market price per share and stock return as dependent variables while earning per share, dividend per share, dividend payout ratio, price-earnings ratio, return on equity and return on assets were taken as independent variables. 15 insurance companies were used as a sample from the total population and the study period is 6 years starting from 2011/2012 to 2017/2018. Secondary data were used and all the data was collected from different sources such as annual reports of the sampled insurance companies. All the collected data were analysed using a correlation coefficient matrix and regression analysis. The result of the analysis shows that earning per share has a positive relationship with market price per share and stock return. Similarly, the P/E ratio, return on equity, dividend per share and return on assets have a positive impact on the market price per share and stock return while the dividend payout ratio has a negative impact on the stock return but a positive impact on the market price per share.



### **2.2.6 Research Gap**

Most studies conducted to date provide a diverse conclusion about the effect of dividends on the market price of shares. Some say dividend influences the share price while some argue that it is irrelevant and share price is affected by other measures such as investment policy and retained earnings rather than a dividend. The different researchers used a variety of variables such as MPS, EPS, DPS, DPR, DY, P/E ratio, RE, ROE, RR and many more as dependent and independent variables respectively. Despite examination of that entire mentioned variable, the result of the study about whether or not the dividend affects the share price is still debatable. Therefore, this study is trying to identify or investigate the relationship between and effect of the dividend on share price particularly in the case of Nepalese commercial banks. Furthermore, there is no study regarding this topic on the basis of the current or some few year data. Hence, the study will be conducted using the latest data from commercial banks and the econometric method will be used to analyze the data collected from different sources. Overall, this descriptive study attempts to fill all the research gaps.

## CHAPTER–III

### RESEARCH METHODOLOGY

#### 3.1 Research design

Research design is the plan and structure of investigation which is developed in such a way so that a researcher obtains the answer to the research questions. Under this research the descriptive and analytical research design will be used to conduct the research. Since the main topic of research is to examine the effect dividend on the stock price, all the variables that are chosen as independent, which affects the market price will be studied in detail. Moreover, the topic of the study is highly debated because some researchers believe that dividend have significant positive effect on share price while other think that it doesn't have any effect. Therefore, the analytical method will be used to identify what is the actual situation or to find whether or not the dividend decision from the company effect on share price.

#### 3.2 Population and sample

The sample size of a survey is the total number of complete response that was received during the survey process. It is referred to as a sample because it does not include full target population; it represents a selection of the population (Daniel, 1999). Since the study is concerned with the effects of dividend on share price of commercial banks in Nepal. All the licensed commercial banks that are operating currently are the population of the study. For the purpose of this study, random sampling technique is used where the adequacy of sample from total population were calculated by using the sampling calculator at 95% confidence level developed by Daniel (1999) as follows;

$$n = \frac{[z^2 \times p \times (1 - p) / e^2]}{[1 + (z^2 \times p \times (1 - p) / (e^2 \times N))]}$$

$$n = \frac{[1.96^2 \times 0.99 \times (1 - 0.99) / 0.05^2]}{[1 + (1.96^2 \times 0.99 \times (1 - 0.99) / (0.05^2 \times 27))]}$$

$$n = \frac{15.2127}{1.5634} = 9.73$$

$$n \approx 10$$

Where,

n= Sample size of finite population

z = Confidence level ( $\alpha$ ) of 95%

p = Proportion population (expressed as a decimal)

N = Population size

e = Margin of error.

At present, there are 27 commercial banks are operating their activities in Nepal. According to sampling calculator 10 samples are adequate for the study, while 12 samples are actually used for the study. Covering the period from 2011/12 to 2020/21 using the random sampling technique. The sample banks are presented in Table 7.

Table 7

*List of sampled commercial banks*

S.N	Name of the bank	Study period
1	Citizen Bank international Ltd	2011/12-2020/21
2	Everest bank Ltd	2011/12-2020/21
3	Himalayan Bank Ltd	2011/12-2020/21
4	Kumari Bank Ltd	2011/12-2020/21
5	Nabil Bank Ltd	2011/12-2020/21
6	Nepal Investment Bank Ltd	2011/12-2020/21
7	NIC Asia Bank Ltd	2011/12-2020/21
8	Prime Bank Ltd	2011/12-2020/21
9	Sanima Bank Ltd	2011/12-2020/21
10	Nepal SBI bank Ltd	2011/12-2020/21
11	Standard Chartered Bank Ltd	2011/12-2020/21
12	Siddhartha Bank Ltd	2011/12-2020/21

### 3.3 Nature and sources of data

The research is totally based on a secondary data. In this study data are collected from different sources: Nepal stock Exchange, website of the respective banks and from NRB website. From these sources, annual reports are collected and some related information will be taken from Economic Survey and relevant to the study.

### 3.4 Method of analysis

Generally data accumulated from the different sources in order to carry out the research, so these data need to be analyzed properly to get use it properly for the research and to get the objective of the research. Therefore, different financial, statistical tools are used for the data analysis where econometric method of analysis is used. Here, the financial analysis includes the ratio analysis and statistical tools are outlined as follows.

#### Arithmetic mean

Arithmetic mean is the number which is obtained by adding the various numbers of all the items of a series and dividing the total by the number of items. Arithmetic mean is a useful tool in statistical analysis. The arithmetic mean is the simplest and most widely used measure of a mean, or average. It simply involves taking the sum of a group of numbers, then dividing by the count of the numbers used in the series.

$$\text{Mean (X)} = \frac{\sum x}{N}$$

Where,

X = mean

$\sum X$  = total sum

N = Total number of observation

#### Standard deviation

The standard deviation is a statistic that measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance. It is calculated as the square root of variance by determining the variation between each data point relative to the mean. If the data points are further from the mean, there is higher deviation within the data set; thus, the more spread out the data, the higher the standard deviation.

$$SD (\sigma) = \sqrt{\left[ \frac{\sum X^2}{N} - \left( \frac{\sum X}{N} \right)^2 \right]}$$

Where,

S.D = standard deviation

N = number of observation

### **Co-efficient of variation (CV)**

The coefficient of variation is the relative measure of dispersion, comparable across, which is defined as the ratios of the standard deviation to the mean expressed in percent.

$$(CV) = \frac{\sigma}{\bar{x}} \times 100$$

### **Coefficient of Correlation (r)**

The correlation coefficient is a statistical measure that calculates the strength of the relationship between the relative movements of the two variables. It is a useful statistical tool for measuring the intensity of the magnitude of linear relationship between two variables. The most important method of measuring the correlation between the two variables is “Karl Pearson’s coefficient of correlation. “If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, then the correlation is said to be negative. The correlation coefficient always remains within the limit of +1 to -1. The correlation coefficients (r) between two variables X and Y can be obtained by using following formula.

$$\text{Correlation of coefficient (r)} = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2} \times \sqrt{n\sum y^2 - (\sum y)^2}}$$

### **Regression analysis**

Regression analysis is concerned with the study of the relationship between one variable called the explained or dependent variable and one or more other variables called independent or explanatory variables. There are two types of regression analysis. One is called simple linear regression analysis, which is concerned with the study of the relationship between one variable called the dependent or explained variable and one other variable called independent or explanatory variable. Other is called multiple linear regression analysis, which is concerned with the study of the relationship between one variable called the dependent or explained variable and more than one other variable called independent or explanatory variable. The regression model under this study is depicted as under.

$$MPS = \beta_0 + \beta_1EPS + \beta_2DPS + \beta_3DPR + \epsilon$$

Where,

MPS = Market price per share

EPS = Earning price per share

DPS = Dividend per share

DPR = Dividend payout ratio

$\beta_0$  = Intercept

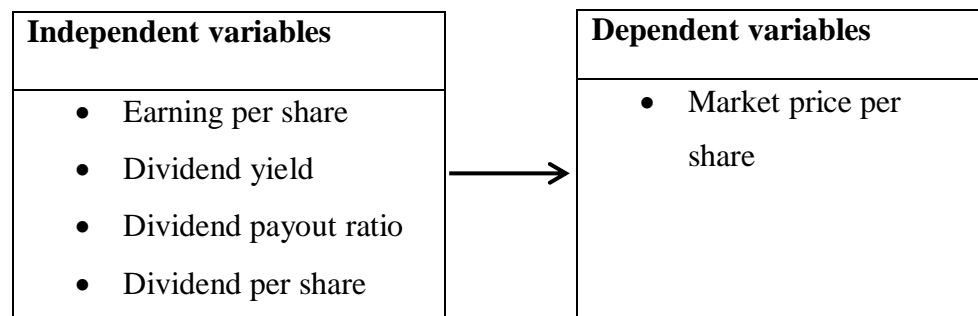
$\beta_1$  = coefficient of *i*th independent variable

$\epsilon$  = Random error.

The outcome of regression analysis implies that there a direct relationship between dividends with market price, which is expected sign as previous studies.

### 3.5 Research framework and definition of variables

While conducting this study different article were reviewed, where researcher conducted their study using different independent and variables such EPS, MPS, DPR, DY, P/E ratio, lagged MPS, ROA and ROE. Out of these many variables, some variables were applied in this research. In this study, market price per share is taken as dependent variable and other variables such as dividend per share, dividend payout ratio, earning per share and dividend yield as an independent variable.



#### Independent variable

Independent variable can be defined as the variable that influences the dependent variable positively or negatively with the change on it. Independent variables remain unchanged due to change in other variables but changes in independent variables changes to dependent variables.

**Dividend per share**

Dividend per share (DPS) is the sum of declared dividends issued by a company for every ordinary share outstanding. DPS is calculated by dividing the total dividends paid out by a business, including interim dividends, over a period of time, usually a year, by the number of outstanding ordinary shares issued.

$$\text{Dividend per share} = \frac{\text{Total dividend}}{\text{Total number of share}}$$

**Earning per share**

Earning per share (EPS) is a company's net profit divided by the number of common shares it has outstanding. EPS indicates how much money a company makes for each share of its stock and is a widely used metric for estimating corporate value. A higher EPS indicates greater value because investors will pay more for a company's shares if they think the company has higher profits relative to its share price.

$$\text{Earning per share} = \frac{\text{Net profit after tax}}{\text{Number of common stock outstanding}}$$

**Dividend payout ratio**

The dividend payout ratio is the ratio of the total amount of dividends paid out to shareholders relative to the net income of the company. It is the percentage of earnings paid to shareholders via dividends. The amount that is not paid to shareholders is retained by the company to pay off debt or to reinvest in core operations. It is sometimes simply referred to as simply the payout ratio.

$$\text{Dividend payout ratio} = \frac{\text{Dividend paid}}{\text{Net income}}$$

**Dividend yield**

Dividend yield is a financial ratio that measures the dividend a company pays out to shareholders over the course of a year in relation to its stock price. The dividend yield is expressed as a percentage and it's calculated by dividing the dividend of a stock by its price per share.

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

**Dependent variable**

Variables which are affected by the changes in independent variables are known as dependent variables. The dependent variables are the variable of primary interest to the researchers. The researcher's goal is to explain or predict the variability in the dependent variable. By the analysis of the dependent variable researcher finds the solution of the problem.

**Market price per share**

Market price per share is the value of stock, which can be obtained from the capital market. The capital market determines MPS on the basis of supply and demand of the stock among the investors. In this study the market price of share means the closing price of the share indicated in the NEPSE Index. The market price per share is a financial measure that investors use to determine whether or not to purchase a stock.

$$\text{MPS} = \text{EPS} \times \text{P/E ratio}$$

Where,

EPS = Earning per share

P/E = Price earning ratio



## **CHAPTER-IV**

### **RESULTS AND DISCUSSION**

This chapter is organized to analyze the structure and pattern of dependent variables i.e market price per share and various independent variables i.e earning per share, dividend per share, dividend payout ratio and a dividend yield of sampled commercial banks for the period of 2011/2012 to 2020/2021. In this chapter raw forms of data which were collected from various sources are processed and changed into an understandable presentation using financial as well as statistical tools supported by diagrams and graphs as mentioned in the previous chapter plan. Similarly, the process of transforming data is undertaken for the examination and interpretation of such data to conclude. Therefore, this chapter is the heart of the study, as all the findings, conclusions and implications are going to derive from the calculations and analysis done in this section.

#### **4.1 Analysis of financial indicators and variables**

Different independent and dependent variable are used to conduct this study therefore in this section these variable and there position in different sampled banks will be analyzed.

##### **4.1.1 Analysis of Earning per share**

Earning per Share (EPS) is one of the most important financial indicators, which measure the earning capacity of a firm. It measures the profit available to the ordinary shareholders on a per share basis. EPS is calculated by dividing net income available to the common stockholders by the total number of common shares outstanding.

Table 8

*Earning per share of sample commercial banks of Nepal for the period of ten years.*

YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	10.7	88.55	39.94	17.18	83.23	27.6	29.87	6.04	20.4	12	22.93	72.6
2012/13	19.66	91.88	34.19	18.17	95.14	46.2	47.41	15.13	29.8	18.55	32.75	65.7
2013/14	23.7	86.04	33.1	18.69	83.68	40.7	35.98	19.28	38.6	20.97	34.83	65.47
2014/15	30.94	78.04	33.37	16.24	57.24	30.9	25.59	24.47	37.8	23.74	34.84	57.38
2015/16	35.25	65.97	43.03	26.53	59.27	29.3	28.31	32.55	41.5	30.11	34.29	45.96
2016/17	20.27	32.48	35.15	13.29	59.86	29.3	23.06	26.31	26.6	23.21	30.61	35.49
2017/18	15.37	32.78	23.11	14.54	51.84	35.7	16.62	21.22	26.5	21.49	25.16	27.33
2018/19	17.49	38.05	32.44	14.81	50.57	26.4	34.22	28.22	23.1	23.6	27.13	30.39
2019/20	13.88	29.71	27.6	12.08	36.16	17	31.89	20.18	19.6	16.1	17.23	24.81
2020/21	17.35	19.91	28.07	14.2	33.57	22	28.18	23.94	26	20.32	10.15	16.32
<b>Mean</b>	20.461	56.341	33	16.573	61.056	30.5	30.113	21.734	29	21.009	26.99	44.15
<b>Cv</b>	37.246	50.346	17.6852	24.6736	33.453	28.1	27.405	33.98	26.9	23.203	30.78	45.32
<b>Std</b>	7.6209	28.366	5.8361	4.08916	20.425	8.57	8.2526	7.385	7.79	4.8746	8.309	20.01
<b>Max</b>	35.25	91.88	43.03	26.53	95.14	46.2	47.41	32.55	41.5	30.11	34.84	72.6
<b>Min</b>	10.7	19.91	23.11	12.08	33.57	17	16.62	6.04	19.6	12	10.15	16.32

Source: Annual report of commercial banks

Table 8 demonstrates information about the EPS of 12 sample banks over a period of ten years starting from 2011/12 to 2020/2021. It also shows the average EPS of sample banks. When we look at the average row we can see that Nabil bank and Everest bank are limited to have the highest average EPS among all the banks which are 61.056 and 56.341 respectively, which is followed by the standard chartered bank with 44.145. Moreover, Kumari bank limited has the lowest average EPS over a period, which is followed by NMB bank, with 16.573, and 20.205 respectively.

Furthermore, NABIL bank has the highest EPS of 95.14 in the year 2012/13 among all banks, while Nabil bank has the lowest EPS of 33.57. Over the period of a decade, Everest bank limited ranked second after Nabil bank in terms of highest EPS which is 91.88 in the fiscal year 2012/2013, but it has the lowest EPS of 19.91 in the fiscal year 2020/2021. Along with this, NICASIA bank had a 47.41 and 16.62 highest and lowest EPS respectively or NIBL has highest EPS of 46.2 and lowest is 17 and CZBIL accounted

for 35.25 of maximum EPS and 10.7 of lowest EPS over the period of time. Moreover, EBL has the highest standard deviation of 28.37 and CV of 50.35 per cent respectively, which means EBL has a high dispersion of data set relative to its mean. However, KBL has the lowest standard deviation among all banks of 4.0892 and HBL has the lowest CV of 17.685 per cent.

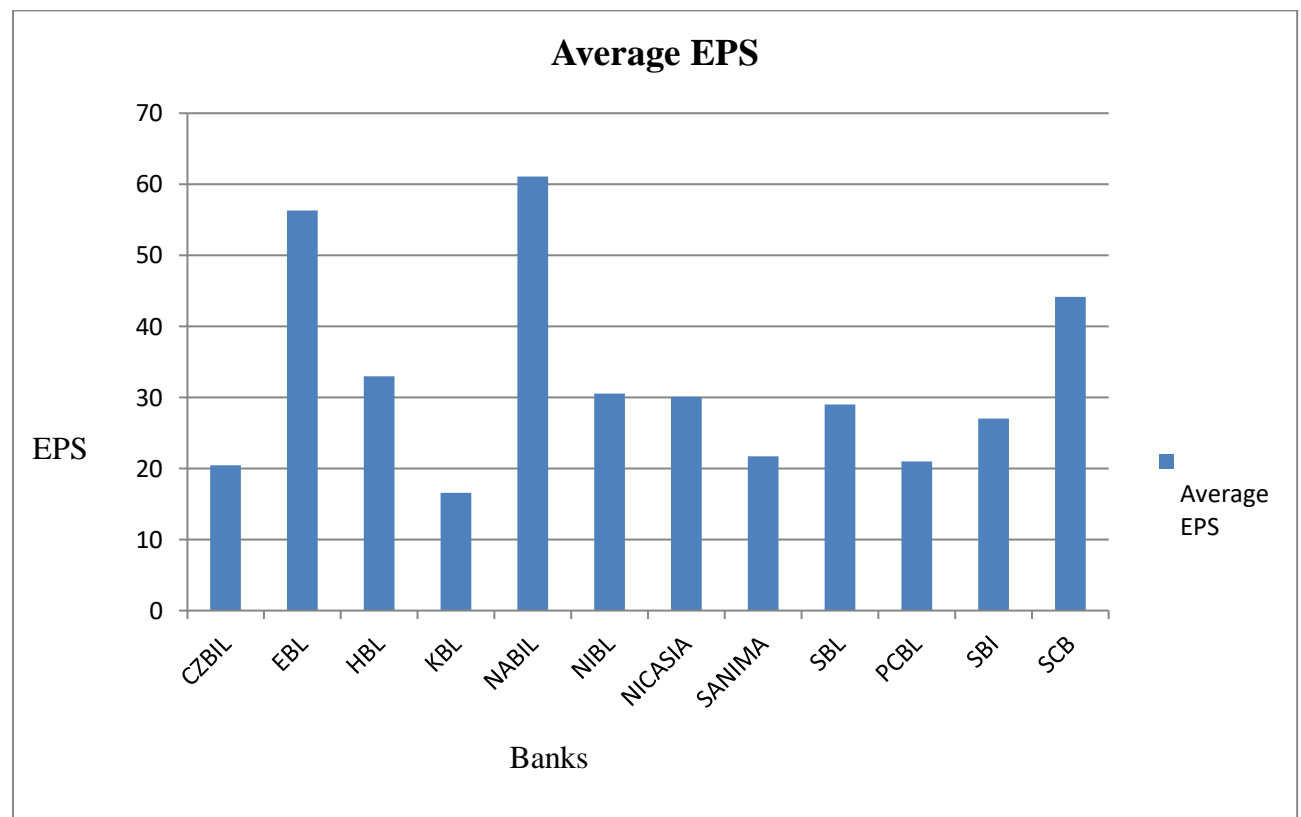


Figure 1

*Average EPS of sample commercial banks*

Figure 1 shows Average EPS of sample commercial banks over period of decade. In the figure we can see that, Nabil bank has the highest average EPS among all the banks which is more than NRS 60, which is followed by EBL and SCB with NRA 56.34 and 44.15 respectively. On the other hand, KBL has the lowest EPS of NRS 16.573 among all the sample banks. Moreover, average EPS value of the CZBIL is just more than NRS 20 and HBL recorded NRS 33.

### 4.1.2 Analysis of market price per share

Market price per share is the value of the share which we can get from the capital market. Market price per share of any company is determined by demand and supply of companies stock in the capital market. Here 10 year data of 12 different commercial banks were analysed. In this study MPS is considered as a closing average price of stock.

Table 9

*Market price per share of sample commercial banks of Nepal over the period of ten years*

YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	230	1033	653	242	1355	511	468	225	345	237	635	1799
2012/13	267	1591	700	260	1815	784	554	260	300	324	850	1820
2013/14	539	2631	941	536	2535	960	970	638	810	583	1280	2799
2014/15	489	2120	813	380	1910	704	617	555	678	455	887	1943
2015/16	680	3385	1500	352	2344	1040	798	750	869	746	1875	3600
2016/17	403	1353	886	327	1523	770	445	431	485	421	925	2295
2017/18	236	663	551	199	921	621	316	324	300	287	499	755
2018/19	224	666	552	220	800	519	448	348	318	278	469	682
2019/20	188	675	540	186	765	431	553	330	296	255	435	645
2020/21	386	738	484	371	1359	460	994	485	504	479	409	590
<b>Mean</b>	364.2	1485.5	762	307.3	1532.7	680	616.3	434.6	491	406.5	826.4	1693
<b>CV</b>	45.065	63.942	39.7468	35.08	40.378	30.8	37.414	39.33	45.2	40.465	55.87	60.79
<b>Std</b>	164.13	949.86	302.871	107.805	618.88	210	230.58	170.94	222	164.49	461.7	1029
<b>Max</b>	680	3385	1500	536	2535	1040	994	750	869	746	1875	3600
<b>Min</b>	188	663	484	186	765	431	316	225	296	237	409	590

Source: Annual report of commercial banks

Table 9 provides information about the average MPS of 12 sample commercial banks over a decade. According to the table, among all the 12 banks SCB, NABIL and EBL have the highest average MPS throughout the period of time, which are NRS 1692.8, 1532.7 and 1485.5 respectively. However, KBL has the lowest average MPS over a period of time, which is NRS 307.3 per share. Moreover, among all the banks standard chartered bank had the highest MPS of RS 3600 in the fiscal year 2015/2016, which is followed by EBL with RS 3385 in the same year, while SCB has the lowest EPS of RS

590 and EBL has the lowest EPS of RS 663 in the fiscal year 2020/2021 and 2017/2018 respectively.

We can see from the table that the MPS of some commercial banks such as EBL, HBL, NIBL, SCB and SBI decreased gradually while the MPS of other banks such as CZBIL, KBL, NABIL, NICASIA, SANIMA, SBL, and PCBL have increased steadily. Moreover, EBL has the higher St deviation and CV which are 949.9 and 63.94 per cent respectively while KBL has the lowest St deviation of 107.81 and NIBL has the lowest CV, which is 30.84 per cent.

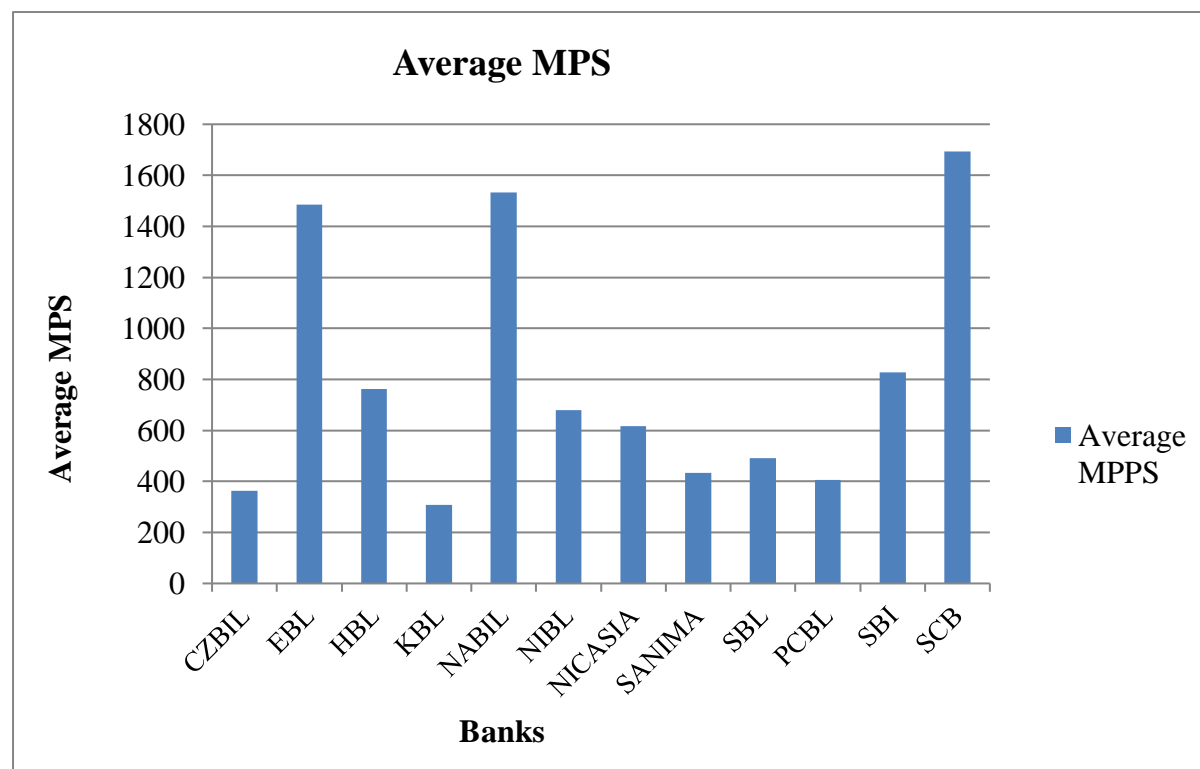


Figure 2

*Average MPPS of sample commercial banks*

Figure 2 provides information about the ten-year average MPS of 12 sample commercial banks in Nepal. According to the table, in the last ten year, SCB has the highest average MPS of NRS 1693 in comparison to other banks, which is followed by Nabil bank and Everest bank limited with NRS 1532.7 and 1486 respectively. However, Kumara bank limited has the lowest MPS in ten year period of time which is only NRS 307.3. Overall, among all the banks only 4 banks have average MPPS of more than NRS 800.

### 4.1.3 Analysis of dividend per share

Dividend per share (DPS) is the sum of declared dividends issued by a company for every ordinary share outstanding. DPS is calculated by dividing the total dividends paid out by a business, including interim dividends, over a period of time, usually a year, by the number of outstanding ordinary shares issued. The table below shows the Average DPS of sample commercial banks.

Table 10

*DPS of sample commercial banks for the period of ten years*

YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	8.42	31.6	28.42	7	60	30	25	5.5	8.42	11.58	17.5	60
2012/13	15	60	15	14.7	65	35	20	10.53	22.1	15	20	50
2013/14	18.95	62	21.05	34.2	65	40	30	15.79	23.2	20	22.1	51.5
2014/15	21.05	35	42.11	11.6	36.84	34.7	41.1	21.05	21.1	18.95	28.4	44.2
2015/16	25.78	73.7	31.58	22.1	45	41	27	15.79	48.8	17.25	29.5	35.1
2016/17	17	33	26.32	12.8	48	40	21.1	16	14	27	16.3	105
2017/18	5.236	20	15.79	8.5	34	40	10	14	13.2	16	15.8	17.5
2018/19	15	25	22	10.5	34	19	21.1	21.05	25.3	16	16.8	22.5
2019/20	11	10.5	20	14	35.26	18.5	19	13.6	15	15	9.47	11.8
2020/21	16	10.3	26	8.67	38	16		17.89	15	16	5.31	13.1
<b>Mean</b>	15.34	36.1	24.83	14.4	46.11	31.4	23.8	15.12	20.6	17.28	18.1	41.1
<b>CV</b>	39.28	61.2	32.46	56.6	27.756	31.8	36.1	30.93122	54.5	23.82	41.3	69.1
<b>Stdev</b>	6.026	22.1	8.06	8.15	12.798	9.98	8.59	4.676801	11.2	4.116	7.49	28.4
<b>Max</b>	25.78	73.7	42.11	34.2	65	41	41.1	21.05	48.8	27	29.5	105
<b>Min</b>	5.236	10.3	15	7	34	16	10	5.5	8.42	11.58	5.31	11.8

Source: Annual report of commercial banks

Table 10 shows information about the mean, CV, St Dev and maximum and minimum DPS of sample banks over a period of a decade. By analyzing the table, we can find that Nabil bank has the highest average DPS NRS 46.11 in comparison to other banks. SCB ranked second after Nabil with 41.1. However, KBL has the lowest average DPS over the period, which is NRS 14.4 per share. So, according to the DPS data, we find Nabil is the best bank for the investor. Moreover, if we look at the individual year SCB has the highest DPS of NRS 105.3 while Sanima has the lowest DPS of NRS 5.5.

Furthermore, the standard deviation and coefficient of variation of the standard chartered bank are the highest, which are 28.39 and 69.07 per cent respectively. It shows SCB's high degree of dispersion of data set relative to its data of DPS. Nevertheless, Sanima

bank has the lowest St Deviation and CV 4.68 and 30.94 per cent simultaneously, which demonstrates that there is not much fluctuation in the DPS of Sanima bank limited.

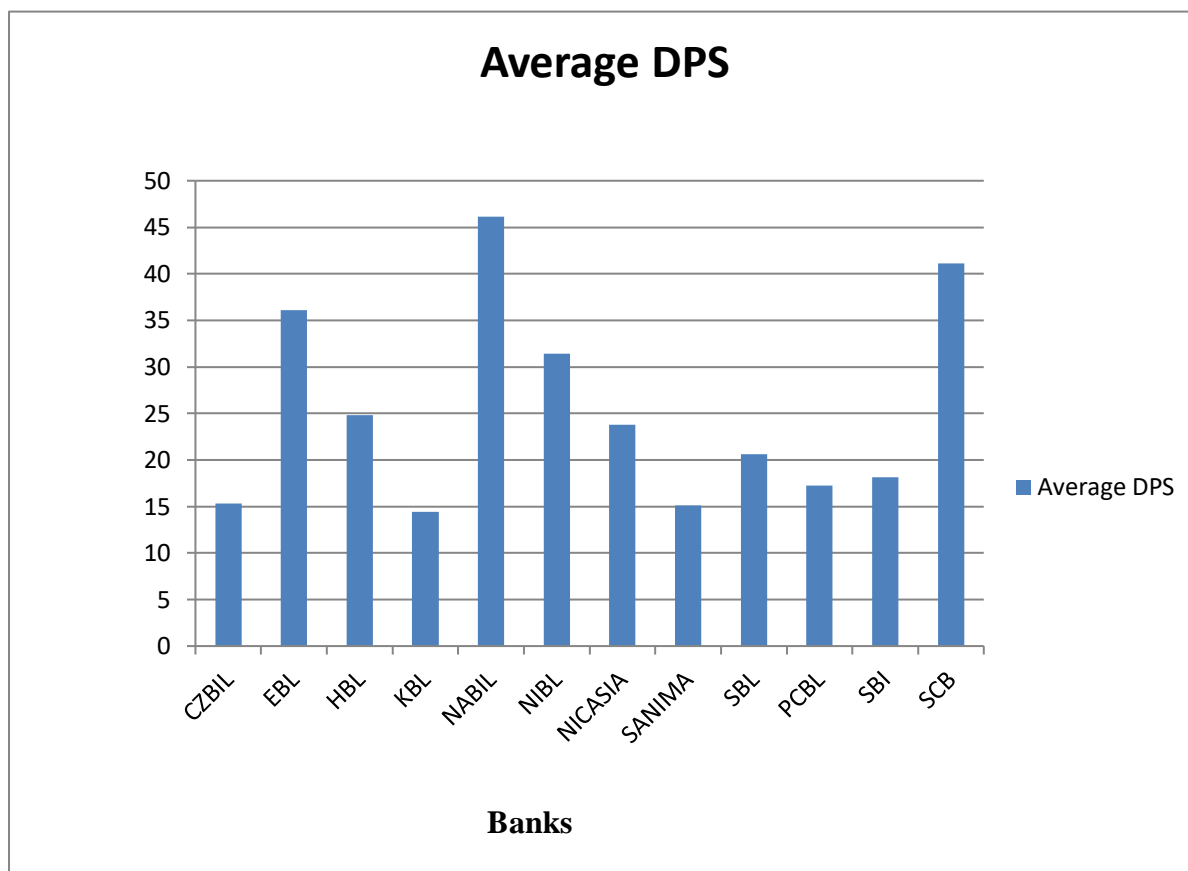


Figure 3

#### *Average DPS of sample commercial banks*

Figure 3 gives information about the average DPS of commercial banks in Nepal. According to the figure, Nabil bank limited has the highest average DPS among all the sample banks which is NRS 46.11, this is followed by standard charted bank limited with NRS 41.1 and the Everest bank limited ranked third with NRS 36.12. However, Kumari bank limited has the lowest DPS of NRS 14.40. The value of other banks such as HBL, NIBL, NICASIA, SBL, and PCBL is as follows 24.83, 31.42, 23.79, 20.59 and 17.28 respectively.

#### **4.1.4 Analysis of dividend payout ratio**

Dividend payout ratio (D/P ratio) indicates what percentage of actual earnings of a firm has been received by the ordinary shareholders. It is calculated by dividing the dividend per share to ordinary shareholders by the earning per share (EPS). The table below shows the Dividend payout ratio of sample banks.

Table 11

*Dividend payout ratio of sample commercial banks*

YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	78.691	35.663	71.15	40.745	72.08	108.69	83.696	91.05	41.254	96.5	76.319	82.645
2012/13	76.29	65.303	43.87	81.123	68.32	75.75	42.185	69.59	74.195	80.863	61.069	76.104
2013/14	79.958	72.06	63.59	182.83	77.67	98.28	83.38	81.89	59.953	95.374	63.365	78.662
2014/15	68.035	44.849	126.1	71.305	64.36	112.29	160.41	86.02	55.732	79.823	81.573	77.048
2015/16	73.135	111.78	73.39	83.302	75.92	139.93	95.373	48.50	117.39	57.29	86.118	76.349
2016/17	83.868	101.6	74.87	95.937	80.18	136.51	91.284	60.81	52.632	116.33	53.381	296.59
2017/18	34.066	61.013	68.32	58.459	65.58	112.04	60.168	65.97	49.754	74.453	62.758	64.032
2018/19	85.763	65.703	67.81	71.101	67.23	71.96	61.514	74.59	109.49	67.797	62.072	74.038
2019/20	79.251	35.443	72.46	115.89	97.51	108.82	59.58	67.39	76.726	93.168	54.962	47.723
2020/21	92.219	51.833	92.62	61.056	113.2	72.72		74.72	57.604	78.74	52.315	80.025
<b>Mean</b>	75.128	64.525	75.432	86.175	78.209	103.70	81.955	72.05	69.473	84.034	65.393	95.321
<b>CV</b>	21.169	39.7	28.462	46.199	20.05	23.53	41.832	17.38	36.733	19.979	18.206	74.954
<b>St dev.</b>	15.904	25.616	21.469	39.812	15.681	24.40	34.283	12.52	25.519	16.789	11.905	71.447
<b>Max</b>	92.219	111.78	126.19	182.83	113.2	139.93	160.41	91.05	117.39	116.33	86.118	296.59
<b>Min</b>	34.066	35.443	43.872	40.745	64.361	71.96	42.185	48.50	41.254	57.29	52.315	47.723

Source: Annual report of commercial banks

Table 11 provides DPR data of different sample commercial banks. It presents the average, CV, St Deviation, Max and minimum of DPR of different banks. According to the data presented above in the table, NIBL has the highest average dividend payout ratio over a period of a decade which is 103.7 per cent. SCB ranked second with 95.32 per cent, followed by KBL with 86.175 per cent. Moreover, the data presented above show that EBL has the lowest average DPR among all the banks, which is 64.52 per cent. It has been also found that the highest recorded DPR among all the banks is 182.83 per cent which was given by KBL in the fiscal year 2013/2014. While the minimum DPR recorded was 34.07 by CZBIL in the fiscal year 2017/2018.

Moreover, SCB bank has the highest St Deviation and CV of 71.45 and 74.95 respectively while SBI has the lowest St Deviation of 11.905 and CV of 18.206 percent respectively.



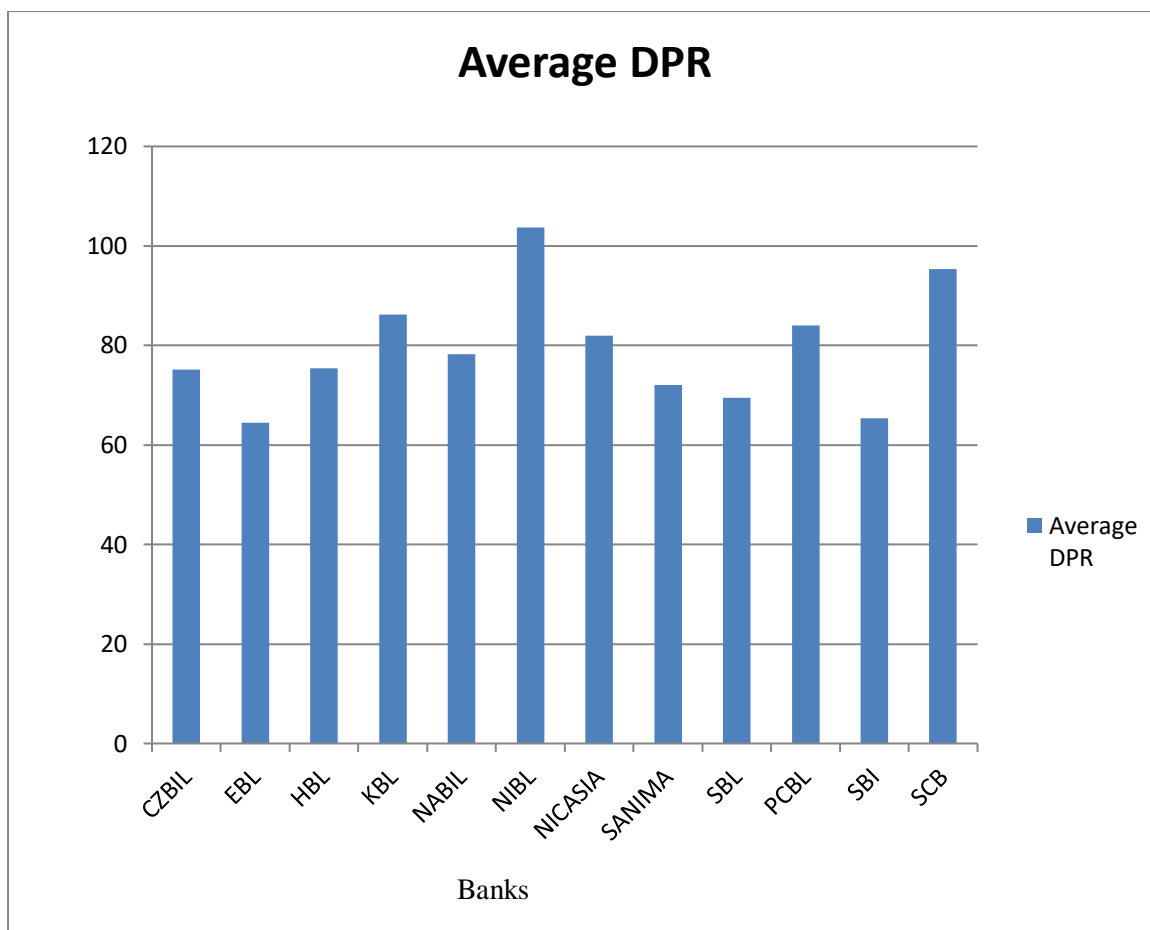


Figure 4

*Average DPR of sample commercial banks*

Figure 4 presents information about the 10-year average DPR of 12 commercial banks. Among all the banks mentioned above, NIBL has the highest average DPR, which is 103.7. SCB becomes second with 95.32 per cent, which is followed by a KBL with 86.175 per cent. Moreover, EBL has the lowest average DPR among all the sample banks, which is 64.52 per cent. The value of other banks such as NABIL, SANIMA, PCBL, SBL, and CZBIL comprises 78.21, 72.05, 84.03, 69.47 and 75.13 respectively.

#### **4.1.5 Analysis of dividend yield**

Dividend yield is a financial ratio that measures the dividend a company pays out to shareholders over the course of a year in relation to its stock price. The dividend yield is expressed as a percentage and it's calculated by dividing the dividend of a stock by its price per share. The table below shows the DY of different sample commercial banks.

Table 12

*Dividend yield of sample commercial banks for the period of 10 years*

YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	3.661	3.06	4.352	2.89	4.428	5.87	5.34	2.444	2.44	4.886	2.76	3.34
2012/13	5.618	3.77	2.143	5.67	3.5813	4.46	3.61	4.05	7.37	4.63	2.35	2.75
2013/14	3.516	2.36	2.237	6.38	2.5641	4.17	3.09	2.474	2.86	3.431	1.72	1.84
2014/15	4.305	1.65	5.18	3.05	1.9288	4.93	6.65	3.792	3.1	4.165	3.2	2.28
2015/16	3.791	2.18	2.105	6.28	1.9198	3.94	3.38	2.103	5.61	2.312	1.57	0.97
2016/17	4.218	2.44	2.971	3.9	3.1517	5.19	4.73	3.717	2.89	6.413	1.77	4.59
2017/18	2.219	3.02	2.866	4.27	3.6916	6.44	3.16	4.399	4.39	5.575	3.16	2.32
2018/19	6.696	3.75	3.986	4.79	4.25	3.66	4.7	6.0264	7.94	5.755	3.59	3.3
2019/20	5.851	1.56	3.704	7.53	4.6092	4.29	3.44	4.112	5.07	5.882	2.18	1.84
2020/21	4.145	1.4	5.372	2.34	2.7962	3.48		3.643	2.98	3.34	1.3	2.21
<b>Mean</b>	4.402	2.52	3.491	4.71	3.2921	4.64	4.23	3.67	4.46	4.639	2.36	2.54
<b>CV</b>	29.74	34.3	34.94	36.5	29.905	20.7	28.6	31.18	44.5	28.44	33.3	39.6
<b>St dev.</b>	1.309	0.86	1.22	1.72	0.9845	0.96	1.21	1.566	1.98	1.319	0.79	1.01
<b>Max</b>	6.696	3.77	5.372	7.53	4.6092	6.44	6.65	6.044	7.94	6.413	3.59	4.59
<b>Min</b>	2.219	1.4	2.105	2.34	1.9198	3.48	3.09	2.103	2.44	2.312	1.3	0.97

Source: Annual report of commercial banks

Table 12 shows the average, maximum, minimum, St Deviation, and CV of DY of the 12 different commercial banks in Nepal over a period of a decade starting from the fiscal year 2011/12 to 2020/2021. According to the table, KBL has the highest average DY which is 4.71 per cent, while SBI has the lowest average DY of 2.36 per cent. The average DY Value of the CZBIL is 4.402, EBL 2.518, HBL 3.49, NABIL 3.29, NIBL 4.644, SBL 4.64 so on. Moreover, SBL has the highest DY among all the banks which is 7.943 per cent in the fiscal year 2018/2019 while SCB has the lowest at 0.975 per cent in the fiscal year 2015/16

Furthermore, KBL has the highest St Deviation and CV respectively, which are 1.7205 and 36.542. However, SBI has the lowest St Deviation of 0.7863 and NIBL has the lowest of a CV which is 20.71.

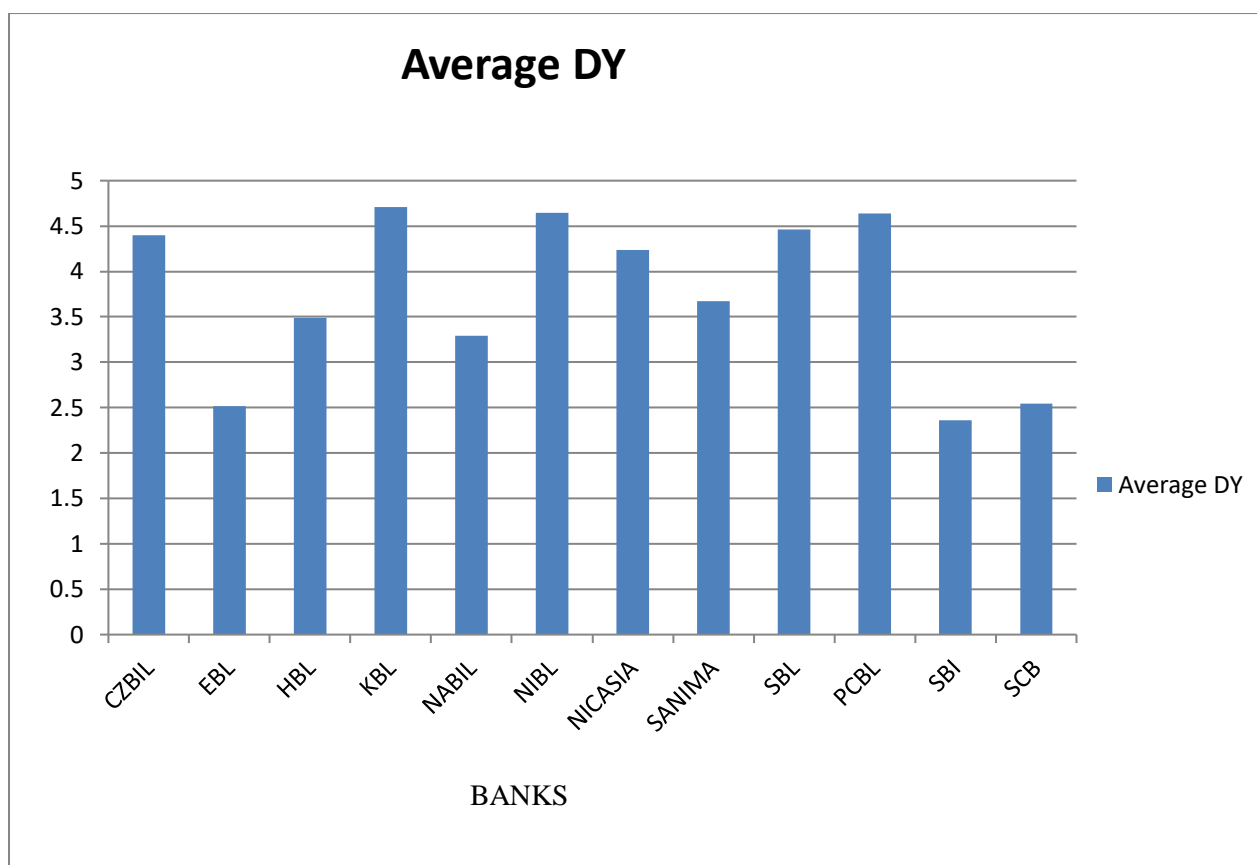


Figure 5

*Average DY of sample commercial banks*

Figure 5 gives information about the average dividend yield of 12 different commercial banks in Nepal for the period of ten years. From the figure 5 we can observe that KBL has the highest DY in comparison to all the mentioned banks, which is 4.71. NIBL ranked second with 4.64, which is followed by PCBL with 4.639 per cent. Moreover, SBI has the lowest DY of 2.36 per cent. The average DY value of other banks such as CZBIL, EBL, HBL and NABIL are 4.402, 2.52, 3.49 and 3.29 respectively.

## 4.2 Correlation between MPS, EPS, DPS, DPR and DY

Correlation is a term that refers to the strength of a relationship between variables. Correlation shows two things; first it shows the direction between two variables and second it shows the strength of associations between two variables. Correlation can be range between -1 to +1. Where, +1 means there is a positive relationship between two variables, while -1 means there is a negative relationship. The Pearson correlation

coefficient of independent variables i.e EPS, DPS, DPR and DY associated with dependent variable MPS have been computed and the results are presented in table 13.

Table 13

*Correlation matrix*

Variables	MPS	EPS	DPS	DPR	DY
MPS	1.000				
EPS	0.759	1.000			
DPS	0.773	0.762	1.000		
DPR	0.162	-0.084	0.541	1.000	
DY	-0.462	-0.251	0.010	0.447	1.000

Source:Stata

The correlation between the independent and dependent variables is presented in the table 13. According to the table, EPS is positively correlated with MPS, where the correlation value is 0.759. It means when the EPS increase MPS will also increase. DPS and DPR both also have a positive relationship with MPS, where the values of the correlations are 0.773 and 0.162 respectively. It suggests that when the DPS and DPR increase the value of the MPS will also rise. However, the DY is negatively correlated with MPS as it shows the correlation value is -0.462. Since there is negative correlation between DY and MPS, increase in DY will leads to decrease MPS and fall in DY will lead to rise in the MPS.

### 4.3 Regression Analysis

It is a statistical technique used to determine the relationship between the dependent and independent variables. Under this study, it is used to analyze the relationship between the dependent variable MPS and independent variables EPS, DPS, DPR and DY. Under the panel data regression analysis, we can use different models such as pooled OLS, fixed effect and random effect models. Since pooled OLS is considered an unreliable method, one model between fixed and random effect has to select, which can be done through the Hausman test.

The below table presents the regression result between the dependent variable MPS and independent variables EPS, DPS, DPR and DY using fixed-effect model.

### 4.3.1 Regression of fixed effect model

The fixed effect model is one of the statistical models where the values of independent variables are assumed to be constant and there change in dependent variables only due to the change in value of independent variables other things remaining the same. The below table shows the regression result of independent variables i.e EPS, DPS, DPR and DY with dependent variable MPS under fixed effect model.

Table 14

*Regression results using fixed effect model*

MPS	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
EPS	5.888	5.846	1.01	.316	-5.707	17.482	
DPS	26.753	7.997	3.35	.001	10.893	42.613	***
DPR	.046	2.826	0.02	.987	-5.558	5.65	
DY	-186.24	26.107	-7.13	0	-238.018	-134.462	***
Constant	621.196	199.3	3.12	.002	225.931	1016.462	***
Mean dependent var		798.269	SD dependent var			668.172	
R-squared		0.670	Number of obs			119	
F-test		52.394	Prob > F			0.000	
Akaike crit. (AIC)		1677.966	Bayesian crit. (BIC)			1691.861	

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

Source: Stata

Table 14 shows regression results using the fixed-effect model, where except DY all other variables have a positive relationship with MPS. According to this model, DPS has a significant positive relationship with MPS while DY has a negative significant relationship with MPS. Furthermore, EPS and DPR have an insignificant positive relationship with MPS.

Moreover, as per this model overall R-squared is 67 %, which means four independent variables such as EPS, DPS, DPR and DY define 67 % of the variation in the dependent variable market price per share MPPS.

### 4.3.2 Regression of random effect model

The random effect model is one of the statistical models where the effect that defines systematic components shows different forms of random variation. In other word this is the model which helps to provide efficient result by nullifying the correlation among

unobserved heterogeneity variables. Table 15 shows the regression result of independent variables i.e EPS, DPS, DPR and DY with dependent variables MPPS under random effect model.

Table 15

*Regression result using random effect model*

MPS	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
EPS	5.788	5.445	1.06	.288	-4.884	16.46	
DPS	26.411	7.552	3.50	0	11.609	41.213	***
DPR	.516	2.681	0.19	.847	-4.739	5.771	
DY	-198.718	21.385	-9.29	0	-240.632	-156.804	***
Constant	642.612	186.416	3.45	.001	277.243	1007.981	***
Mean dependent var		798.269	SD dependent var			668.172	
Overall r-squared		0.825	Number of obs			119	
Chi-square		538.331	Prob > chi2			0.000	
R-squared within		0.670	R-squared between			0.975	

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

Source: Stata

Table 15 shows regression results based on a fixed-effect model. According to this result, the only dividend yield has a negative relationship with market price per share whereas all other three variables have a positive relationship with market price per share. Moreover, DPS has a positive significant relationship with MPS since the p-value is 0.000 which is less than 0.05 at a 95 % confidence level while DY has a negative significant relationship because the p-value is 0.000 which is also less than 0.05.

Additionally, EPS and DPR have a high degree of a positive insignificant relationship with MPS. According to this result, the overall R-squared is 82.5 per cent which means all the four variables such as EPS, DPS, DPR and DY define 82.5 per cent of variation in a market price per share MPS.

### 4.3.3 Hausman test for the selection of appropriate model for regression analysis

Hausman test developed in 1978 is the test that helps to finding the econometric model misspecification that exist among variables between two different model i.e fixed effect and random effect model. So, this test helps to choose the appropriate econometric model for the regression analysis of the variables. According to the Hausman test if null hypothesis is accepted random effect model is considered reliable while if rejected fixed model is considered appropriate model for the regression analysis.

Coefficient	fixed Random differences		S.E	
	(b)	(B)	(b-B)	sqrt (diag (V_b-V_B))
EPS	5.8879	5.7878	.10011	2.1283
MPS	26.7529	26.4113	.3416	2.6291
DPR	.0462	.51604697		.8914
DY	-186.2397	-198.7178	12.4781	14.9757

Source: Stata

Where,

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho, obtained from xtreg

Test = difference in coefficient is not systematic

$$\begin{aligned} \text{chi2 (4)} &= (b-B)'[(V_b-V_B)^{-1}](b-B) \\ &= 1.41 \end{aligned}$$

$$\text{Prob}>\text{chi2} = 0.8425$$

Hausman (1978) specification test

	Coef.
Chi-square test value	1.41
P-value	.842

Source: Stata

The P-value from the Hausman test is 0.842, which is higher than 0.05. It indicates that we cannot reject the null hypothesis or we have to accept the null hypothesis. Since the

null hypothesis is accepted the random effect model is an appropriate model for panel data regression analysis or it is more relevant in describing the relationship among the given variables.

#### 4.3.4 Regression Analysis under Random effect model

The random effect model is one of the statistical models where the effect that defines systematic components shows different forms of random variation. In other word this is the model which helps to provide efficient result by nullifying the correlation among unobserved heterogeneity variables. Table 16 shows the regression result of independent variables i.e EPS, DPS, DPR and DY with dependent variables MPPS under random effect model.

Table 16

*Regression result using random effect model*

MPS	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
EPS	5.788	5.445	1.06	.288	-4.884	16.46	
DPS	26.411	7.552	3.50	0	11.609	41.213	***
DPR	.516	2.681	0.19	.847	-4.739	5.771	
DY	-198.71	21.385	-9.29	0	-240.632	-156.804	***
Constant	642.61	186.41	3.45	.001	277.243	1007.981	***
Mean dependent var			798.269	SD dependent var		668.172	
Overall r-squared			0.825	Number of obs		119	
Chi-square			538.331	Prob > chi2		0.000	
R-squared within			0.670	R-squared between		0.975	

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

Source: Stata

Based on table 16 results the following equation has been derived

$$MPS = 642.612 + 5.778EPS + 26.411DPS + 0.516DPR - 198.718DY + e$$

Table 16 presents the regression analysis result of the dependent variable MPS and independent variables EPS, DPS, DPR, and DY. The random effect model can explain 82.5 per cent of the total variation in MPS. Furthermore, the results show that there exists a positive insignificant relationship between EPS and MPS as the p-value is 0.288, which



is more than 0.05 at a 95 % confidence level. There is also a positive insignificant relation between MPS and DPR.

Furthermore, DPS has a positive significant relationship with MPS as the p-value is 0.00 less than 0.05 at 95 % confidence level, whereas DY has a negative significant relationship with market price per share as the p-value is also 0.00 less than 0.05 at 95% confidence level.

#### **4.4 Discussion**

The analysis of the effect of dividends on the market price per share along with other variables such as EPS, DPS, DPR and DY were carried out in this study. For the analysis of all the collected data econometric method has been used. Under which Hausman test was conducted to select the best model from the fixed-effect model or random-effect model. While carrying out the Hausman test the P value is 0.842 which is higher than 0.05, it means we have to accept null hypothesis hence random effect model became suitable for the analysis of data. As per the random effect model, the overall R-squared is 82.5 %, which indicates that four independent variables of the study define 82.5 per cent of the total variation in the market price per share.

As per the regression result from the random effect model, there is a significant positive relationship between dividends per share (DPS) and market price per share (MPPS). This result is in line with Hasan et al. (2013) whereas other researchers such as Sharif et al. (2018), Singh and Tandon (2019) and Aarsal (2021) concluded that dividend per share has no or negative effect on the market price per share.

Furthermore, dividend yield (DY) is found to have a significant negative impact on the market price per share (MPPS). This result is similar to the result propounded by Masum (2014), Nazir et al. (2012), Hunjra et al. (2014) and Singh and Tandon (2019). However, this result is in contrast with the finding of Hussainey et al. (2011), where the researcher concluded that there is a positive relationship between dividend yield and market price per share.

In addition to this, earning per share has an insignificant positive relationship with market price share. This result is similar to the many other researchers such as Vijaykumar

(2010), Masum (2014), Farrukh et al. (2017), Adesina et al. (2017) and Singh and Tandon (2019). Along with this dividend payout ratio has an insignificant positive relationship with market price per share, this finding is in line with some well-known researchers such as Nishat and Irfan (2004), Hunjra et al. (2014) and Iftikhar et al. (2017). However, some researchers concluded that DPR has a negative effect on MPPS such as Lashgari and Ahmadi (2014) and Sattar (2017).

Thus, we conclude from the regression analysis that EPS and DPR have an insignificant positive relationship with MPS. In addition to this, DPS has a significant positive relationship with MPS while DY has a negative insignificant relationship with MPPS. The result of this study is varied from the result published by previous researchers because of the difference in sample size or sample banks, country of the study and period of the study. Also, different methods and models of data analysis were adopted in the study that has been carried out earlier resulting in a deviation in the conclusion of the study.

## **Chapter-V**

### **SUMMARY AND CONCLUSION**

#### **5.1 Summary**

This study is conducted to examine the effect of dividends on the stock price of Nepalese commercial banks. The very first chapter of the study is "introduction" gives relevant information about the topic, which also comprises the opinions and findings of the previous researchers. The second chapter of this research includes a "review of the literature", in which different theoretical reviews and previous research of different researchers and scholars were reviewed. The major goal of the literature review was to gain in-depth knowledge of the topic of the study. Different independent variables under the study were also taken from the different previous research articles. Moreover, the third chapter of the study is "research methodology", which includes many important sections of the study such as research design, population and sample, nature and sources of data and method of data analysis. In addition to this, chapter four of the research is results and discussions where different collected data were presented using tables and figures. Along with this, these data were analyzed using various financial and statistical tools such as mean, standard deviation, coefficient of variation, correlation coefficient and regression analysis. Under regression analysis, the Hausman test was carried out to find out the appropriate model, so as per the test random effect model was considered the best model to examine the relationship between different variables under study. Moreover, "summary and conclusion" is the last and final chapter of the study. Its main purpose is to provide an overview of the study. It comprises different independent sections such as the summary, conclusion and implication of the study.

The primary goal of this study is to examine the effect of dividends on the share price of commercial banks in Nepal. Along with this, it also tries to analyze whether or not dividends influence the share price of commercial banks in Nepal. This study also examines the impact of different independent variables such as EPS, DPS, DPR and DY on the MPS of different sample commercial banks in Nepal. Moreover, another objective of this study is to find out the current position of EPS, DPS, DPR and DY of sample commercial banks in Nepal.

Moreover, the research is based on the secondary data which are collected from different sources such as the websites of respective banks and the NRB website. Out of the 27 commercial banks, 12 banks were selected randomly as a sample of the study. Descriptive and analytical research design is used to carry out the research. The analysis of balance panel data was carried out using a wide variety of statistical tools like structure and pattern of variables, descriptive statistics using trend analysis, correlation analysis and regression analysis using the econometric method. The use of the random effect model has been favoured over the fixed effect model as per the Hausman test since the unobserved heterogeneity exists among the variables

The major findings of the study are as follows:

- NABIL has the highest average EPS among all the 12 sample banks over the period of decade i.e RS 61.056 which means among all the banks Nabil bank earns highest amount of money per share while KBL has the lowest average EPS over the period of 10 year i.e RS 16.573 which imply that it has lowest amount of earning per share.
- SCB has the highest average MPS over the period of time i.e RS 1692.8, which is followed by a Nabil bank with RS 1532.7 whereas KBL has the lowest average MPS among all the banks which is RS 307.3.
- NABIL possesses the highest average DPS i.e 46.11 and SCB ranked second with 41.096. However, KBL own the lowest average DPS i.e 14.404.
- NIBL possesses the highest average DPR over the period of decade i.e 104, which indicates that it distributes enough earning to its shareholders while EBL own the lowest average DPR which is 64.52 implying that it retains adequate amount of money for the future investment.
- In terms of DY it has been found that KBL has the highest average DY over the period of 10 year which is 4.71 while SBI possess the lowest average DY i.e 2.36.
- Pearson correlation analysis shows that the dependent variables market price per share has the positive relationship with EPS i.e 0.759 indicating that as the earning per share increase market price per share also increase.
- Correlation coefficient analysis shows that independent variable DPS is positively correlated with dependent variable MPS i.e 0.773. They move to similar direction

when changes occur in one of the variable, which means an increase in DPS share also leads to increase in MPS and decrease.

- Dividend payout ratio (DPR) is positively correlated market price per share (MPS), i.e 0.162. This relationship implies that both move to the same direction when there is a change independent variable DPR.
- According the result shown by correlation coefficient only DY is negatively correlated with MPPS out of four independent variables i.e -0.462, this result indicates that they move to the negative direction when changes occur in the independent variable DY. So, if DY increase MPS will decline while if DY decrease MPS will rise.
- As per the random effect model of panel data regression analysis DPS has significant positive relationship MPS as the p value is 0.00 which is less than 0.05 at 95 % confidence level.
- DY has a negative significant relationship with MPS where p value is 0.00, which implies that increase in dividend yield leads to decrease in market price per share while decrease in dividend yield leads to increase in market price per share.
- EPS and DPR have an insignificant positive relationship with MPS as its p value is 0.288 and 0.847 respectively at 95 % confidence level which are higher than 0.05.
- According to the random effect model of panel data analysis overall R-squared is 82.5 %, which indicates that four independent variables such as EPS, DPS, DPR and DY define or explain 82.5 % of variation in the MPPS.

## 5.2 Conclusion

The main objective of this study is to examine the effect of dividends on the share price of commercial banks in Nepal. Twelve different commercial banks were taken as sample banks to examine the effect of dividends on the share price. In this study, different variables such as EPS, DPS, DPR and DY were taken as independent variables while MPS was used as the dependent variable.

The result of correlation indicates that DY has a negative impact on MPS while other variables such as EPS, DPS and DPR are positively correlated with MPS.

Moreover, the regression result shows that DPS has a significant positive relationship with MPS. This implies that banks' market price per share will rise with the increase in the dividend per share. However, DY has a negative significant relationship with MPS, which indicates that an increase in DY leads to a decrease in MPS or a decrease in DY causes a rise in the MPS. Furthermore, EPS and DPR have a positive insignificant relationship with MPS, which indicates these factors also influence the share price of commercial banks.

Overall, after conducting correlation and regression analysis and observing the impact of dividend on share price it has been found that the independent variables such as EPS, DPS, and DPR have positively influenced the share price while only DY influence the movement of share price in a negative way.

### **5.3 Implications**

The results of this study are useful and important for investors, managers, lenders and other stakeholders. It is important for investors because they consider dividends not only a source of income but also a way to assess firms from the investment point of view. The results of the study are imperative for the management to formulate the dividend policy in such a way as to maximize shareholders' wealth. Moreover, this study would also be suitable for the students to take it as a source of literature review for their research.

Under this study, only 12 commercial banks were taken as samples, so the future researcher can take more samples from the population to get more accurate results. Here, EPS, DPS, DPR and DY were taken as independent variables to define variation in MPS, whereas in the future researchers can take other more independent variables to define the effect of dividends on share price.

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## Appendices

Appendix 1: Earning per share												
YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	10.7	88.6	39.94	17.2	83.23	27.6	29.9	6.04	20.4	12	22.9	72.6
2012/13	19.66	91.9	34.19	18.2	95.14	46.2	47.4	15.13	29.8	18.55	32.8	65.7
2013/14	23.7	86	33.1	18.7	83.68	40.7	36	19.28	38.6	20.97	34.8	65.5
2014/15	30.94	78	33.37	16.2	57.24	30.9	25.6	24.47	37.8	23.74	34.8	57.4
2015/16	35.25	66	43.03	26.5	59.27	29.3	28.3	32.55	41.5	30.11	34.3	46
2016/17	20.27	32.5	35.15	13.3	59.86	29.3	23.1	26.31	26.6	23.21	30.6	35.5
2017/18	15.37	32.8	23.11	14.5	51.84	35.7	16.6	21.22	26.5	21.49	25.2	27.3
2018/19	17.49	38.1	32.44	14.8	50.57	26.4	34.2	28.22	23.1	23.6	27.1	30.4
2019/20	13.88	29.7	27.6	12.1	36.16	17	31.9	20.18	19.6	16.1	17.2	24.8
2020/21	17.35	19.9	28.07	14.2	33.57	22	28.2	23.94	26	20.32	10.2	16.3

Appendix 2: Market price per share												
YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	230	1033	653	242	1355	511	468	225	345	237	635	1799
2012/13	267	1591	700	260	1815	784	554	260	300	324	850	1820
2013/14	539	2631	941	536	2535	960	970	638	810	583	1280	2799
2014/15	489	2120	813	380	1910	704	617	555	678	455	887	1943
2015/16	680	3385	1500	352	2344	1040	798	750	869	746	1875	3600
2016/17	403	1353	886	327	1523	770	445	431	485	421	925	2295
2017/18	236	663	551	199	921	621	316	324	300	287	499	755
2018/19	224	666	552	220	800	519	448	348	318	278	469	682
2019/20	188	675	540	186	765	431	553	330	296	255	435	645
2020/21	386	738	484	371	1359	460	994	485	504	479	409	590

Appendix 3: Dividend per share												
YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	8.42	31.6	28.42	7	60	30	25	5.5	8.42	11.58	17.5	60
2012/13	15	60	15	14.7	65	35	20	10.53	22.1	15	20	50
2013/14	18.95	62	21.05	34.2	65	40	30	15.79	23.2	20	22.1	51.5
2014/15	21.05	35	42.11	11.6	36.84	34.7	41.1	21.05	21.1	18.95	28.4	44.2
2015/16	25.78	73.7	31.58	22.1	45	41	27	15.79	48.8	17.25	29.5	35.1
2016/17	17	33	26.32	12.8	48	40	21.1	16	14	27	16.3	105
2017/18	5.236	20	15.79	8.5	34	40	10	14	13.2	16	15.8	17.5
2018/19	15	25	22	10.5	34	19	21.1	21.05	25.3	16	16.8	22.5
2019/20	11	10.5	20	14	35.26	18.5	19	13.6	15	15	9.47	11.8
2020/21	16	10.3	26	8.67	38	16		17.89	15	16	5.31	13.1

Appendix 4: Dividend payout ratio												
YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	78.691	35.7	71.2	40.7	72.089	109	83.7	91.0596	41.25	96.5	76.319	82.6
2012/13	76.29	65.3	43.9	81.1	68.32	75.8	42.19	69.59683	74.19	80.86	61.069	76.1
2013/14	79.958	72.1	63.6	183	77.677	98.3	83.38	81.89834	59.95	95.37	63.365	78.7
2014/15	68.035	44.8	126	71.3	64.361	112	160.4	86.0237	55.73	79.82	81.573	77
2015/16	73.135	112	73.4	83.3	75.924	140	95.37	48.50998	117.4	57.29	86.118	76.3
2016/17	83.868	102	74.9	95.9	80.187	137	91.28	60.81338	52.63	116.3	53.381	297
2017/18	34.066	61	68.3	58.5	65.586	112	60.17	65.97549	49.75	74.45	62.758	64
2018/19	85.763	65.7	67.8	71.1	67.234	72	61.51	74.59249	109.5	67.8	62.072	74
2019/20	79.251	35.4	72.5	116	97.511	109	59.58	67.39346	76.73	93.17	54.962	47.7
2020/21	92.219	51.8	92.6	61.1	113.2	72.7		74.72849	57.6	78.74	52.315	80

Appendix 5: Dividend yield

YEAR	CZBIL	EBL	HBL	KBL	NABIL	NIBL	NICA	SANIMA	SBL	PCBL	SBI	SCB
2011/12	3.6609	3.06	4.35	2.89	4.428	5.87	5.342	2.444	2.441	4.886	2.7559	3.34
2012/13	5.618	3.77	2.14	5.67	3.5813	4.46	3.61	4.05	7.37	4.63	2.3529	2.75
2013/14	3.5158	2.36	2.24	6.38	2.5641	4.17	3.093	2.474	2.859	3.431	1.7242	1.84
2014/15	4.3047	1.65	5.18	3.05	1.9288	4.93	6.653	3.792	3.105	4.165	3.2041	2.28
2015/16	3.7912	2.18	2.11	6.28	1.9198	3.94	3.383	2.103	5.61	2.312	1.5749	0.97
2016/17	4.2184	2.44	2.97	3.9	3.1517	5.19	4.73	3.717	2.887	6.413	1.7665	4.59
2017/18	2.2186	3.02	2.87	4.27	3.6916	6.44	3.165	4.399	4.387	5.575	3.1643	2.32
2018/19	6.6964	3.75	3.99	4.79	4.25	3.66	4.699	6.0264	7.943	5.755	3.5906	3.3
2019/20	5.8511	1.56	3.7	7.53	4.6092	4.29	3.436	4.112	5.068	5.882	2.177	1.84
2020/21	4.1451	1.4	5.37	2.34	2.7962	3.48		3.643	2.976	3.34	1.2983	2.21