Effect of earning per share and stock dividend on share price fluctuation of Private Commercial Banks:

A comparative study of *NMB Bank and* Machhapuchhre *Bank*

A dissertation submitted to the office of the Dean, Faculty of Management in partial fulfillment of the requirement for the Master's Degree

by

Shreejina Shrestha

Symbol No.:3508/17

T.U. Regd. No.:7-3-271-309-2016

People's Campus

Kathmandu

March, 2020

Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "Effect of earnings per share and stock dividend on share price fluctuation of private commercial banks: A comparative study of NMB and Machhapuchhre Bank." The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purpose.

The assistance and cooperation that I have received during this 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.

Shreejina Shrestha
28-03-2020

Report of Research Committee

Ms. Shreejina Shrestha has defended research proposal entitled effect of earnings per share and stock dividend on share price fluctuation of private commercial banks: A comparative study of NMB and Machhapuchhre Banks successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Mr. Rajan Bilas Bajracharya and submit the thesis for evaluation and viva voce examination.

____

Dissertation Proposal Defended Date:

Supervisor (Defend)

____

Rajan Bilas Bajracharya

Supervisor

Dissertation Submitted Date:

____

Gopal Krishna Shrestha, PhD

Head Researcher Committ

Dissertation Viva Voce Date:

Approval Sheet

We have examined the dissertation entitled effect of earnings per share and stock dividend on share price fluctuation of private commercial banks: A comparative study of NMB and Machhapuchhre banks presented by Ms. Shreejina Shrestha for the degree of Master of Business Studies. We hereby certify that the dissertation is acceptable for the award of degree.

____

Dissertation Supervisor

____

Internal Examiner

____

External Examiner

____

Chairperson, Research Committee

Acknowledgement

The study has been prepared for the partial fulfillment of the requirement for the Master degree in Business studies. It is my privilege to complete this thesis entitled, Effect of Earning per Share and stock dividend on share price fluctuation of Private Commercial Banks: *A* comparative study of NMB Bank and Machhapuchhre Bank is an outcome of continuous cooperation and support of several hands and heads. I would like to express my gratitude to all for their support. I would like to appreciate the people helping me and contributing in writing this thesis.

Firstly, I express the gratitude for overall brilliant assistant and very useful comments to my supervisors Mr. Rajan Bilas Bajracharya. In addition, I am thankful to the head of the Research Department Dr. Gopal Krishna Shrestha. I am also extremely indebted to all the teachers of People's campus, who encouraged me in my entire academic attempt.

At the end, I would like to express gratitude to all my friends and colleagues, who kept me float when some moments were hard.

Shreejina Shrestha

TABLE OF CONTENTS

Title Page	*i*
Certification of Authorship	*ii*
Report of Research Committee	*iii*
Approval Sheet	*iv*
Acknowledgement	*v*
Table of Contents	*vi*
List of Tables	*vii*
List of figures	*viii*
Abbreviations	*ix*
Abstract	*x*
CHAPTER ONE: INTRODUCTION	1-5
1.1 Background of the Study	1
1.2 Effect of Dividend and earning on share price	3
1.3 Statement of the Problem	4
1.4 Objective of the Study	5
1.5 Significance of the Study	5
1.6 Limitations of the Study	5
CHAPTER TWO: REVIEW OF LITERATURE	**6-17**
2.1 Conceptual Framework	6
2.2 Review of related studies	9
CHAPTER THREE: RESEARCH METHODOLOGY	**18-23**
3.1 Research Methodology	18
3.2 Research Design	18
3.3 Population and the Sample	19
3.4 Nature and Sources of Data	19
3.5 Data Processing Procedure and Analysis	19
3.6 Tools and Techniques of Analysis	19

CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA **24-39**
4.1 Introduction 24
4.2 Descriptive Statistics 24
4.2.1 Earning Per Share 24
4.3 Statistical Analysis 33
4.4 Relationship between EPS, DPS, and BPS to MPS 34
4.5 Regression Analysis 36

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION **40-44**
5.1 Summary 40
5.2 Conclusion 41
5.3 Recommendation 43

References **45-47**

Appendix **48-55**

LIST OF TABLES

Table 1	Detail of Variables	
Table 2	Review of Empirical studies	16
Table 3	EPS of Sample Banks	24
Table 4	DPS of Sample Banks	26
Table 5	MPS of Sample Banks	28
Table 6	P/E ratio of Sample Banks	30
Table 7	Book Value per Share	32
Table 8	Mean, S.D & CV of MPS, EPS, DPS and BVPS	33
Table 9	Correlation analysis	34
Table 10	Regression Coefficient of MPS on EPS	36
Table 11	Regression Coefficient MPS on DPS	37
Table 12	Significant Relationship	38

LIST OF FIGURES

Figure 1	Conceptual model	15
Figure 2	EPS of Sample Banks	24
Figure 3	DPS of Sample Banks	26
Figure 4	MPS of Sample Banks	29
Figure 5	P/E ratio of Sample Banks	31
Figure 6	Book Value per Share	33

ABBREVIATIONS

BVPS	:	Book Value per Share
CV	:	Coefficient of Variation
MBL	:	Machapuchchre Bank
DPS	:	Dividend per Share
EPS	:	Earning per Share
MPPS	:	Market Price per Share
NMB	:	Nepal Merchant Bank Limited
NEPSE	:	Nepal Stock Exchange
NRB	:	Nepal Rastra Bank
P/E Ratio	:	Price Earnings Ratio
SD	:	Standard Deviation
SEBON	:	Security Board of Nepal
SEC	:	Security Exchange Center

ABSTRACT

The purpose of this study is to examine the effect of earnings per share and stock dividend on the share price of commercial bank in Nepal. The study has been conducted to assess the current situation of the share prices in the market of the commercial banks and describe the situation and event occurring at the present context. The study is based on secondary data of 2 commercial banks of Nepal and data are collected from annual report (F/Y 2011/12 to F/Y 2018/19). The paper investigates the relationship between DPS, EPS, P/E ratio, BVPS, on stock price by using Statistical tool, Correlation and Regression and probable error. EPS and DPS have positive relationship with MPPS. The articles conclude that except DPS and EPS they are other factors i.e. P/E ratio and BVPS also have positive relationship with stock price. Investing in shares provide a profit with the increase in market price and dividend distributed by the company

Key words: Earnings per share and stock dividend

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The impact of announced Earnings per Share (EPS) on stock prices is something that has been at the core of interest to investors and shareholders. And this owes to the fact that EPS is a crucial instrument that evaluates a company's performance in the long run, (Seetharaman & John, 2011). The EPS is one of the crucial investment factors that help in the evaluation of the health of any company as well as how it influences the buying tendency in the market that results to the fluctuation of particular stock prices. A company's EPS are significant as it is a good indicator of the financial health and performance of the company. Gordon (2009) pointed out that shareholder when buying shares usually pay for the earnings and the dividends. Multiple practical research has ascertained that, within corporate finance, one most crucial evaluation is linked to whether a firm's revenue should be allocated to shareholder bonuses or it must be reinvested back to the business through new investment prospects, and if it is to be spread among the two, what percentage of the revenue ought to be owed to shareholders and what amount ought to be allocated to corporate ventures (Dawar, 2012; kouki & Guizani, 2009)

This study was guided by efficient market hypothesis and random walk theory and signaling supposition theories. Efficient market hypothesis affirms that an industry is considered efficient if security prices instantaneously and completely respond to changes in prices so as to echo the existing data. Efficiency, in this context refers to informational efficiency and not to the operational efficiency. Therefore, if a market echoes the data, the knowledge of that data cannot allow someone to profit from it since the security prices incorporate the data itself (Dolvin et al, 2012). Random walk is a theory affirming that the former direction of price or stock movement and/or overall market cannot be adopted in the prediction of its future movement. Signaling theory, in turn, puts forth that stockholders consider dividends as tools of managing the forecast of earnings. For example, if investors or stakeholders anticipate a firm's dividend to increase by five percent, then it is expected that, on general terms, the stock price will not vary considerably on the moment of dividend announcement.

In general terms, the security prices are an indication of a company's performance. Both economic and non-economic elements consistently influence the behavior of stock return. As Cootner (1964) claimed that security prices are normally sensitive and responsive to all real and imagined events. As well, a major factor behind the variation of returns is speculative foreign institutional investor's sales and purchases.

In the absence of developed securities market in Nepal, the government was the sole issuing authority of development bond's and national saving certificates. Therefore, the securities generally floated in the market were mainly the government securities. Nepal Rastra Bank as the central bank is responsible to mobilize resources, on behalf of the government. To finance the development activities and manage public debt under the public debt act, Nepal Rastra Bank has been managing the issue of short-term Treasury bills to time accordingly. Ninety-one-day Treasury bills of Rs.7 million were issued for first time during June /July 1962. Nepal Rastra Bank arranges for the issue, register, purchase and sale, transfer of ownership and redemption of government bond and debentures. Therefore, the government securities are fully traded under the management and supervision of Nepal Rastra Bank.

Nepalese stock market is very small as compared to other neighbour countries. Capital market plays a vital role in the economic development of a country. Being a capital deficient country, Nepal has to make every attempt to mobilize available capital effectively. Securities are financial assets. Securities markets are mechanism created to facilitate the exchange of financial assets. Therefore, the market exists in order to bring together the buyers and sellers of securities. Capital market is the mechanism designed to facilitate the exchange of financial assets by bringing orders from buyers and sellers of securities together. The stock market has been global phenomenon in the present world regardless of the size of any particular region.

Securities market is place where buying and selling of securities take place in an organized way. The parties involved in securities market are investors, intermediaries and specialists. Security market provides mobility of the scattered savings. Retail investors with limited capital fund could also participate in the industrial development process of the country through their investment in the securities. Investors who are willing to buy or sell securities quickly may be searching good offers or accepting poor offers with higher risk and higher return. Securities market is the major constituents of capital market. Although some analysts view securities market in developing countries as gambling casinos that have little positive impact on economic growth, empirical evidence suggests that securities markets give a big boost to economic development (Levine, 1996). Securities market is the pivot on which the economic development oscillates; it does mean that securities market is the foundation stone of any economic development. Securities market in developed countries has become an integral part of economy (Brennan, 1995) and its role in developing countries is increasing day-by day. In securities market, the securities of listed companies are traded through organized brokerage firm. It is, thus, a mechanism for bringing together buyers and sellers of financial assets in order to facilitate trading.

During the last two and half decade the financial sector of Nepal has grown significantly. It is said that despite a history of almost half a century of developmental efforts under different national plans, conscientious efforts to develop financial sector started quite late in Nepal.

1.2 Effect of Dividends and Earnings on Share Price

Gordon (1959) pointed out that investors pay three things when paying for the shares listed namely: both the dividends and the earnings, the dividends, and the earnings. The shareholder's interest in the company earnings is represented by the portion of the earning per share hence to understand the effect of the EPS on the stock price is vital as the EPS is an important consideration when investors buy the shares of a company. An investigation by (Patel & A.Wolfson, 1984) showed how swiftly prices can fluctuate if data is available to the market; they established that when a company updates its earnings data, or dividend changes, main part of the variation occurs between 5-10 minutes of the announcement. Similar studies by (Bernard & Thomas, 1989)on stock performance following the declaration of sudden good or bad news in the period 1974 to 1986 in the US found out that stocks with best earnings news do better than those with worst news. There definitely appears to be an impact over the stock prices following the announcement of company's earnings. The linkage between earnings and dividends remains an issue that is not attended to. According former finance literature studies, it is possible to use dividends to predict future earnings. Miller and Modigliani (2008) utilized intelligent examination method to clarify firms' profit approaches.

The two specialists guaranteed that in an impeccable market, the organization esteem ought to be novel as far as its profit arrangement. They included that a modification in profit arrangement can show an adjustment in the administration's point of view of future income. Benartzi et al (2011) discovered restricted support for the point of view that profit modifications have information content an association's future income. They expressed that "while there is a vigorous past and simultaneous connection between profit changes and income, the prescient esteem that accompanies adjustments in profits are apparently insignificant." Mozes and Rapaccioli (2010) contemplated the linkage between corporate income and profits. They continued by giving confirmation that critical increments of profits can normally prompt increments in future income. Then again, a little increment in benefit qualities can foresee an expansion in future income. They promote inferred that if an organization reported misfortunes, the profit decline would need to outperform a specific edge before it could be utilized as a part of the report of a misfortune. Mozes and Rapaccioli (2010) assumed that the linkage between the decrease of profits and future income cannot be direct and positive.

1.3Statement of the Problem

The development of capital market in general and stock market in particular is a must for a sound industrial development of the country. Capital market institutions help to mobilize the funds from the surplus unit into the deficit units for productive investments. As it mobilizes the scattered resources and channels them in productive sector, it is an effective instrument of expanding productive capacities of the country. Due to the lack of information and poor knowledge, investors are manipulated or exploited by the financial institutions or other market intermediaries such as extent that are investing in common stock are intolerably hazardous. Investor's attitude and perception plays a vital role in rational decision which is influenced by the knowledge and access to the data required for the analysis. Most of Nepalese investors invest their fund in single securities because of less knowledge about risk-return behaviours of the securities.

The development of stock market in Nepal is both challenging and difficult. The problems like lack of professionalism in brokers, independent buyers and sellers, well trained manpower; management delay of shares, rational investor exist from Nepalese stock market. Because of embryonic nature, Nepalese stock market is not effective enough to evaluate the price of stock. There are no private open investment companies (mutual fund) operating at present time. Therefore, the government needs to create incentives for capital mobilization remove impediments to private sector development and provide basic legal regulatory reforms.

The companies use different rules and regulation in stock market development. There is no consistency between Acts and Niyamabali. They are not matching each other. The special institute incorporated under a special Charter governs accountancy profession. These institutes regularise the profession and also issues of accounting standards and guidelines. All the members are required to follow it mandatorily which discharge their duties. These practices help to maintain a reasonable standardize performance by professional accountants.

Nepalese capital market is very small in comparison with other developed stock markets. There are a few numbers of brokers, limited number of listed companies, very few transactions and most importantly, investors are unknown about the pros and cons of the stock market. The market is almost totally captured by individual investors who buy very little number of shares and therefore they do not bother analysing the data and information before buying and selling stock. The variety of securities available in the market allows each investor to select asset that suits his risk, preferences and beliefs. But there is lack of different types of securities in the stock market.

1.4 Objectives of the Study

The main objective of the study is to identify the effect of earning per share (EPS) and stock dividend on share price fluctuation of private commercial banks. To achieve the main objectives the following specific objective has been formulated:

- To examine the effect of earnings per share on stock price of selected commercial banks; and
- To analyze the effect of stock dividend to stock price of selected commercial banks.

1.5 Significance of the Study

Stock market is a leading indicator of economy. When stock market is booming, the economy is good and when stock market is declining, the economy is bad. Stock markets have direct relation with the economic growth. Economic growths come with more earning capacity, opportunities to save and also the opportunity to invest. It must be noted that economic growth is, to a great extent, dependent on the industrialization in a country.

This study will be useful to the university students who are curious to know about the current status of Nepalese stock market, its growth, issues and challenges for the development of stock market. Similarly, the recommendations that this study intends to propose on the basis of its findings are expected to be useful for the policy makers associated with the development of capital markets. This study is also useful to the government of our country who can take the decisions accordingly regarding the stock prices.

1.6Limitations of the Study

The scope of the study has been limited in terms of period of study as well as sources and nature of the data. The following are some of the limitations of the study:

1. The study is based on secondary data only and is focused on the annual report given by the bank.
2. Only financial and statistical tools have been used for analyzing the stock market.
3. Out of 27 Class A commercial banks, the study has concerned with NMB Bank Limited & Machhapuchhare Bank Limited.
4. The period coverage by the study extends the period of eight years 2011/12 to 2018/19 (2068/69 to 2075/76) only.
5. Although there are various aspects of financial management, this research study is mainly concerned with the stock market aspects of the selected banks.

CHAPTER TWO

REVIEW OF LITERATURE

Review of literature means reviewing research studies or other relevant proposition in the related areas of study so that all the post studies, their conclusions and deficiencies may be known and further research can be conducted. It is an integral and mandatory process in research work.

Research is a continuous process. The procedure of findings may change but it never ends. In literature review researcher reviews the books, journals, magazine or any other type of studies, which are related to his or her field study in order to analyze the data and to find something new. Review of literature further helps us to identify the problem, to avoid unintentional replication of previous studies and also helps us to interpret the significance of researchers results in precise manner.

The purpose of reviewing the literature is to develop some expertise in one area and to see what new contribution can be made and to receive some ideas for developing a research design. Various books, journals and articles, thesis, some research reports related with the topic have been reviewed.

2.1 Conceptual Framework

Earnings per Share

Earnings per share or EPS are an important financial measure, which indicates the profitability of a company. EPS is the portion of a company's profit that is allocated to every individual share of the stock. It is a term that is of much importance to investors and people who trade in the stock market. The higher the earnings per share of a company, the better are its profitability. When a company's earnings increase, it is an indication that the company is doing well financially and that it's potentially a worthwhile investment. But as a measure of a company's financial health, the earnings per share calculation has its limitations. Because companies have the option to buy back their own shares, they can improve their earnings per share by reducing their number of shares outstanding without actually increasing their net income. In this regard, companies can essentially manipulate investors into thinking they're doing better than they actually are. Furthermore, earnings per share do not take factors such as a company's outstanding debt into account.

A firm's earnings paint a picture of the degree of the alteration in the worth of the firm to individual shareholders (Nichols & Wahlen, 2010). Earnings are given by revenues less the cost of sales, taxes and operating expenses over a specific period. In this research, we will evaluate the earnings as annual earnings per share due to the essence of comparability. Basu (2007) in the earnings multiplier model (P/E) supposed that earnings are one of the most crucial factors that establishes both the real value and health of a firm. Investors make decisions depending on public data such as earnings, which are perceived as indicators of a company's financial health and future expectations, therefore, determining the share price (Al-Malkawi, 2007). Incomes are considered as pointers of a firm's efficiency of management and profitability.

Empirical studies suggest that earnings per share (EPS) are one of the most significant factors that influence the price of a share (Sharma, 2011). The pioneers of the studies on elements and determinants of share price were (Gordon, 1959) and Collins (1957). In their independent studies, both identified earnings as one of the dynamics influencing share prices. Beaver (2009), further, put forth that current period revenue present data to predict future periods' profits. The future periods' earnings, further, provide data that helps in the development of prospects in future. This gives data that enables a firm determine the share price. Firms need to carry out effective earnings management and at the same time the executive needs to understand the effect of the firm's policies so that they can make the best possible decisions for the company.

Stock Dividend

Dividend is the distribution of past or present earnings in terms of real assets among company shareholders proportionally as per their ownership (kapoor, 2009).They are thus, distributions made out of the firm's profits/revenues and the decision to pay out dividends is rooted on the dividend policy of the company.

A dividend per share (DPS) is the summation of all dividends declared by a company divided by the issued outstanding ordinary shares.

According to Zameer et al; (2013), there are varied reasons why firms allocate dividends. It may either be a way to lower the rise in agency cost between shareholders and managers or to reduce investor's insecurity. It could be the aim of an investor to receive dividends continuously, preferring to invest in companies that pay dividends. The research also concludes that firms paying more dividends have no trouble when accessing capital markets and dividends also influence the valuation of stock.

Dividends are mostly paid out by companies that are in a better cash position and whose earnings can be said to best able and sound (Kania & Bacon, 2005). According to (Osobov, 2008,), large, mature and more profitable firms are thought to be highly probable to pay dividends as they can even source for such funds to pay out dividends from cheap external debt sources at their disposal. The firm’s liquidity position, its earnings and leverage, the profitable opportunities available and its debt to equity ratio are important determinants of dividend payments by firms from the financial sector listed at the Nairobi Securities Exchange.

The functions of finance involve three major decisions a company must make: the investment decision, financing decision, and the dividend decision. Each must be considered in relation to firm's objective; an optimal combination of the three will create Value (Van Horne, 1929).

Dividend refers to a portion of earning, which is distributed to shareholders in return of their investment in share capital. It is the periodic payment made to the shareholders to compensate them for the use of and risk to their investment.

If additional shares are issued to existing shareholders instead of cash dividend, it is known as stock dividend. "A stock dividend represents distribution of shares in addition to the cash dividend to the existing shareholders." This has the effect of increasing the number of outstanding share of the company. The shares are distributed proportionately. Thus, the shareholders retain their proportionate ownership of the company. The declarations of bonus share increases the paid-up share capital and reduce the reserves and surplus of the company. The total net worth is not affected by the issue of bonus shares.

Share Price

A share price is defined as the price of one share among a number of commercially viable stocks of a firm. A share cost or price at a particular time represents the balance that buyers and sellers strike among themselves. The price reflects the collective knowledge and wisdom concerning the market (Sharma, 2011). On the other hand, the alteration of a stock price determines the return on investment on that particular stock. Thus the share price among the most important factors that influence investment decisions made by investors. This factor is majorly controlled by the supply and demand forces of a certain security (Zakir & Khanna, 1982). Specialists can hotspot at share costs from the stock market exchange.

The share cost of a particular organization is plainly detectible from the stock trade, a portion of the capital market's security fragment. The most well known securities are alternatives, bonds, and stocks. Securities market permit demanders and providers of assets to carry out exchanges. They likewise permit less demanding and quicker exchanges at sensible costs (Feldstein & Green, 2013).

2.2 Review of related studies

Poudel (2002) in his article determined whether the shares of commercial banks in Nepal are correctly priced and to trace their future price movements when striving towards equilibrium.

For this, some theoretical models have been discussed to analyze return and risk characteristics of those shares. The correlation coefficients between the returns on individual shares and the return on market portfolio have been analyzed with the objective of decomposing the total risk into systematic and unsystematic components. The analysis of the individual stock's beta coefficient helps determine the minimum rate of return required by the investor to compensate for systematic risk. Statistical results suggest that the analyzed shares here are not in equilibrium with most of the shares being less risky than the market. While all the shares examined appear to be attractive to the potential investors since they produce higher rates of return than that of the average stock, the various shares have different degrees of risk with some shares being unable to generate the minimum rate of return (i.e. the sum of risk free-rate plus a premium for additional risk bearing).

The shares of commercial banks in Nepal are heavily traded in the stock market and, therefore, these shares play a key role in the determination stock exchange indicators .All the shares produced higher rates of return than the return on market portfolio. However, the risk-return characteristics do not seem to be the same for all the shares reviewed. The shares with larger standard deviations seem to be able to produce higher rates of return. The portion of unsystematic risk is very high with the shares having negative beta coefficient. The risk per unit of return, as measured by the coefficient of variation, is less than that of the market as a whole for all the individual shares.

Pradhan (2003) conducted that the effect of dividend payment and retained earnings on market price of share in the context of Nepalese companies. The study shows a predominant influence of dividends and an absence of retained earning effect on share price. Dividends are found relatively more attractive among the Nepalese stockholders. They are therefore not indifferent toward dividend and retained earnings. It attempts to determine relative importance of dividends and retained earnings in determining market price of share. The findings indicate that share value is affected by dividend payments. This finding is consistent with the existence of net preference for current dividends as opposed to capital gains. There is an indication that a somewhat higher investor valuation may be placed on dividends than on retained earnings. To the extent that this conclusion is valid, it is possible that management might be able, at least in some measure, to increase stock prices by raising dividends. However, the opposite may be true in growth companies where management might be able to increase share price by greater retention of earnings that could not be revealed by this study.

Thus it may be pointed out that dividend payment is more important as compared to retained earnings in Nepal. If the company retains more earnings, the market price of share may decline. In this connection, it may be interesting to conduct a similar study at different points in time to ascertain whether importance of retained earning has increased over a period of time. Similarly, an industry wise analysis may also be very rewarding as such study can reveal the degree of importance of dividend or retained earnings in different industries.

Joshi (2012) in his article examined the impact of dividends on stock price in the context of Nepal. A majority of earlier studies conducted in developed countries show that dividend has strong effect than retained earnings. The study examines whether this is consistent in the context of Nepal (or not) and the implication particularly to the banking and non-banking sector. To achieve the objective of the study, a descriptive and analytical research design has been administered. The secondary data are used to test this impact. In order to examine the impact of dividends on stock prices, a multivariate linear regression analysis has been implied in which current market stock price is taken as a dependent variable and four other variables namely Dividend Per Share (DPS), Retained Earnings Per Share, Lagged Price Earnings Ratio (P/E ratio) and Lagged Market Price Per Share as the explanatory variables. This attempt has been made to test the dividends retained earning hypothesis and to examine the estimated relationship over the period of time. The overall conclusion drawn in this study reveals that, the impact of dividends is more pronounced than that of retained earnings in the context of Nepal. Dividend has a significant effect on market stock price in both banking and non-banking sector.

The impact of dividends on stock price of Nepalese stock market, it is found that DPS is a motivating factor in the Nepalese financial sector which is strong enough to increase market price per share of the banking and non banking firms. Comparatively, it is also found that the effect of DPS greater than REPS on the impact of market price per share. Lagged market price per share is an accelerator to increase market price per share in subsequent years. Finally, the study shows that dividends and retained earnings significantly explain the variations in share price in both banking and nonbanking sectors. The impact of dividend, however, is much more pronounced than that of the retained earnings. The relation of dividends and retained earnings on share price is positive in all cases.

Shrestha and Subedi (2014) in their article examined the determinants of stock market performance in Nepal, which has been passing through up and down in recent years. Since stock market tends to be highly sensitive and volatile, the determinants of stock market index on monthly data found that the Nepalese stock market has been behaving as expected theoretically. It has strong positive relationship with inflation and growth of money supply, and negative response to interest rate. It shows that people have been gradually taking stock market as a hedge against inflation and invest in this market when there is ample liquidity available at a low interest rate. More importantly, the stock market performance has been found to be influenced by political changes similar to finding of Dangol (2008) and the NRB's policy. The positive outlook for political stability has positive impact on stock market index. Similarly change in NRB's policy on lending against share collateral has significant impact on the movement of stock market index. A number of policy implications can be drawn from this study. First, Nepalese stock market has been quite responsive to macroeconomic development, especially monetary sector development. Second, a loose monetary policy could trigger an asset price bubble in share market, which is mainly dominated by banks and financial institutions. Third, share investors seem to watch the political development closely. Hence, a positive political development with stability can promote share market further which can play a vital role for financial intermediation and resource mobilization through capital market. Fourth, NRB's policy on lending against share collateral has been effective in influencing the share market. This indicates the significant role of NRB's policy in the share market. As the results the share market is also influenced by rumors, news and speculations, transparency should be increased in this market by making information related to listed companies easily accessible. Transparency and communication should, in fact, be enhanced by the concerned authorities in order to clear gossips and rumors in the market.

Islam et al; (2014) in their article concluded that Earnings per Share (EPS) is generally considered most important factor to determine share price and firm value. Literature shows that most of the individual investors take their individual investment decision based on the EPS. This paper attempts to provide empirical evidence on how EPS affect the share price movement. They found that the share price movement depends on micro and macro economic factors on the economy. They suggest that investors must consider other factors as well as EPS in order to invest in the security market.

Bhattarai (2016) in his article examined the effect of dividend payment on stock prices of commercial banks in Nepal. The study has adopted causal comparative research design. The secondary data of six commercial banks were collected during 7 years (2010 to 2016) period. Data were analyzed using both descriptive and inferential statistics. From the empirical analysis this study found a significant positive relationship between share price and dividend payment. This study concludes that payment of dividend positively affect share price of Nepalese commercial banks

Dongol (2016) investigated the effect of dividend and earnings announcements on share prices in Nepal between 2000 and 2011. The study finds, dividend increased (decreased) announcement effect positively (negatively) during the dividend announcement period. Similarly, the announcement of Dividend shows positive influence on the share prices. The study also finds the significant effect of constant dividend announcement on share price. The reason behind this phenomenon could be that the investors perceive 'no change in the dividend' positively. This result suggests that the both dividend increase and decrease convey useful information to the market. The results accept the dividend signaling hypothesis but reject the semi-strong form of market efficiency.

Dhakal and Shah (2016) in their article expressed that dividend yield and retention ratio have significant negative impact, whereas earning per share has significant positive impact on market price of commercial banks in Nepal. Two variables profit after tax and return on equity have insignificant impact on share price. The study is further extended to analyze the impact of dividend change in future profitability of commercial banks. The analysis indicates that the current year dividend change has significant impact on current year earning changes. The analysis is further carried on by modifying empirical regression equation by adding number of other relevant variables for more accurate analysis. Even after series of regression model, the result does not improve. The result of all subsequent analysis supports the initial findings that the rate of change in dividend does not have significant impact on future profitability of commercial banks in Nepal. Hence, dividend change does not support signaling hypothesis of dividend and do not carry information regarding changes in earning in subsequent years of dividend declaration. The study covers more recent study period and wider study area. Hence, this study and its findings are significant to the entire banking industry regarding the factors and its intensity on influencing share prices of commercial banks in Nepal. Besides, the study has taken a lead in analyzing the impact of dividend changes in future profitability of commercial banks in Nepal. The finding would guide bankers to focus on changing rate of dividend distribution to influence the respective year earning changes. However, in the subsequent years, the changes in dividend distribution would not be useful. Thus to influence the future profitability of commercial banks in desired direction, they need to focus on other variables except dividend policy. The result of the study would also be informative to Nepalese shareholders i.e. not to judge the profitability of commercial bank solely on behalf of the dividend distribution pattern.

Murira et al., (2017) conducted study that investors expect to earn returns from their investment in shares and hence they pursue a profit maximization objective. The higher the returns the higher the demand for shares, which in turn causes share, prices to rise. This study investigated the relationship between share returns, represented by; earnings per share, dividends per share and price-earnings ratio with market price of shares. The study found out that both earnings per share and dividend per share have a positive significant relationship with share prices. However, price earnings ratio is positive but does not have any significant relationship with share prices. Therefore the study concluded that earning per share and dividend per share positively influence market price of shares listed on the Nairobi Securities Exchange. The study therefore recommends that companies should come up with an optimal dividend policy for dividend payment as dividends affect the market price for shares. In addition, managers of companies listed on the Nairobi Securities Exchange should enhance the earning per share as they positively influence the market price for shares.

Jain and Bajaj (2017) the study was undertaken to find whether the earnings per Share and market price of the share are related or not, whether EPS has any effect on the market price of the share. The most important factors that influence price of equity share are demand and supply. If investors start buying shares then prices move up and if investors start selling shares prices go down. There are various factors that may affect the market price of share such as Government policies, firm's and industry's performance. In this study the impact of earnings per share on share price of selected companies has been analyzed, the strength of association of variables has also been measured**.** The selected companies were those companies which are listed and actively traded with high volumes in National Stock Exchange (NIFTY 50). The data were collected from 5 companies from different sectors for the period of 2008-2017 for the study. The collected data was exploratory in nature which was measured through simple Correlation analysis and regression analysis. The analysis shows that share price of most of the companies is affected by the independent variable i.e. EPS.

Maswadeh (2018) in her article expressed that earnings per share is the strongest variable that helps to predict the market value of the banks' shares, while there was no significant effect of the dividends in the prediction of the banks 'stock market value. Additionally, bank size was found to have a significant effect on the prediction of stock market value. It is an indication that bank size is important in expressing the market share of the banks in the financial market, where increasing the size of the banks leads to the availability of more investment opportunities that can be used to generate profits, which in turn is reflected on the earnings per share. The researchers recommend that the attention of the banks' management is focused on choosing a dividend policy that distinguishes between the banks distributing a portion of the profits to the shareholders and returning the current profits to be invested in new investment opportunities. Allocating a portion of the profits to the shareholders would motivate and attract them to invest in the banks' shares. Accordingly, returning the current profits for new investment opportunities would support the banks' ability to continue to grow and achieve higher levels of profit. This would reflect positively on the earnings per share which has been proven in this study to be an important variable influencing the stock market value of the banks operating in Jordan.

Ghimire and Mishra (2018) in their article expressed that the stock market is all about dynamics and that is why investors and fund managers have been time and again confronted with the problem of accurately predicting the stock prices so as to earn decent returns. Investment in shares offers the benefit of liquidity as well as the opportunity to beat the market and earn high returns. But the task of predicting share prices is far from simple. Share price movement is not dependent in nature and both intrinsic as well as extrinsic factors have been established to exerciser influence over stock price movement. Using multiple regression analysis and descriptive statistics this study investigates the factor affecting the stock price. The study has chosen DPS, EPS, P-E ratio, BV, market to BV as the major variable of stock price with the sample size of 11 financial and nonfinancial firms.

The result indicates that the variables Market to Book value, P-E ratio are the significance determinants of stock price which affects the stock price in direct manner. Likewise, DPS, Book value also have significance positive influence on stock price but EPS has minimum influence on the stock price. Many researchers have conducted research in this particular topic and most of them have found positive relationship between EPS and Market price whereas present researcher has shown minimum influence of EPS in stock price. EPS can be never studied in isolated form. For instance, Increase in EPS means firms are most likely to give dividend in near future but in current scenario, NRB the regulator of banking institutions has imposed regulation to raise the capital of banking institution. In such situation, banks are most likely to retain their profit with themselves rather than distributing it as dividend to stockholders as a result fund manager and other investors are not taking EPS as factors to be considered while making investment decision. So here, despite of increase in EPS it is not contributing to market price. Therefore, minimum influence is traced between these factors in this recent study and probably such findings can be traced in future research as well until the capital problem of bank is solved. Finally, the results of this study uncovered new evidence in Nepalese perspective, which are considered to be valuable to market participants. Thus, findings of this study seems to be particularly useful for the share investors, fund manager and economy as well, as they can watch out for these significant factors while estimating stock returns and predicting share prices.

Karki (2018) in his article studied the cross-sectional differences in stock prices of Nepalese commercial banks to the underlying behavior of six fundamental variables: earnings per share, book value per share, cash dividend per share, stock dividend per share, price earnings ratio, and firm size. The earnings per share and stock dividend per share are the more significant determinants of stock prices of commercial banks in Nepal. The performance of the stock dividend is especially noteworthy; this variable is statistically and economically the most important of the six fundamental variables investigated. The result of the study concludes that the earnings and stock dividend are the more significant determinants of stock prices of commercial banks in Nepal. The effects of these variables on stock prices are consistent and statistically significant across all the analyses and all the specifications of the model. The performance of the stock dividend is especially noteworthy; this variable is statistically and economically the most important of the six firm specific variables investigated.

Conceptual Framework

This framework offers an illustration of how variables are linked to each other. These variables, in this case, are the independent (explanatory) along with the dependent variable (response). Notably, an independent variable affects and determines the effect of another variable. The independent variable in this study is earnings per share, dividend per share, P/E ratio and book value per share. On the other hand, the dependent variable is the observable and measurable factor that regulates the influence of the independent variable. The response, in our case variable is share price, and therefore, is the dependent variable. Control variables are extraneous factors, conceivably affecting the investigation, that are kept continuous to reduce their effects on the outcome. In this research the control variables are the market price per share. The study expects that the independent variables will have a significant positive relationship on dependent variable

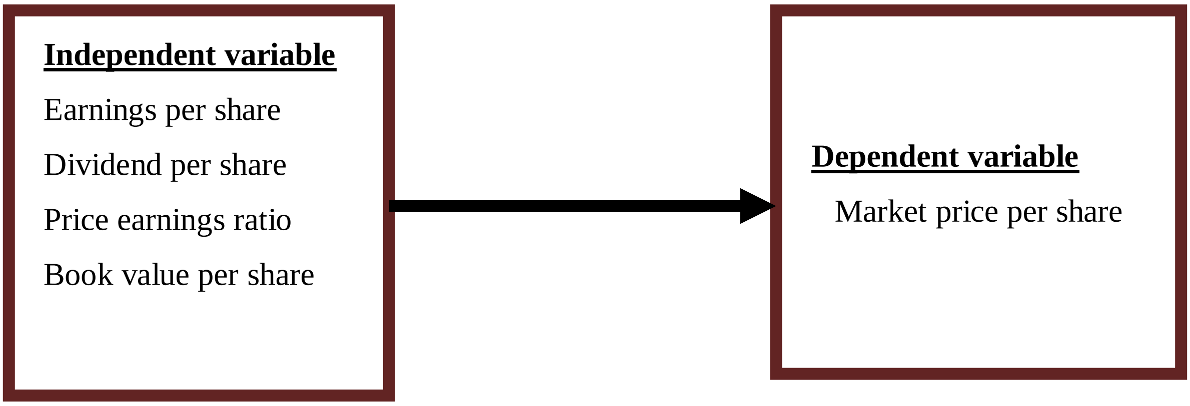

Figure 1 Conceptual Model

Table 1

Details of Variables

Variables	**Short Name**	**Type**	**Unit**	**Calculation**
Earnings Per Share	EPS	Independent	Rupees	Net profit after tax/No. of shares
Dividend Per Share	DPS	Independent	Rupees	Total Dividend/No. of shares
Price Earnings Ratio	P/E ratio	Independent	Times	Market price per share/EPS
Book Value Per Share	BVPS	Independent	Rupees	Shareholder's equity/no. of share
Market Price Per Share	MPPS	Dependent	Rupees	Total market capitalization/no. of share

Note: Developed by researcher from different sources

Table 2

Review of Empirical studies

Source	*Major Finding*
Poudel (2002)	*All the shares produced higher rates of return than the return on market portfolio, However, the risk-return shares characteristics do not seem to be the same for all the reviewed.*
Pradhan (2003)	*The findings indicate that share value is affected by dividend payments. This finding is consistent with the existence of net preference for current dividends as opposed to capital gains.*
Joshi (2012)	*It is found that DPS is a motivating factor in the Nepalese financial sector which is strong enough to increase market price per share of the banking and non-banking firms. Comparatively, it is also found that the effect of DPS greater than REPS on the impact of market price per share.*

Shrestha & Subedi (2014)	*Since stock market tends to be highly sensitive and volatile, we have found the Nepalese stock market has strong positive relationship with inflation and growth of money supply, and negative response to interest rate.*
Khan, Islam, Choudhury& Adnan (2014)	*Although the EPS is increasing, the share price is not Increasing that much*
Bhattarai(2016)	*The estimated regression models reveal that dividend per share has positive and statistically significant impact on share price on share price of commercial bank. Thus, this study concludes that increase in dividend payment can enhance the share price of the commercial banks in Nepal*
Dangol (2016)	*The study finds, dividend increased(decreased) announcement effect positively (negatively during the dividend announcement period*
Dhakal& Shah(2016)	*The finding of the study explains that dividend yield and retention ratio have significant negative impact, whereas earning per share has significant positive impact on market price of commercial banks in Nepal.*
Murira, Baimwera, Munene (2017)	*This study investigated the relationship between share returns, represented by; earnings per share, dividends per share and price-earnings ratio with market price of shares for companies listed at the Nairobi Securities. The study found out that both earnings per share and dividend per share have a positive significant relationship with share prices. However, price earnings ratio is positive but does not have any significant relationship with share prices. Therefore the study concluded that earning per share and dividend per share positively influence market price of shares listed on the Nairobi Securities Exchange.*

Jain and Bajaj (2017)	*There are different factors affecting the market price of a share. Among them one of the important factors took in the study Earnings per share.*
Maswadeh (2018)	*It was found that earnings per share is the strongest variable that helps to predict the market value of the banks' shares, while there was no significant effect of the dividends in the prediction of the banks 'stock market value. Additionally, bank size was found to have a significant effect on the prediction of stock market value. Thus, these results emphasize the significance of information related to earnings per share and the rapid impression and effect that the users of the financial statements have on market value of the bank's shares.*
Karki (2018)	*The result of the study concludes that the earnings and stock dividend are the more significant determinants of stock prices of commercial banks in Nepal. The effects of these variables on stock prices are consistent and statistically significant across all the analyses and all the specifications of the model*
Ghimire& Mishra (2018)	*Share price movement is not dependent in nature both intrinsic as well as extrinsic factors have been established to exerciser influence over stock price movement.*

Research Gap

Earlier works conducted by the previous researchers are very useful and appreciated by the personnel in various related field. The suggestion and recommendation given by the previous researchers helped to improve and increase the data for the related topic. Most of the above stated studies use technical method and statistical methods like regression analysis, correlation coefficient, NEPSE trend etc. for analysis. None of the studies use financial analysis tools for the study, which is most important in the study of financial institutions. Hence, the researcher has taken the financial analysis tools like P/E ratio, dividend per share, book value per share to identify the financial health of the sample banks. So, this study tries to analyze the relationship of EPS, DPS, P/E, BVPS along with influencing factor on market price of the stock.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter deals with the presentation and analysis of secondary data. It gives a clear picture of how the collected data has been presented on the study and how it has been analyzed. More over this chapter focuses on the major findings of the data analysis.

3.1 Research Methodology

Research methodology means the analysis of specific topic by using proper method. The research methodology tries to make a clear view of the method and process adopted in the entire aspect of the study. It is also considered as the path from which researcher can systematically solve the research problem. This chapter aims to present a basic framework of the research work, in efforts that have been made to present and explain the specific research design to attain the research objective.

This chapter describes the methods and process applied in the entire subject of the study. The study covers the quantities methodology using both financial and statistical tools and the study is based on secondary data only.

3.2 Research Design

Selection of appropriate research design is necessary to meet the study objectives of any research. The study aims to represent the effect of earning per share and stock dividend on share price fluctuation of private commercial banks by studying the overall financial position of the selected banks. It is based on recent eight years data from F/Y 2011/12 to 2018/19(2068/69 to 2075/76). The study has been conducted to assess the current situation of the share prices in the market of the commercial banks and describe the situation and event occurring at the present context. In this study descriptive and analytical survey is done. The justification for the choice of these methods can be various types. The descriptive method is preferred because it includes reliable data and information covering a long time and avoids several complex variables operating into formulation and adoption of credit and investment policies.

3.3 Population and Sample

In the present context there are 27 A class commercial banks operating in Nepal. Among them, NMB &MBL of the selected banks have been taken as a sample for the study. These sample banks are the pioneer leading banks in the context of deposits collection and loan payment. Machhapuchchhre Bank Limited (MBL) is first bank to introduce centralized banking software, Globus Banking System of Temenos NV, Switzerland._Nepal Merchant Bank (NMB) was awarded 'Bank of the year 2017' and 'Bank of the year 2018' consecutively by the banker, Financial Times, London. The financial statements of the 8 fiscal years from F/Y2011/12 to 2018/19(2068/69 to 2075/76) have been taken as sample data for evaluating determinants of stock price fluctuation in Nepalese market.

3.4 Nature and Sources of Data

The secondary data have been extracted from the annual report of the selected banks. Similarly, various data and information have been collected from periodicals, managerial and economics magazine, journals etc.

3.5 Data Processing Procedure and Analysis

The method of analysis was classified and tabulated as per the nature of study and in accordance of the data. Different financial and statistical tools for data analysis were used. The obtained data analysis has been presented in various tables, charts and diagram with the help of supporting interpretation.

3.6 Tools and Techniques of Analysis

Under this study, financial as well as statistical tools have been used to analyze data and information, which were collected.

Tools and Techniques of Analysis

Financial Tools

Statistical Tools

Financial Tools

In this research study, various financial tools have been used for analyzing the data. The study focuses on NEPSE Index and the market ratios as Earnings per share (EPS), Dividend per Share (DPS), Market Value per share (MVPS) and Book Value per share (BVPS).

Statistical Tools

Statistical tools are the measures or the instruments to analyze the collected data from different sources. In statistics, there are numerous statistical tools to analyze various natures. In this study, the researcher has used the following statistical tools to analyze the data.

i. Arithmetic Mean or Average ($\bar{x}$)

An average is a single value that represents a group of values. It depicts the characteristic of the whole group. It is a representative of the entire mass of homogeneous data, its value lies somewhere in between the two extremes, i.e. the largest and the smallest items. It is obtained by dividing the sum of the quantities by the number of items. Therefore, it is calculated as

$$\bar{x} = \frac{\sum X}{N}$$

Where,

$\bar{x}$ = Arithmetic Mean or Average
$\sum X$ = Sum of the sizes of the items
N= Number of items

ii. Standard Deviation (S.D.)

It is the most usual measure of dispersion and it represents the square root of the variance of a group of numbers, i.e., the square root of the sum of the squared differences between a group of numbers and their arithmetic mean. Generally, it is denoted by σ (read as sigma). Therefore, it is calculated as:

$$\sigma = \sqrt{\frac{\sum(x - \bar{x})^2}{N}}$$

Where,
$\sigma =$ Standard Deviation
N = Number of items in the series.
$\overline{X}$= Average or Arithmetic Mean
X = Variable

The standard deviation measures the absolute dispersion or variability of a distribution; the greater the amount of dispersion or variability the greater the standard derivation, for the greater will be the magnitude of the deviations of the values from their mean.

iii. Coefficient of Variation

Karl Pearson developed this measurement to measure the relative dispersion. It is used in such problems where we want to compare the variability of two or more series. The CV is the relative measure of dispersion, comparable across distribution. It is denoted by dividing the arithmetic mean to standard deviation.

$\mathrm{C.V.} = \frac{\sigma}{\overline{X}} \times 100$Percentage
Where,
$\mathrm{CV} =$ Coefficient of Variation
σ = Standard Deviation
$\overline{X}$ = Average or Arithmetic Mean

iv. Coefficient of Correlation

The correlation analysis refers to the techniques used in measuring the closeness of the relationship between the variables. It helps us in determining the degree of relationship between two or more variables. It doesn't tell us anything about cause and effect relationship. It describes not only the magnitude of correlation but also its direction. The coefficient of correlation is a number, which indicates to what extent two variables are related to what extent variations in one go with the variations in the other. The value of coefficient of correlation always lie between +1 and -1 indicating -1 as perfect negative relationship, +1 as perfect positive relationship, and of 0 as no relationship between the variables. It is defined by Karl Pearson as:

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

v. Probable Error

The probable error denoted by P.E. is used to measure the reliability and test of significance of correlation coefficient. Significance of relationship has been tested by using the probable error (P.E.) and the following model denotes it:

$$\mathrm{P.E.} = 0.6745 \text{ x } \frac{1 - \mathrm{r}^2}{\sqrt{\mathrm{N}}}$$

or

$$\mathrm{P.E.} = 0.6745 \text{ x } \mathrm{S.E.}$$

Where,

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

S.E. = Standard error of correlation coefficient

r = correlation coefficient

N = number of pairs of observations

If r is less than PE (i.e. r <PE) the value of ‘r’ is not significant no matter how high the value of r is.

If r is greater than 6 PE (i.e. r > 6PE) the value of ‘r’ is significant

If r is equal to PE (i.e. r = PE) the value of ‘r’ is no correlated

vi. Regression Analysis and Trend Analysis:

Regression is a statistical tool, which is used to determine the statistical relationship between two variables and to make the estimation or prediction of one variable based on another variable. Therefore, trend helps to estimate the value of one variable from the given value of another. This analysis also helps to describe the average mathematical relationship between two variables known as simple linear trend analysis. It’s “Simple” because there is only one independent variable and “Linear” because the relationship between the independent and dependent variables is assumed linear.

Trend analysis is one the most important methods, which enables to find out the actual position of business cycle over a period of years. The study of the data over a long period enables us to have a general idea about the pattern of the behavior of the trend under consideration. This help in business forecasting and planning future operation. The trend analysis also enables us to compare two or more time series over different periods and draw important conclusion about them. In this study, the researcher has used least square method for analyzing trend analysis. It is computed as follows:

$Y = a + bX$

Following two equations can be developed putting the above values in normal equation

$\sum Y = Na + b\sum X$

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

Where,

$$a = \frac{\sum Y - b\sum X}{N}$$

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

Where,

Y = Value of dependent variable

a = Intercept of trend line

b = Slope of trend line

X = Value of the independent variable

N = Number of variables

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The main objective of the study was to determine the effects of earnings and dividends on stock prices of firms listed at the NSE. The data was analyzed using SPSS Version 21. Data has been presented by use of tables. The findings with regards to the objectives of the study have been described using inferential statistics

4.2 Descriptive Statistics

Descriptive statistics are the measures that define the general nature of the data under study. They define the nature of response from primary data and/or secondary data. Descriptive statistics for this study were: mean, standard deviation, minimum and maximum. Descriptive data analysis was performed on the share prices, EPS, DPS, BVPS, and P/E Ratio. The descriptive statistics results are tabulated below

Earning Per Share.

Table 3

EPS of NMB Bank and Machhapuchchhre Bank

(in Rupees)

Fiscal Year	NMB Bank	MachhapuchchhreBank
2011/12 (2068/69)	2.61	1.54
2012/13 (2069/70)	18.02	5.98
2013/14 (2070/71)	20.50	18.34
2014/15 (2071/72)	21.48	22.20
2015/16 (2072/73)	22.10	25.04
2016/17 (2073/74)	22.24	24
2017/18 (2074/75)	21.86	15.81
2018/19 (2075/76)	23.54	21.07
Total	**152.35**	**133.98**
Mean	19.04375	16.7475
Standard deviation	6.392	8.065
Coefficient of Variation	33.56	48.16

Note: From annual report of NMB and Machahapuchchhre Bank

Table 3 shows EPS of NMB and Machahapuchchhre Bank. The EPS of NMB Bank had highest EPS than Machhapuchchhre Bank. The higher a company's EPS the more profitable it is considered. Hence NMB Bank is more profitable than Machahapuchchhre Bank. The above table shows the amount of earning per share of NMB 2011/12 to 2018/19 is increasing 2.61, 18.02, 20.50, 21.48, 22.10, 22.24, 21.86 and 23.54 respectively. The above table shows the amount of earning per share of Machhapuchchhre Bank 2011/12 to 2018/19 is increasing 1.54, 5.98, 18.34, 22.20, 25.04, 24, 15.81 and 21.07 respectively.

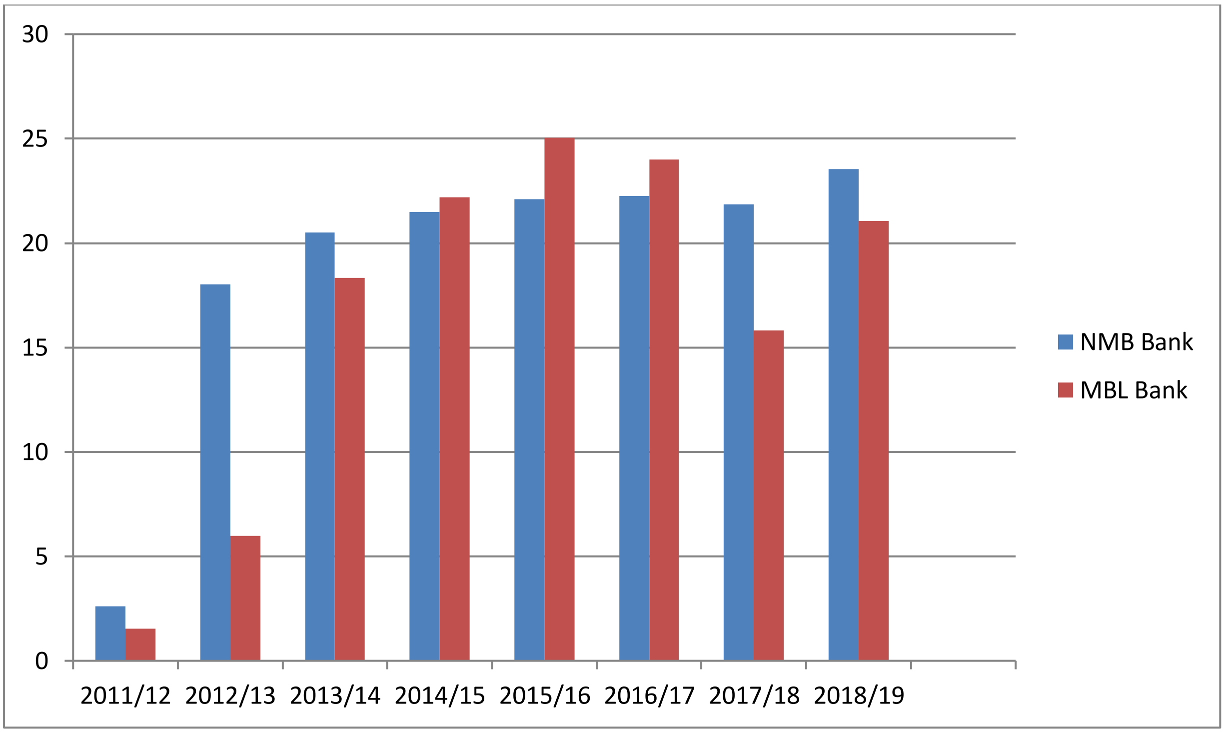

Figure 2 Earnings per share paid by the banks from the year 2011/12 to 2018/19.

Dividend per share

Dividend per share is the sum of declared dividends issued by a company for every ordinary share outstanding. The figure is calculated by dividing the total dividends paid by a business; including interim dividends for a period of time by number of outstanding ordinary shares issued. Investors very much rely on this ratio for investing. They prefer the company that distributes attractive dividends. Table number 4.2 shows the DPS of all samples banks. A company uses this calculation to share profits with its shareholders. DPS can indicate how profitable a company is over a fiscal period.DPS can tell an investor about the company's past financial health and its current financial stability. A decrease in DPS can cause investors to sell their stake in the company. It is calculated as follows:

DPS = $\frac{\text{Total dividend proposed}}{\text{No. of ordinary share}}$

Table 4

DPS of NMB Bank and Machhapuchchhre Bank

(In Rupees)

Fiscal Year	NMB Bank	MachhapuchchhreBank
2011/12 (2068/69)	0	0
2012/13 (2069/70)	0	0
2013/14 (2070/71)	21.05	12.63
2014/15 (2071/72)	8.42	16.84
2015/16 (2072/73)	20	21.84
2016/17 (2073/74)	15.79	15
2017/18 (2074/75)	30	10
2018/19 (2075/76)	35	16
Total	**130.26**	**92.31**
Mean	16.2825	11.53875
Standard deviation	12.08	7.38
Coefficient of Variation	74.191	63.96

Note: From annual report of NMB and Machahapuchchhre Bank

Table 4 shows the Mean DPS, standard deviation and coefficient of variation of NMB Bank and Machhapuchchhre Bank. The average of DPS of NMB Bank had highest than Machhapuchchhre Bank. The CV of NMB Bank is 74.191percentage which shows the high fluctuation in the dividend distribution pattern. The above table shows the amount of dividend per share of NMB 2011/12 to 2018/19 is increasing 0, 0, 21.05, 8.42, 20, 15.79, 30 and 35 respectively. The above table shows the amount of earning per share of Machhapuchchhre Bank 2011/12 to 2018/19 is increasing 0, 0, 12.63, 16.84, 21.84, 15, 10 and 16 respectively. The higher the coefficient of variation of NMB Bank which is 74.191 percentage, the greater the level of dispersion around the mean.

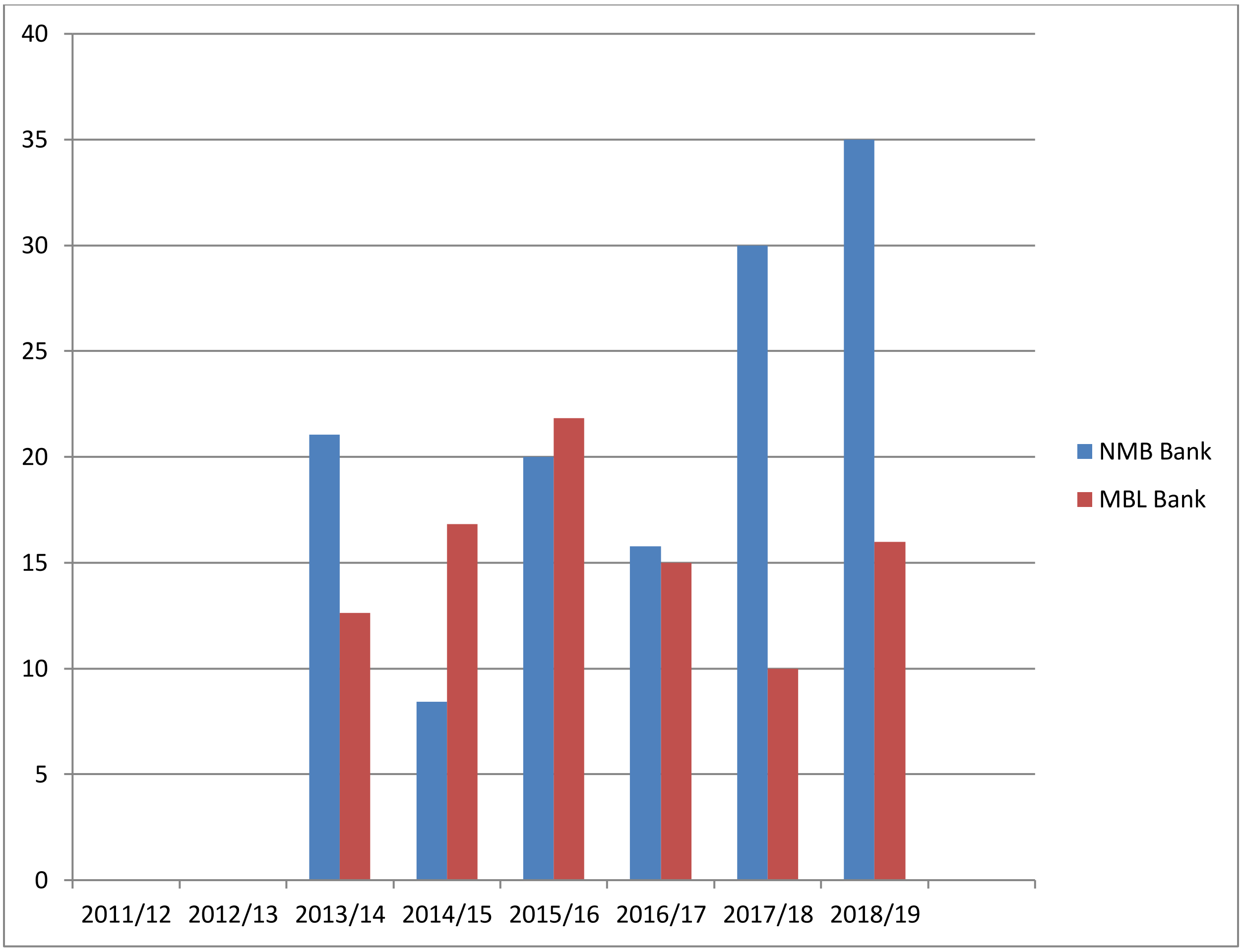

Figure 3 Dividend per share paid by the banks from the year 2011/12 to 2018/19.

Market Price per Share

Market price is the price an asset would fetch in the market place. Market value is also commonly used to refer to market capitalization of a publicly traded company and is obtained by multiplying the number of its outstanding shares by the current share price. Market value can fluctuate a great deal over periods of time and is substantially influenced by the business cycle. Market values plunge during the bear market and rise during the bull markets. The market price per share of the sample banks is analyzed in the table number 4.3.

Table 5

MPS of NMB Bank and Machhapuchchhre Bank

(In Rupees)

Fiscal Year	NMB Bank	MachhapuchchhreBank
2011/12 (2068/69)	180	107
2012/13 (2069/70)	252	203
2013/14 (2070/71)	515	576
2014/15 (2071/72)	507	564
2015/16 (2072/73)	810	680
2016/17 (2073/74)	545	360
2017/18 (2074/75)	358	209
2018/19 (2075/76)	382	264
Total	**3549**	**2963**
Mean	443.625	370.375
Standard deviation	184.04	197.004
Coefficient of Variation	41.49	53.19

Note: From annual report of NMB and Machahapuchchhre Bank

Table 5 shows the amount of market price per share of NMB 2011/12 to 2018/19 is increasing 180, 252, 515, 507, 810, 545, 358 and 382 respectively. The above table shows the amount of market price per share of Machhapuchchhre Bank 2011/12 to 2018/19 is increasing 107, 203, 576, 564, 680, 360, 209 and 264 respectively. NMB Bank had the most fluctuation MPPS with a standard deviation is 184.04 and CV of 41.49percentage. Machhapuchchhre Bank had less fluctuating market price per share.

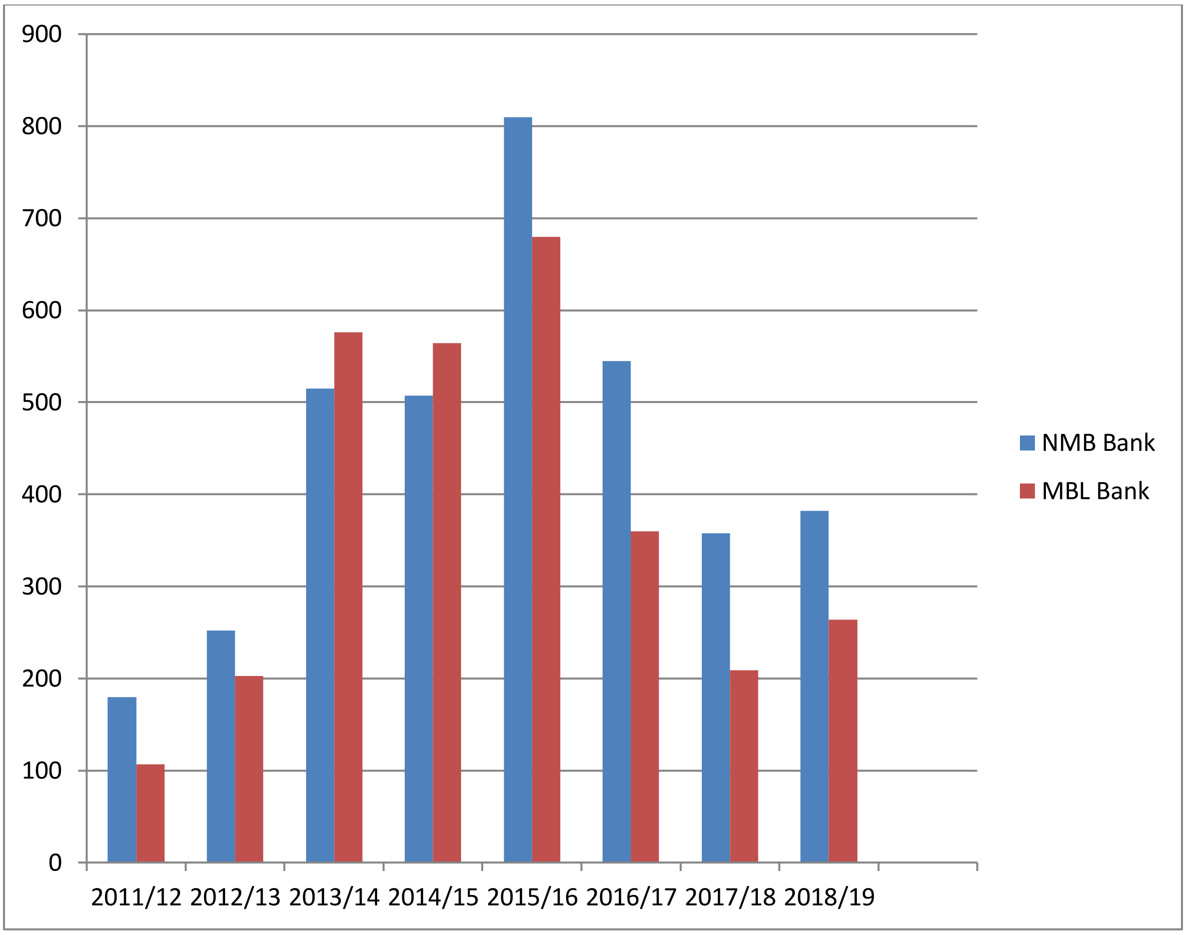

Figure 4 Market price per share of the banks from the year 2011/12 to 2018/19.

Price Earnings Ratio.

P/E ratio is the ratio for valuing a company that measures its current share price relative to its per-share earnings. It is also sometimes known as the price multiple or the earnings multiple. In essence, the P/E ratio indicates how much amount an investor can expect to invest in a company in order to receive one rupee of that company's earnings. A high P/E ratio could mean that a company's stock is over-valued, or else that investors are expecting high growth rates in the future.

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

Table 6

Price Earnings Ratio (P/E ratio) of NMB Bank and Machhapuchchhre Bank

(In times)

Fiscal Year	NMB Bank	Machhapuchchhre Bank
2011/12 (2068/69)	68.93	69.41
2012/13 (2069/70)	13.98	33.96
2013/14 (2070/71)	25.13	31.40
2014/15 (2071/72)	20.24	25.40
2015/16 (2072/73)	29.15	27.15
2016/17 (2073/74)	20.27	15
2017/18 (2074/75)	12.48	13.22
2018/19 (2075/76)	16.23	12.53
Total	**206.41**	**228.07**
Mean	25.80125	28.50875
Standard deviation	17.11	17.45
Coefficient of Variation	66.29	61.21

Note: From annual report of NMB and Machahapuchchhre Bank

Table 6 shows the amount of P/E ratio of Machhapuchchhre Bank 2011/12 to 2018/19 is increasing 69.41, 33.96, 31.40, 25.40, 27.15, 15, 13.22and 12.53 respectively. The above table shows the amount of P/E ratio of NMB Bank 2011/12 to 2018/19 is increasing 68.93, 13.98, 25.13, 20.24, 29.15, 20.27, 12.48 and 16.23 respectively. The average P/E ratio of NMB is 25.80125 lowest than Machhapuchchhre Banks, which indicates the low risk associated with the bank's common stock investment. The CV of NMB is highest 66.29percentage which indicates the higher fluctuation of the bank's earnings multiple ratios. Stock price of Machhapuchchhre Bank seems to be overvalued.

Figure 5 Price earnings ratio of the banks from the year 2011/12 to 2018/19.

Book Value per Share

Book value per share is the ratio that divides common equity value by number of share outstanding. The book value of equity per share is one factor that investors can use to determine whether a stock price is undervalued. If a business can increase its BVPS, investors may view the stock as more valuable, and the stock price increases.

$$BVPS = \frac{\text{Value of common equity}}{\text{No. of shares outstanding}}$$

Table 7

Book Value per Share of NMB Bank and Machhapuchchhre Bank

(In Rupees)

Fiscal Year	NMB Bank	Machhapuchchhre Bank
2011/12 (2068/69)	113.34	106.83
2012/13 (2069/70)	121.20	112.81
2013/14 (2070/71)	140.65	130.54
2014/15 (2071/72)	137.35	137.46
2015/16 (2072/73)	159.35	138.18
2016/17 (2073/74)	168.72	124.43
2017/18 (2074/75)	216.88	128.57
2018/19 (2075/76)	180.94	139.49
Total	**1238.43**	**1018.31**
Mean	154.80375	127.28875
Standard deviation	31.83	11.29
Coefficient of Variation	20.56	8.87

Note: From annual report of NMB and Machahapuchchhre Bank

Table 7 shows the amount of book value per share of Machhapuchchhre Bank 2011/12 to 2018/19 is increasing 106.83, 112.81, 130.54, 137.46, 138.18, 124.43, 128.57 and 139.49 respectively. The above table shows the amount of book value per share of NMB Bank 2011/12 to 2018/19 is increasing 113.34, 121.20, 140.65, 137.35, 159.35, 168.72, 216.88 and 180.94 respectively. The average book value of NMB is Rs.154.80375 highest than Machhapuchchhre Bank. The average BVPS of Machhapuchchhre Bank is Rs.127.28875 with a standard deviation of 11.29 and coefficient of variation is 8.87 percentages which indicates high fluctuation of the company's book value per share. The average book value of NMB Bank is high therefore the stock value is undervalued.

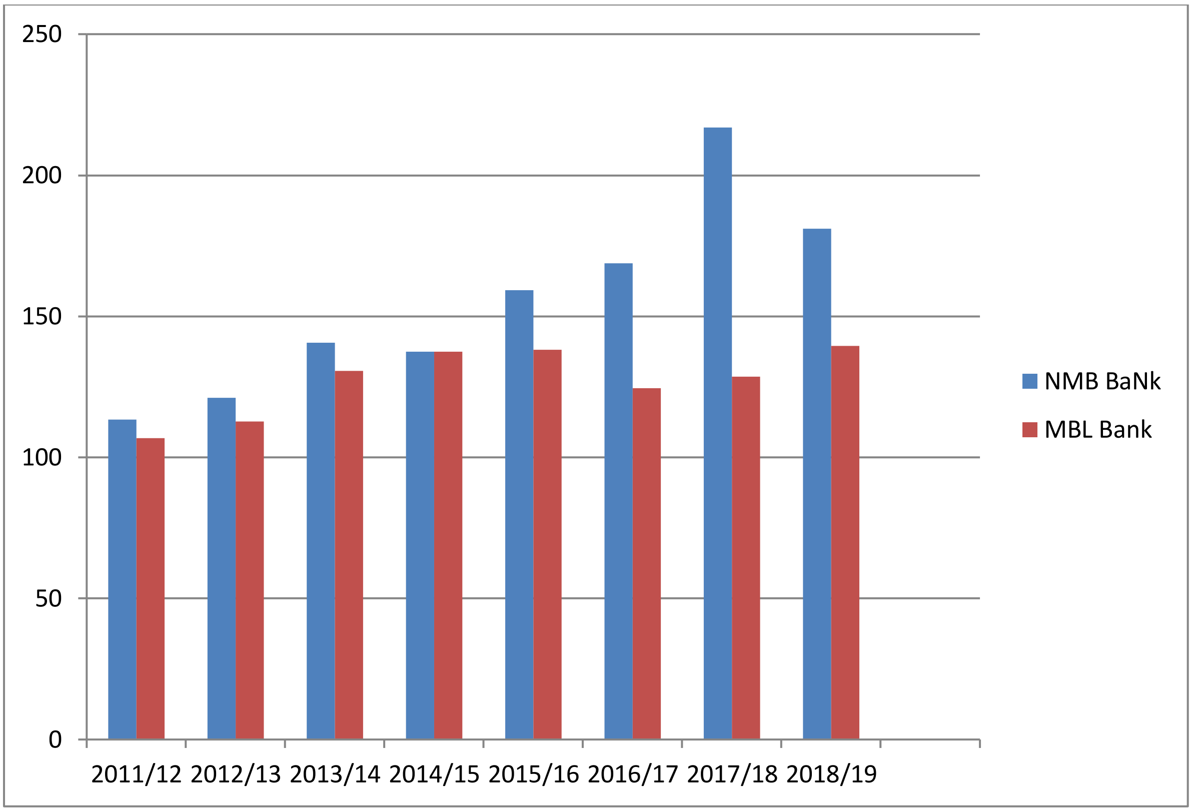

Figure 6 Book value per share of the banks from the year 2011/12 to 2018/19.

4.3 Statistical Analysis

The table given below shows the financial summary of the commercial banks based on past eight years, their mean, standard deviation and coefficient of variation of individual bank. The yearly EPS, DPS, BVPS and MPS of individual bank are presented in the appendix section.

Table 8

Mean, S.D. & C.V. of MPS, EPS, DPS and BVPS

Bank	Tools	MPS	EPS	DPS	BVPS
NMB	Mean	443.625	19.04	16.28	154.80
	SD	184.64	63.92	12.08	31.83
	CV	41.49	33.56	74.191	20.56
MBL	Mean	370.375	16.75	11.54	127.29
	SD	197.004	8.065	7.38	11.29
	CV	53.19	48.16	63.96	8.87

Note: From Researcher Calculation

Table 8 shows MPS, EPS, DPS, BVPS of NMB Bank and Machhapuchchhre Bank from period 2011/12 to 2018/19. Comparing average mean of MPS NMB has highest mean of 443.625 and MBL has lowest mean of mps of 370.375. CV of NMB Bank is 41.49 which are lowest to MBL of 53.19. SD of NMB is 184.64 and MBL is 197.004.

Average mean of EPS of NMB Bank is 19.04 which is highest than MBL of 16.75.SD of NMB Bank is 63.92 and MBL is 8.065. CV of NMB Bank is 33.56 and MBL Bank has 48.16.

Average Mean of DPS of NMB Bank is 16.28, SD is 12.08 and CV is 74.191 whereas MBL has average mean of 11.54, SD is 7.38 and CV is 63.96.

Average Mean of BVPS of NMB Bank is 154.80, SD is 31.83 and CV is 20.56 and MBL has average mean is 127.29, SD is 11.29 and CV is 8.87.

4.4 Relationship between EPS, DPS and BPS to MPS

The relationship of Earning per share, dividend per share, and book value per share to market value per share is determined in this section. For the analytical purpose, the Market Price per Share (MPS) is assumed to be influenced with the volatility occurred in EPS, DPS and BVPS. Hence, MPS is taken as dependent variable whereas EPS, DPS, and BPS are taken as independent variable. The correlation analysis is performed to determine the relationship of EPS, DPS and BPS with MPS. To determine the effect of DPS, EPS and BPS on MPS, simple correlation as well as their coefficient of determination are calculated. To determine the magnitude of the effects of the independent variable to the dependent variable, simple regression analysis is performed.

Correlation Analysis.

Table 9

The correlation analysis overall data is done to find out the relationship of different variables with MPS.

Variable	NMB Bank Correlation (r)	Machapuchchre Bank Correlation (r)	R2 NMB	R2 MBL	Significant/Insignificant NMB	Significant/Insignificant MBL
MPS & EPS	0.6069	0.7375	0.3683	0.5439	Significant (0.01 level)	Significant (0.01 level)
MPS & DPS	0.1405	0.7863	0.0197	0.6183	Significant (0.01 level)	Significant (0.01 level)
MPS & BVPS	0.2433	0.6940	0.0592	0.4816	Significant (0.01 level)	Significant (0.01 level)
MPS & P/E Ratio	-0.2822	-0.2863	0.0796	0.0819	Insignificant (0.01 level)	Insignificant (0.01 level)

Table 9 shows the relation of MPS with EPS, DPS, BVPS and P/E ratio. It shows that MPS is positively correlated with EPS, DPS, BVPS and P/E ratio. It means rise in these indicators results the rise in MPS. The correlation between MPS and EPS is 0.6069 of NMB Bank. It shows that MPS is significantly positively correlated with EPS at 0.01 level of significance (2- tailed). It indicates that when EPS increases MPS also increases and vice–versa .The coefficient of determination is 0.7983, which indicates that nearly 79percentage of the total change in MPS is due to the effect of EPS and rest 21percentage change in MPS is due to other factors. The correlation between MPS and DPS is 0.1405. It reveals that MPS is significantly positively correlated with DPS at 0.01 level of significance (2-tailed). It indicates that when DPS increases MPS also increases and vice versa. The coefficient of determination 0.0197 explains that nearly 2percentage of the total change in MPS is due to the effect of DPS and remaining 88percentage change in MPS is due to other factors. The correlation of MPS with BVPS is 0.2433. Correlation between MPS and BVPS shows that there is also positive relationship. The coefficient of determination between MPS and BVPS is 0.0592 that means nearly 6percentage variation in MPS is explained by variation in BVPS. Rest 94percentage is explained by other factors. The correlation of MPS with P/E ratio is -0.2822 it suggests that there is negative correlation between MPS and P/E ratio.

The correlation between MPS and EPS is 0.7375 of MBL Bank. It shows that MPS is significantly positively correlated with EPS at 0.01 level of significance (2- tailed). It indicates that when EPS increases MPS also increases and vice–versa.

The coefficient of determination is 0.5439, which indicates that nearly 54percentage of the total change in MPS is due to the effect of EPS and rest 46percentage change in MPS is due to other factors. The correlation between MPS and DPS is 0.7863. It reveals that MPS is significantly positively correlated with DPS at 0.01 level of significance (2-tailed). It indicates that when DPS increases MPS also increases and vice versa. The coefficient of determination 0.6183 explains that nearly 62percentage of the total change in MPS is due to the effect of DPS and remaining 38percentage change in MPS is due to other factors. The correlation of MPS with BVPS is 0.6940. Correlation between MPS and BVPS shows that there is also positive relationship. The coefficient of determination between MPS and BVPS is 0.4816 that means nearly 48percentage variation in MPS is explained by variation in BVPS. Rest 52percentage is explained by other factors. The correlation of MPS with P/E ratio is -0.2863 it suggests that there is negative correlation between MPS and P/E ratio. The coefficient of determination between MPS and P/E ratio is 0.0819.

4.5 Regression analysis.

The regression analysis is carried out to determine whether the dependent variable is influenced by the given independent variables or not.

4.5.1 S*imple Regression Analysis.*

1. MPS on EPS.

Where, MPS is dependent and EPS is independent.

Table 10

Regression Coefficient

MPS = a + b EPS

Bank	Regression Constant (a)	Regression Coefficient (b)	Equation Line
NMB	110.74	17.48	MPS=110.74+17.48 EPS
MBL	68.75	18.01	MPS=68.75+18.01 EPS

Referring to table 10 for NMB Bank, simple linear equation is given by MPS=110.74+17.48EPS, where slope (b) of 17.48 shows that for each increase of 1 rupee in EPS, the expected MPS increases by RS 17.48.similarly, constant value (a) of 110.74 states that when the EPS is nil, value of MPS is RS 110.74.

For MBL bank, simple linear equation is given by MPS=68.75+18.01EPS, where slope (b) of 18.01 shows that for each increase of 1 rupee in EPS, the expected MPS increases by RS 18.01.Similarly, constant value (a) of 68.75 states that when the EPS is nil, value of MPS is RS 68.75.

MPS on DPS.

Where, MPS is dependent variable and DPS is independent variable

Table 11

Regression Coefficient MPS = a + b DPS

Bank	Regression Constant (a)	Regression Coefficient (b)	Equation Line
NMB	356.61	5.34	MPS=356.61+5.34 DPS
MBL	128.29	20.98	MPS=128.29+20.98 DPS

Referring to table 11 for NMB bank, simple linear equation is given by MPS=356.61+5.34DPS, where slope (b) of 5.34 shows that for each increase of 1 rupee in DPS, the expected MPS increases by RS 5.34.similarly, constant value (a) of 356.61 states that when the DPS is nil, value of MPS is RS 110.74.

For MBL bank, simple linear equation is given by MPS=128.29+20.98DPS, where slope (b) of 20.98 shows that for each increase of 1 rupee in DPS , the expected MPS increases by RS 20.98.Similarly, constant value (a) of 128.29 states that when the DPS is nil, value of MPS is RS 128.29.

Hypothesis Testing

The probable error denoted by P.E. is used to measure the reliability and test of significance of correlation coefficient. Significance of relationship has been tested by using the probable error (P.E.) and the following model denotes it:

$$\mathrm{P.E.} = 0.6745 \text{ x } \frac{1 - \mathrm{r}^2}{\sqrt{\mathrm{N}}}$$

or

$$\mathrm{P.E.} = 0.6745 \text{ x } \mathrm{S.E.}$$

Where,

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

S.E. = Standard error of correlation coefficient

r = correlation coefficient

N = number of pairs of observations

If r is less than PE (i.e. r <PE) the value of ‘r’ is not significant no matter how high the value of r is.

If r is greater than 6 PE (i.e. r > 6PE) the value of ‘r’ is significant

If r is equal to PE (i.e. r = PE) the value of ‘r’ is no correlated

Table 12

Correlation coefficient and probable error of NMB and MBL banks

Variable	NMB BANK CORRELATION COEFFICIENT (r)	MBL CORRELATION COEFFICIENT (r)	NMB BANK (PE)	MBL (PE)	Remarks NMB	Remarks MBL
MPS & EPS	0.6069	0.7375	0.0481	0.1087	r>PE, significant	r>PE, significant
MPS & DPS	0.1405	0.7863	0.2336	0.0909	r<PE, insignificant	r>PE, significant
MPS & BVPS	0.2433	0.6940	0.2242	0.1236	r>PE, significant	r>PE, significant
MPS & P/E RATIO	-0.2822	-0.2863	0.2194	0.2188	r<PE, insignificant	r<PE, insignificant

For NMB Bank, MPS on EPS the correlation coefficient (r) is 0.6069 and probable error (PE) is 0.0481. Since r>PE the relationship between MPS on EPS is significant. MPS on DPS the correlation coefficient (r) is 0.1405 and probable error (PE) is 0.2336. Since r<PE the relationship between MPS on DPS is insignificant.MPS on BVPS the correlation coefficient (r) is 0.2433 and probable error (PE) is 0.2242. Since r>PE the relationship between MPS on DPS is significant.MPS on P/E Ratio the correlation coefficient (r) is -0.2822 and probable error (PE) is 0.2194. Since r<PE the relationship between MPS on DPS is insignificant.

For MBL Bank, MPS on EPS the correlation coefficient (r) is 0.7375 and probable error (PE) is 0.1087. Since r>PE the relationship between MPS on EPS is significant. MPS on DPS the correlation coefficient (r) is 0.7863 and probable error (PE) is 0.0909. Since r>PE the relationship between MPS on DPS is significant.MPS on BVPS the correlation coefficient (r) is 0.6940 and probable error (PE) is 0.1236. Since r>PE the relationship between MPS on DPS is significant.MPS on P/E Ratio the correlation coefficient (r) is -0.2863 and probable error (PE) is 0.2188. Since r<PE the relationship between MPS on DPS is insignificant.

Major Findings

1. The study shows that the average EPS of NMB Bank is greater. Hence, EPS directly affects the MPPS. The NMB bank has highest EPS than MBL bank which is considered as more profitable.

2. CV of MPS in MBL is higher than NMB bank. There is high risk associated in market price of share for the investors and shareholders of this bank. The CV of MPS in NMB is low which indicates that there is low risk involved in market price per share of the bank.

3. The CV of EPS in MBI is the highest, which means that MBL's common stock, are riskier as compared to NMB bank. The CV of NMB is lower and it is less risky.

4. The CV of DPS in NMB is the highest and MBL has the lowest. Thus, it can be concluded that NMB has higher fluctuation in DPS rather than MBL banks. The least CV of MBL indicates that MBL has the highest consistency in paying dividend.

5. The NMB has the highest and MBL has the lowest CV of BVPS respectively. The CV of NMB shows that there is fluctuation in BVPS and CV of MBL shows lower fluctuation among the sampled banks.

6. The correlation analysis shows there is high degree of positive relationship of MPS with EPS among all other different variables and is significant at 0.01 level of significance (2-tailed).

7. The simple regression analysis of MPS on EPS shows that the MPS of MBL is highly affected by EPS NMB banks.

8. The simple regression analysis of MPS on DPS shows that MPS of NMB is highly affected by DPS and MPS.

9. The simple regression analysis of MPS on BVPS shows that MPS of NMB is highly affected by BVPS.

10. The average P/E ratio of NMB bank is 25.80125 which is the lowest than MBL bank, which indicates the low risk associated with the bank's common stock investment.

11. The CV of NMB bank is highest which indicates the higher fluctuation of the bank's earnings multiple ratios. Stock price of MBL bank seems to be overvalued.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This is the fifth and last chapter of the study. This chapter is divided into three parts: summary, conclusion and recommendation. They are discussed below.

5.1 Summary

The number of investor in stock market is increasing day by day. Many young people are attracted towards stock investment. Investment in common stock is not an easy task. It requires proper knowledge, risk taking capacity and patience. Since, the stock investment provides a handsome profit sometimes with the increase in market price and dividend distributed by the company; many people are attracted in this sector. But, sometimes the stock price declines so heavily that the dividend provided by the company cannot cover the loss amount occurred due to decrease in MPS.

Basically, the price of the stock is determined by demand and supply, but there are many other factors that lead to the fluctuation in price. Company financial indicator like EPS, DPS, BVPS, P/E ratio, cost of equity, cost of fund and other environmental factor like government's policy, fiscal policy, political situation, NRB's policy, news, rumors, interest rate affects the share price. Nobody can predict the main factors that affect the change in share price. It has been a major concern to many researcher and investors regarding the major determinants and variables of share price.

The study is focused on the effect of Earning per share and stock dividend on he share price fluctuation of private commercial banks. Hence, two commercial banks are taken in consideration for the purpose. Market price of the sample banks has been analytically tested here to compare with other financial indicator like EPS, DPS, BVPS and P/E ratio. For this purpose, secondary data was gathered from different sources and different financial tools as well as statistical tools have been used for analysis.

The major findings from the financial analysis are presented below:

- The banks with higher EPS, DPS and BVPS also have higher MPPS.
- The MPPS of the company is mostly affected by EPS, BVPS and DPS.
- The average EPS of the banks for the study period was found to be Rs.22.20

- The average DPS of the banks is Rs.21.05.

- The average MPS of the sample bank is Rs.360.

- The average BVPS of the sample bank is Rs.138.18.

The first chapter covers various problems of stock market relating to the technical analysis and efficient market. Thus, main objectives of this study were to examine the effect of earnings and dividends on stock prices of firms based on financial and statistical tools, bar diagram and chart analysis.

In the same way through literature review from books, journals, articles and previous studies has been presented in the second chapter which lays the foundation for further study, analysis and findings.

To meet the objectives stated above, different research designs were designed in third chapter of this study to present and analyzed the data. For this researcher relied on primary and secondary source of data. For this annual report were downloaded from the website of individual banks.

In fourth chapter secondary data were analyzed using one of the most popular statistical tools presenting in the chart and graphs based on the calculated value. Based on such analysis the findings were evaluated in real terms and on the basic of such findings appropriate conclusions is drawn.

Data analysis showed most of the simple linear trend analysis and chart analysis gave the true result and all the samples has been calculated on least square method for analyzing trend analysis.

5.2 Conclusion

For investors, dividends serve as a popular source of investment income. For the issuing company, they are a way to redistribute profits to shareholders as a way to thank them for their support and to encourage additional investment. Dividends also serve as an announcement of the company's success. Because dividends are issued from a company's retained earnings, only companies that are substantially profitable issue dividends with any consistency. Though dividends are not guaranteed on common stock, many companies pride themselves on generously rewarding shareholders with consistent—and sometimes increasing—dividends each year. Companies that do this are perceived as financially stable, and financially stable companies make for good investments, especially among buy-and-hold investors who are most likely to benefit from dividend payments.

When companies display consistent dividend histories, they become more attractive to investors. As more investors buy in to take advantage of this benefit of stock ownership, the stock price naturally increases, thereby reinforcing the belief that the stock is strong. If a company announces a higher-than-normal dividend, public sentiment tends to soar.

Conversely, when a company that traditionally pays dividends issues a lower-than-normal dividend or no dividend at all, it may be interpreted as a sign that the company has fallen on hard times. The truth could be that the company's profits are being used for other purposes—such as funding expansion—but the market's perception of the situation is always more powerful than the truth. Many companies work hard to pay consistent dividends to avoid spooking investors, who may see a skipped dividend as darkly foreboding. Though stock dividends do not result in any actual increase in value for investors at the time of issuance, they affect stock price similar to that of cash dividends. After the declaration of a stock dividend, the stock's price often increases. However, because a stock dividend increases the number of shares outstanding while the value of the company remains stable, it dilutes the book value per common share, and the stock price is reduced accordingly.

From the secondary data analysis, it is found that the commercial banks performance is highly inconsistent in the relationship of MPPS with EPS, DPS and BVPS. The MPPS is found to be highly correlated with the EPS and BVPS. The study shows that the average EPS of NMB Bank is greater. Hence, EPS directly affects the MPPS. CV of MPS in MBL is higher than NMB bank. There is high risk associated in market price of share for the investors and shareholders of this bank. The CV of MPS in NMB is low which indicates that there is low risk involved in market price per share of the bank. The CV of EPS in MBL is the highest, which means that MBL’s common stock, are riskier as compared to NMB bank. The CV of NMB is lower and it is less risky. The CV of DPS in NMB is the highest and MBL has the lowest. Thus, it can be concluded that NMB has higher fluctuation in DPS rather than MBL banks. The least CV of MBL indicates that MBL has the highest consistency in paying dividend. The NMB has the highest and MBL has the lowest CV of BVPS respectively. The CV of NMB shows that there is fluctuation in BVPS and CV of MBL shows lower fluctuation among the sampled banks. The correlation analysis shows there is high degree of positive relationship of MPS with EPS among all other different variables and is significant at 0.01 level of significance (2-tailed). The simple regression analysis of MPS on EPS shows that the MPS of MBL is highly affected by EPS NMB banks. The simple regression analysis of MPS on DPS shows that MPS of NMB is highly affected by DPS and MPS. The simple regression analysis of MPS on BVPS shows that MPS of NMB is highly affected by BVPS.

5.3 Recommendation

Based on this study, the major recommendations are as follows.

1. Most of the investors were found to rely very much only EPS, DPS, BVPS and P/E ratio of a company. Sometimes the EPS and DPS only may not cover the return as per risk associated with it. The investors are recommended not to perceive EPS, DPS, BVPS only as the performance measurement of the company. Other fundamental factors like cost of capital, corporate governance of the company, non-performing loan ratio should also be taken into considerations. Investors are recommended to invest in the stock of the company only after proper fundamental as well as technical analysis and also take only the calculated risk.

2. Most of the investors are expecting a quick return on their investment rather than long term return due to declining economic condition of Nepal. They prefer dividend in form of cash rather than stock. So, the cash dividend should be distributed to satisfy the stockholders of the company.

3. During the study it is found that investors have limited choice of investment sector. Nepalese stock market is dominant by bank and financial institutions. There are other big companies operating in Nepal. NEPSE and SEBON should make a policy to motivate other sectors like manufacturing and processing, trading and real estate to come under listing of NEPSE. It would increase the market size and investors would have sectoral choices of investment.

4. The new investors coming in the market are suggested not to invest in common stock without proper knowledge and investment strategy. The new investors are recommended to buy the stock for investment purpose rather than trading purpose.

5. During the study it is found that the investors now-a-days is more rational and aware than before. They measure the cost savings, invest as per their risk bearing capacity and consider tax savings. Hence, the investor who holds the stock for longer period should be charged less capital gain tax. So, it is recommended to NEPSE to reduce the broker commission, minimize the capital gain tax for long term stock holders and cut off the DP fee charged for every transaction.

6. For the future study in the same are the researcher are recommended to focus more on financial analysis tools rather than statistical analysis tools. The more use of financial analysis tools on large sample will provide more accurate findings in the stock price behavior.

7. For the further development of the stock market SEBON should establish and introduce the fully online trading system as per international standards, provide the broker license to the commercial banks, motivate the NRN to invest in capital market.

REFERENCE

Al-Malawi, H. N. (2007). Determinants of corporate dividend policy in Jordan: an application of the Tobit model. *Journal of Applied Accounting Research,* 23, 44- 70.

Benartzi, S. M. (2011). Do changes in dividends signal the future or the past? *Journal of finance 3 ,* 1007-1033.

Bernard, V. L., & Thomas, J. K. (1989). Post-Earnings-Announcement Drift: Delayed Price Response or Risk Premium? *Journal of Accounting Research , 27,* 1-36.

Bhattarai, Y. R. (2016). Effect of Dividend Payment on Stock Prices of Commercial Banks in Nepal: Panel Approach. *Economic Journal of Development Issues , 21 & 22* (1-2), 55-68.

Brennan, M. J. (1995). The Individual Investor. *Journal of Financial Research*

Basu, S. (2007). Investment performance of common stock in relation to their price earnings ratios: A test of efficient market hypothesis. *Journal of Finance,* 32(2), 63-78.

Beaver, W. (2009). Financial Reporting: An Accounting Revolution (6th ed.) Upper Saddle, NJ: Prentice Hall.

Cootner, P.H. (1964) The Random Character of Stock Market Prices. MIT Press, Cambridge.

Collins, J. (1957). How to Study the Behavior of Bank Stocks. T*he Analysts Journal, 13, 109-113.*
*https://doi.org/10.2469/faj.v13.n2.10*9

Dhakal, N., & Shah, A. (2016). Dividend Policy, Share Price and Future Profitability: Case of Commercial Banks in Nepal. *Journal of Business and Social Sciences Research , 1* (1), 89-110.

Dangol, J. (2016). Effect of Dividend and Earnings announcement on share prices:Nepalease evidence. *SSRG international Journal of economics and management studies , 3* (5).

Dangol, J. 2008. "Unanticipated Political Events and Stock Returns: An Event Study." *Economic Review,* 20 : 86-110.

Dawar, V. (2012). Role of fundamental variables in explaining stock prices:indian FMCG sector evidence.researchers world. *journals of arts,science & commerce , 4* (1), 56-62.

Dolvin, S., TW, J., & Jordan, B. (2012). Fundamental of investment valuation and management. (6. edition, Ed.)

Feldstein, M. & Green, J. (2013). Why do companies pay dividends? *American Economic Review,* 73, 17-30.

Gordan, M. (2009). Divdends,earning and stock prices. *The review of economic and Statistic*, 99-105.

Gordon, M. J. (1959). Dividends, Earnings, and Stock Prices. *The Review of Economics and Statistics , 41*, 99-105.

Ghimire, R. R., & Mishra, D. (2018). Determinants of Stock Price in Nepalese Market. *The International Research Journal of Management Sceince , 3* (1).

Gordan, M. (2009). Divdends,earning and stock prices. *The review of economic and Statistic* , 99-105.

Islam, M. R., Khan, T. R., Choudhury, T. T., & Adnan, A. M. (2014). How Earning Per Share (EPS) Affects on Share Price and Firm value. *European Journal of Business and Management , 6* (17).

Jain, N., & Bajaj, K. (2017). Impact of Earnings per Share on Market Price of Share with Special Reference to Selected companies listed on NSE. *International Journal of Engineering and Management Research , 7* (3), 1-9.

Javel Muthee Murira, B. B. (2017). Relationship between share return and share prices for stocks listed at the Nairobi securities exchanged. *The Strategic Journal of Business & Change Management , 4* (3), 614-628.

Joshi, R. (2012). Effects of Dividends on Stock Prices in Nepal. *NRB Economic Review , 24* (2), 61-75.

Karki, D. (2018). Fundamentals of Common Stock Pricing:Evidence from commercial banks of nepal. *SAARJ jounal on banking & insurance research , 7* (1), 4-32.

Kouki, M., & Guizani, M. (2009). Ownership Structure and Dividend Policy Evidence from the Tunisian Stock Market. *European Journal of Scientific Research,* 25(1), 42-59.

Levine, R. (1996) Foreign Banks Financial Development and economic Growth. *Journal of Economic Literature*

Maswadeh, S. (2018). The Effect of Dividends and Earnings per Share on the Stock Marke Value by moderating bank size. *Journal of Modern Accounting and Auditing , 14* (8), 408-415.

Mozes, A. H. (2010). The link between dividend changes and future earnings. *Journal of Financial statement analysis , 3*, 29-40.

Miller and Modigliani (2008). Dividend policy, growth and the valuation of Shares. *Journal of Business of University of Chicago,* 48.

Nichols, D. C., & Wahlen J. M. (2010). How Do Earnings Numbers Relate to Stock Returns? A Review of Classic Accounting Research with Updated Evidence. *Accounting Horizons.* 18, (4) 263–286.

Osobov, D. J. (2008,). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics , 89* (1), 62-82.

Paudel, N. P. (2002). Investing in shares of commercial Banks in Nepal:An assessment of return and risk elements. *Economic Review: Occasional Paper , 14*

Pradhan, R. (2003). Effects of dividends on common stock prices: The Nepalese evidence. *The jounal for management and IT professionals , 2* (1), 18-25.

Patel, J. M., & A.Wolfson, M. (1984). The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements. *Journal of Financial Economics , 13* (2), 223-252

Seetharaman, A., & John, R. (2011). An empirical study on the impact of earnings per share on atock price of a listed bank in Malaysia. *The international journal of applied economic and finance* (5), 114-126.

Shrestha, P. K., & Subedi, P. R. (2014). Determinants of Stock Market Performance in Nepal. *NRB Economic Review, Nepal Rastra Bank,Research department , 26* (2), 25-40.

Sharma, S. & Singh, B. (2011). Determinants of equity share prices in Indian corporate sector: An empirical study. *The ICFAI Journal of Applied Finance,* 12(4), 21-38.

Shrestha, M.K. & Bhandari, D.B. (2007). Financial Markets and Institutions. Kathmandu: Asmita Publication.

Kapoor. S Imapact of Dividend policy on shareholder's value: A study of Indian firms. *Unpublished paper, Jaypee Institute of Information*

Kania, SL and Bacon, FW 2005, „What factors motivate the corporate dividend decision? *American Society of Business and Behavioral Sciences E-Journal,. 1*, No. 1.

Tache, G. M. (november 2016). *The effect of earning and dividend on share prices of firms listed at the Nairobi securities ecxhange* . Nairobi.

Van Horne, C.J. (1929). Financial management (11th ed.). New Delhi; Prentice Hall

Zameer, H., Rasool, S., Iqbal, S., & Arshad, U. (2013). Determinants of Dividend Policy: A Case of Banking Sector in Pakistan. *Middle-East Journal of Scientific Research , 18* (3), 410-424.

Zakir, M. A., & Khanna, Y. (1982). Determinants of Stock Prices in India. *The Chartered Accountant, 30*(8), 521-523.

Appendix

Table 1

Calculation of Earnings per share of NMB Bank and Machhapuchchhre Bank

(in rupees)

Fiscal Year	NMB Bank (x)	Machhapuchchhre Bank (y)	x-x̄	$(x-\bar{x})^2$	y-ȳ	$(y-\bar{y})^2$
2068/69	2.61	1.54	-16.43	269.9449	-15.21	231.3441
2069/70	18.02	5.98	-1.02	1.0404	-10.77	115.9929
2070/71	20.5	18.34	1.46	2.1316	1.59	2.5281
2071/72	21.48	22.2	2.44	5.9536	5.45	29.7025
2072/73	22.1	25.04	3.06	9.3636	8.29	68.7241
2073/74	22.24	24	3.2	10.24	7.25	52.5625
2074/75	21.86	15.81	2.82	7.9524	-0.94	0.8836
2075/76	23.54	21.07	4.5	20.25	4.32	18.6624
Total	**152.35**	**133.98**		**326.8765**		**520.4002**
Mean	19.04375	16.7475		40.86		65.05
Standard deviation	6.392	8.065				
Coefficient of variation	33.56	48.16				

Note : Annual report of Banks

Table 2

Calculation of Dividend per share of NMB Bank and Machhapuchchhre Bank

(in rupees)

Fiscal Year	NMB Bank (x)	Machhapuchchhre Bank (y)	x-x̄	$(x-\bar{x})^2$	y-ȳ	$(y-\bar{y})^2$
2068/69	0	0	-263.625	69498.14	-263.375	69366.39063
2069/70	0	0	-191.625	36720.14	-167.375	28014.39063
2070/71	21.05	12.63	71.375	5094.391	205.625	42281.64063
2071/72	8.42	16.84	63.375	4016.441	193.625	37490.64063
2072/73	20	21.84	366.375	134230.9	309.625	95867.64063
2073/74	15.79	15	101.375	10276.89	-10.375	107.640625
2074/75	30	10	-85.625	7331.641	-161.375	26041.89063
2075/76	35	16	-61.625	3797.641	-106.375	11315.64063
Total	**130.26**	**92.31**		**270966.2**		**310485.875**
Mean	16.2825	11.53875		33870.78		38810.73438
Standard deviation	12.08	7.38		69498.14		69366.39063
Coefficient of variation	74.191	63.96		36720.14		28014.39063

Table 3

Calculation of Price earnings per share

(in times)

Fiscal Year	NMB Bank (x)	Machhapuchchhre Bank (y)	x-x̄	$(x-\bar{x})^2$	y-ȳ	$(y-\bar{y})^2$
2068/69	68.93	69.41	43.13	1860.197	40.9	1672.81
2069/70	13.98	33.96	-11.82	139.7124	8.45	71.4025
2070/71	25.13	31.4	-0.67	0.4489	2.89	8.3521
2071/72	20.24	25.4	-5.56	30.9136	-3.11	9.6721
2072/73	29.15	27.15	3.35	11.2225	-1.36	1.8496
2073/74	20.27	15	-5.53	30.5809	-13.51	182.5201
2074/75	12.48	13.22	-13.32	177.4224	-15.29	233.7841
2075/76	16.23	12.53	-9.57	91.5849	-15.98	255.3604
Total	**206.41**	**228.07**		**2342.083**		**2435.7509**
Mean	25.80125	28.50875		292.7603		304.4688625
Standard deviation	17.11	17.45				
Coefficient of variation	66.29	61.21				

Table 4

Calculation of Market price per share

(in rupees)

Fiscal Year	NMB Bank (x)	Machhapuchchhre Bank (y)	x-x̄	$(x-\bar{x})^2$	y-ȳ	$(y-\bar{y})^2$
2068/69	180	107	-263.625	69498.14	-263.375	69366.39063
2069/70	252	203	-191.625	36720.14	-167.375	28014.39063
2070/71	515	576	71.375	5094.391	205.625	42281.64063
2071/72	507	564	63.375	4016.441	193.625	37490.64063
2072/73	810	680	366.375	134230.9	309.625	95867.64063
2073/74	545	360	101.375	10276.89	-10.375	107.640625
2074/75	358	209	-85.625	7331.641	-161.375	26041.89063
2075/76	382	264	-61.625	3797.641	-106.375	11315.64063
Total	3549	2963		270966.2		310485.875
Mean	443.625	370.375		33870.78		38810.73438
Standard deviation	184.04	197.004				
Coefficient of variation	41.49	53.19				

Table 5

Book Value per Share of NMB Bank and Machhapuchchhre Bank

Fiscal Year	NMB Bank (x)	Machhapuchchhre Bank (y)	x-x̄	$(x-\bar{x})^2$	y-ȳ	$(y-\bar{y})^2$
2068/69	113.34	106.83	-41.46	1718.932	-20.46	418.6116
2069/70	121.2	112.81	-33.6	1128.96	-14.48	209.6704
2070/71	140.65	130.54	-14.15	200.2225	3.25	10.5625
2071/72	137.35	137.46	-17.45	304.5025	10.17	103.4289
2072/73	159.35	138.18	4.55	20.7025	10.89	118.5921
2073/74	168.72	124.43	13.92	193.7664	-2.86	8.1796
2074/75	216.88	128.57	62.08	3853.926	1.28	1.6384
2075/76	180.94	139.49	26.14	683.2996	12.2	148.84
Total	1238.43	1018.31		8104.312		1019.5235
Mean	154.80375	127.28875		1013.039		127.4404375
Standard deviation	31.83	11.29				
Coefficient of variation	20.56	8.87				

Table 6

Relationship between EPS and MPS of NMB Bank

Fiscal Year	NMB Bank EPS (x)	NMB Bank MPS (y)	XY	y^2	x^2
2068/69	2.61	180	469.8	32400	6.8121
2069/70	18.02	252	4541.04	63504	324.7204
2070/71	20.5	515	10557.5	265225	420.25
2071/72	21.48	507	10890.36	257049	461.3904
2072/73	22.1	810	17901	656100	488.41
2073/74	22.24	545	12120.8	297025	494.6176
2074/75	21.86	358	7825.88	128164	477.8596
2075/76	23.54	382	8992.28	145924	554.1316

Table 7

Relationship between EPS and MPS of MBL Bank

Fiscal Year	Machhapuchchhre Bank MPS (y)	Machhapuchchhre Bank EPS (x)	XY	y^2	x^2
2068/69	107	1.54	164.78	11449	2.3716
2069/70	203	5.98	1213.94	41209	35.7604
2070/71	576	18.34	10563.84	331776	336.3556
2071/72	564	22.2	12520.8	318096	492.84
2072/73	680	25.04	17027.2	462400	627.0016
2073/74	360	24	8640	129600	576
2074/75	209	15.81	3304.29	43681	249.9561
2075/76	264	21.07	5562.48	69696	443.9449

Table 8

Relationship between DPS and MPS of NMB Bank

Fiscal Year	NMB Bank MBS (y)	NMB Bank DPS (x)	xy	x^2	y^2
2068/69	180	0	0		32400
2069/70	252	0	0		63504
2070/71	515	21.05	10840.75	443.1025	265225
2071/72	507	8.42	4268.94	70.8964	257049
2072/73	810	20	16200	400	656100
2073/74	545	15.79	8605.55	249.3241	297025
2074/75	358	30	10740	900	128164
2075/76	382	35	13370	1225	145924

Table 9

Relationship between DPS and MPS of MBL Bank

Fiscal Year	Machhapuchchhre Bank MPS (y)	Machhapuchchhre Bank DPS (x)	xy	x^2	y^2
2068/69	107	0	0		11449
2069/70	203	0	0		41209
2070/71	576	12.63	7274.88	159.5169	331776
2071/72	564	16.84	9497.76	283.5856	318096
2072/73	680	21.84	14851.2	476.9856	462400
2073/74	360	15	5400	225	129600
2074/75	209	10	2090	100	43681
2075/76	264	16	4224	256	69696

Table 10

Relationship between MPS and BVPS of NMB Bank

Fiscal Year	NMB Bank MPS (y)	NMB Bank BVPS(x)	xy	y^2	x^2
2068/69	180	113.34	20401.2	32400	12845.96
2069/70	252	121.2	30542.4	63504	14689.44
2070/71	515	140.65	72434.75	265225	19782.42
2071/72	507	137.35	69636.45	257049	18865.02
2072/73	810	159.35	129073.5	656100	25392.42
2073/74	545	168.72	91952.4	297025	28467.28
2074/75	358	216.88	77643.04	128164	47036.93
2075/76	382	180.94	69119.08	145924	32739.28

Table 11

Relationship between MPS and BVPS of MBL Bank

Fiscal Year	Machhapuchchhre Bank MPS (y)	Machhapuchchhre Bank BVPS (x)	xy	x^2	y^2
2068/69	107	106.83	11430.81	11412.65	11449
2069/70	203	112.81	22900.43	12726.1	41209
2070/71	576	130.54	75191.04	17040.69	331776
2071/72	564	137.46	77527.44	18895.25	318096
2072/73	680	138.18	93962.4	19093.71	462400
2073/74	360	124.43	44794.8	15482.82	129600
2074/75	209	128.57	26871.13	16530.24	43681
2075/76	264	139.49	36825.36	19457.46	69696

Table 12

Relationship between MPS and P/E ratio of NMB Bank

Fiscal Year	NMB Bank MPS (y)	NMB Bank P/E ratio (x)	xy	x^2	y^2
2068/69	180	68.93	12407.4	4751.345	32400
2069/70	252	13.98	3522.96	195.4404	63504
2070/71	515	25.13	12941.95	631.5169	265225
2071/72	507	20.24	10261.68	409.6576	257049
2072/73	810	29.15	23611.5	849.7225	656100
2073/74	545	20.27	11047.15	410.8729	297025
2074/75	358	12.48	4467.84	155.7504	128164
2075/76	382	16.23	6199.86	263.4129	145924

Table 13

Relationship between MPS and P/E ratio of MBL Bank

Fiscal Year	Machhapuchchhre Bank MPS (y)	Machhapuchchhre Bank P/E ratio(x)	xy	x^2	y^2
2068/69	107	69.41	7426.87	4817.748	11449
2069/70	203	33.96	6893.88	1153.282	41209
2070/71	576	31.4	18086.4	985.96	331776
2071/72	564	25.4	14325.6	645.16	318096
2072/73	680	27.15	18462	737.1225	462400
2073/74	360	15	5400	225	129600
2074/75	209	13.22	2762.98	174.7684	43681
2075/76	264	12.53	3307.92	157.0009	69696

Effect of Earning Per Share and stock dividend on share price fluctuation of Private Commercial Banks

(A comparative study of*NMB Bank and* Machhapuchhre *Bank*)

A PROPOSAL

Submitted By:
Shreejina Shrestha

People's Campus

T.U. Regd. No.:7-3-271-309-2016

Exam Roll No.:3508

Class Roll No.:13

Submitted To:
Head of Research Department
People's Campus

In partial fulfillment of the requirement for the degree of
Master of Business Studies (M.B.S.)

Paknajol, Kathmandu

August 2019

INTRODUCTION

1.1 Background of the Study

Industrial and commercial sector plays vital role for development of the nation. This is still in primary stage in Nepal. The industrial development process started from 1937 with the establishment of Biratnagar Jute Mill and Nepal Bank Limited. Company act was firstly introduced in 1964 and government issued bond in the same year. Most of the institutions have been established as private limited company and government owned organization especially after the restoration of democracy, industrial development took place. However, that couldn't sustain, some of the industries have been shut down.

In the absence of developed securities market in Nepal, the government was the sole issuing authority of development bond's and national saving certificates. Therefore, the securities generally floated in the market were mainly the government securities. Nepal Rastra Bank as the central bank is responsible to mobilize resources, on behalf of the government. To finance the development activities and manage public debt under the public debt act, Nepal Rastra Bank has been managing the issue of short-term Treasury bills to time accordingly. Ninety-one-day Treasury bills of Rs.7 million were issued for first time during June /July 1962. Nepal Rastra Bank arranges for the issue, register, purchase and sale, transfer of ownership and redemption of government bond and debentures. Therefore, the government securities are fully traded under the management and supervision of Nepal Rastra Bank.

Nepalese stock market is very small as compared to other neighbour countries. Capital market plays a vital role in the economic development of a country. Being a capital deficient country, Nepal has to make every attempt to mobilize available capital effectively. Securities are financial assets. Securities markets are mechanism created to facilitate the exchange of financial assets. Therefore, the market exists in order to bring together the buyers and sellers of securities. Capital market is the mechanism designed to facilitate the exchange of financial assets by bringing orders from buyers and sellers of securities together. The stock market has been global phenomenon in the present world regardless of the size of any particular region.

Securities market is place where buying and selling of securities take place in an organized way. The parties involved in securities market are investors, intermediaries and specialists. Security market provides mobility of the scattered savings. Retail investors with limited capital fund could also participate in the industrial development process of the country through their investment in the securities. Investors who are willing to buy or sell securities quickly may be searching good offers or accepting poor offers with higher risk and higher return. Securities market is the major constituents of capital market. Although some analysts view securities market in developing countries as gambling casinos that have little positive impact on economic growth, empirical evidence suggests that securities markets give a big boost to economic development *(Levine, 1996).* Securities market is the pivot on which the economic development oscillates; it does mean that securities market is the foundation stone of any economic development. Securities market in developed countries has become an integral part of economy *(Brennan, 1995)* and its role in developing countries is increasing day-by day. In securities market, the securities of listed companies are traded through organized brokerage firm *(Douglas, 1991).* It is, thus, a mechanism for bringing together buyers and sellers of financial assets in order to facilitate trading.

During the last two and half decade the financial sector in Nepal has grown significantly. It is said that despite a history of almost half a century of developmental efforts under different national plans, conscientious efforts to develop financial sector started quite late in Nepal. The history of capital market started since the period of Rana Prime Minister Juddha Shamsher. He set up a holding company namely Biratnagar Jute Mill under joint financing agreement with an Indian Jute processing industry in 1936 (1993 B.S) as the first modern industry in the country. After that various mills of rice, cotton, sugar and other were established to mobilize economy's capital for the industrial development. In 1937(1994 B.S), Nepal Bank Limited as commercial Bank was established. In the same year, the first individual act was promulgated which was a favorable step to promote capital market in Nepal. But Rana family did not like the participation of public in the ownership structure of industries and all the shares of company were gone to Rana families, the expansion of capital market to the desired level has been estimated. In 1950*(2007B.S)* democracy was established, the interim government were much busy in devising measures to recognize the sick industries and gave little attention to initiate the development of stock market. The process of stock market development in the country actually started in 1976 when the government established Securities Exchange Centre to provide and develop market for securities. However, visible impact on the development of financial sector was observed only when the government changed its restrictive policy and opened up hitherto closed financial sector to private sector and foreign participation in the establishment of banks. With the adoption of privatization and economic liberalization policy the process gets further impetus and the financial institution in Nepal grew at a faster pace especially in quantitative terms. Securities exchange center was established with the objective of facilitating and promoting the growth of capital markets. Before its conversion into Nepal stock exchange, it was only capital market institution undertaking the job of brokering, underwriting, managing public issues, market making for government bonds and other financial services. It was converted in NEPSE i.e. Nepal Stock Exchange in 1993.The basic objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through members' markets intermediaries.

Nepalese capital market was given proper structure in June 1993 with the establishment of SEBON as the market regulator. Since its establishment, SEBON has been concentrating its efforts on improving the legal and statutory frameworks which are the bases for the healthy development of capital market. SEBON is the supreme body to regulate the Nepalese securities market. As a part of its continuous efforts to build a sound system, the securities Exchange Act, 1983 was amended for the second time on January 30, 1997. This amendment paved the way for establishing SEBON as an apex regulatory body as it widened the horizon of SEBON by bringing market intermediaries directly under its jurisdiction and also made it mandatory for the corporate bodies to report annually as well as semiannually regarding their performance. The main objective of SEBON is to promote and protect the interest of investors by regulating the securities market, to monitor and control the entire capital market, sale and distribution of securities and purchase, sale or exchange of securities. SEBON was established with the objective to render contribution to the development of capital markets by making securities transactions fair, healthy, efficient and responsible. Whereas, its main functions are to provide licenses to stock exchange and securities business person and to monitor the activities carried by NEPSE to know if they are in accordance with the laws or not. Despite this, Nepalese stock market is still underdeveloped and there is lot of shortcomings in Nepalese stock market. Hence, the present study is conducted on Nepalese stock market in order to find out the determinants of stock price fluctuation in Nepalese stock market.

1.2 Profile of sample Banks

1.2.1 Background of NMB Bank

NMB Bank Limited licensed as “A” class financial institution by Nepal Rastra Bank in May 2008 has been operating in the Nepalese Financial market for over twenty years and is one of the leading commercial banks in the banking industry. The Bank has a Joint Venture Agreement with Nederland Financiering – MaatschappijvoorOntwikkelingslanden (FMO), wherein FMO holds 17% of the Bank’s shares and is the largest shareholder of the Bank. In September 2016, the Bank signed a Joint Venture Agreement with Nederland Financiering – MaatschappijvoorOntwikkelingslanden (FMO), the Dutch development bank following which FMO became the single largest share holder of the Bank. The alliance with FMO positions the NMB Bank in becoming the market leader in managing environmental & social risks and the leading player in renewable energy and agribusiness.NMB Bank was awarded **'Bank of the Year - 2017'** and **'Bank of the Year 2018'** consecutively by The Banker, Financial Times, London.

Vision

Building communities through responsible banking, preferred by all stakeholders, enabling customers and clients achieve their financial goals thus contributing towards prosperous Nepal.

Mission

- Helping clients and customers to achieve financial security
- Strengthening and promoting sustainable socio economic development by working actively with local and international stakeholders
- Being responsible for bringing about positive environmental and social impacts
- Promoting self reliance through financial products for real economy
- Creating an innovative climate within the organization, utilizing the skills and potential of staff.
- Delivering banking products and services to create delightful customer experience

1.2.2 Background of Machhapuchhre Bank

Machhapuchchhre Bank Limited was registered in 1998 as the first regional commercial bank from the western region of Nepal and started its banking operations from Pokhara since year 2000. The Bank facilitates its customer needs by delivering the best of services in combination with the latest state of the art technologies and prudent international practices. The Bank is the pioneer in introducing the latest technology in the banking industry in the country. It is the first bank to introduce centralized banking software, GLOBUS BANKING SYSTEM of Temenos NV, Switzerland. The bank provides modern banking facilities such as Any Branch Banking, Internet Banking, Mobile Banking, Safe Deposit Locker facilities, Utility Bill payment (Telephone & Mobile), ATM (VISA Debit Cards) to its valued customers. Besides these, the Bank is providing 365 Days Banking and Evening Counter services to the customers through many of its offices.

The Bank has been promoted by highly renowned Non-Residential Nepalese, prominent business man and industrialists with a vision and dedication to provide the best financial products and services in the most efficient and professional manner.

Now with a paid up capital of over 8.05 billion rupees, 136 Branch Offices, 121 Branchless Banking Units and 157 ATMs spread all across the country, it is one of the full fledged national level commercial banks operating in Nepal. It takes pride in having its own buildings for its Head and Corporate Office in Lazimpat, and Branch offices in Naya Bazar, Pokhara, Jomsom, Baglung and Damauli.

Vision

To become the bank of the first choice of the people

Mission

To be one of the most preferred banks in Nepal, easily recognized as the bank which satisfies and cares for its customers through quality service, innovative products, professionalism and wide branch network, offering full array of financial services using modern technology and with good corporate governance practices.

1.3 Focus of the Study

Establishment of industries and different project has vital role for economic development of the nation. Financially, it is difficult for an average Nepalese to launch a project. By raising the scattered funds from a large number of investors, by issuing of share and debenture, such projects can be launched, as there are large, numbers of middle classes families. The small investors can invest by purchasing share of such company from primary market during the initial public offering period or from secondary market. But, the general public and investors do not have adequate knowledge about the capital market and pricing techniques. Simply, the price of share is determined by the interaction of buyers and sellers in NEPSE *(Neupane, 2008).*

Investment in share of different companies is highly risky being an ownership capital. It has interest rate risk, purchasing power risk, bull-bear risk, and management risk, default risk, liquidity risk, task risk, political risk, industrial risk etc. but most of the investments are risky. Different factors are responsible to set the share price. Among them some are quantitative, and some are qualitative effect of qualitative ,can't be quantified *(Neupane, 2008).*

This study is focused on the sensitivity of stock price in NEPSE towards various factors. Which factors have positive and which has negative effect to determine the stock price? In other words, this study tends to determine the factor affecting the stock price. This study is also focused on the capital market development in Nepal and the investment opportunities for small investors to reduce the foreign dependency on development process.

1.4 Statement of the Problem

The development of capital market in general and stock market in particular is a must for a sound industrial development of the country. Capital market institutions help to mobilize the funds from the surplus unit into the deficit units for productive investments. As it mobilizes the scattered resources and channels them in productive sector, it is an effective instrument of expanding productive capacities of the country. Due to the lack of information and poor knowledge, investors are manipulated or exploited by the financial institutions or other market intermediaries such as extent that are investing in common stock are intolerably hazardous. Investor's attitude and perception plays a vital role in rational decision which is influenced by the knowledge and access to the data required for the analysis. Most of Nepalese investors invest their fund in single securities because of less knowledge about risk-return behaviours of the securities.

The development of stock market in Nepal is both challenging and difficult. The problems like lack of professionalism in brokers, independent buyers and sellers, well trained manpower; management delay of shares, rational investor exist from Nepalese stock market. Because of embryonic nature, Nepalese stock market is not effective enough to evaluate the price of stock. There are no private open investment companies (mutual fund) operating at present time. Therefore, the government needs to create incentives for capital mobilization remove impediments to private sector development and provide basic legal regulatory reforms.

The companies use different rules and regulation in stock market development. There is no consistency between Acts and *Niyamabali*. They are not matching each other. The special institute incorporated under a special Charter governs accountancy profession. These institutes regularise the profession and also issues of accounting standards and guidelines. All the members are required to follow it mandatorily which discharge their duties. These practices help to maintain a reasonable standardize performance by professional accountants.

Nepalese capital market is very small in comparison with other developed stock markets. There are a few numbers of brokers, limited number of listed companies, very few transactions and most importantly, investors are unknown about the pros and cons of the stock market. The market is almost totally captured by individual investors who buy very little number of shares and therefore they do not bother analysing the data and information before buying and selling stock. The variety of securities available in the market allows each investor to select asset that suits his risk, preferences and beliefs. But there is lack of different types of securities in the stock market.

1.5 Objectives of the Study

The main aim of the study is to identify the determinants of stock price fluctuation in NEPSE and their relationship with stock price. Mores specific objectives to the study are as follows:

- To examine the effect of earnings per share on stock price of selected commercial bank.
- To analyze the effect of stock dividend to stock price of selected commercial bank.

1.6 Significance of the Study

Stock market is a leading indicator of economy. When stock market is booming, the economy is good and when stock market is declining, the economy is bad. Stock markets have direct relation with the economic growth. Economic growths come with more earning capacity, opportunities to save and also the opportunity to invest. It must be noted that economic growth is, to a great extent, dependent on the industrialization in a country *(Doodha, 1962).*

This study will be useful to the university students who are curious to know about the current status of Nepalese stock market, its growth, issues and challenges for the development of stock market. Similarly, the recommendations that this study intends to propose on the basis of its findings are expected to be useful for the policy makers associated with the development of capital markets. This study is also useful to the government of our country who can take the decisions accordingly regarding the stock prices.

1.7 Limitations of the Study

None of the study can go beyond the boundary of some limitations. The scope of the study has been limited in terms of period of study as well as sources and nature of the data. The following are some of the limitations of the study:

6. The study is based on secondary data only and is focused on the annual report given by the bank.
7. Only financial and statistical tools have been used for analyzing the stock market.
8. Out of 28 Class A commercial banks, the study has concerned with the selected banks (NMB Bank Limited &Machhapuchhare Bank Limited)
9. The period coverage by the study extends the period of five years (2070/71 to 2074/75) only.
10. Although there are various aspects of financial management, this research study is mainly concerned with the stock market aspects of the selected banks.

1.8 Organization of the Study

The study has been organized into the following five chapters:

Chapter I: Introduction

This chapter deals with the background of the study, a review on selected bank, focus of the problem, statement of the problem, objectives of the study, significance of the study, limitation of the study and organization of the study.

Chapter II: Review of Literature

This chapter is divided into two sections: the first part of the chapter focuses on the conceptual framework of the study and the second part of the chapter focuses on the review of literature regarding the review of journals, articles, review of previous thesis and research gap.

Chapter III: Research Methodology

This chapter deals with the research methodology. In this chapter, the research has been dealt with the research design, population and sample, sources of data, data processing and analysis and tools and technique of analysis.

Chapter IV: Presentation and Analysis of Data

This chapter deals with the presentation and analysis of secondary data. It gives a clear picture of how the collected data has been presented on the study and how it has been analyzed. More over this chapter focuses on the major findings of the data analysis.

Chapter V: Summary, Conclusion and Recommendations

This chapter deals with elaboration of summary of the study, conclusion made from the analysis of data and recommendation made on the bases of the major findings and conclusion, Bibliography and Appendix made.

1.8 Review of Literature

This chapter highlights the review of literature regarding the stock market in Nepalese commercial banks. The chapter is divided into three parts. The first part of the chapter deals with the conceptual framework regarding stock markets. The second part of the chapter deals with relating of some available literature including review of journals, articles and thesis. The third part of this chapter highlights the research gap which has been found out.

1.8.1 Concept of Common Stock

The common stock represents equity or an ownership position in a corporation. It is a residual claim in the sense that creditors and preferred stockholders must be paid as scheduled before common stockholders can receive any payments. In bankruptcy, common stockholders are in principle entitled to any value remaining after all other claimants have been satisfied. However, in practice courts sometimes violate this principle (Gupta, 1991).

The great advantage of the corporate firm of organization is the limited liability of its owners. Common stocks are generally fully paid and non-assessable, meaning that common stock holders may lose their initial investment but not more. That is, if the corporation fails to meet its obligations, the stockholders cannot be forced to give the corporation the funds that are needed to pay off the obligations (Doodha, 1962).

However, as result of such a failure, it is possible that the value of corporations' share will be negligible. This outcome will result in the stockholders having lost an amount equal to the price paid to buy the shares. Common stock or equity share is the ownership of a company that gives the owner the right to participate in electing the board of directors and voting on other matter brought before the stockholders in proportion to the number of shares held (Francis, 1997).

a) Financial Market

Financial market denotes the place or mechanisms where financial instruments are traded. Financial instruments denote paper evidence showing the exchange of instruments between concerned parties. A financial market is a place where firms and individuals enter into contracts to sell or buy specific products, such as stocks, bond or future contracts. This market provides a meeting place for buyers and sellers where price is determined (Chandra, 1994).

Financial markets provide a forum in which suppliers of funds and demanders of loans and investments can transact business directly whereas the loans and investments of institutions are made without the direct knowledge of suppliers of funds (savers), suppliers in the financial markets know where their funds are being lent or invested. The two key financial markets are the money market and the capital market. Transactions in short term debt instruments or marketable securities (bonds and stocks) are traded in the capital market (Gitman, 1988).

Financial market is the place where the financial instruments are traded. Financial instruments include share bond and debenture etc. The purpose of financial market in an economy is to allocate savings efficiently during the period-days, a week, a month, or a quarter to parties who use funds for investment in real assets or consumption (Van Horne, 2000).

Financial intermediaries (financial institution) are organization that issue financial claims against themselves and use the proceeds from this issuance to purchase primarily the financial assets of others. Financial claims simply represent the right hand side of balance sheet for any organization, so the key distinction between financial intermediaries and other types of organization involves what is on the left hand side of the balance sheet. Financial intermediaries provide an indirect method for corporation to acquire funds (Chandra, 1994).

Chandra (1994) further states that financial institutions are said to be the bridge between the savers and users. They also collect scattered deposits and give loans to maximize their wealth. Financial institutions actively participate in the money market and the capital market, as both suppliers and demanders of funds. Financial intermediaries include, saving and loan associations, saving banks, credit unions, life insurance companies, mutual funds, pension funds etc. The financial system is an important element of modern economy.

b) Securities Market

The securities market is the place where large number of financial securities (shares, bonds, debentures etc.) are traded according to the prescribed rules. As far as the securities market is concerned, it is the important constituent of capital market; it has wide term embracing the buyers and sellers of securities and all the agencies and institutions that assist all the sales and resale of corporate securities (Raghu, 1965).

In Nepalese context, it is mandatory to register the portion of securities issued to the public with the Securities Board of Nepal (SEBON) then the firms are eligible to issue the registered portion of securities through recognized bodies. The recognized bodies mean those who have received certificate from SEBON to act as issuing house and security promoter to get membership from security exchange market. Security market exists in order to bring together buyer and sellers of securities, meaning that they are mechanisms created to facilitate the exchange assets. There are many ways in which security market can be distinguished. One is primary and secondary markets. Interestingly, the primary market itself can be subdivided into seasoned and unseasoned new issues.

A seasoned new issue refers to the offering of an additional amount of an already existing security; whereas an unsecured new issue involves the initial offering of a security to the public. Unseasoned new equity issues are often referred to as initial public offerings, or IPOs. Another way of distinguishing between security markets considers the life span of financial assets. Money markets typically involve financial assets that expire in one year or less; whereas capital market typically involves financial assets with spans of greater than one year(Sharpe, Alexander& Bailey, 2000).

Securities market provides an effective way of raising money for commercial enterprises and at the same time provides an investment opportunity for individuals and institutions. Securities markets have both theoretical and practical perspectives. Securities markets provide value and significance to the financial assets. Practically, the activities of buying and selling securities on the security markets are extremely important for the allocation of capital within economics the securities market serves as a reliable guide to the performance of companies and thereby promoting efficiency. Holders of stocks and bonds may decide to obtain cash for their investments by selling their securities to other investors (Fischer & Jordan, 2000).

Similarly, others in the economy have cash to invest and are desirous of buying stocks and bonds. The problem is to bring together the order of prospective sellers and prospective buyers so that an exchange of securities for cash may take place. An efficient system whereby investors can convert their securities into cash quickly at or near the current market price makes investors readier to put their savings into stocks and bonds (Edward, 1958).

c) Stock Market

Stock market is known as secondary market in the other side of market segment under capital market. It includes all transferable securities issued previously by corporate bodies; such securities are also traded in the stock exchange. Stock market does not include securities of private company as they are not capable of being dealt in on stock exchange and are not marketable securities due to the restrictions on transferability. In order to take the benefit from stock market, the corporate bodies should have listed the security in the stock exchange. Stock market covers activities pertaining to the dealing in securities, whether good or bad, for the liquidity and marketability. Only the securities of existing companies are tradable on the stock exchange irrespective of issuer's corporate bodies or government.

A stock market is a market for trading of publicly held company stock and associated financial instruments. Originally, stock markets were “open outcry”, where trading occurring on the floor of a stock exchange. Most modern stock trading is done in electronic exchanges where buying and selling occurs via online matching of order placed buyers and sellers (Manandhar, 2006).

1.9 Research methodology

Research methodology means the analysis of specific topic by using proper method. The research methodology tries to make a clear view of the method and process adopted in the entire aspect of the study. It is also considered as the path from which researcher can systematically solve the research problem. This chapter aims to present a basic framework of the research work, in efforts that have been made to present and explain the specific research design to attain the research objective.

This chapter describes the methods and process applied in the entire subject of the study. The study covers the quantities methodology using both financial and statistical tools and the study is based on secondary data only. Thus, this chapter contains on research design, population, and sample, sources of data, data processing and analysis and tools and techniques of analysis.

1.9.1 Research Design

Selection of appropriate research design is necessary to meet the study objectives of any research. “Research design is plan for collecting and analyzing evidence that will make it possible for the investigator to answer whatever question he or she has posed the design of an investigator touches almost all aspect of the research forms the minute details of data collection to the selection of the techniques of data analysis *(*Ragin, 1994*)*.

The study aims to represent the determinants of stock price fluctuations in Nepalese market by studying the overall financial position of the selected banks. It is based on recent 5 years’ data from F/Y 2069/70 to 2073/74. The study has been conducted to assess the current situation of the share prices in the market of the commercial banks and describe the situation and event occurring at the present context. In this study descriptive and analytical survey is done. The justification for the choice of these methods can be various types. The descriptive method is preferred because it includes reliable data and information covering a long time and avoids several complex variables operating into formulation and adoption of credit and investment policies.

1.9.2 Population and Sample

In the present context there are 27 A class commercial banks operating in Nepal. Among them, NMB &MBL of the selected banks have been taken as a sample for the study. These sample banks are the pioneer leading banks in the context of deposits collection and loan payment. The financial statements of the 5 fiscal years from F/Y 2069/70 to 2073/74 have been taken as sample data for evaluating determinants of stock price fluctuation in Nepalese market.

1.9.3 Nature and Sources of Data

This study is conducted based on secondary data relating to determinants of stock price fluctuation in Nepalese market. The secondary data have been extracted from the annual report of the selected banks. Beside these, the annual report of NEPSE has been equally reviewed. Further, the directives issued by the NRB also have been taken as the sources of secondary data. Similarly, various data and information have been collected from periodicals, managerial and economics magazine, journals etc.

Data Processing Procedure and Analysis

The data collected from various sources were in the raw form. The method of analysis was classified and tabulated as per the nature of study and in accordance of the data. Different financial and statistical tools for data analysis were used. The obtained data analysis has been presented in various tables, charts and diagram with the help of supporting interpretation.

1.9.5 Tools and Techniques of Analysis

Under this study, financial as well as statistical tools have been used to analyze data and information, which were collected.

Tools and Techniques of Analysis

Financial Tools

Statistical Tools

Financial Tools

In this research study, various financial tools have been used for analyzing the data. The study focuses on NEPSE Index and the market ratios as Earnings per share (EPS), Dividend per Share (DPS), Market Value per share (MVPS) and Book Value per share (BVPS).

i. Earnings Per Share

Earnings per share, also called net income per share, is a market prospect ratio that measures the amount of net income earned per share of stock outstanding. In other words, this is the amount of money each share of stock would receive if all of the profits were distributed to the outstanding shares at the end of the year. Earnings per share are the same as any profitability or market prospect ratio. Higher earnings per share are always better than a lower ratio because this means the company is more profitable and the company has more profits to distribute to its shareholders. Although many investors don't pay much attention to the EPS, higher earnings per share ratio often make the stock price of a company rise. Since, so many things can manipulate this ratio; investors tend to look at it but do not let it influence their decisions significantly. It is expressed as:

$$\text{EPS} = \frac{\text{Total Earnings available to the shareholder}}{\text{Total Number of Shares Outstanding}}$$

ii. Dividend per Share

Dividends per share show the percentage of the profit earned by a company that is to be given to the shareholders. This amount is important to both the shareholders and investors. Shareholders care about this figure because dividends are one way they can gain a financial return after buying shares in a company. Investors use this ratio as one method of analysing the financial capabilities of a company. Dividends per share only accounts for dividends that are to be distributed regularly, rather than one-time payments to shareholders. It is expressed as:

$$\mathrm{DPS} = \frac{\text{Total Dividend paid to the shareholders}}{\text{Total Number of Shares Outstanding}}$$

iii. Market Price per Share

The market value per share or fair market value of a stock is the price that a stock can be readily bought or sold in the current market place. In other words, the market value per share is the going price of a share of stock. The stock market and economy changes every day and with it comes fluctuations in company stock prices. A stock's market value is largely influenced by not only the economy as a whole but also investors' predictions and expectations. It is expressed as

$$\mathrm{MVPS} = \frac{\text{Total Market Capitalization}}{\text{Total Number of Shares Outstanding}}$$

iv. Book Value per Share

Book value per share (BVPS) is a ratio used to compare a firm's common shareholder's equity to the number of shares outstanding. In the case that the firm dissolves, it is the amount the shareholders will receive. In other words, Book value per share compares the amount of stockholders' equity to the number of shares outstanding. If the market value per share is lower than the book value per share, then the stock price may be undervalued. Thus, this measure is a possible indicator of the value of a company's stock; it may be factored into a general investigation of what the market price of a share should be, though other factors concerning cash flows, product sales, and so forth should also be considered. The measurement is rarely used internally; instead, it is used by investors who are evaluating the price of a company's stock.

It is expressed as:

$$\mathrm{BVPS} = \frac{\text{Book Net Worth Value}}{\text{Total Number of Shares Outstanding}}$$

Statistical Tools

Statistical tools are the measures or the instruments to analyze the collected data from different sources. In statistics, there are numerous statistical tools to analyze various natures. In this study, the researcher has used the following statistical tools to analyze the data.

vii. Arithmetic Mean or Average ($\bar{x}$)

An average is a single value that represents a group of values. It depicts the characteristic of the whole group. It is a representative of the entire mass of homogeneous data, its value lies somewhere in between the two extremes, i.e. the largest and the smallest items. It is obtained by dividing the sum of the quantities by the number of items. Therefore, it is calculated as

$$\bar{x} = \frac{\sum X}{N}$$

Where,
$\bar{x}$ = Arithmetic Mean or Average
$\sum X$ = Sum of the sizes of the items
N= Number of items

viii. Standard Deviation (S.D.)

It is the most usual measure of dispersion and it represents the square root of the variance of a group of numbers, i.e., the square root of the sum of the squared differences between a group of numbers and their arithmetic mean. Generally, it is denoted by σ (read as sigma). Therefore, it is calculated as:

$$\sigma = \sqrt{\frac{\sum(x-\bar{x})^2}{N-1}}$$

Where,
σ = Standard Deviation
N = Number of items in the series.
$\bar{X}$= Average or Arithmetic Mean
X = Variable

The standard deviation measures the absolute dispersion or variability of a distribution; the greater the amount of dispersion or variability the greater the standard derivation, for the greater will be the magnitude of the deviations of the values from their mean.

ix. Coefficient of Variation

Karl Pearson developed this measurement to measure the relative dispersion. It is used in such problems where we want to compare the variability of two or more series. The CV is the relative measure of dispersion, comparable across distribution. It is denoted by dividing the arithmetic mean to standard deviation.

$$C.V. = \frac{\sigma}{\overline{X}} \text{ x } 100\ \%$$

Where,

$CV = $ Coefficient of Variation

σ = Standard Deviation

$\overline{X}$ = Average or Arithmetic Mean

x. Coefficient of Correlation

The correlation analysis refers to the techniques used in measuring the closeness of the relationship between the variables. It helps us in determining the degree of relationship between two or more variables. It doesn't tell us anything about cause and effect relationship. It describes not only the magnitude of correlation but also its direction. The coefficient of correlation is a number, which indicates to what extent two variables are related to what extent variations in one go with the variations in the other. The value of coefficient of correlation always lie between +1 and -1 indicating -1 as perfect negative relationship,+1 as perfect positive relationship, and of 0 as no relationship between the variables. It is defined by Karl Pearson as:

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

xi. Probable Error

The probable error denoted by P.E. is used to measure the reliability and test of significance of correlation coefficient. Significance of relationship has been tested by using the probable error (P.E.) and the following model denotes it:

$$P.E. = 0.6745 \text{ x } \frac{1 - r^2}{\sqrt{N}}$$

or

$$P.E. = 0.6745 \text{ x } S.E.$$

Where,

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

S.E. = Standard error of correlation coefficient
r = correlation coefficient
N = number of pairs of observations
If r is less than PE (i.e. r <PE) the value of 'r' is not significant no matter how high the value of r is.
If r is greater than 6 PE (i.e. r > 6PE) the value of 'r' is significant
If r is equal to PE (i.e. r = PE) the value of 'r' is no correlated

xii. **Regression Analysis and Trend Analysis**:

Regression is a statistical tool, which is used to determine the statistical relationship between two variables and to make the estimation or prediction of one variable based on another variable. Therefore, trend helps to estimate the value of one variable from the given value of another. This analysis also helps to describe the average mathematical relationship between two variables known as simple linear trend analysis. It's "Simple" because there is only one independent variable and "Linear" because the relationship between the independent and dependent variables is assumed linear.

Trend analysis is one the most important methods, which enables to find out the actual position of business cycle over a period of years. The study of the data over a long period enables us to have a general idea about the pattern of the behavior of the trend under consideration. This help in business forecasting and planning future operation. The trend analysis also enables us to compare two or more time series over different periods and draw important conclusion about them. In this study, the researcher has used least square method for analyzing trend analysis. It is computed as follows:

$Y = a + bX$

Following two equations can be developed putting the above values in normal equation

$\sum Y = Na + b\sum X$
$\sum XY = a\sum X + b\sum X^2$
Where,

$$a = \frac{\sum Y - b\sum X}{N}$$

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

Where,

Y = Value of dependent variable

a = Intercept of trend line

b = Slope of trend line

X = Value of the independent variable

N = Number of variables

REFERENCE

Ackerman I.L. 1980 **How to Invest in the Philippine Stock Market.** New Delhi: McGraw-Hill Publishing Co. Ltd

Chandra, P. 1994. **Financial Management Theory& Practice.** New Delhi: Tata McGraw-Hill Publishing Co. Ltd.

Doodha, K.D. 1962. **Stock Exchange in Developing Economy.** Bombay: University Press

Edward R.D. &Magee.J 1958. **Technical Analysis of Stock.** West. Verginia: Springfield Mass

Fischer D.E. and Jordan. 2000 **Security Analysis and Portfolio Management** . New Delhi: Prentices Hall of India Pvt. Ltd.

Francis, J.C. (1997). Investments: Analysis and Management. New York: McGraw Hill.

Gitman, L.J. (1991). Principle of Managerial Finance. Singapore: Harper Collins Publications

Gupta, O.P. (1985). Behavior of Share Prices in India: A Test of Market Efficiency. New Delhi: National Publishing House.

Kene, S.M. 1983. **Stock Market Efficiency- Theory, Evidence and implication.** New Delhi: Haritage Publisher

Raghu, P. 1991. **Shares for investment and Wealth, A guide to investing Wisely.** New Delhi: Indian Book Distributor

Sharma, V. 1996. **Financial Management.** New Delhi: Anamol Publications.

Sharpe, W. F. Alexander, G. J., & Bailey, V.B. (2000). Investment. New Delhi: Prentice Hall of India

Sharpe, W.F. Alexander and Bailey, 2001. **Investment.** New Delhi: Prentice Hall of India.

Shrestha, M.K. & Bhandari, D.B. (2007). Financial Markets and Institutions. Kathmandu: Asmita Publication.

Levine, R. (1996) Foreign Banks Financial Development and economic Growth. *Journal of Economic Literature*

Brennan, M. J. (1995). The Individual Investor. *Journal of Financial Research*