

1. Background of the study

Share price is the value of the firm divided by the number of shares outstanding (Weston, 1989). It is the price of a single share of a number of saleable stocks of a company or financial institution, derivative or other financial asset. The stock price is the highest amount someone is willing to pay for the stock or the lowest amount that it can be bought for.

The stock market plays an important role in economic development by promoting capital formation and raising economic growth. Trading of securities in this market facilitates savers and users of capital by fund pooling, risk sharing, and transferring wealth. Economic activities can be created by flow of reserves to the most productive investment. Investors take decisions to invest in particular shares of companies, keeping in view their share prices. Theories suggest that there is an association between changes in share prices and changes in financial fundamental variables (Nisa & Nishat, 2011).

Equity markets enhance corporate efficiency, spur innovation, and provide a valuable source of capital for long-term economic development. They also provide a useful mechanism for governments to raise capital through the sale of state-owned Enterprises. Moreover, equity market investments constitute an important element of individuals' assets, particularly as governments shift their pension systems toward the private sector. In short, it is clear that equities constitute an increasingly important capital market in the world economy (Mosley & Singer, 2008).

Stocks are equities that allow investors to put their money into a company with hope of achieving a higher return than that of a saving account or bonds. Stock markets operate as an intermediary between savers and users of capital by means of pooling funds, sharing risk, and transferring wealth (Almumani, 2014). The stock exchange plays pivotal roles in the economy. Stock exchange provides a critical link between companies that need funds to set up new businesses or to expand their current operations and investors that have excess funds to invest in such companies and it provides a regulated market place for buying and selling of shares at prices

determined by supply and demand, notwithstanding other macroeconomic fundamentals such as interest and inflation rates (Sanderson, 2009).

Securities history began when two companies, that are Biratnagar Jute Mills and Nepal Bank Limited share was floated in 1937 over Nepali Market. After 24 years of the floating of share over the market, the Company Act was enacted and at the same time there was the issue of Government Bonds. In 1973, in the collaboration of Nepal Government and Nepal Rastra Bank, Securities Exchange Center was established, whose task was to undertake brokering, underwriting, manage public issues, create markets for Securities and Government bonds. Nepal Government under a programme initiated to reform the capital market converting Securities Exchange Center (SEC) into Nepal Stock Exchange (NEPSE) in 1993 as non-profit organization under Securities Exchange Act, 1983. In the same year, the Securities Board of Nepal (SEBON) was established by the Government of Nepal on June 7, 1993 as an apex regulator of Securities Markets. SEBON provides advice to the government on the issue of the capital markets. It allows issuing necessary securities regulations and directives. It allows the registration of public companies. It regulates and systematizes the issue, transfer, sale and exchange of registered securities. It takes necessary actions to prevent insider trading or any other offenses relating to transactions in securities in order to protect the interest of investors in securities. It allows issuing licenses to operate stock exchanges. In the context of Nepal, SEBON works for the capital market so that the market will be in sound economic conditions. It establishes coordination and exchange cooperation with appropriate agencies in order to supervise and regulate matters concerning securities or companies (Aryal & Khadka, 2020).

According to Nepal Rastra Bank Financial report 2020, there are 27 Commercial Banks have been operating in Nepal till fiscal year 2076/77. All banks have listed in Nepal Stock Exchange (NEPSE) which is the main secondary or capital market in Nepal which is regulated by Securities Exchange Board of Nepal (SEBON). Stock or share price of listed Commercial Bank is determined on the basis of demand and supply of shares of the banks i.e. on the basis of daily transaction in the secondary market. For this stock market fair many investors, securities brokers and other concerned parties involve in daily trading to gain their own return. In this study, it is

mainly focused on the price movement of stock of listed Commercial Banks in Nepal for which it would have to be examined the secondary stock market of Nepal and it also be identified how the price of banks' stock fluctuate (volatile) in daily or why this shift happened in stock price.

2. Statement of the Problem

A person or entity invests in equity shares of companies for a number of reasons. It may be for safety cushion, cyclical cash needs, investment for a return, investment for influence, or purchase for control. Whatever the reason might be, an investor undertakes thorough financial evaluation of the available options before deciding to invest in stocks of a particular company. A stock price in an efficient market provides investors with a good measure of any firm's performance and its value. Understanding the impact of various fundamental variables on stock price is therefore very important to investors since that will help them make profitable investment decisions (Srinivasan, 2013). Financial market in Nepal starts systematically with the establishment of the Nepal Stock Exchange (NEPSE). Common stocks comprise the largest portion of securities in the financial market in Nepal listed with the Nepal Stock Exchange (NEPSE). Stocks are traded in primary and secondary market. Generally, the common stock in the primary market is traded at par value, however, it is traded either underpriced, overpriced or at par value in the secondary market. The stock price fluctuates continuously in the secondary market due to organizational (internal) and external factors. Moreover, the NEPSE index is sensitive to both firm specific factors and external factors (Nepal, 2016).

Secondary market in Nepal covers small area in security transaction volume in comparison of international stock markets such as New York Stock Exchange, Hong Kong Stock Exchange, and Bombay Stock Exchange etc. (Paudel, Baral, Gautam, & Rana, 2019). Few investors invest in secondary market in Nepal due to lack of information and knowledge regarding stock trading and capital market investment. So there is not efficient stock market in Nepal. Limited investors have monopoly in Nepalese secondary market. In Nepal, the price of stock fluctuates on the basis of hearsay so there is no any pre-specified and fair factors that cause price volatile (Bam, Thagurathi, & Shrestha, 2018).

This study attempts to analyse how is market price of stock (MPS) fluctuates in Nepalese Commercial Banks by using various measuring financial indicators such as earning per share(EPS), dividend per share (DPS), price earnings ratio (PE), and book value per share (BVPS). So, the following questions may arise:

- a. What is the current trend of EPS, DPS, PE, BVPS and MPS of the sample banks?
- b. Is there any relationship between MPS with EPS, DPS, PE and BVPS?
- c. Are the investors awareness of financial indicators which influence the MPS of the Commercial Banks?

3. Objectives of the Study

The general objective of the study is to investigate, analyse and interpret the movement of share market price of Nepalese Commercial Banks. The specific objectives of this study are:

- a. To examine the current trend of EPS, DPS, PE, BVPS and MPS of the sample banks.
- b. To examine the relationship of MPS with EPS, DPS, PE, and BVPS of selected Nepalese Commercial Banks.
- c. To explore the investors awareness of financial indicators of share price movement of Commercial Banks of Nepal.

4. Significance of the Study

Stock price movement analysis of the Nepalese Commercial Banks focuses on stock price fluctuation and determinant factors that changes price of share in the secondary market in Nepal, so the study is particularly significant to the investors, mangers, bankers, stock analyst, brokers, government officials, academicians, students and other stakeholders who are interested in understanding the share price behaviour of the Commercial Banks.

This study analyses financial condition of the Commercial Banks and performance of their stock traded in the financial market. Therefore, the study is significant to investors and public to help them undertake rational decisions while investing in the

stock of Commercial Banks to acquire fair returns from their investment. Moreover, the study provides insight over the financial position and capitalization status of the Commercial Banks. The bank management can analyse the financial position and performance of their traded stock to undertake necessary steps for its improvement. Since, the study provides general picture of the existing share market, it is significant to the government and the policy making agencies to prepare/amend policies in a timely manner for effective and efficient functioning and growth of stock market.

The stock market and banks can benefit from this study as it will highlight those factors which are perceived by an investor as share price determinants. Once these factors or variables are identified the banks can strive hard in maximizing the value of the aforesaid variables that are deemed significant for investment decisions. In addition, the study would also be useful to stock analyst, brokers and other persons who are actively involved in stock market. Moreover, the study is significant to academicians and students who are willing to learn about the movement in stock price behaviour of the Commercial Banks and also to those who wanted to pursue their career in banking or share business. Taking all these issues into consideration, this study will analyze about stock price movement of the listed Nepalese Commercial Banks.

5. Limitation of the Study

Despite the ample efforts on the part of the research, this study cannot be exceptional and free from limitations. The accuracy of this study largely depends upon the data and statements provided by the sample Commercial Banks.

The major limitations of the study are presented below:

- a. This study will cover only the relevant data of seven years i.e. from fiscal year 2012/13 to 2018/2019.
- b. The study will be based on primary and secondary data. Thus, the validity and reliability of the data will depend upon their sources.
- c. The study has been designed to concentrate on stock price volatility of the banking sector, which is a part of total capital market. Hence, the conclusion cannot be generalized on the total capital market.

- d. This study has been based on only bank specific factors (like EPS, DPS, P/E ratio, BVPS) affecting the stock price.

6. Literature Review

Review of literature means reviewing research studies of other relevant propositions in the related area of the study so that all the past studies, their conclusions and deficiencies may be known and further research can be conducted. This part of the study highlights available literature related to this research which makes base of knowledge for the study. Review of literature is stock thinking of available literature in one's field of research. This part will involve the theoretical and empirical review of the literature in this research study. The related literature based on this topic has been derived from:

Mishkin and Eakins (2012) Capital markets are for securities with an original maturity that is greater than one year. These securities include bonds, stocks, and mortgages. Capital markets have well-developed secondary markets. A secondary market is where the sale of previously issued securities takes place, and it is important because most investors plan to sell long-term bonds before they reach maturity and eventually to sell their holding of stock. Firms and individuals use capital market for long-term investment purpose.

Dividend per share is calculated by dividing the total dividend amount paid for the financial period by the number of ordinary shares in issue. The directors may pay an interim dividend during the accounting period and then recommend a final rate of dividend per share for approved by shareholders at the Annual General Meeting (AGM).

Gitman & Zutter (2012) defined book value per share as 'the amount per share of common stock that would be received if all of the firm's assets were sold for their exact book (accounting) value and the proceeds remaining after paying all liabilities (including preferred stock) were divided among the common stockholders'.

Price-earnings ratio, usually called PE ratio is the ratio of market price per share to earnings per share. It is calculated by dividing market price per share by earnings per share (Baral, Paudel, Gautam, & Rana, 2019).

Almumani (2014) attempted to identify the quantitative factors that influence share prices for the listed banks in Amman Stock Exchange over the period 2005-2011 using a linear multiple regression model. There is a significant positive relationship between EPS and the MPS of the listed banks in Jordan. Moreover, there is a significant relationship between banks BVPS and MPS. Another empirical finding from the regression analysis shows a positive relationship between P/E and MPS. Empirical findings from the regression analysis on the relationship between SIZE and MP indicate that there is an inverse relationship between Size and MPS. Finally, other variables (DPS and DP) have insignificant impact on MPS.

Pradhan and Dahal (2016) examined the relationship between bank specific and macroeconomic variables and MPS in Nepal's banking sector. It determines the effect of earnings per share, dividend per share, price earnings ratio, book-value per share, return on assets, size, gross domestic product, inflation and money supply on MPS. The study is based on pooled cross sectional analysis of secondary data of 14 commercial banks for the period 2002/03-2013/14. As first approximation to the theory, this study hypothesizes that the MPS depends on several bank specific and macroeconomic variables such as earnings per share, dividend per share, price earnings ratio, book value per share, returns on assets, size, gross domestic product, inflation and money supply. Variables like earning per share, price earnings ratio and book value per share are very weak effect in determining market price per share. The research study suggests a rational investor's need to consider dividend per share, firm size and money supply before making investment decision along with signalling and asymmetric information in context of imperfect stock market like Nepal.

The study of Malhotra and Tandon (2013) attempted to determine the factors that influence stock prices in the context of National Stock Exchange (NSE) of 100 companies. A sample of 95 companies was selected for the period 2007- 2012 and linear regression model was used. The results indicated that firms' book value, earning per share, and price-earnings ratio are having a significant positive association with firm's stock price while dividend yield is having a significant inverse association with the market price of the firm's stock.

The study of Velankar , Chandani, and Ahuj (2017) examined the Impact of EPS and DPS on stock price of selected public sector banks of India. The time series data on

different variables; EPS, DPS and Stock Price were taken for carrying out the study mainly from the websites of money control and NSE. Time period is taken to analysis the cause and effect relationship between EPS, DPS and Stock Price, 9 years period from 2006-07 to 2014-15. Stationarity test, regression model assumption was checked through ARCH LM test and to check the impact of EPS and DPS on stock price, regression test was applied. It has been concluded by testing the hypothesis and following results were obtained that, there is a significant effect of EPS and DPS on Stock price of selected Public sector banks in India.

7. Research Methodology

The Research methodology covers issues that relate to the type of data collected, the way it was collected, and analysed. This part is the master plan of research study that we are going to study in the field to achieve the objective stated in the earlier chapter. In this part, it will contain research design, nature and source of data, population and sample data and data analysis and model to be analysed which will ensure validity, reliability and ethical standards in the study.

7.1 Research design

Research design is the conceptual structure within which research is conducted. It constitutes the blue print for the collection, measurement and qualities of data. Research design is also known as plan, structure and strategy of investigation conceived. This study will be based on descriptive and causal comparative research design and will be quantitative and qualitative approach of the research. The data will be collected to examine the interrelation of MPS with EPS, DPS, PE, BVPS, and other financial indicators that influence to the stock price movement of listed Commercial Banks in the NEPSE.

7.2 Population and sample

There are various sectors in the stock market such as financial institutions, insurance companies, manufacturing and processing, trading, hydropower and others. In this study, 27 commercial banks listed in NEPSE are taken as population. Out of total 27 commercial banks 5 commercial banks taken as sample to represent the performance of the capital market.

7.3 Nature and Sources of Data

For the effective and efficient findings, both primary and secondary data has been collected as source of data. For the purpose of primary data, a questionnaire will be presented to the 100 respondents using convenience sampling technique of non-probability sampling. The respondents will be from the NEPSE courtyard that have either invested in Share or willing to invest in Share soon. Similarly, the secondary data will be collected from the annual report of NEPSE, annual report of listed Commercial Banks and other related companies along with these sources; some sources will also be the year-ended equity share data sheet showing MPS, BPVS, EPS, DPS, PE, Balance Sheet Profit and Loss Account etc. information relevant to study available in various web-sites, previous thesis and studies and relevant books, journals, magazines, reports, bulletins, etc.

7.4 Methods of Analysis

Data analysis will be based on the objective of the study and will be done using statistical package for social sciences (SPSS) on collected data to draw meaningful interpretation and conclusion. The data will be collected from the above mentioned resources and analyzed by using statistical tools.

7.4.1 Statistical Tools

Statistical tools measure the data and give the result in numeric form which helps to analyze the data in logical way. The following statistical tools will be applied for the study.

Average/ Mean

Average is calculated by adding all the numbers of all observations and dividing by the total number of observations. It is in fact, a value which is represented to stand for whole group of which it is part, as typical of all the value in the group.

$$\text{Mean} = \frac{\sum X}{n}$$

Where,

X = Number in X-series

n = Number of Observations in a sample

Standard Deviation

The standard deviation (σ) is another measure of investment risk. It is absolute measures of dispersion. The smaller the standard deviation the lower will be the degree of risk of the stock. In other words, a small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series and vice versa. The formula for calculating the standard deviation is:

$$\sigma = \sqrt{\frac{\sum (X - \bar{X})^2}{n}}$$

Where,

σ = Standard Deviation

X = Number in X-series

\bar{X} = Mean

n = Number of Observations in a sample

Coefficient of Variation

The coefficient variation (CV) is the other useful measure of risk. It is the standard deviation divided by the expected return, which measures risk per unit of return. It provides a more meaningful basis for comparison when the expected returns on two alternatives are not the same. If investors believe that the rate of return should increase as the risk increase, then the coefficient of variation provides a quick

summary of the relative trade-off between expected return and risk.

$$CV = \frac{\sigma}{\bar{X}}$$

Where,

CV = Coefficient of Variation

\bar{X} = Mean

σ = Standard Deviation

Correlation Coefficient

Correlation may be defined as the degree of linear relationship existing between two or more variables. Two variables are said to be correlated if accompanied by the change of another variable. If the increase (decrease) in the value of one variable on an average is associated with the increase (decrease) in the value of another variable, positive relationship is said to be existed. The relationship will be negative if increased (decreased) in the variable of one variable is associated with the decreased (increased) in the value of another variable. But the correlation coefficient always remains within the limit of +1 to -1. By Karl Pearson, the simple correlation coefficient (between two variables say X and Y) is given by:

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

Where,

r	:	Correlation between X and Y
n	:	Number of observations in series X and Y
$\sum X$:	Sum of observations in series X
$\sum Y$:	Sum of observations in series Y
$\sum X^2$:	Sum of square observations in series X
$\sum Y^2$:	Sum of squared observations in series Y
$\sum XY$:	Sum of product of observations in series X and Y

Coefficient of Determination

The coefficient of determination gives the percentage variation in the dependent variable that is accounted for by the independent variables. In other words, the coefficient of determination gives the ratio of expected variance to the total variance. The coefficient of determination is given by the square of the correlation coefficient, i.e. r^2 so the coefficient of determination = Square of correlation = (r^2)

Regression Analysis:

Multiple Regression Analysis

Multiple regression analysis is a logical extension of the simple linear regression analysis. Instead of single independent variable, two or more independent variables are used to estimate the unknown values of a dependent variable. However the fundamental concept in the analysis remains the same. Multiple regression is defined as statistical device which is used to estimate (or predicts) the most probable value of dependent variable on the basis of known value of two or more independent variables. The following multiple regression equation is analyzed.

Multiple Regression Model

$$\hat{Y}_{MPS} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_i.$$

Where,

\hat{Y}_{MPS} = Dependent variable

X_1 = EPS

X_2 = DPS

X_3 = PE

X_4 = BVPS

α = Constant

β_i = Beta Coefficient of slope of regression model and

e_i = Error term

8. Chapter Plan

On this research, the study is carried out through different stages and procedures, as it is necessary. The study has been organized on following chapters in order to make the study easy to understand.

Chapter-I: introduction

This chapter covers background of the study, focus of the study, statement of the problem, objectives of the study, significance of the study, theoretical framework, research hypothesis and , limitations of the study.

Chapter-II: Review of Literature

This Chapter is the brief review of literature related to this study. It includes a discussion on the conceptual framework and review of the major studies and research gap.

Chapter-III: Research Methodology

This chapter deals with the methodology followed to achieving the objective of the study, which include research design, population and sample, sampling procedure, collection of data and data analysis tools and techniques.

Chapter-IV: Results and Discussion

This chapter deals with presentation, analysis and interpretation of data, collected from various sources. It also includes the major finding of the study.

Chapter-V: Summary and Conclusion

This chapter includes brief sketch of the study, conclusions and recommendation or implications. Finally, references and appendices are also included at the end of the study.

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