

Factors Influencing The Stock Price of Nepalese Commercial Banks

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Abstract

The purpose of this research is to examine the impact of factors influencing the stock price of Nepalese commercial banks. This research uses MPS as the dependent variable and independent variables are DPS, EPS, P/E ratio, ROA, GDP, and inflation rate. The secondary data has been collected from the annual reports of selected commercial banks for five year study period from 2017 to 2021. Descriptive and causal-comparative research design has been used to analyze and interpret this data using SPSS 23 version. Ten commercial banks are taken as a sample out of 27 banks. The convenience sampling method is used. Multiple linear regression models have been used to show the impact of independent variables on the dependent variable. The result shows that there is a positive and statistically significant effect of DPS, EPS, and P/E ratio on the stock price. ROA and GDP have a positive but not significant effect on the stock price but the inflation rate has a negative and insignificant impact on the stock price.

Key Words: DPS, EPS, P/E ratio, Commercial Banks, MPS.

Introduction

In the Nepalese market, the market price per share of commercial banks has been changing speedily. The investors are facing an unstable situation in the share market. During these two years, the NEPSE index has raised from 1400 to 3000 to decrease from 3000 to 1900 points which shows the capital market in Nepal is highly volatile. The stock market is affected by many more factors such as political upheaval, interest rates, current events, exchange rate fluctuations, natural calamities, and so on. The stock price is directly impacted by the demand and supply of stock. The stock price fluctuates from time to time and stock exchanges react to the environmental changes. Stock prices rise when buy orders outnumber sell orders, and prices decline when sell orders outnumber buy orders. Demand is relative to four factors which are earnings, economy, expectations, and emotion. Stock prices habitually rise when all four factors are positive and fall when all four factors are negative.

Laksitaputri (2012) found that efficient capital market, stock prices reveal all relevant information and the market will achieve this if there is a change in the stock price. Stock

prices are influenced by various fundamental and technical factors. Earnings affect how investors value companies but other indicators are used to forecast stock prices. Stock prices are affected by investors' prospects, attitudes, and sentiments.

The stock market plays an important role in the economic development of the country. It helps to transfer the funds from the savings of the public to industrial and business activities. The status of an economy can almost always be predicted and understood as a result of the performance of its stock market since the capital market plays a great role in the process of economic development. The share price is subject to great fluctuations depending on various factors one of which is earnings. Knowledge of the impact of earnings on share prices is highly significant as it would help in determining price volatility and in the prediction of price movement to enable firms to improve their market value and investors to maximize their wealth (Zarezadeh et al., 2011).

Raza et al., (2021) explained stock market performance is considered the most important area of financial research by investors, managers, financial analysts, and the government. The stock market is vital to sustaining economic growth as it assists the fund movements among the government, investors, and other stakeholders. This research aims to determine the impact of dividend per share, earnings per share, price-earnings ratio, return on assets, Inflation, and gross domestic product on the market price per share in Nepalese commercial banks.

The purpose of this is to analyze the main factors that influence the stock price of Nepalese commercial banks from 2017 to 2021. The objectives of this research are to explore the primary elements that influence the stock price of Nepalese commercial banks for five years.

There are six sections of the study. The review of literature is presented in section II., section III explains the conceptual framework, and section IV describes the study's research methods. The empirical data and discussion are presented in section V last, section VI presents the study's conclusion.

Review of Literature

Nisa & Nishat (2011) examined the empirical relationship between the stock prices, financial fundamentals, and macroeconomic factors in Karachi Stock Exchange, and collected data from 221 non-financial firms from 1995-to 2006. Data analysis was used by dynamic penal data and they were used to generalize the method of moment's technique. This research used independent variables are company size, earning per share market-to-book ratio, and macroeconomic variables like GDP, inflation, and share turnover ratio. The result found that size, earnings per share, and GDP have a significant relationship with the share price. Market-to-book value ratio, inflation, and share turnover ratio also influenced stock price behavior.

Khan & Amanullah (2012) examined the relationship of determinants with the share prices of the Karachi Stock Exchange (KSE) index of Pakistan. The researcher has selected the

various independent variables which are book-to-market ratio, price-earnings ratio, dividend, GDP, and interest rate to find the way and support the relationship. Samples are randomly selected from 34 companies from the KSE of the sample. They collected 10 years of (2000-2009) data of sample companies and used linear multiple regression and correlation models for data analysis. The results showed that all the selected variables have a positive and significant relationship with the share price.

Menike and Prabath (2014) examined a study to evaluate the impact of accounting variables on the share price. The main independent variables are dividend per share, earning per share and book value per share have been used for analysis. A total of 100 listed companies on CSE, Sri Lanka were considered as samples, and the study period was 5 years from 2008 to 2012. Used for analyzing multiple linear regressions to evaluate the factors that influence share price. The results show that all independent variables had a positive and significant impact on the stock price.

Salam, Islam, and Hasan (2015) conducted a study on factors affecting the share price movement of the Dhaka Stock Exchange. They have performed a factor analysis to identify the factors that influence share prices. Results revealed that Industry Performance, Market Influences, Company Performance, Investor Decisions, and Financial Consideration are the factors that influence share price. Further, results revealed that EPS was highly correlated to stock price movement in the capital market.

Pradhan and Dahal (2016) investigated the factors that affected the share price of Nepalese commercial banks. Samples are taken from NEPSE listed 14 commercial banks from the study period 2003/2004 to 2013/2014. The main specific variables are earning per share, dividend per share, price-earnings ratio, book value per share, return on assets, size GDP, inflation and money supply are the major determining factors of the share price. The result shows that EPS, DPS, ROA, size, GDP, inflation, and money supply are positive and significant impacts, and the price-earnings ratio and book value per share is insignificant.

Banerjee (2019) examined the impact of firm performance on its stock return. The main variables of the studies are dividend yield, return on equity, earning per share, price-earnings ratio, and debt-equity ratio. These studies used the OLS in secondary data. The result of this study's dividend yield and return on equity has statistical significance for forecasting stock prices. But, earnings per share, price earning and debt-equity do not predict stock prices and therefore can be considered statistically insignificant.

Oyedokun et al. (2019) reached conflicting results regarding the effect of stock properties on the market value of bank shares in Nigeria. The population of all fifteen listed deposit money banks on the Nigeria Stock Exchange and sample selected only twelve listed deposit money banks on NSE was taken on the judgmental sampling techniques. Study period from 2013 to 2017. OLS was used to analyze the data. The major variables are the dividend payout ratio, price-earnings ratio, dividend yield, and book value per share. The result of the study DPR and P/E ratio has a significant positive relationship with the share price. The dividend yield has significant negative relation with share price and book value per share

has no meaningful relationship with the share price. While the book value per share did not have any relationship with the share price.

Chhajer, Mehta, & Gandhi (2020) analyzed stock prices have always been a subject of intrigue. Researchers have strived to find the factors which influence stock prices and thereby return. Researchers have generally focused on market-based factors to examine the relationship. The study assesses the impact of firm-specific fundamental factors, total assets, debt-equity ratio, current ratio, return on equity, and dividend yield apart from market-based factors, beta, and price-to-book value ratio on the stock returns. The total sample of selected 198 stocks listed on NSE panel data is used for this study. Size and leverage are insignificant, and return on equity and dividend yield also significantly affects the stock returns.

Moradi, et al. (2021) found the effects of macroeconomic variables on stock price crash risk in the economically uncertain conditions of Iran's market. A total sample of the studies is 152 Iranian companies that are listed on the Tehran Stock Exchange. Studies period was from 2014 to 2019. The main variables are inflation, unemployment rates, GDP, and exchange rates. The results showed that there is a positive relationship between inflation and unemployment rates and stock price crash risk, but the GDP and exchange rates are negatively correlated with crash risk. It also appears that if the exchange rate raises the investors like better to buy companies' shares to sustain the purchasing power of their money.

Niraula (2021) studied on stock price behavior of commercial banks in Nepal with view to examine the stock price behavior of commercial banks in Nepal. Total population of the study was 27 commercial bank which are listed in NEPSE only eighteen banks are taken. Convenience sampling technique is used. In this research collected only secondary data form 2015/16 to 2019/20. Descriptive research design was used. To interpreted the research data were analyzed and interpretation statistics. To show the relation of both dependent and independents variables by using correlation coefficient and impact of independent variables on dependent variables was show using multiple regression analysis. EPS, P/E ratio, DY, size, BVPS, ROA are independent variables. The result shows that EPS,P/E ratio and size are positive and significant effect on MPS but other variables are insignificant impact on MPS.

Research Methodology

This research is based on a descriptive and causal-comparative research design. The specific variables are dividend per share, earning per share, price-earnings ratio, return on assets, GDP, and inflation are taken independent variables and market price per share is outcome variable. The study is based on secondary penal data selected from 2017 to 2021. The samples are selected based on convenience sampling. All data are collected by published annual reports of sample banks. These data are analyzed and interpreted by descriptive and inferential statistics like mean, standard deviation, coefficient of variance, correlation, and multiple regression using SPSS version 23 and Microsoft excel 10.

The Model

The econometric model is expressed for the study:

$$y = \alpha + \beta x + \varepsilon$$

Where:

y is the outcome variable; α is constant; β is the explanatory variable coefficient; x is the explanatory variable vector; and ε is the error term. The regression model can be shown as:

$$MPS_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 DPS_{it} + \beta_3 PE_{it} + \beta_4 ROA_{it} + \beta_5 GDP_{it} + \beta_6 Inf_{it} + \varepsilon_{it}$$

Where,

MPS_{it} = Market price per share for the bank during t period.

DPS_{it} = Dividend per share for the bank during t period.

EPS_{it} = Earnings per share for the bank during t period.

PE_{it} = Price earnings ratio for the bank during t period.

ROA_{it} = Return on Assets for the bank during t period.

GDP_{it} = Gross domestic product during t period.

Inf_{it} = Inflation rate during t period.

ε_{it} = Error terms

β_0 = Intercept

$\beta_1 - \beta_6$ = Coefficient parameters

Research Framework

Following research framework has been used in the study:

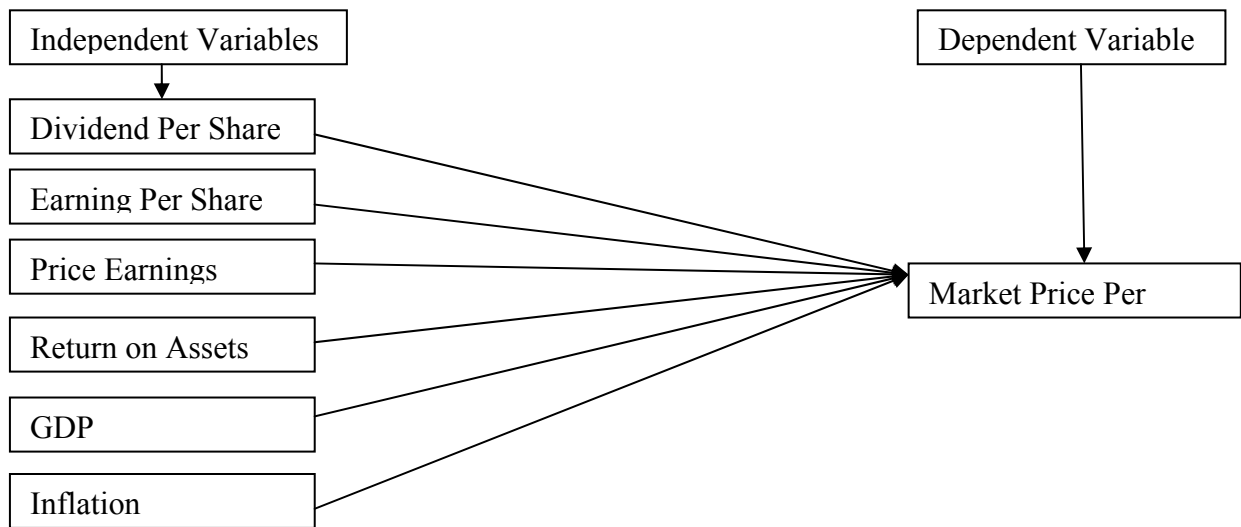


Figure 1. Research Framework

Results and Discussion

Descriptive Statistics

Descriptive statistics of the variables used in the study of commercial banks in Nepal from 2016/17 to 2020/21 have been presented in table 1. The statistics include values of mean, standard deviation, CV, minimum and maximum values.

Table 1

Descriptive Analysis of Variables.

Variables	Minimum	Maximum	Mean	Std. Dev.	CV
MPS	139.00	2295.00	548.94	406.11	0.74
EPS	6.11	59.86	23.69	12.00	0.51
DPS	0.00	105.26	20.47	15.86	0.77
PE ratio	8.29	64.67	22.86	10.58	0.46
ROA	0.51	2.69	1.52	0.53	0.35
GDP	-8.20	-0.30	-4.70	3.38	-0.72
INF	3.60	6.10	4.58	0.85	0.18

Note: Annual Report

Table 1 Shows that minimum value of MPS is 139, maximum value is 2295, mean value is 548.94, S.D. value is 406.11 and CV is 0.74 it shows that MPS of sample banks increase until maximum value of 2295. It means Nepalese capital market is highly volatile in stock price. Similarly, minimum value of EPS is 6.11, maximum value is 59.86, mean value is 23.69, S.D value is 12 and CV is 0.51. Likewise, PE ratio of the bank minimum value is 8.29, maximum value is 64.67 with an average mean value is 22.86. Dividend per share minimum value is 0 and maximum value is 105.26 and means value is 20.47. In terms of ROA, minimum value is 0.51, maximum value is 2.69, mean value is 1.52, S.D. is 0.53 and CV is 0.35. Moreover, minimum value of GDP is -8.20, maximum value is -0.30, mean value is -4.70 and S.D. is 3.38 it shows that the highly fluctuation on the GDP. Maximum value of inflation is 6.10, minimum is 3.60, average mean is 4.58 and S.D. is 0.85. its result indicated that inflation fluctuation is minimum.

Correlation Matrix

Correlation matrix shows the relation between dependent and independent variables under this study. Table 2 Shows the Pearson's correlation coefficients of market price per share, earning per share, price earnings ratio, dividend per share, return on assets, GDP, Inflation.

Table 2

Correlation Coefficient between the Variables

Variables	MPS	EPS	DPS	PE ratio	ROA	GDP	INF
MPS	1						
EPS	.690**	1					

DPS	.770**	.567**	1				
PE ratio	.629**	-.009	.393**	1			
ROA	.485**	.720**	.478**	-.090	1		
GDP	.180	.133	.214	.038	.020	1	
INF	-.117	.001	.028	-.246	-.047	.701**	1

Note: Annual Report

Table 2 shows that earning per share, dividend per share, price earnings ratio and return on assets are positively correlated at 1% level of significant on market price per share which means that increase in EPS, DPS, PE ratio and ROA result also increase the market price per share that increase in PE ratio results into increase in share price in market. This result is consistent with the study of Oyedokun et al. (2019). However, GDP is positive correlated and Inflation is negatively correlated with market price per share. This means if increasing the inflation that effect decreasing the market value per share and decreasing the inflation also increase the market price per share. The result is similar with the study of Moradi , Appolloni , Zimon , Tarighi, and Kamali (2021) and contradict with the result of Pradhan and Dahal (2016) and Nisa & Nishat (2011).

Regression Analysis

Table 3

Regression Analysis between Dependent and Independent Variables.

Variables	B	Std. Error	T	Sig.	Tolerance	VIF
Constant	-402.00	220.26	-1.83	0.07		-
EPS	17.85	2.39	7.46	0.00	0.40	2.48
DPS	5.76	1.67	3.45	0.00	0.47	2.11
PE ratio	20.68	2.18	9.48	0.00	0.62	1.60
ROA	33.57	51.32	0.65	0.52	0.44	2.25
GDP	7.80	8.13	0.96	0.34	0.44	2.27
INF	-16.75	33.18	-0.50	0.62	0.42	2.37
R ² = 0.91, Adj. R ² = 0.90, F. Stat. =75.47, F. Sig. =0.000						

Dependent Variable: MPS

Table 3 Regression coefficients of dependent and independent variables have been shown. This table shows that adjusted R² value is 0.90 which means the selected all independent variables like, DPS, EPS, P/E ratio, ROA, GDP and inflation rate are explain MPS by 90% remaining 10% explains by other variables. Likewise, F. Sig. is 0.000, it means the overall model is significant for the study and it can use the OLS to test the variables. Variance inflation factors of all variables ranges from 1.60 to 2.48, and therefore there is no problem of multicollinearity. All VIF value is less than 10. It means that there is no correlation between the independent variables and changes in one independent variable do not change

the value of another independent variable. Earnings per share, dividend per share and Price Earnings Ratio has positive and statistically significant effect on Market Price Per Shares of commercial banks in Nepal at 1% level of significance. It means one-unit increase in EPS, DPS and PE ratio causes 17.85, 5.76 and 20.68 units increase in market price per shares of commercial banks in Nepal. The result is consistent with the study of Moradi , et al. (2021) and contradict with the result of Pradhan and Dahal (2016) and Nisa & Nishat (2011).

Conclusion

The main purpose of this study is to examine the impact of DPS, EPS, P/E ratio, ROA, GDP, and inflation on MPS. Few types of research in influencing the stock price of Nepalese commercial banks have been undertaken. This research uses descriptive and inferential statistics, DPS, EPS, and PE ratios have a significant and positive effect on the stock price. The stock price is influenced by ROA and GDP positive but not significant and inflation has a negative and insignificant effect on the market price per share. The results of this study support the hypothesis of dividend per share, earnings per share, and price-earnings ratio have a positive and significant effect on the stock price and return on assets, GDP, and inflation not support the hypothesis of this study.

Implication for Future Research

The focus of this research is exclusively on the factor influencing the stock price of commercial banks. Using the other independent variables and the same dependent variables, future researchers can investigate the factor influencing the stock price of hydropower, manufacturing and non-manufacturing firms, life and non-life insurance company, microfinance, development banks, and other financial institutions which are listed in the NEPSE.

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