
An Empirical Assessment of Factors Impacting Stock Prices of Nepalese Commercial Banks

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Abstract

This study examines the impact of various financial variables on the pricing of commercial banks in Nepal. Key financial metrics analyzed include earnings per share, dividend yield, price-to-earnings (P/E) ratio, earnings yield, book value per share, money supply, market-to-book value ratio, and stock return. The research highlights the importance of market financial ratios in the investment decisions of Nepalese investors. Using data from 10 out of 20 commercial banks listed on the Nepal Stock Exchange, spanning 110 yearly observations from fiscal years 2012/13 to 2022/23, multiple regression models were employed to determine the relationships between these factors. The findings reveal that earnings per share, dividend yield, P/E ratio, book value per share, money supply, market-to-book value ratio, and stock return are significantly positively correlated with the prices of commercial banks. Conversely, earnings yield shows a negative correlation. Despite the strong preference for price and profitability metrics, the study's limited sample size and focus on commercial banks may affect the generalizability of the results. This research provides critical insights, particularly emphasizing the importance of earnings per share, dividend yield, P/E ratio, and book value per share in guiding investors' financial decisions in Nepal. The findings are anticipated to benefit investors, scholars, policymakers, and other stakeholders by enhancing their understanding of the factors influencing stock prices in the Nepalese banking sector.

Keywords: Market price per share, Earning per share, Dividend yield, Price-to-earnings ratio, Earnings yield, Book value per share, Money supply, Market-to-book value, and Stock return.

JEL Classification: G11, G12, G21, G41

1. Introduction

In global finance, the dynamics of stock market pricing are a topic of significant interest. Numerous financial indicators are acknowledged to play a crucial role in influencing investor perception and stock prices, alongside internal and external factors such as the financial ratio. Among various relative valuation measures, professionals prefer financial ratios to evaluate the market price of common stock when making investment decisions. Essentially, financial ratios help assess a company in proportion to its earnings, making the stock appear more affordable when compared to its earnings (Dahal and Puri, 2021).

As of June 2024, Nepal Stock Exchange Limited, the sole organized exchange center in the nation, has 271 listed firms, including 19 commercial banks. According to the latest estimates, these commercial banks represent a substantial portion of the market, accounting for approximately 29% of the total market value. Nepalese commercial banks, notable for their significant capitalization, are often perceived as lower-risk sectors due to the relative stability of their stock prices. This stability contrasts with the higher volatility observed in other sectors, making commercial bank stocks less susceptible to unforeseen market fluctuations.

Stock price fluctuations are inherently influenced by supply and demand dynamics, yet no infallible system exists to predict these variations accurately. Sharma (2011) identifies both fundamental and technical approaches, focusing on earnings per share, net asset value, and price-earnings ratios, as key methods for analyzing stock prices. Nepalese investors typically concentrate on dividend yield and share price appreciation, often employing a buy-and-hold strategy. This tendency reflects a lack of professionalism within the investor community, as highlighted by Gurung (2004), Panta (2020), Thapa (2019), and Poudel (2016). Adhikari (2010) further underscores that Nepalese investors are significantly influenced by both financial and non-financial factors, including behavioral elements such as information availability, overconfidence, and herding behavior.

Kadariya (2012) reveals that younger Nepalese investors prioritize capital gains over dividends, often relying on market noise, media, and informal discussions for their investment decisions. Shrestha and Subedi (2014) emphasize the role of liquidity, low interest rates, political environment, and policies in enhancing the performance of Nepal's stock market. Joshi (2018) observed an erratic trend in the capital market, identifying firm reputation and public opinion as key determinants of investment decisions. Further, Pandey et al.'s research on investor psychology highlights that self-image, firm image, accounting information, advocate recommendations, and financial needs significantly influence investment decisions. Shrestha and Pokhrel (2019) stress the necessity for increased transparency in Nepal's stock market to mitigate the impact of rumors and misinformation. This study aims to delve into the factors influencing stock prices in Nepalese commercial banks, providing a comprehensive understanding of investor behavior and market dynamics in Nepal's evolving capital market.

2. Literature Review

Earnings per share (EPS) consistently emerges as a critical factor influencing stock prices across various contexts. Uddin (2009) highlighted the positive impact of EPS, dividend percentage, and net asset value per share on stock market prices. Similarly, Al-Tamimi et al. (2011) and Mirfakhr-Al-Dini et al. (2011) found strong positive relationships between EPS and stock prices, with Mirfakhr-Al-Dini et al. (2011) additionally noting a negative relationship between dividend per share (DPS) and the price-to-earnings (P/E) ratio with stock prices. Emamgholipour et al. (2013) emphasized EPS's significant positive effect on stock returns, while also noting that P/E ratio and market value to book value (MV/BV) ratio had significant negative effects on stock returns. Adekunle et al. (2015) and Arshad et al. (2015) corroborated the positive relationship between EPS and stock prices. Agnihotri (2017) found EPS, DPS, and P/E ratio highly correlated with future stock prices across various sectors. Edem (2018) supported these findings with a significant positive association between EPS and stock prices, while noting a positive but statistically insignificant relationship between return on assets (ROA) and stock prices.

Several studies underscore the importance of various financial ratios in determining stock prices. Jadhav and Badade (2012) concluded that EPS, DPS, P/E ratio, dividend yield, and book value per share consistently play vital roles in determining equity share prices. Umathevan (2020) found positive relationships with return on assets, return on equity, book value per share, EPS, and DPS, while noting a negative relationship with dividend yield in diversified financial companies listed on the Colombo Stock Exchange. Wet and Mpinda (2013) observed a positive relationship between dividend yield and market price per share, whereas EPS showed no significant impact. Tandon and Malhotra (2013) found significant positive associations between book value per share, EPS, P/E ratio, and stock prices, while identifying a significant inverse relationship between dividend yield and stock price. Dahal and Puri (2021) and Bhattarai (2014) reinforced the influence of dividend yield, EPS, and P/E ratio as key factors in determining share prices.

Other significant studies have highlighted additional factors affecting stock prices. Mondal and Imran (2010) and Oyama (1997) emphasized the impact of the P/E ratio, stock price rumors, demand for shares, changes in government policies, and economic conditions. Khan (2012) found positive and significant relationships between the P/E ratio, dividends, GDP, and share prices, while noting negative relationships with interest rates and the book-to-market ratio. Hatta and Dwiyanto (2012) highlighted the positive effects of the P/E ratio and EPS on stock prices, along with negative impacts from the debt-to-equity ratio and net profit margin. Motamedi (2013) reported a significant positive relationship between bank returns and systematic risk (Beta), size, volume of trade, and the P/E ratio, while noting an inverse relationship between bank returns and book value. Safitri et al. (2020) concluded that the P/E ratio and EPS have a positive and significant impact on share prices. Additional research has identified critical economic factors influencing stock prices. Ray (2012) highlighted that interest rates, foreign exchange reserves, GDP, and money supply positively affect Indian stock prices. Ouma and Muriu (2014) reported a significant positive relationship between money supply and stock returns, while exchange rates negatively impacted stock returns. Khan and Khan (2018)

concluded that money supply exerts a strong positive impact on stock prices, while inflation rates have a negative impact.

3. Research Framework, Variable Definitions and Research Hypothesis

A research framework provides the underlying structure for a study, encompassing the theories, concepts, and methodologies that guide the research process and ensure systematic and rigorous inquiry. Figure 1 presents the outline of the research framework. It provides dependent and independent variables to explain the stock price paradigm of Nepalese commercial banking industry by establishing link with different influential variables. It also presents the detailed definition of the variables employed in the study to explore the influence of those variables upon the dependent variable stock price of Nepalese commercial banking industry.

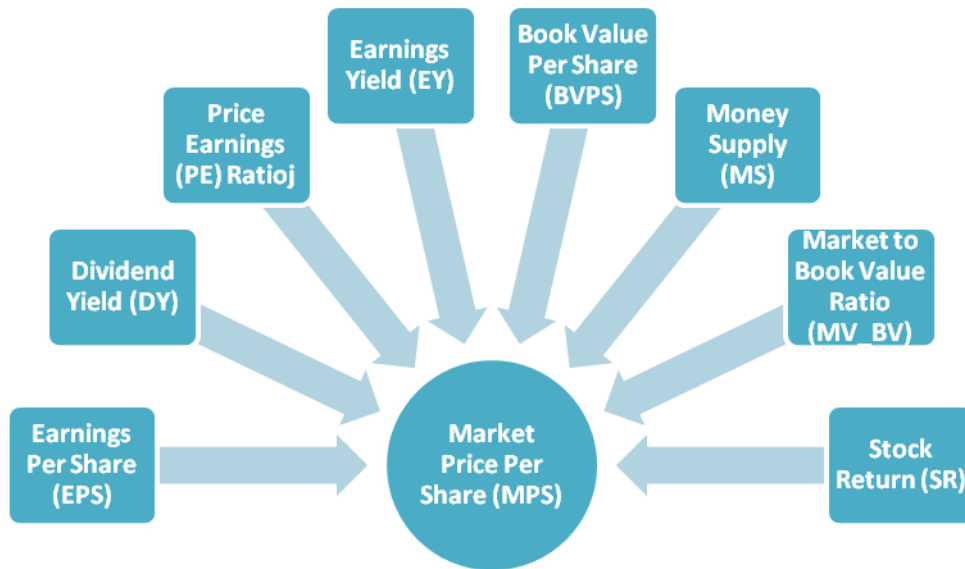


Figure 1: Research Framework

Market Price per Share (MPS)

Market Price per Share (MPS) denotes the price at which a single share of a corporation is currently trading, as agreed upon by buyers and sellers. Supply and demand, investors' attitude, business finances, business environment, and market movements all have an impact on it.

$$MPS = \frac{D_1}{(K-g)} \dots\dots\dots (1)$$

Earnings per Share (EPS)

Earnings per Share (EPS) is a measure of a company's profitability calculated by dividing its net income by the number of outstanding shares of common stock.

$$EPS = \frac{\text{Net Income}}{\text{Number of Share outstanding (NSO)}} \dots\dots\dots(2)$$

H11: There is positive and significant impact of earning per share on market price per share (MPS).

Dividend Yield (DY)

Dividend yield is a financial ratio that shows how much a company pays out in dividends each year relative to its stock price, indicating the return on investment for shareholders in the form of dividends.

$$DY = \frac{\text{Divident Per Share}}{\text{Price Per Share}} \dots\dots\dots(3)$$

H12: There is positive and significant impact of dividend yield on market price per share (MPS).

Price Earnings (PE) Ratio

The Price-Earnings Ratio (P/E ratio) evaluates the stock price of a firm against its earnings per share (EPS). It displays how eager investors are to pay for every dollar of profits.

$$PE \text{ Ratio} = \frac{\text{Market Price Per Share}}{\text{Earnings Per Share}} \dots\dots\dots(4)$$

H13: There is positive and significant impact of PE Ratio on market price per share (MPS).

Earning Yield (EY)

Earnings yield is a financial ratio that measures the earnings generated per share of stock, expressed as a percentage of the current market price per share, indicating the return on investment from earnings.

$$\text{Earning Yield (EY)} = \frac{\text{Earning Per Share}}{\text{Price Per Share}} \dots\dots\dots(5)$$

H14: There is significant impact of earning yield on market price per share (MPS).

Book Value per Share (BVPS)

Book Value per Share (BVPS) is a financial measure that represents the value of a company's net assets available to common shareholders, calculated by dividing the company's total equity minus preferred equity by the number of outstanding shares of common stock.

$$\text{Book Value per Share (BVPS)} = \frac{\text{Total Shareholders' Equity}}{\text{Number of Outstanding Share (NSO)}} \dots\dots\dots(6)$$

H15: There is positive and significant impact of book value per share on market price per share (MPS).

Money Supply (MS)

Money supply (M2) is the total money circulating in an economy, encompassing physical currency, deposits, and time deposits. It's a vital gauge for assessing liquid assets and overall economic activity. M2 fluctuations impact inflation, interest rates, and economic stability.

$M2 = M1 + \text{savings deposits} + \text{money market funds} + \text{certificates of deposit} + \text{other time deposits} \dots\dots\dots(7)$

H16: *There is positive and significant impact of money supply on market price per share (MPS).*

Market to Book Value Ratio (MV_BV Ratio)

The Market to Book Value Ratio (MV_BV ratio) quantifies the relationship between a company's current market price per share and its book value per share, providing insight into how investors perceive the company's financial health relative to its accounting value.

$$MV_BV \text{ Ratio} = \frac{\text{Market Price Per Share}}{\text{Book Value Per Share}} \dots\dots\dots(8)$$

H17: *There is positive and significant impact of market to book value ratio on market price per share (MPS).*

Stock Return (SR)

Stock return (SR) refers to the percentage change in the price of a stock over a specific period, including both capital gains (and losses) and dividends received. It measures the profitability of an investment in a stock and is commonly used to assess the performance of individual stocks or portfolios relative to benchmarks or other investments.

$$\text{Stock Return (SR)} = \frac{(P_1 - P_0) + \text{Dividend}}{P_0} \dots\dots\dots(9)$$

H18: *There is positive and significant impact of stock return on market price per share (MPS).*

4. Research Methodology

This study employs a rigorous descriptive and causal-comparative research design to examine the impact of several factors on the market price of stocks in Nepal's commercial banking industry. The variables investigated in this study include Earnings per Share (EPS), Dividend Yield (DY), Price-Earnings (PE) Ratio, Earning Yield (EY), Book Value per Share (BVPS), Money Supply (MS), Market to Book Value Ratio (MV_BV Ratio), and Stock Return (SR).

The population of the study comprises all 20 commercial banks licensed by the Nepal Rastra Bank (NRB). However, using judgmental and convenient sampling methods, a sample of 10 commercial banks has been selected for this study through non-probability sampling approaches. The selected banks aim to represent diverse characteristics of the commercial banking sector. For example, partially government-owned banks like Agricultural Development Bank Limited (ADBL) and Nepal Bank Limited (NBL), and foreign joint venture banks such as Everest Bank Limited (EBL) and Standard Chartered Bank Nepal Limited (SCB), have been included. Additionally, entirely privately owned banks like Citizen Bank International Limited (CZBIL), Nepal SBI Bank Limited (SBI), Machhapuchchhre Bank Limited (MBL), Prime Commercial Bank Limited (PCBL), Sanima Bank Limited (SANIMA), and Siddhartha Bank Limited (SBL) are part of the sample. This selection aims to encompass the diversity and characteristics of the overall population.

The study utilizes time series data covering eleven years for each sample, specifically from 2012/13 to 2022/23, resulting in a total of 110 observations. The purpose of the data set is to capture cross-sectional changes among the variables of interest, representing the dynamic and constantly evolving Nepalese banking industry.

Multiple Regression Model

In order to evaluate the impact of important explanatory variables on the market price of the selected commercial banks, this study uses a multiple regression model (equation 10).

$$MPS_{it} = \beta_0 + \beta_1EPS_{it} + \beta_2DY_{it} + \beta_3P_E_{it} + \beta_4EY_{it} + \beta_5BVPS_{it} + \beta_6MS_{it} + \beta_7 MV_BV_{it} + \beta_8SR_{it} + \mathcal{E}_{it} \dots\dots\dots(10)$$

Where MPS is the dependent variable that stands for market price per share, EPS for earning per share, DY for dividend yield, P_E Ratio for price to earnings ratio, EY for earnings yield, BVPS for book value per share, MS for money supply, MV_BV for market to book value ratio, and SR for stock return. The model includes a constant term (β_0) and coefficients (β_1 to β_8) for each independent variable, quantifying their effects on MPS. The term \mathcal{E}_{it} stands for the residual component, which includes the remaining MPS variability the model does not consider.

5. Results

5.1 Descriptive statistics

The descriptive statistics table 1 presents a detailed overview of several financial variables. An overview of the independent and dependent variables' descriptive statistics for the study's sample banks, spanning the fiscal years 2012/2013 and 2022/2023, is reported in Table 1.

Table 1: Descriptive Statistics

<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>Median</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Std. Dev.</i>
<i>MPS</i>	<i>110</i>	<i>629.792</i>	<i>433.50</i>	<i>3600.0</i>	<i>171</i>	<i>635.079</i>
<i>EPS</i>	<i>110</i>	<i>30.2819</i>	<i>23.930</i>	<i>198.53</i>	<i>5.3</i>	<i>22.8514</i>
<i>DY</i>	<i>110</i>	<i>4.11976</i>	<i>3.7920</i>	<i>14.896</i>	<i>0</i>	<i>2.68349</i>
<i>PE RATIO</i>	<i>110</i>	<i>21.0702</i>	<i>17.640</i>	<i>78.330</i>	<i>0.86</i>	<i>11.5524</i>
<i>EY</i>	<i>110</i>	<i>6.91057</i>	<i>5.6102</i>	<i>116.099</i>	<i>1.2767</i>	<i>11.0198</i>
<i>BVPS</i>	<i>110</i>	<i>185.780</i>	<i>162.06</i>	<i>370.84</i>	<i>59.257</i>	<i>62.3639</i>
<i>MS</i>	<i>110</i>	<i>3390.36</i>	<i>3094.5</i>	<i>6130.5</i>	<i>1315.4</i>	<i>1596.97</i>
<i>MV_BV</i>	<i>110</i>	<i>3.27271</i>	<i>2.5633</i>	<i>13.456</i>	<i>0.8713</i>	<i>2.28094</i>
<i>SR</i>	<i>110</i>	<i>0.14482</i>	<i>-0.0254</i>	<i>2.6405</i>	<i>-0.6558</i>	<i>0.58173</i>

Source: Based on computation by the authors.

The average market price per share is high, with a mean of 629.792 and a median of 433.50. However, a large standard deviation and a right-skewed distribution suggest a small number of companies with high share values are pushing the average higher. With a high standard deviation

of 22.8514 and a right-skewed earnings distribution with a range of 5.3–198.53, the companies exhibit significant variability. Companies usually pay dividends in the range of 4.12% of their share price, according to the Dividend Yield (DY), which has a right-skewed distribution with a mean of 4.11976 and a median of 3.7920. With a mean of 21.0702 and a median of 17.640, the P/E ratio, which has a right-skewed distribution, differs greatly amongst companies. Diversity in the sample is indicated by the right-skewed earnings yield (EY) distribution, which has a large standard deviation and a number of outliers. The distribution of book value per share (BVPS) is significantly biased to the right, with a mean of 185.780 and a median of 162.06. The standard deviation of 62.3639 indicates a modest level of variability, indicating slight variations in book value per share among the companies. This variation is shown by the range (minimum 59.257, maximum 370.84). With a significant standard deviation of 1596.97, the Money Supply (MS) displays a mean of 3390.36 and a median of 3094.5. This shows that the money supply varied significantly among the samples, with a little rightward bias in the data. The range (highest 6130.5, minimum 1315.4) demonstrates the significant variation in money supply data. Market values are often greater than book values, according to the Market Value to Book Value Ratio (MV_BV), which has a mean of 3.27271 and a median of 2.5633. The standard deviation of 2.28094 emphasises the substantial variation within businesses. The range illustrates the disparity in the market-to-book value ratios even further (lowest 0.8713, maximum 13.456). Last but not least, a modest average positive return is indicated by the stock return (SR) mean of 0.14482. More than half of the companies had negative returns, as indicated by the negative median of -0.0254. The range from -0.6558 to 2.6405 and the large standard deviation of 0.58173 demonstrate the substantial diversity in stock performance.

The financial variables under investigation are given a thorough overview by the descriptive statistics. Numerous variables have right-skewed distributions, which draw attention to the existence of outliers with very high values. The data's variety indicates that the sample companies' financial standing and market perceptions vary, which is important information for the research paper's further study. The variability in financial indicators is highlighted by the large ranges and significant standard deviations across the variables, requiring cautious interpretation and analysis.

5.2 Data stationary

To determine whether a unit root exists in a time series, which would indicate non-stationarity, statisticians frequently employ the Augmented Dickey-Fuller (ADF) test. More lagged components of the series are added to the test to better account for autocorrelation, making it an improvement over the original Dickey-Fuller test (Dickey & Fuller, 1979). Presented below is the ADF test equation.

$$\Delta y_t = \alpha + \beta y_{t-1} + \gamma \Delta y_{t-1} + \delta_1 y_{t-2} + \dots + \delta_p y_{t-p} + \epsilon_t \dots \dots \dots (11)$$

The initial difference of the time series $\Delta y_t(\Delta y_t)$ —that is, the difference between y_t and its lagged value—is what the ADF equation for the unit root test uses. It also contains words like the initial difference of the lagged value (Δy_{t-1}), the lagged value of the time series (y_{t-1}), and the coefficients ($\alpha, \beta, \gamma, \delta_1, \delta_2, \dots, \delta_p$) that need to be estimated, where p is the number of lagged values taken into account. The ADF test's null hypothesis states that the time series has a

unit root, which suggests non-stationarity. In order to decide whether to reject the null hypothesis, the test statistic—which is obtained from the t-value of the coefficient β —is essential. The test's critical values depend on the sample size and selected significance level. If the null hypothesis is rejected, the time series is thought to be stationary, meaning that a unit root is not present.

Table 2 presents the results of the Augmented Dickey-Fuller (ADF) unit root test for various financial variables. All variables, including Market Price per Share (MPS), Earnings per Share (EPS), Dividend Yield (DY), Price-Earnings Ratio (PE RATIO), Earnings Yield (EY), Book Value per Share (BVPS), Money Supply (MS), Market Value to Book Value Ratio (MV_BV), and Stock Return (SR), have been found to be integrated of the first order, I(1), as indicated by their significant ADF t-statistics and p-values below the 5% significance level. The ADF t-statistics for these variables are all more negative than the critical values at 1%, 5%, and 10% levels, confirming that the null hypothesis of a unit root can be rejected for each variable at the first difference.

Table 2: Result of unit root test

<i>Variables</i>	<i>ADF t-statistic</i>	<i>P-Value</i>	<i>Order of Integration</i>
<i>MPS</i>	<i>-3.29454</i>	<i>0.0178*</i>	<i>1st difference</i>
<i>EPS</i>	<i>-12.06046</i>	<i>0.0010*</i>	<i>1st difference</i>
<i>DY</i>	<i>-10.81134</i>	<i>0.0050*</i>	<i>1st difference</i>
<i>PE RATIO</i>	<i>-10.20550</i>	<i>0.0007*</i>	<i>1st difference</i>
<i>EY</i>	<i>-9.43502</i>	<i>0.0000*</i>	<i>1st difference</i>
<i>BVPS</i>	<i>-10.50971</i>	<i>0.0003*</i>	<i>1st difference</i>
<i>MS</i>	<i>-10.69875</i>	<i>0.0001*</i>	<i>1st difference</i>
<i>MV_BV</i>	<i>-3.59237</i>	<i>0.0076*</i>	<i>1st difference</i>
<i>SR</i>	<i>-12.65525</i>	<i>0.0001*</i>	<i>1st difference</i>

Critical values for 1%, 5% and 10% are -3.498439, -2.891234 and -2.582678, respectively.

Source: Based on computation by the authors.

* indicates significance at a 5 percent level.

This indicates that all variables are stationary after differencing once, suggesting that they do not exhibit a unit root in their first-differenced form. In Table 2, all variables have an order of integration of I(1), which indicates that after the initial differencing, they become stationary. The star (*) next to the p-values denotes significance at the 5% level, suggesting that the null hypothesis can be rejected with 95% confidence.

5.3 Correlation coefficients

The Table 3 correlation matrix reveals the relationships between market price per share (MPS) and various independent financial variables. MPS shows a significant positive correlation with EPS (0.431), indicating that higher earnings per share tend to be associated with higher market prices. There is also a strong positive correlation between MPS and the Price-Earnings Ratio (PE

RATIO) (0.733), suggesting that companies with higher market valuations relative to their earnings tend to have higher share prices. A moderately positive correlation exists between MPS and book value per share (BVPS) (0.499), indicating that companies with higher book values tend to have higher market prices. Additionally, MPS is positively correlated with the Market Value to Book Value Ratio (MV_BV) (0.901), showing that companies with higher market value relative to book value also have higher market prices. Conversely, MPS has a weaker but significant positive correlation with money supply (MS) (0.374), suggesting that market prices may also be influenced by broader economic liquidity. The correlations between MPS and Dividend Yield (DY), Earnings Yield (EY), and Stock Return (SR) are weaker and less consistent, indicating that these variables have a more complex or indirect relationship with market prices. The significance levels indicate strong statistical confidence in these relationships, particularly for EPS, PE ratio, BVPS, and MV_BV, all of which have p-values well below the 5% threshold.

Table 3: Correlation Matrix

Variables	MPS	EPS	DY	PE RATIO	EY	BVPS	MS	MV_BV	SR
MPS	1								
EPS	0.431 0.000*	1							
DY	0.297 0.002*	-0.171 0.073	1						
PE RATIO	0.733 0.000*	-0.045 0.644	-0.430 0.000*	1					
EY	-0.191 0.046*	0.712 0.000*	0.009 0.928	-0.367 0.001*	1				
BVPS	0.499 0.000*	0.331 0.004*	-0.041 0.673	0.152 0.113	-0.091 0.343	1			
MS	0.374 0.001*	-0.416 0.000*	0.143 0.138	-0.183 0.056**	-0.109 0.257	0.114 0.234	1		
MV_BV	0.901 0.000*	0.330 0.004*	-0.382 0.000*	0.777 0.000*	-0.220 0.021**	0.155 0.107	-0.529 0.000*	1	
SR	0.217 0.023**	0.083 0.386	-0.142 0.138	0.203 0.034**	-0.071 0.458	-0.046 0.632	-0.284 0.003*	0.332 0.004*	1

Source: Based on computation by the authors.

*' and '**' are significant at 1 percent and 5 percent significance levels, respectively.

5.4 Multiple Regression

Regression analysis utilizing multiple regression is used to examine how eight important financial factors affect a commercial bank's market price per share (MPS). A few examples of these indicators are book value per share, money supply, market-to-book value ratio, stock return, earning yield, earning per share, and price-to-earnings ratio. Table 3 presents the findings from eight estimated models, each of which involved gradually adding components to each independent variable in order to look at their individual and combined impacts on market price.

Table 4 presents the regression results with Market Price per Share (MPS) as the dependent variable and several financial metrics as independent variables. The regression equation has a high R-squared value of 0.9606, indicating that approximately 96.06% of the variability in MPS is explained by the independent variables included in the model. This high explanatory power suggests that the chosen financial metrics are highly relevant in predicting the market price per share. The F-statistic of 307.44 and its associated p-value indicate that the overall regression model is statistically significant.

Table 4: Regression Results

Variables	Coefficient	Std. Error	t-Statistic	Prob.	Additional
C	-1014.8	70.324	-14.430	0.0000*	R-squared = 0.9606 or 96.06%
EPS	8.8232	2.1071	4.1873	0.0001*	
DY	20.489	5.4067	3.7895	0.0003*	F-statistic = 307.44
PE RATIO	11.231	2.6234	4.2811	0.0000*	
EY	-10.077	3.4657	-2.9076	0.0045*	S.E. of regression = 131.03
BVPS	2.4712	0.3480	7.1005	0.0000*	
MS	0.0261	0.0110	2.3680	0.0198**	Durbin-Watson stat = 1.47
MV_BV	178.37	18.540	9.6204	0.0000*	
SR	-36.636	23.333	-1.5701	0.1195	

$MPS = -1014.8 + 8.8232 (EPS) + 20.489 (DY) + 11.231 (PE \text{ Ratio}) - 10.077 (EY) + 2.4712 (BVPS) + 0.0261 (MS) + 178.37 (MV_BV) - 36.636 (SR) + \zeta_{it}$

Source: Based on computation by the authors.

*' and ***' are significant at 1 percent and 5 percent significance levels, respectively.

Breaking down the coefficients, EPS has a positive coefficient of 8.8232 with a t-statistic of 4.1873 and a p-value of 0.0001, indicating a strong and statistically significant positive impact on MPS. Similarly, DY, PE Ratio, BVPS, MS, and MV_BV all have positive and significant coefficients, suggesting that higher values in these variables are associated with higher market prices per share. Notably, MV_BV has the highest positive coefficient (178.37), indicating a substantial influence on MPS. On the other hand, EY has a negative and significant coefficient of -10.077, indicating that higher earnings yield is associated with lower market prices per share.

SR, while having a negative coefficient, is not statistically significant (p-value of 0.1195), suggesting that stock return does not have a strong direct impact on MPS in this model. The standard error of regression (131.03) and the Durbin-Watson statistic (1.47) indicate a relatively good fit and there is no serious autocorrelation problem. Overall, the regression results provide robust evidence on the relationships between MPS and key financial variables, supporting their inclusion in predictive models for market price determination.

4.5 Discussions

The primary objective of this study is to assess the factors influencing the stock prices of Nepalese commercial banks, with a particular focus on the price-to-earnings (P/E) ratio. Additionally, the analysis considers other critical financial indicators such as book value (BV), dividend rate (DR), earnings yield (EY), and market-to-book value (MV_BV) ratio. The findings provide valuable insights into the dynamics of bank stock prices by elucidating the complex relationships between these variables. Notably, the regression models reveal a strong influence of both the P/E ratio and BV on market price per share (MPS), underscoring the significant weight investors place on profitability and the intrinsic worth of banks when determining stock prices.

The positive association between earnings per share (EPS), dividend yield (DY), price-to-earnings (P/E) ratio, book value per share (BVPS), money supply (MS), market-to-book value ratio (MV_BV), and market price per share (MPS) underscores investors' willingness to pay a premium for stocks in anticipation of future profitability. This finding aligns with the expectation that investors are forward-looking, valuing stocks based on anticipated earnings growth. Studies by Dahal and Puri (2021), and Bhattarai (2014) suggest that high EPS, DY, P/E ratio, and BVPS indicate higher expected profit growth compared to companies with lower values in these metrics. As investors aim to capitalize on both present and future gains, rising EPS, DY, P/E ratio, and BVPS increase demand for shares, thereby driving up their prices. This relationship is corroborated by prior research from Mondal and Imran (2010), Oyama (1997), Malhotra and Tandon (2013), Jadhav and Badade (2012), and Khan (2012), which documented supportive relationships between these financial indicators and a company's market price.

The study also highlights the favorable influence of MS and MV_BV on the market price of bank stocks. This suggests that investors are hesitant to purchase stocks with market prices significantly lower than their book values per share. A high money supply indicates investors' willingness to buy stocks of commercial banks in Nepal. In the event of liquidation, shareholders would theoretically receive a payment at least equal to the book value per share. The hypothesis that an increase in market value relative to book value leads to a rise in market price per share is consistent with the strong positive correlation observed in this study, corroborating findings by Dahal and Puri (2021), Umathevan (2020), and Wet and Mpinda (2013).

Additionally, the research identifies a significant and direct association between earnings yield (EY) and a company's market value. This is consistent with earlier studies by Adekunle et al. (2015) and Arshad et al. (2015), which suggest that high-earnings-yield equities typically offer better risk-adjusted returns than low-yielding firms. Similarly, the MV_BV ratio has shown a productive impact on stock prices, highlighting its essential role in determining the market price of Nepalese bank stocks. Stock return (SR) also plays a crucial role in influencing stock prices in

the Nepalese context. While it shows a positive correlation, its regression impact is negative and less significant. According to Edem (2018) and Agnihotri (2017), the SR ratio provides insight into whether a company's market price is undervalued or overvalued. This finding aligns with the research of Shittu, Safitri et al. (2020), who noted that different investor groups and investment analysts might use the MV_BV ratio to predict future stock prices of companies listed on organized stock exchanges. Ouma and Muriu (2014) further stated that among various equity valuation multiples used to forecast performance, the price-to-book value multiple offers the most robust justification for potential stock returns.

In overall, the price-to-earnings ratio is a critical determinant of the market prices of banks operating in Nepal. Additionally, variables such as book value per share, earnings yield, market-to-book value ratio, and stock return also exhibit positive relationships, emphasizing their importance in stock price determination. These findings provide valuable insights for investors and financial analysts, aiding in informed decision-making regarding investment opportunities in the Nepalese banking sector.

5.6 Conclusion and Suggestions

This comprehensive analysis demonstrates that several key factors, including market earnings per share, dividend yield, price-to-earnings (P/E) ratio, book value per share, money supply, and the market-to-book value (MV_BV) ratio, significantly influence the stock prices of Nepalese commercial banks. The study reveals a positive correlation between stock prices and market earnings per share, dividend yield, P/E ratio, book value per share, money supply, and the MV/BV ratio. In contrast, earnings yield exhibits a negative correlation, emphasising the importance of profitability metrics in investment decisions and highlighting the priority placed on projected future earnings by investors.

The findings indicate that book value per share is a critical factor, reflecting that investors prioritise a bank's inherent value in their decision-making processes. While the impact of the dividend rate on stock prices appears less pronounced, adherence to dividend distribution policies, as examined through dividend yield, remains essential. Additionally, the research underscores the significant roles of earnings yield and the MV/BV ratio in determining the pricing of bank stocks in the Nepalese market, further emphasising their importance in evaluating a bank's value.

By identifying the key variables influencing stock prices in the Nepalese banking sector, this study makes a substantial contribution to the field. The integration of these financial metrics provides a robust framework for understanding the determinants of market prices, offering valuable insights not only for academic purposes but also for practical applications by investors, analysts, and policymakers. These findings aid in evaluating stock market trends and investment opportunities.

Future research should build upon these findings by exploring additional variables, refining predictive models, and considering the impact of external economic factors on stock market behaviour, thereby enhancing our understanding of the dynamics shaping stock prices in the Nepalese banking industry.

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