Dividend policy and stock price volatility: A case of Nepalese commercial banks

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Abstract

The study examines the effect of dividend policy on stock price volatility of Nepalese commercial banks. The dependent variables selected for the study are stock price volatility and change in market price per share. The selected independent variables are dividend yield, dividend payout, bank size, earnings per share, leverage and return on equity. The study is based on secondary data of 10 commercial banks with 108 observations for the study period from 2013/14 to 2022/23. The data were collected from Banking and Financial Statistics published by Nepal Rastra Bank, publications and websites of Nepal Rastra Bank (NRB), Economic Survey Report published by Ministry of Finance and annual reports of the selected commercial banks. The correlation coefficients and regression models are estimated to test the significance and importance of dividend policy on stock price volatility of Nepalese commercial banks.

The study showed that dividend yield has a negative effect on stock price volatility and change in market price per share. It means that increase in dividend yield leads to decrease in stock price volatility and change in market price per share. Similarly, dividend payout has a positive effect on stock price volatility and change in market price per share. It means that increase in dividend payout ratio leads to increase in stock price volatility and change in market price per share. The results of the study also showed that bank size has a positive effect on change in market price per share. It implies that increase in bank size leads to increase in change in market price per share. Likewise, earnings per share have a positive effect on stock price volatility which indicates that higher earnings per share leads to increase in stock price volatility. However, leverage ratio has a negative effect on stock price volatility. It implies that higher leverage ratio leads to decrease in change in market price per share. Similarly, return on equity has a positive effect on stock price volatility. It implies that higher return on equity leads to increase in stock price volatility.

Keywords: market price per share, dividend yield, dividend payout, bank size, earnings per share, leverage, return on equity, stock price volatility

1. Introduction

Volatility plays a central role in the risk associated with stock trading. Volatility is intrinsically linked to the risk of stock trading. It reflects the uncertainty and potential variability in stock prices, which can significantly influence investor behavior and market dynamics. By understanding the

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causes and implications of volatility, investors can better manage risk and make informed investment decisions. Sporadic swings in the prices of securities traded on stock market creates market volatility. Stock market price volatility is the ups and downs in the stock prices during a time period (Sadiq, Alajekwu and Ezeabasili, 2020). It describes the variation of the changes in a firm share price. This is usually measured using the standard deviation of changes in stock prices (Profilet and Bacon, 2013). Dividend policy can significantly impact stock price volatility through signaling effects, reduction in information asymmetry, catering to investor preferences, tax considerations, market reactions, and implications for financial health and stability.

Dividend policy is the action program used by a firm to decide how much of its residual profits should be paid out to shareholders in dividends. In any circumstance, the portion of the residual profits not paid as dividend is referred to as retained earnings. Dividends are usually distributed in the form of cash (cash dividends) or share (share/stock dividends). Therefore, dividend payout ratio indicates the proportion of total residual profits distributed as dividend to shareholders (Gill et al., 2010). Dividend has been adjudged to be the catalyst for the movement of firms' share prices. Stock return volatility which represents the variability of stock price changes could be perceived as a measure of risk faced by investors. In financial markets, volatility clustering emerges when a high return (positive or negative) is more likely to be followed by another high return, or when a low return (positive or negative) is more likely to be followed by another low return. Rajni and Mahendra (2007) noted that stock price volatility tends to rise when new information is released into the market, however the extent to which it rises is determined by the relevance of that new information as well as the degree in which the news surprise investors.

Stock price volatility is measured by annualized standard deviation of daily price changes of the stocks. Stocks whose prices oscillate rapidly over short timeframes as highly volatile, while those whose prices change slightly are fewer volatile stocks. Pirzada (2017) assessed the impact of dividend policy on stock price volatility in the financial sector of Malaysia between 2001 and 2009. The study sought to find out influence of dividend policy to changes of share prices in the financial sector. The results found the relationship between dividend yield and dividend payout ratio and share price volatility in the financial sector to be insignificant. Pelcher (2019) examined the effect of dividend policy on share price volatility for forty firms on Johannesburg Stock Exchange for a five-year period. The results of the

panel data analysis revealed that dividend had an association with stock price volatility. The study observed that managers of dividend paying companies can manipulate dividend policy to smooth out share price volatility. Mouton and Smith (2016) observed that the sustainable wealth creation is one of the key objectives of a company which can be archived through maximization of earnings and minimization of risk. Share prices are particularly more sensitive to prior to the announcement of dividend due to investors desire to dispose nonperforming stocks (Liyambula, 2014).

Akbar and Baig (2010), using a sample of 79 companies listed at Karachi Stock Exchange for the period of 2004 to 2007, revealed that announcement of dividends; either cash dividend or stock dividend or both have positive effect on stock prices. Nazir et al. (2010) examined the effect of dividend policy on stock prices. The results of their study showed that dividend payout and dividend yield have significant effect on stock prices while size and leverage have negative insignificant effect. Earning and growth have positive and significant effect on stock prices. Khan et al. (2011) analyzed the effect of dividend payment on stock prices by taking a sample of fifty-five companies listed at Karachi Stock Exchange. The study showed that dividend yield, earnings per share, return on equity and profit after tax were positively related to stock prices while retention ratio has negative impact on Stock Prices. Okafor et al. (2011) examined the relationship between dividend policy and share price changes in the Nigerian Stock Exchange market using a multiple regression analysis. The study showed that dividend yield showed a negative impact on share price risk while dividend payout ratio, showed negative influence in some years. The study supported the fact that dividend policy is relevant in determining share price changes for a sample of firms listed in the Nigerian Stock Exchange. The study suggested that dividend announcements can signal management's confidence in the company's future earnings prospects. A dividend increase might signal positive future performance, leading to a rise in stock prices, while a dividend cut might signal trouble, resulting in a price decline.

Adesola and Okwong (2009) evaluated the observed dividend policy of a cross section of 27 Nigeria quoted companies using theories tested to explain dividend behavior of those firms. The study found that dividend policy is significantly associated with earnings, earnings per share and previous year dividends but discovered that growth and size had no effect on dividend policy. Allen and Rachim (1996) found a significant positive correlation among stock price volatility and earning volatility and leverage, and a

significant negative relationship between price volatility and payout ratio. A stable and predictable dividend payout ratio can reduce stock price volatility. Investors tend to perceive consistent dividends as a sign of financial health and operational stability, which can lead to lower price fluctuations. Companies with high payout ratios are often seen as mature, with less reinvestment back into the business, leading to classification as value stocks. These tend to have lower volatility compared to growth stocks, which reinvest more earnings for growth and often have lower payout ratios. Stocks with high dividend yields are often attractive to income-focused investors who prefer steady returns. These stocks might experience less volatility since income investors are less likely to react to short-term market movements.

Conroy et al. (2000) found that current dividend announcements are unable to explain the market reaction towards announcements. Rashid and Rehman (2008) found a positive but non-significant relationship among stock price volatility and dividend yield in the stock market of Dhaka. High-yield stocks can be more sensitive to changes in interest rates. When interest rates rise, dividend stocks may become less attractive compared to fixed-income securities, potentially increasing volatility. In stable markets, high dividend payout ratios and yields can reduce volatility as investors seek safe returns. In contrast, during economic downturns, companies that maintain or increase dividends might see increased volatility if investors doubt the sustainability of those dividends. both the dividend payout ratio and dividend yield play crucial roles in shaping investor expectations and behaviors, which in turn impact stock price volatility. Companies with stable, predictable dividend policies tend to experience lower volatility, while those with erratic or significantly changing dividend policies can see higher volatility. Ilaboya and Aggreh (2003) examined the relationship between dividend policy and share price volatility across companies listed in the Nigerian Stock Exchange Market. The results showed that that dividend yield exerts a positive and significant influence on share price volatility of firms while dividend payout exerts a negative and insignificant influence on share price volatility.

In the context of Nepal, Gautam (2017) examined the impact of firm specific variables on stock price volatility and stock return in context of Nepalese commercials banks over the period of 2008/09 to 2015/16. The study revealed a positive relationship between leverage, market capitalization, dividend payout and dividend yield with stock return which indicates that higher the market capitalization, leverage, dividend payout and dividend yield ratio, higher would be the stock return. Likewise, there is negative relation

between book to market, growth of assets, and earning price ratio with stock return which reveals that higher the book to market, growth of assets and earning price ratio, lower would be the stock return. Similarly, leverage, dividend payout, and dividend yield have positive relation with share price volatility, which shows higher the leverage, dividend payout and dividend yield, higher would be the share price volatility. However, there is negative relationship between market capitalization, book to market, growth of assets and earning price ratio which showing higher the market capitalization, book to market, growth of assets and earning price ratio, lower would be the share price volatility. Pandey et al. (2024) explored the factors affecting the market price of Nepalese commercial banks over the period from 2017/18 to 2021/22 AD. The results unveiled a significant positive correlation between earnings per share (EPS) and price-earnings ratio (P/E ratio), indicating that as EPS increases, so does the P/E ratio, and consequently, the market price. However, the impact of book value and dividend per share on market prices was found to be negligible, suggesting that these factors exert minimal influence on market valuations. The primary inference drawn from the findings underscores the dominance of price- earnings ratio and earnings per share as pivotal determinants of share prices within Nepalese commercial banks.

The above discussion shows that empirical evidences vary greatly across the studies on the effect of dividend policy on stock price volatility of banks. Though there are above-mentioned empirical evidence in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The major objective of the study is to examine the effect of dividend policy on stock price volatility in the context of Nepalese commercial banks. Specifically, it examines the relationship of dividend yield, dividend payout, bank size, earnings per share, leverage and return on equity on stock price volatility and change in market price per share in the context of Nepalese commercial banks.

The remainder of this study is organized as follows: Section two describes the sample, data and methodology. Section three presents the empirical results and the final section draws the conclusion.

2. Methodological aspects

The study is based on the secondary data which were collected from 10 Nepalese commercial banks from 2013/4 to 2022/23, leading to a total of

100 observations. The study employed convenience sampling method. The main sources of data collected from the Bank Supervision Report published by Nepal Rastra Bank (NRB), annual reports of Nepal Stock Exchange and annual reports of the selected commercial banks. This study is based on descriptive as well as causal comparative research designs. Table 1 shows the list of commercial banks selected for the study along with the study period and number of observations.

Table 1

List of commercial banks selected for the study along with study period and number of observations

S. N.	Name of commercial banks	Study Period	Observations
1.	Agricultural Development Bank Limited	2013/14-2022/23	10
2.	Citizens Bank International Limited	2013/14-2022/23	10
3.	Machhapuchchhre Bank Limited	2013/14-2022/23	10
4.	Nepal Bank Limited	2013/14-2022/23	10
5.	Nepal SBI Bank Limited	2013/14-2022/23	10
6.	NIC Asia Bank Limited	2013/14-2022/23	10
7.	Prime Commercial Bank Limited	2013/14-2022/23	10
8.	Siddharth Bank Limited	2013/14-2022/23	10
9.	Standard Chartered Bank Nepal Limited	2013/14-2022/23	10
10.	Sunrise Bank Limited	2013/14-2022/23	10
Total number of observations			**100**

Thus, the study is based on 100 observations.

The model

The model used in this study assumes that stock price volatility of listed banks depends upon dividend policy and other firm specific factors. The dependent variables selected for the study are Stock price volatility and change in market price per share. Similarly, the selected independent variables are dividend yield, dividend payout, bank size, earnings per share, leverage and return on equity. Therefore, the models take the following forms:

$$PVL = \beta_0 + \beta_1 DY_{it} + \beta_2 PAY_{it} + \beta_3 BS_{it} + \beta_4 EPS_{it} + \beta_5 LEV_{it} + \beta_6 ROE_{it} + e_{it}$$

$$MPV = \beta_0 + \beta_1 DY_{it} + \beta_2 PAY_{it} + \beta_3 BS_{it} + \beta_4 EPS_{it} + \beta_5 LEV_{it} + \beta_6 ROE_{it} + e_{it}$$

Where,

PVL = Stock price volatility as measured by the ratio of range of high and low market price of shares to average of the high and low price of the year,

in percentage.

MPV = Change in market price per share, in Rs.

EPS= Earnings per share as measured by the ratio of total earnings to total outstanding shares, in Rs.

DY= Dividend yield as measured by the ratio of total dividend amount to current market price per share, in percentage.

BS= Bank size as measured by the total assets, Rs. in billions.

ROE= Return on equity as measured by the ratio of net profit to total shareholders' equity, in percentage.

LEV= Leverage ratio as measured by the ratio of total debt to total assets, in percentage.

PAY= Dividend payout ratio as measured by the ratio of dividend per share to earnings per share, in percentage.

The following section describes the independent variables used in this study along with hypothesis formulation:

Earnings per share

Hunjra et al. (2014) assessed the impact of dividend yield, dividend payout ratio, return on equity, earning per share and profit after tax on stock prices in Pakistan. The study concluded that profit after tax and earnings per share have significant positive impact on stock price and return on equity which shows positive insignificant impact on stock price. Dissanayake and Wickramasinghe (2016) examined the earnings fluctuations impact on share price volatility of firms listed at the CSE. The results showed that there is a significant relationship between earnings fluctuations and share price volatility. The study also showed that earnings and dividends are among the strongest predictors of share price. The study further revealed that there is a positive relationship between EPS and Share price Volatility. Al-Deehani (2005) examined the determinants of share price for companies listed on the Kuwait stock exchange. The empirical findings showed that previous earnings per share, previous cash dividends per share, previous cash dividends per share, previous return on equity, previous price to book value ratio and previous cash flow per share are all positively correlated to the share price. Based on it, this study develops the following hypothesis:

H_1: There is a positive relationship between earnings per share and stock price volatility.

Dividend yield

Ilaboya and Aggreh (2003) showed that the share price volatility is positively and significantly influenced by the dividend yield. Duke et al. (2015) investigated the impact of dividend policy on share price valuation in Nigerian banks. The results showed that dividend yield has a significantly positive effect while retention ratio has a significantly negative effect on share price. Oyinlola and Ajeigbe (2014) carried out a study on 22 companies listed on Nigerian Stock Exchange from 2009 to 2013. The findings revealed that both dividend payout and retained earnings are significantly relevant in the market price per share of the companies. Al-Shawawreh (2014) examined the relationship of dividend payout and share price volatility using a sample of 53 companies listed in main market of Bursa Amman in Jordanian Stock Market from 2001 to 2013. The results of this study showed a significant positive relationship of dividend yield with share price volatility. Based on it, this study develops the following hypothesis:

H_2: There is a positive relationship between dividend yield and stock price volatility.

Dividend payout ratio

Nazir et al. (2010) assessed the role of dividend policy in determining the share price volatility in Karachi Stock Exchange (KSE) in Pakistan with a sample of 73 firms and from the period 2003 to 2008. The study found that dividend yield has positive relationship with share price volatility and dividend payout ratio has negative relationship with share price volatility. Ramadan (2013) examined 77 industrial firms listed on the Amman Stock Exchange from the period 2000 to 2011 and found that both dividend yield and dividend payout have significant negative influence on share price volatility, which indicate that dividend policy has impact on the share price volatility. AlQudah and Yusuf (2015) analyzed the firms in Amman Stock Exchange from the period 2001 to 2011 and found that dividend yield and dividend payout has significant negative impact on volatility of share price. Based on it, this study develops the following hypothesis:

H_3: There is a negative relationship between dividend payout ratio and stock price volatility.

Bank size

Kimani and Olweny (2021) examined the relationship between dividend payout ratio and stock price volatility of listed commercial banks in Kenya while incorporating size of the firm as a control variable. When firm size is

small, the dividend payout ratio tends to have a negative influence on the stock price volatility among the selected commercial banks in Kenya and when the firm size is high, the dividend pay-out ratio tends to have a positive influence on the stock price volatility among the selected commercial banks in Kenya. The study also showed a negative relationship between firm size and stock price volatility. Silwal and Napit (2019), book value per share, price earnings ratio and return on equity have a positive association with stock price. Despite a positive relationship, dividend yield had a minimal impact on stock price, while the size has negative relationship with stock price. Hussainey et al. (2011) found that company size has a negative and significant impact on share price volatility, while the leverage of the firms has a positive correlation to share price volatility. Based on it, this study develops the following hypothesis:

H_4: There is a negative relationship between bank size and stock price volatility.

Return on equity

Hunjra et al. (2014) assessed the effect of dividend yield, dividend payout ratio, return on equity, earning per share and profit after tax on stock prices in Pakistan. The results showed that profit after tax and earnings per share have significant positive impact on stock price and return on equity shows positive insignificant impact on stock price. Tarsono (2021) analyzed the effect of debt equity ratio, return on equity and net profit margin on stock prices on the Indonesia Stock Exchange during the 2015-2019 period. The results of this study revealed that the debt equity ratio, return on equity and net profit margin have positive effect on stock prices. Mahirun et al. (2023) found a positive relationship between return on equity and stock price volatility. Based on it, this study develops the following hypothesis:

H_5: There is a positive relationship between return on equity and stock price volatility.

Leverage ratio

According to Handayani et al. (2018), higher debt levels mean higher interest obligations, which can strain a company's cash flow, especially during economic downturns or periods of lower revenue. This increased financial risk can lead to greater volatility in the company's earnings, which in turn can cause greater volatility in its share price. Hussainey et al. (2011) found that leverage of the firms has a positive correlation to share price volatility. High leverage increases the probability of financial distress or default, particularly

if the company experiences a decline in its cash flows. Investors may respond to the increased default risk by adjusting the share price more dramatically in response to changes in the company's financial outlook (Mehmood et al., 2019). Based on it, this study develops the following hypothesis:

H_6: There is a positive relationship between leverage ratio and stock price volatility.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of selected dependent and independent variables during the period 2013/14 to 2022/23.

Table 2

Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 10 Nepalese commercial banks for the study period from 2013/14 to 2022/23. The dependent variables are PVL (Stock price volatility as measured by the ratio of range of high and low market price of shares to average of the high and low price of the year, in percentage) and MPV (Change in Market price per share, in Rs.). The independent variables are EPS (Earnings per share as measured by the ratio of total earnings to total outstanding shares, in Rs.), DY (Dividend yield as measured by the ratio of total dividend amount to current market price per share, in percentage), PAY (Dividend payout ratio as measured by the ratio of dividend per share to earnings per share, in percentage), ROE (Return on equity as measured by the ratio of net profit to total assets, in percentage), LEV (Leverage ratio as measured by the ratio of total debt to total assets, in percentage) and BS (Bank size as measured by the total assets, Rs. in billions).

Variables	Minimum	Maximum	Mean	Std. Deviation
PVL	0.00	113.69	56.62	21.84
MPV	-256.60	67.10	-9.48	58.19
DYLD	0.00	8.37	3.46	1.87
PAYOUT	0.00	296.61	60.09	41.33
SIZE	24.10	26.62	25.43	0.58
EPS	5.30	111.77	27.01	13.52
LEV	6.37	93.96	85.42	16.37
ROE	0.67	42.94	14.95	5.60

Source: SPSS Software

Correlation analysis

Having indicated the descriptive statistics, Pearson's correlation coefficients are computed and the results are presented in Table 3.

Table 3

Pearson's correlation coefficients matrix

This table shows the bivariate Pearson's correlation coefficients of dependent and independent variables of 10 Nepalese commercial banks for the study period of 2013/14 to 2022/23. The dependent variables are PVL (Stock price volatility as measured by the ratio of range of high and low market price of shares to average of the high and low price of the year, in percentage) and MPV (Change in Market price per share, in Rs.). The independent variables are EPS (Earnings per share as measured by the ratio of total earnings to total outstanding shares, in Rs.), DY (Dividend yield as measured by the ratio of total dividend amount to current market price per share, in percentage), PAY (Dividend payout ratio as measured by the ratio of dividend per share to earnings per share, in percentage), ROE (Return on equity as measured by the ratio of net profit to total assets, in percentage), LEV (Leverage ratio as measured by the ratio of total debt to total assets, in percentage) and BS (Bank size as measured by the total assets, Rs. in billions).

Variables	PVL	MPV	DYLD	PAY-OUT	SIZE	EPS	LEV	ROE
PVL	1							
MPV	-0.168	1						
DYLD	-0.294**	-0.065	1					
PAYOUT	0.015	0.007	0.441**	1				
SIZE	-0.206*	0.243*	-0.093	-0.278**	1			
EPS	0.118	-0.150	-0.030	0.047	-0.201*	1		
LEV	0.109	-0.081	0.072	0.008	-0.127	0.130	1	
ROE	0.057	-0.162	-0.076	0.044	-0.388**	0.565**	0.261**	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent respectively.

Table 3 shows that dividend yield has a negative relationship with stock price volatility. It means that increase in dividend yield leads to decrease in stock price volatility. Similarly, dividend payout has a positive relationship with stock price volatility. It means that increase in dividend payout ratio leads to increase in stock price volatility. The results of the study also shows that bank size has a negative relationship with stock price volatility. It implies that increase in bank size leads to decrease in stock price volatility. Likewise, earnings per share have a positive relationship with stock price volatility which indicates that higher earnings per share leads to increase in stock price volatility. However, leverage ratio has a positive relationship with stock price volatility. It implies that higher leverage ratio leads to increase in stock price volatility. Similarly, return on equity has a positive relationship with stock price volatility. It implies that higher return on equity leads to increase in

stock price volatility.

On the other hand, dividend yield has a negative relationship with change in market price per share. It means that increase in dividend yield leads to decrease in change in market price per share. Similarly, dividend payout has a positive relationship with change in market price per share. It means that increase in dividend payout ratio leads to increase in change in market price per share. The results of the study also shows that bank size has a positive relationship with change in market price per share. It implies that increase in bank size leads to increase in change in market price per share. Likewise, earnings per share have a negative relationship with change in market price per share which indicates that higher earnings per share leads to decrease in change in market price per share. However, leverage ratio has a negative relationship with stock price volatility. It implies that higher leverage ratio leads to decrease in change in market price per share. Similarly, return on equity has a negative relationship with change in market price per share. It implies that higher return on equity leads to decrease in change in market price per share.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and results are presented in Table 4. More specifically, it shows the regression results of dividend yield, dividend payout, bank size, earnings per share, leverage and return on equity on stock price volatility in the context of Nepalese commercial banks.

Table 4

Estimated regression results of dividend yield, dividend payout, bank size, earnings per share, leverage and return on equity on stock price volatility

The results are based on panel data of 10 commercial banks with 100 observations for the period of 2013/14 to 2022/23 by using the linear regression model and the model is $PVL = \beta_0 + \beta_1 DY_{it} + \beta_2 PAY_{it} + \beta_3 BS_{it} + \beta_4 EPS_{it} + \beta_5 LEV_{it} + \beta_6 ROE_{it} + e_{it}$ where, the dependent variable is PVL (Stock price volatility as measured by the ratio of range of high and low market price of shares to average of the high and low price of the year, in percentage). The independent variables are EPS (Earnings per share as measured by the ratio of total earnings to total outstanding shares, in Rs.), DY (Dividend yield as measured by the ratio of total dividend amount to current market price per share, in percentage), PAY (Dividend payout ratio as measured by the ratio of dividend per share to earnings per share, in percentage), ROE (Return on equity as measured by the ratio of net profit to total assets, in percentage), LEV (Leverage ratio as measured by the ratio of total debt to total assets, in percentage) and BS (Bank size as measured by the total assets, Rs. in billions).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		DYLD	PAYOUT	SIZE	EPS	LEV	ROE			
1	0.685 (15.475)**	-3.433 (3.049)**						0.077	0.209	9.294
2	0.561 (14.445)**		0.008 (0.153)					0.01	0.219	0.024
3	2.506 (2.690)**			-0.76 (2.083)*				0.033	0.214	4.338
4	0.515 (10.535)**				0.002 (1.173)			0.004	0.217	1.377
5	0.445 (3.880)**					0.141 (1.076)		0.002	0.218	1.157
6	0.533 (8.499)**						0.221 (0.562)	0.007	0.219	0.316
7	0.66 (14.253)**	-4.361 (3.509)**	0.095 (1.693)					0.095	0.207	6.168
8	2.314 (2.411)*			-0.072 (1.961)*		0.110 (0.842)		0.03	0.215	2.518
9	0.520 (8.113)**				0.002 (1.03)		0.056 (0.118)	0.006	0.219	0.689
10	0.511 (4.473)**	-4.503 (3.63)**	0.098 (1.742)			0.178 (1.423)		0.104	0.206	4.830
11	2.8 (2.551)*		0.027 (0.493)	-0.087 (2.084)*	0.002 (1.106)		0.420 (0.836)	0.018	0.216	1.441
12	2.782 (2.679)*	-4.557 (3.703)**	0.065 (1.138)	-0.087 (2.211)*	0.002 (1.230)	0.181 (1.416)	0.718 (1.481)	0.134	0.203	3.543

Notes:

i. Figures in parenthesis are t-values.
ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
iii. Stock price volatility is the dependent variable.

Table 4 shows that the beta coefficients for dividend yield are negative with stock price volatility. It indicates that dividend yield has a negative impact on stock price volatility. This finding is similar to the findings of Ilaboya and Aggreh (2003). Similarly, the beta coefficients for dividend payout are positive with stock price volatility. It indicates that dividend payout has a positive impact on stock price volatility. This finding is similar to the findings of Nazir et al. (2010). Likewise, the beta coefficients for bank size are negative with stock price volatility. It indicates that bank size has a negative impact on stock price volatility. This finding is similar to the findings of Kimani and Olweny (2021). In addition, the beta coefficients for earnings per share are positive with stock price volatility. It indicates that earnings per share have a positive impact on stock price volatility. This finding is consistent with the findings of Dissanayake and Wickramasinghe (2016). Further, the beta coefficients for leverage are positive with stock price volatility. It indicates that leverage has a positive impact on stock price volatility. This finding is consistent with the findings of Handayani et al. (2018). Moreover, the beta coefficients for return on equity are positive with stock price volatility. It indicates that return on equity has a positive impact on stock price volatility. This finding is similar to

the findings of Hunjra et al. (2014).

Table 5 shows the regression results of dividend yield, dividend payout, bank size, earnings per share, leverage and return on equity on change in market price per share in the context of Nepalese commercial banks.

Table 5

Estimated regression results of dividend yield, dividend payout, bank size, earnings per share, leverage and return on equity on change in market price per share

The results are based on panel data of 10 commercial banks with 100 observations for the period of 2013/14 to 2022/23 by using the linear regression model and the model is MPV = $\beta_0 + \beta_1 DY_{it} + \beta_2 PAY_{it} + \beta_3 BS_{it} + \beta_4 EPS_{it} + \beta_5 LEV_{it} + \beta_6 ROE_{it} + e_{it}$ where, the dependent variable is MPV (Change in market price per share, in Rs.). The independent variables are EPS (Earnings per share as measured by the ratio of total earnings to total outstanding shares, in Rs.), DY (Dividend yield as measured by the ratio of total dividend amount to current market price per share, in percentage), PAY (Dividend payout ratio as measured by the ratio of dividend per share to earnings per share, in percentage), ROE (Return on equity as measured by the ratio of net profit to total assets, in percentage), LEV (Leverage ratio as measured by the ratio of total debt to total assets, in percentage) and BS (Bank size as measured by the total assets, Rs. in billions).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		DYLD	PAYOUT	SIZE	EPS	LEV	ROE			
1	-0.025 (0.201)	-2.634 (0.751)						0.006	0.5836	0.418
2	-0.101 (0.972)		0.101 (0.068)					0.011	0.5849	0.005
3	-6.186 (2.514)*			0.239 (2.476)*				0.049	0.5674	6.131
4	0.079 (0.612)				-0.006 (1.501)			0.012	0.5783	2.252
5	0.101 (0.326)					-0.227 (0.647)		0.006	0.5836	0.419
6	0.157 (0.947)						-1.681 (1.623)	0.016	0.5722	2.635
7	-0.041 (0.314)	-2.634 (0.751)	0.062 (0.392)					0.015	0.5862	0.284
8	-5.968 (2.346)*			0.235 (2.402)*		-0.126 (0.363)		0.041	0.5699	3.104
9	0.181 (1.07)				-0.004 (0.709)		-1.177 (0.936)	0.011	0.5786	1.562
10	0.272 (1.313)	-2.387 (0.764)			-0.004 (0.696)		-1.246 (0.986)	0.007	0.5799	1.232
11	-5.877 (2.009)*		0.106 (0.728)	0.231 (2.093)		-0.066 (0.184)	-0.72 (0.627)	0.031	0.5729	1.783
12	-5.846 (1.992)*	-3.160 (0.908)	0.173 (1.071)	0.233 (2.106)*	-0.004 (0.783)	-0.036 (0.1)	-0.283 (0.206)	0.025	0.5746	1.423

Notes:

i. Figures in parenthesis are t-values.
ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
iii. Change in market price per share is the dependent variable.

Table 5 shows that the beta coefficients for dividend yield are negative with change in market price per share. It indicates that dividend yield has a negative impact on change in market price per share. This finding is similar to the findings of Oyinlola and Ajeigbe (2014). Similarly, the beta coefficients for dividend payout are positive with change in market price per share. It indicates that dividend payout has a positive impact on change in market price per share. This finding is similar to the findings of AlQudah and Yusuf (2015). Likewise, the beta coefficients for bank size are positive with change in market price per share. It indicates that bank size has a positive impact on change in market price per share. This finding is similar to the findings of Kimani and Olweny (2021). In addition, the beta coefficients for earnings per share are negative with change in market price per share. It indicates that earnings per share have a negative impact on change in market price per share. This finding is consistent with the findings of Al-Deehani (2005). Further, the beta coefficients for leverage are negative with change in market price per share. It indicates that leverage has a negative impact on change in market price per share. This finding is consistent with the findings of Hussainey et al. (2011). Moreover, the beta coefficients for return on equity are negative with change in market price per share. It indicates that return on equity has a negative impact on change in market price per share. This finding is similar to the findings of Tarsono (2021).

4. Summary and conclusion

Volatility is linked to the risk of stock trading which reflects the uncertainty and potential variability in stock prices, which can significantly influence investor behavior and market dynamics. By understanding the causes and implications of volatility, investors can better manage risk and make informed investment decisions.

This study attempts to analyse the effect dividend policy on stock price volatility in Nepalese commercial banks. The study is based on secondary data of 10 commercial banks with 100 observations for the period from 2013/14 to 2022/23.

The major conclusion of this study is that dividend yield, earnings per share, leverage and return on equity have negative effect on change in market price per share in the context of Nepalese commercial banks. However, dividend payout and bank size have positive effect on change in market price per share. The major conclusion of this study is that dividend yield and bank size have negative effect on stock price volatility in the context of Nepalese commercial banks. However, dividend payout, earnings per share, leverage

and return on equity have positive effect on stock price volatility. Similarly, the study also concluded that dividend yield followed by bank size is the most influencing factor that determines the stock price volatility in the context of Nepalese commercial banks.

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