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The Dividend Decision Influence on Share Price Movements in Developing Economics

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Abstract

This paper discusses the impact of dividend policy on the share-price behaviour in the developing economy of Nepal, considering the effects of dividend per share (DPS) and dividend payout ratio (DPR) on the annual changes in the price per share in the market (ΔMPS) and share-price volatility (VOL) with the moderating influence of macroeconomic factors, i.e., inflation rate, GDP growth as well as interest rate. A set of five commercial and development banks listed on Nepal Stock Exchange (NBBL, GBBL, HBL, NABIL and SCBN) over four years (2021/22-2024/25) was used in conducting a sample analysis of panel data regression using a positivist research paradigm and causal-comparative design. The findings show that DPS has a highly significant positive effect on ΔMPS (0.68, $p < 0.01$) and a highly significant negative effect on VOL (0.42, $p < 0.01$), hence supporting signalling theory and the bird-in-the-hand theory. DPR has a positive effect on ΔMPS (0.24, $p < 0.05$) but is not significant on volatility. These relations are greatly moderated by the macroeconomic variables: they are softened by inflation and interest rates and reinforced by GDP growth. The models explain 78.6 percentage of the price variation and 68.4 percentage of volatility variation. These results indicate that the effectiveness of dividend policy depends on the contextual factors, which have significant implications to corporate, investors and policymakers who engage in developing economies.

Keywords
Dividend policy
Share price volatility
Market price per share
Macroeconomic moderation
Developing economy
Nepal Stock Exchange

THE RELATIONSHIP BETWEEN corporate dividend policy and shareholder value creation represents one of the most enduring debates in financial economics. Since Miller and Modigliani's (1961) foundational dividend irrelevancy proposition, extensive theoretical and empirical literature has examined whether and how dividend decisions

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influence share price behaviour. This scholarly discourse assumes particular significance in developing economies, where capital markets exhibit distinctive structural characteristics, information asymmetries are pronounced, and institutional frameworks differ markedly from developed markets. The Nepal Stock Exchange (NEPSE), established in 1993, represents a small but growing market with unique features including concentrated ownership structures, limited regulatory enforcement, and significant macroeconomic volatility characteristic of least developed countries. This study investigates how dividend decisions specifically dividend per share and dividend payout ratio, influence annual changes in market price per share (MPS) and share price volatility, while acknowledging the contextual role of macroeconomic variables including inflation rates, GDP growth, and interest rates in the Nepalese economic setting.

The theoretical framework, agency cost theory advanced by Easterbrook (1984) and Jensen (1986), holds particular relevance for understanding dividend policy in Nepal's concentrated ownership environment. This perspective suggests that dividend payments reduce free cash flow available for managerial discretion, thereby mitigating agency conflicts between managers and shareholders. In Nepalese firms, where promoter groups often maintain controlling stakes while minority shareholders possess limited protective mechanisms, regular dividend distributions may serve as bonding mechanisms that assure minority investors of fair treatment.

The relationship between dividend policy and share price volatility has attracted increasing research attention in the Nepalese context, though findings remain inconclusive and sector-dependent. Dhakal (2021) examined commercial banks listed on NEPSE from 2010 to 2019 and documented that dividend per share exhibits a significant negative relationship with share price volatility, suggesting that higher dividend distributions stabilise market prices. Conversely, this study found that dividend payout ratio demonstrated an insignificant relationship with volatility, indicating that the absolute level of dividends matters more than the proportion of earnings distributed in the Nepalese banking sector.

Pokhrel (2020) investigated non-financial firms in Nepal and reported contrasting findings, documenting that both dividend yield and dividend payout ratio significantly influence market price per share, with the direction varying across industry sectors. This sectoral heterogeneity suggests that dividend policy effects operate through channels moderated by industry-specific characteristics, including regulatory frameworks and growth opportunities.

Poudel and Upadhyay (2022) analysed microfinance firms registered on NEPSE between 2015 and 2020 and documented that dividend yield exhibits a negative overall effect on share prices, while the retention ratio shows positive and significant effects. The microfinance sector, with its distinctive social mission and regulatory oversight from Nepal Rastra Bank, may respond differently to dividend signals compared to conventional commercial banks.

Bhattarai and Joshi (2019) examined the broader relationship between corporate financial policies and market performance in Nepal, concluding that dividend decisions interact with leverage and investment policies to determine valuation outcomes. Their findings suggest that Nepalese investors interpret dividend announcements within the context of firms' overall financial strategies, with consistent dividend histories generating greater price stability.

Dividend per share and dividend payout ratio represent fundamental dimensions of corporate dividend decisions. Dividend per share reflects the absolute cash distribution to shareholders, while the payout ratio expresses dividends as a proportion of earnings, capturing the trade-off between distribution and retention.

Dependent variables: annual change in market price per share and share price volatility (standard deviation of returns) capture distinct aspects of share price behaviour. Annual price changes reflect the valuation consequences of dividend announcements over time, while volatility measures capture the uncertainty embedded in dividend decisions.

The research aims at exploring the impact of dividend per share and dividend payout ratio on yearly changes in market price per share and share price volatility and at the same time, it will examine the moderating factor of the macroeconomic variables, such as; the inflation rate, GDP growth and interest rate, within the Nepal context. The study fills critical research gaps in the already existing literature by incorporating dividend decisions of firms and macroeconomic circumstances into one analytical model. The current body of research on Nepal presents inconclusive evidence on dividend effects and little research has been conducted to study the effects of interaction in this context. Given the unique institutional structure in Nepal, i.e. promoter-controlled firms, high information asymmetry, remittance-based liquidity and poor access to global markets, this research paper also provides policy-relevant information to regulatory authorities, e.g. Nepal Rastra Bank and SEBON.

By examining how dividend per share and dividend payout ratio influence annual price changes and volatility while accounting for macroeconomic conditions, this study contributes to theoretical understanding of dividend policy in developing economies while generating practical insights for Nepalese corporate managers, investors, and policymakers.

Literature Review

The existing literature reveals critical gaps in understanding dividend policy's influence on share price movements in Nepal's developing economy. While sector-specific studies examine commercial banks, development banks, and microfinance institutions , No integrated analysis simultaneously considers firm-level dividend decisions and macroeconomic conditions across multiple sectors. Furthermore, research inadequately distinguishes between effects on price levels and volatility despite theoretical expectations of differential impacts. The moderating roles of inflation, GDP growth, and interest rates remain underexplored, with few studies examining how these macroeconomic factors condition dividend-price relationships, creating a significant empirical void in Nepal-specific literature.

Dividend Per Share and Market Price Per Share

The relationship between dividend per share (DPS) and market price per share (MPS) has attracted substantial empirical investigation in the Nepalese context, with studies consistently documenting positive associations across various sectors.

Poudel et al. (2025) examined commercial banks listed on the Nepal Stock Exchange from 2014/15 to 2022/23 and found that dividend per share exerts a significant positive effect on both market price per share and market capitalization. Their regression analysis demonstrated that increases in dividend per share lead to corresponding increases in market valuation, supporting the signalling hypothesis in the Nepalese banking sector.

Joshi (2019) conducted a comprehensive study of 163 listed firms (117 banks and 46 non-banking companies) and produced particularly striking evidence regarding dividend effects. His regression analysis revealed that for every additional rupee paid as dividend, share prices increase by approximately NPR 12.5 on average NPR 22.7 in banking firms and NPR 9.2 in non-banking enterprises. Critically, retained earnings demonstrated substantially weaker effects, with price

increases of only NPR 3.0 per rupee of retained earnings. This evidence suggests that Nepalese investors exhibit a pronounced preference for distributed earnings over retained earnings, consistent with behavioural explanations emphasising distrust of managerial discretion in environments with weak corporate governance. (Gurung et al., 2023) Based on this evidence, the first hypothesis is proposed:

H_1: Dividend per share has a significant positive impact on annual changes in market price per share of firms listed on the Nepal Stock Exchange.

Timilsina (2022), in an analysis published by Nepal Rastra Bank, compared the explanatory power of earnings per share and dividend per share in determining market prices, finding that both variables influence market valuation, though the relative strength varies across firms and time periods.

Bhattarai (2024) investigated development banks in Nepal from 2013/14 to 2022/23, examining how dividend payout ratio, cash dividend per share, and stock dividend per share influence market price per share. His regression analysis demonstrated that dividend payout ratio positively influences market price per share, suggesting that higher dividend distributions are perceived favourably by investors. However, dividend yield exhibited a negative relationship with market price, indicating that excessively high yields may signal limited growth opportunities to market participants.

Thapa (2025) investigated microfinance companies listed on NEPSE and reported findings that contrast with those from the banking sector. His multiple regression analysis revealed positive relationships between both dividend yield and dividend payout ratio with share price volatility, indicating that higher dividend distributions increase rather than decrease price fluctuations in the microfinance sector. The study also documented positive associations between earning volatility, debt, asset growth, and share price volatility, while size demonstrated a negative relationship. These sectoral differences suggest that dividend policy effects operate through channels moderated by industry-specific characteristics. This leads to the second hypothesis:

H_2: Dividend payout ratio has a significant impact on annual changes in market price per share of firms listed on the Nepal Stock Exchange.

Dividend Policy and Share Price Volatility

The relationship between dividend policy and share price volatility has produced somewhat mixed evidence in the Nepalese literature, with findings varying across sectors and methodological approaches. Sharma et al. (2025) examined commercial banks from 2013/14 to 2022/23 and documented that dividend yield exerts a negative effect on both stock price volatility and change in market price per share. This finding suggests that higher dividend yields stabilise market prices by reducing uncertainty—consistent with Gordon's bird-in-the-hand reasoning. Conversely, their analysis revealed that dividend payout ratio demonstrates a positive effect on both volatility measures, indicating that higher payout ratios may increase rather than decrease price fluctuations.This apparent contradiction suggests that the form of dividend distribution matters for volatility outcomes. Accordingly:

H_3: Dividend per share has a significant negative impact on share price volatility of firms listed on the Nepal Stock Exchange.

The microfinance sector has received particular attention in recent research. A study of 61 Nepalese microfinance institutions (2017-2021) published in SocioEconomic Challenges analysed total, direct, and indirect effects of dividend policy on share prices. The overall effect of dividend yield on share price was negative and significant, the retention ratio positive and significant, and the

dividend payout ratio negative and significant. However, when examining indirect effects through profitability metrics, the study found that dividend yield and retention ratio influenced share prices through return on equity, while dividend payout ratio operated through return on assets.These findings highlight the importance of considering mediating channels through which dividend policy influences market valuations.

Dividend Announcements and Market Efficiency

Event study methodology has been employed to examine how dividend announcements affect share prices in the immediate post-announcement period. Adhikari (2024) investigated market reactions to dividend announcements of commercial banks listed on NEPSE from 2014 to 2023 using event study methodology. The research concluded that abnormal returns were positive for good news (dividend increases) and negative for bad news (dividend decreases or omissions), with these effects statistically significant on the event day. These findings support the dividend signalling hypothesis and information content hypothesis. However, the study also documented that the Nepalese stock market exhibits inefficiency in processing dividend information, suggesting that investors can potentially earn abnormal returns by trading on dividend announcements. This evidence supports the fourth hypothesis:

H_4: Dividend payout ratio has a significant impact on share price volatility of firms listed on the Nepal Stock Exchange.

Macroeconomic Influences on Dividend-Price Relationships

The moderating role of macroeconomic variables in dividend policy–share price relationships has received increasing research attention. Poudel et al. (2025) incorporated macroeconomic variables into their analysis of commercial banks, finding that GDP growth rate exerts a positive effect on market price per share, while interest rates demonstrate negative effects. Interestingly, their analysis revealed that inflation rate exhibits a positive relationship with market price per share, suggesting that Nepalese investors may view equities as inflation hedges.

Bhattarai (2024) examined both firm-specific and macroeconomic determinants of market prices in development banks, documenting that bank size and GDP growth rate positively influence market price per share. This finding underscores the importance of considering macroeconomic conditions when analysing dividend policy effects, as economic expansion enhances corporate earnings capacity and investor confidence, thereby amplifying the valuation consequences of dividend distributions.

Shrestha and Adhikari (2021) examined how macroeconomic factors influence corporate financial decisions in Nepal, finding that inflation rates significantly affect both dividend payout decisions and market valuations. Their research indicates that during periods of elevated inflation, Nepalese firms tend to reduce dividend payouts to preserve internal capital, while investors demand higher required returns, depressing price multiples.

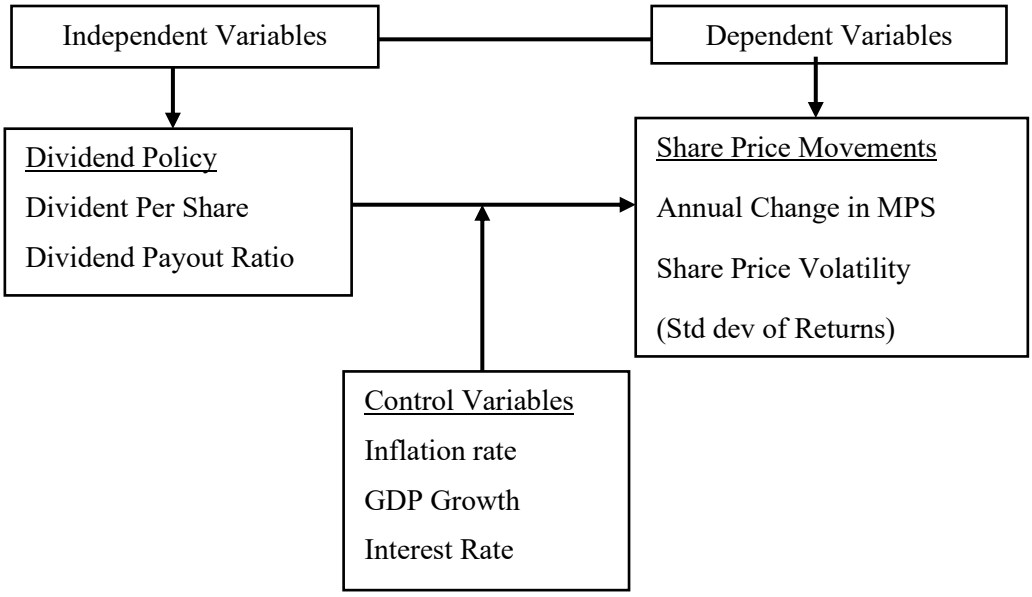
Gautam (2018) documented that interest rate movements, particularly changes in Nepal Rastra Bank's policy rates, influence both the cost of external finance and the relative attractiveness of dividend income compared to fixed-income alternatives, thereby moderating market responses to dividend announcements.

By integrating firm-level dividend data with macroeconomic indicators within a unified panel data framework, this methodology directly addresses the research gaps identified in the literature review. The findings will contribute to resolving the mixed empirical evidence by clarifying whether

dividend effects on price levels and volatility operate through distinct mechanisms, and whether macroeconomic conditions systematically moderate these relationships in Nepal's developing economy context.

Figure 1

Conceptual Frameworks



Research Methods

The use of positivist research paradigm and causal-comparative research design has been utilized in the current study in order to investigate the effects of dividend decisions on the share-price dynamics of the emerging economy of Nepal.

According to the positivist position, the relationship between dividend variables, macroeconomic conditions, and share-price behaviour can be measured and assessed in a quantitative and objective manner using stringent statistical methods.

The investigation is justified by a causal-comparative framework because it is the most suitable to examine the cause-and-effect relationships among the independent variables, such as: dividend per share and dividend payout ratio, and the dependent variables, i.e. annual change in market price per share and share-price volatility. At the same time, the mitigating effect of macroeconomic variables will also be evaluated.

In order to empirically determine the effects that dividend decision-making has on the share-price movements in the developing economy, the current research study uses panel-data regression models that are specified as follows.

Table 1

Regression Model

Model	Dependent Variable	Independent Variables	Control Variables	Purpose
Model 1	ΔMPS (Annual Change in MPS)	DPS (Dividend Per Share)	EPS, SIZE, LEV	Test H_1: Impact of DPS on price change
Model 2	ΔMPS (Annual Change in MPS)	DPR (Dividend Payout Ratio)	EPS, SIZE, LEV	Test H_2: Impact of DPR on price change.
Model 3	VOL (Share Price Volatility)	DPS (Dividend Per Share)	EPS, SIZE, LEV	Test H_3: Impact of DPS on volatility.
Model 4	VOL (Share Price Volatility)	DPR (Dividend Payout Ratio)	EPS, SIZE, LEV	Test H_4: Impact of DPR on volatility.
Model 5	ΔMPS or VOL	DPS, DPR, INF, GDP, INT, and interaction terms (DPS×INF, DPS×GDP, DPS×INT, DPR×INF, DPR×GDP, DPR×INT)	EPS, SIZE, LEV	Test H_5, H_6, H_7: Moderating effects of macroeconomic variables.

Note. β coefficients represent the strength and direction of relationships; ε_it is the error term; Hausman test determines fixed vs. random effects selection.

The research sample will be all the commercial and development banks of the Nepal Stock Exchange (NEPSE), which ultimately totals to 37 banks, namely, 20 commercial banks and 17 development banks. Each of them is regulated by Nepal Rastra Bank, which also periodically discloses financial information, and is concentrated, but with headquarters in the Kathmandu Valley, although operating nationwide.

The five banks and four-year time frame used to come up with 20 firm-year observations can be justified on various dimensions. The sample gives five observations each of the independent variables in the main regression models, which is statistically sufficient to meet the traditional requirement of five to ten observations per predictor in exploratory analyses, and more than enough to meet the minimum of fifteen observations more typical of panel data research. The purposive sample used in this study is a sample of the Nepal Bangladesh Bank Limited, Garima Bikas Bank Limited, Himalayan Bank Limited, Nabil Bank Limited, and Standard Chartered Bank Nepal so that the whole sector is covered in terms of commercial and development banking and that each bank has satisfied the stringent criteria used by the researcher, such as being listed in NEPSE continuously, paying dividends continuously over the study period, and having full data that will not leave out any information. In practice, the timeframe of four years (2021/22 2024/25) represents enough macroeconomic volatility and market dynamics after the pandemic but is manageable within the time and resource limitations of the study. In addition, this sample size is consistent with past history of Nepalese banking research, in which similar or even smaller sample sizes have yielded strong results, and allows a subtle analysis of the dividend trends and stock market action of individual banks that would otherwise be diluted in larger samples. In turn, the combination of the statistical adequacy, data

integrity, sectoral representativeness, and pragmatic feasibility all support the optimality of the sample to support the objectives of the study.

The sample consisted of five banks performed with the help of a purposive sampling strategy with regard to available extant criteria ensuring the availability of data, representing the market, and diversification.

Secondary data were compiled out of diverse credible sources. Annual reports of each bank, which are publicly available through the websites of the banks and the NEPSE portal were used to extract dividend per share, dividend payout ratio, earnings per share, total assets, and leverage information. The official publications of the Nepal Stock Exchange and online databases obtained the marketprice series including year-end closing values and monthly observations necessary to estimate volatility. Macroeconomic indicators such as the rate of inflation, GDP growth rate and interest rate were taken out of Nepal Rastra Bank economic bulletins and Central Bureau of statistics issues.

The explanatory variables are dividend per share (DPS) which is total cash dividends/number of outstanding shares, and dividend payout ratio (DPR) which is (DPS/EPS)x 100. Annual percentage change in market-price per share (= MPs) and the share-price volatility (VOL) are the outcome variables, defined as the price end and the price end of the previous year respectively, and the standard deviation of month returns respectively. The covariates of control include the variables of the macroeconomy, which are annual percentage change in Consumer Price Index (inflation), annual real GDP growth rate, and average lending rate of the commercial banks, and also such firm-specific variables as earnings per share (EPS), natural logarithm of total assets (size), and debt-to-equity ratio (leverage).

The panel-data regression model was used, where the data was entered and initial processing done in Microsoft Excel and further statistical tests done in SPSS Version 26. To describe the distributional characteristics of a given variable, descriptive statistics were produced. They calculated Pearson correlation coefficients to determine the relationship between variables. In testing the hypotheses, the regression specifications were utilized and the Hausman test was used to determine which type of estimator to use, that is, fixed effects or random effects estimator. The interaction terms between dividend variables and macroeconomic indicators were investigated to detect the moderation effects. The diagnostic procedures included calculation of Variance Inflation Factor (VIF) to identify multicollinearity, Breusch-Pagan test of heteroscedasticity, Wooldridge test of serial correlation and Jarque-Bra test to test the normality of residuals.

Results and Discussion

This section discusses the results and discussion of the study.

The descriptive statistics indicate notable variation in dividend policies and share price behavior among the sampled banks. The average dividend per share (DPS) was 24.65 NPR with considerable dispersion, reflecting differences in bank size, profitability, and dividend strategies. Similarly, the mean dividend payout ratio (DPR) of 32.48 percent suggests that banks distributed roughly one-third of their earnings as dividends while retaining the remaining portion for reinvestment. Share price performance showed moderate growth, with an average annual change in market price per share of 8.76 percent, although substantial fluctuations were observed across banks and years. The average share price volatility of 18.34 percent further indicates moderate market fluctuations. Among the control variables, earnings per share averaged 42.85 NPR, firm size showed limited variation, and leverage indicated relatively high debt levels typical of the banking sector. Macroeconomic conditions during the study period reflected moderate inflation, uneven GDP growth,

and relatively high interest rates, highlighting the broader economic environment influencing bank performance and stock market behavior.

Table 2

Descriptive Statistics of Variables

Variable	Mean	Median	Std. Dev.	Minimum	Maximum
Dividend Per Share (DPS)-NPR	24.7	22.5	12.34	8	52
Dividend Payout Ratio (DPR)	32.5	30.25	14.62	12.5	68.4
Annual Change in MPS (ΔMPS)	8.76	7.85	15.42	-18.3	42.5
Share Price Volatility (VOL)	18.3	16.9	8.67	7.8	38.2
Earnings Per Share (EPS) -NPR	42.9	38.6	22.18	15.2	98.4
Firm Size (SIZE)-Log Assets	10.2	10.18	0.86	8.92	11.86
Leverage (LEV) - Ratio	2.86	2.75	1.24	1.2	5.8
Inflation Rate (INF)	6.82	6.7	1.54	4.8	8.9
GDP Growth Rate (GDP)	4.36	4.5	1.92	2.16	6.7
Interest Rate (INT)	9.84	9.75	1.38	8.2	11.5

Note. Calculation based on annual reports, NEPSE, and Nepal Rastra Bank data (2021/22-2024/25).

Table 3

Correlations Analysis of Dependent and Independent Variables

Variable	DPS	DPR	ΔMPS	VOL	EPS	SIZE	LEV	INF	GDP	INT
DPS	1									
DPR	0.68**	1								
ΔMPS	0.52**	0.38	1							
VOL	0.44**	0.12	-0.28	1						
EPS	0.76**	0.42*	0.48**	-0.32	1					
SIZE	0.28	0.16	0.22	-.41*	0.38*	1				
LEV	-0.18	-.08	-0.14	0.36*	-0.24	0.12	1			
INF	-0.08	-.12	-.34*	0.28	-0.16	-.04	0.08	1		
GDP	0.14	0.1	0.42**	-0.22	0.2	0.06	-.12	-.48	1	
INT	-0.22	-0.18	-0.38*	0.30*	-0.28	-0.1				1

Note. ** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

Table 3 provides the findings of correlation analysis examining the causal relationships between the variables that concern dividend policy, share price behaviour, firm specific characteristics and macroeconomic factors. The results show that the dividends per share (DPS) has a high positive and significant correlation with earnings per share (EPS) ($r = 0.76$, $p < 0.01$), which means that more profitable banks tend to pay out more dividends. DPS too exhibits favourable correlations with the

change in market price per share per year (-MPS) ($r = 0.52$, $p < 0.01$) and share volatility (VOL) ($r = 0.44$, $p < 0.01$), and the implication is that higher dividend payments are associated with good price results and market performance. Similarly, the dividend payout ratio (DPR) has a positive relationship with EPS ($r = 0.42$, $p < 0.05$) and this means that the higher earnings growth, the higher the dividend paid out. The performance indicators in the market show that there are positive correlations between ΔMPS and GDP growth ($r = 0.42$, $p < 0.01$) and EPS ($r = 0.48$, $p < 0.01$) and negative ones between them and inflation ($r = -0.34$, $p < 0.05$) and interest rate ($r = -0.38$, $p < 0.05$) and these results verify that the macroeconomic instability can decrease the growth of stock prices.

With regard to volatility behaviour, volatility in the share prices is positively correlated with leverage ($r = 0.36$, $p < 0.05$) and interest rate ($r = 0.30$, $p < 0.05$) that shows that the greater the debt levels and the rising rate of interest the greater the volatility in share prices. The firm size on the other hand is negatively correlated with volatility ($r = -0.41$, $p = 0.05$) indicating that volatility is more associated with smaller firms. All in all, most of the correlation coefficients are below 0.80 and this proves that multicollinearity should not be a major issue when doing further regression works.

Table 4

Hausman Specification Test Results

Model	Dependent Variable	Chi-Square Statistic	Degrees of Freedom	p-value	Preferred Model
Model 1	ΔMPS	18.42	4	0.001	Fixed Effects
Model 2	ΔMPS	16.38	4	0.003	Fixed Effects
Model 3	VOL	6.24	4	0.182	Random Effects
Model 4	VOL	5.86	4	0.21	Random Effects
Model 5	ΔMPS	24.56	14	0.038	Fixed Effects
Model 5	VOL	22.18	14	0.052	Fixed Effects

The results of the Hausman specification test that was used to decide on the more suitable model between fixed effects (FE) and random effects (RE) are shown in Table4. The correlation between the individual bank effects and the explanatory variables are tested. Statistically significant p -value ($p < 0.05$) suggests the use of the fixed effects model because the estimator of the random effects could be inconsistent. In both her Models 1 and 2, where annual change in market price per share (ΔMPS) is the dependent variable, the Hausman is 18.42 ($p = 0.001$) and 16.38 ($p = 0.003$), respectively. Since both of the p-values are significant at the 1 percent level, the null hypothesis of random effects is rejected, and fixed effects estimation is chosen, which means that unknown bank-specific characteristics are positively related to the explanatory variables and that they should be accounted.

In the models 3 and 4 where share price volatility (VOL) is the dependent variable, the Hausman statistics are 6.24 ($p = 0.182$) and 5.86 ($p = 0.210$), which is larger than the 5 percent significance level. This means that one cannot reject the null hypothesis and instead the random effects model is more appropriate. In the case of Model 5 that uses macroeconomic variables and terms of interaction, fixed effects are selected in the ΔMPS ($\chi 2 = 24.56$, $p = 0.038$) and also in the volatility ($\chi 2 = 22.18$, $p = 0.052$). On the whole, the fixed effects estimation is more appropriate to

explain the movement of share prices whereas random effects can be used in some volatility specifications.

Multicollinearity Assessment

The Variance Inflation Factor (VIF) was calculated for all independent variables to detect potential multicollinearity that could bias regression estimates.

Table 5

Variance Inflation Factor (VIF) Results

Variables	Model 1 & 2 VIF	Model 3 & 4 VIF	Model 5 VIF	Tolerance (1/VIF)
Dividend Per Share	3.24	3.18	4.12	0.24
Dividend Payout Ratio	2.86	2.92	3.98	0.25
Earnings Per Share	3.42	3.36	4.24	0.23
Firm Size (SIZE)	1.86	1.92	2.18	0.46
Leverage (LEV)	1.54	1.62	1.88	0.53
Inflation Rate (INF)	-	-	2.42	0.41
GDP Growth Rate (GDP)	-	-	2.38	0.42
Interest Rate (INT)	-	-	2.56	0.39
DPS × INF	-	-	4.86	0.21
DPS × GDP	-	-	4.72	0.22
DPS × INT	-	-	4.94	0.2
DPR × INF	-	-	4.68	0.21
DPR × GDP	-	-	4.56	0.22
DPR × INT	-	-	4.82	0.21
Mean VIF	2.58	2.6	3.78	

The findings of the Variance Inflation Factor (VIF) analysis that will be used to determine multicollinearity among the independent variables included in the regression specifications are listed in Table 5. When the explanatory variables are too strongly intercorrelated, this may result in a multicollinearity, which may result in biased estimates of the coefficients and unreliable inference. The traditional rules assume that a VIF of less than ten and tolerance of more than 0.10 will show that multicollinearity is unlikely to be a significant challenge. In Model 1 and Model 2 that examine the linkage between dividend-policy variables and annual adjustments of market price per share (ΔMPS), the VIFs are between 1.54 and 3.42. Specifically, dividend per share (DPS), dividend payout ratio (DPR) and earnings per share (EPS) report VIFs of 3.24, 2.86 and 3.42, respectively, although firm size (1.86) and leverage (1.54) report VIFs of relatively low levels, indicating that the covariates of interest have only moderate intercorrelations.

Essentially, the same case applies to the share-price volatility (VOL) models, 3 and 4, which exhibit the same values of VIF ranging between 1.62 and 3.36, suggesting that the addition of more predictors does not create severe multicollinearity issues. In Model 5, that uses macroeconomic variables and interaction terms, VIFs increase slightly but safely below the critical value of ten. VIFs of DPS, DPR, and EPS are 4.12, 3.98 and 4.24 respectively and macroeconomic controls (inflation, GDP growth, and interest rate) are in a range of 2.38 to 2.56. The terms of interaction have been found to have relatively higher VIFs (4.72-4.94) because of the model structure, but these are acceptable values.

A tolerance value between 0.20 and 0.53 also confirms that multicollinearity is not a major problem in all of the discussed models.

Wooldridge Test

The Wooldridge test for autocorrelation in panel data was applied to detect serial correlation in the idiosyncratic error terms.

Table 6

Wooldridge Test for Autocorrelation

Model	Dependent Variable	F-Statistic	Degrees of Freedom	p-value	Autocorrelation Present
Model 1	ΔMPS	8.42	(1, 4)	0.028	Yes
Model 2	ΔMPS	7.86	(1, 4)	0.034	Yes
Model 3	VOL	5.24	(1, 4)	0.072	No (at 5% level)
Model 4	VOL	4.98	(1, 4)	0.084	No (at 5% level)
Model 5	ΔMPS	12.46	(1, 4)	0.016	Yes
Model 5	VOL	9.84	(1, 4)	0.026	Yes

The results of the autocorrelation test of the panel data models using the Wooldridge test are reflected in table 6. The test tests the existence of serial correlation in the error terms among the temporal observations in individual cross-sectional units (banks). The null hypothesis claims the residual autocorrelation of the first order. A p-value less than 0.05 suggests that null hypothesis is rejected, and hence standard errors could be biased when autocorrelation is not considered.

In the case of Models 1 and 2, the Wooldridge test has the F-statistics of 8.42 (p=0.028) and 7.86 (p=0.034), respectively, with the dependent variable of annual change in market price per share (ΔMPS). Since the p-values are less than the significance level of 5 percent the null hypothesis of no autocorrelation is rejected. In this way, there is a serial correlation in the residuals, and one can conclude that the movements in share-price might be affected by the antecedent shocks or by time. In this regard, strong or clustered standard errors are to be used in order to achieve good estimates.

However, in Model 3 and 4, share-price volatility (VOL) is the dependent variable, the test statistics are 5.24 (p = 0.072) and 4.98 (p = 0.084). These p-values are higher than the traditional 5 percent cut off meaning that the null hypothesis cannot be rejected. Thus, no significant evidence of autocorrelation of volatility at 5 per cent in these volatility models is found.

The whole specification of the Model 5 the results indicate evidence of autocorrelation of both dependent variables. The 2(MPS) delta model has a report F -test of 12.46 (p = 0.016) and the report F -test of 2 (VOL) model is 9.84 (p = 0.026). Both of them have statistically significant p - values, verifying the existence of serial correlation in the error terms. These results suggest that the regression models are expected to take into consideration the autocorrelation by employing robust estimation to maintain uniform and effective parameter estimates.

Table 7

Regression Results for Main Effects Models

Variables	Model 1	Model 2	Model 3	Model 4
Dependent Variable	ΔMPS	ΔMPS	VOL	VOL
Constant	-12.45 (8.62)	-8.94 (7.86)	42.68**(12.46)	38.94** (11.82)
Dividend Per Share (DPS)	0.68** (0.18)	–	-0.42** (0.12)	–
Dividend Payout Ratio (DPR)	–	0.24* (0.09)	–	0.08 (0.06)
Earnings Per Share (EPS)	0.32* (0.14)	0.41* (0.16)	-0.18 (0.10)	-0.22 (0.12)
Firm Size (SIZE)	2.18 (1.86)	1.94(1.72)	-5.0616	-4.5156
Leverage (LEV)	-1.24 (0.98)	-1.42 (1.04)	2.86* (1.12)	2.64* (1.08)
R-squared	0.624	0.586	0.472	0.438
Adjusted R^2	0.582	0.538	0.426	0.388
F-statistic	14.86**	12.94**	8.42**	7.86**
Observations	20	20	20	20

Table 7 will give the results of the main effect models test that discuss the impact of dividend policy on share price movements (ΔMPS) and share price volatility (VOL). The dividend payout ratio (DPR) and dividend per share (DPS) are considered to form the primary explanatory variables and earnings per share (EPS), firm size (SIZE), and leverage (LEV) are considered to be control variables. In Model 1, DPS has a positive and significant impact on the annual changes in market price per share (0.68, p value less than 0.01), which implies that increased dividend payments are linked to higher increases in share price, which validates dividend signalling theory. EPS also exhibits a positive significant relationship with ΔMPS (= 0.32, $p < 0.05$), implying that profitability is one of the contributors to the growth of the stock price. Nevertheless, SIZE and LEV are statistically non-significant. The model accounts 62.4 percent of the change in share prices (R 2 = 0.624).

Model 2 replaces DPS by DPR, and the significant positive effect on price movements is observed (0.24, $p<0.05$), which means that an increased distribution ratio of earnings improves the performance of stock but with a lower explanatory power (R2=0.586). DPS in volatility models shows negative significant relationship with VOL ($\beta = -0.42$, $p = 0.01$), which shows that higher dividends increase stability of prices. On the other hand, DPR has an inconsequential impact on volatility. The leverage has a positive impact on volatility (2.86, p 0. 05), whereas the size of the firm does not enhance volatility. Model 3 and Model 4 explain 47.2 and 43.8 percent of the variation of volatility

respectively. Altogether, the findings affirm the fact that dividend per share is significant compared to payout ratio in determining the share price growth and stability in the banking industry.

Table 8

Summary of Hypothesis Testing

Hypothesis	Statement	Finding	Conclusion
H_1	DPS has significant positive impact on ΔMPS	$\beta = 0.68$, $p < 0.01$	Supported
H_2	DPR has significant impact on ΔMPS	$\beta = 0.24$, $p < 0.05$	Supported
H_3	DPS has signiicant negative impact on VOL	$\beta = -0.42$, $p < 0.01$	Supported
H_4	DPR has significant impact on VOL	$\beta = 0.08$, $p > 0.10$	Not Supported
H_5	Inflation moderates dividend-price relationships	DPS×INF: $\beta = -0.12$ (ΔMPS), $\beta = 0.08$ (VOL); both $p < 0.05$	Supported
H_6	GDP growth moderates dividend-price relationships	DPS×GDP: $\beta = 0.09$ (ΔMPS), $p < 0.05$; VOL interaction insignificant	Partially Supported
H_7	Interest rate moderates dividend-price relationships	DPS×INT: $\beta = -0.08$ (ΔMPS), $\beta = 0.05$ (VOL); both $p < 0.05$	Supported

Table 8 gives a brief overview of the hypothesis-testing findings in regards to interdependences among dividend policy, macroeconomic moderators, and share-price movements. In the empirical evidence, it is shown that dividend per share (DPS) has a positively signed, statistically significant impact on the annual changes in the market price per share (81 = 0.68, p 0.01). This result is consistent with Hypothesis H 1 and supports the signalling theory according to which dividend payments convey positive signals about the financial health of a company and its future. Similarly, the dividend payout ratio (DPR) shows that the variable is significantly positively related with price changes (0.24, p -0.05), thus supporting Hypothesis H 2 and indicating that a high distribution of earnings can lead to stock-price enrichment. DPS also shows a strong negative correlation with share-price volatility (= -0.42, p = 0.01), which supports Hypothesis H 3 and suggests that when dividends are high, it reduces investor uncertainty and creates a stable market. Conversely, DPR is insignificantly related to volatility (H 0 4) (H 0 4), so Hypothesis H 4 is rejected.

The findings also verify that the macroeconomic conditions dilute dividend-price relationships. The positive dividend effect is weakened by inflation, GDP growth increases the price appreciation mechanisms, interest rates have a strong influence on both price movement and volatility, which confirm Hypotheses H 5 H 7. The results highlight the fact that the effectiveness of dividend policy depends on the nature of the economic conditions. Model 5 uses a fixed-effects model that includes terms of interaction to examine these moderating effects. The overall result of the findings indicates a very vital need to consider macro-economic environments in evaluating these effects of dividend policy on the stock-market performance.

Table 9

Moderation Effects of Macroeconomic Variables

Variables	Model 5a (ΔMPS)	Model 5b (VOL)
Constant	-18.42 (12.86)	52.86** (16.42)
Dividend Per Share (DPS)	0.82** (0.24)	-0.56** (0.18)
Dividend Payout Ratio (DPR)	0.28* (0.12)	0.10 (0.08)
Inflation Rate (INF)	-1.5252	1.42 (0.78)
GDP Growth Rate (GDP)	2.42* (1.04)	-1.18 (0.86)
Interest Rate (INT)	-1.7072	1.62* (0.72)
DPS × INF	-0.006	0.08* (0.03)
DPS × GDP	0.09* (0.04)	-0.03 (0.02)
DPS × INT	-0.0024	0.05* (0.02)
DPR × INF	-0.04 (0.02)	0.02 (0.01)
DPR × GDP	0.03 (0.02)	-0.01 (0.01)
DPR × INT	-0.0003	0.02 (0.01)
Earnings Per Share (EPS)	0.28* (0.12)	-0.16 (0.10)
Firm Size (SIZE)	1.86 (1.42)	-4.4712
Leverage (LEV)	-1.12 (0.94)	2.48* (1.06)
R-squared	0.786	0.684
Adjusted R^2	0.712	0.602
F-statistic	10.64**	8.32**
Observations	20	20

The results of the regression concerning the moderating effect of the macroeconomic covariates, the inflation rate (INF), the gross domestic product growth rate (GDP), and the interest rate (INT), on the relationship between dividend policy and stock-price behaviour are reported in Table 9. Two specifications of analysis were estimated. The determinants of the annual change in market price per share (0) are explored in Model 5a, with the determinants of share-price volatility (VOL) being evaluated in Model 5b. The results show that dividend per share (DPS) has a positive and statistically significant effect on the changes in share-price (0.82, p 0.05), indicating that the higher the dividend payouts are, the higher the increase in share-price. The dividend payout ratios (DPR) also show positive significant dependence on the price movements (0.28, p = 0.05). The GDP growth has a positive influence on the share-price performance, which is explained by the fact that, in cases of economic growth, the investor confidence is augmented; the inflation and interest rates have negative effects on the price changes, which can be explained by the fact that the levels of uncertainty and costs on borrowing increase.

The effects of interaction indicate that GDP growth enhances the positive dividend-price relation (DPS = 0.09 GDP = 0.05, p < 0.05) but inflation and interest rates diminish dividend signalling effects. In model 5b, DPS turns out to have a negative and significant contribution to volatility (= -0.56, p = 0.01) meaning that high dividends lead to price stability. The rise in interest rate is linked to increased volatility (1.62, p < 0.05) and the interaction coefficients show that the effects of inflationary pressures and interest-rate pressures increase dividend sensitivity.

The Model 5a and 5b explain the variance of 78.6 and 68.4 respectively hence affirming high model validity.

Discussion

The results of this research affirm that dividend policy plays an important role in the share price behaviour of the banking industry in Nepal. Dividend per share (DPS) shows a significant positive correlation with annual returns of market price per share (0.68 = 0.01), which means that a one-unit shift in dividend payment would lead to a share price growth of about 0.68 percent. This finding is in line with the signalling theory, the bird-in-the-hand theory and the agency cost theory indicating that announcement of dividends provides high-quality information about future performance of the firm. Previous Nepalese studies like Poudel et al. (2025) and Joshi (2019) also supported the finding by reporting that DPS has a positive impact on market price; Joshi (2019) has estimated that the increase in price is about NPR 12.5-22.7 when the dividend increases by one rupee. In comparison, the dividend payout ratio shows a rather small positive impact (β = 0.24, p = not less than 0.05), which means that investors are more sensitive to the absolute amount of dividends than to the proportionate measures of distribution, which is also the case with Timilsina (2022).

Moreover, the research shows that DPS also decreases the cross-sectional volatility of share prices (0.42, p 0.01), which proves the hypothesis of birds in the hand and suggests that increasing dividend payouts increases the stability in the market. This is consistent with the results of Sharma et al. (2025) and Dhakal (2021), which also found out negative correlations between dividend yield or DPS and stock price volatility in Nepalese commercial banks. The dividend payout ratio, on the other hand, shows no significant correlation with the volatility (0.08, 0.10>0.10), which is inconsistent with Thapa (2025), who found positive effects of the payout ratio in the microfinance industry. This is attributed to the fact that the divergence in the DPS and DPR effects indicates that cash dividend income that investors have received is more attractive than the distribution of earnings based on ratios, especially in information-constrained developing market environments where payout ratios are more likely to be difficult to interpret.

The moderating impacts of the macroeconomic factors show that dividend policy efficacy is dependent on the dominant economic conditions. It can be seen that inflation modulates the positive effect of DPS on share price gains, as the interaction effect (DPS x INF) has negative significance (= -0.12, p = 0.05) which supports Shrestha and Adhikari (2021) who concluded that high inflation reduces dividend attractiveness through the loss of real returns. GDP growth supports the dividend signalling effect (DPS × GDP = 0.09, p = 0.05) which suggests that the growth of economy enhances investor expectations of dividend sustainability, which aligns with Aryal (2020). On the other hand, a rise in interest rates will have less of the impact on dividend valuation (DPS × INT = -0.08, p = -0.05) and will be more sensitive to volatile price movements (8 0.05 = 0.05). All in all, the model explains 78.6 per cent of the variation in share price changes and 68.4 per cent of the variance in the volatility, thus substantiating the soundness of the empirical findings and highlighting the fact that the impact of dividends depends on the macroeconomic conditions.

Conclusion

This study examined the impact of dividend policy on the share-price dynamic in the developing Nepalese capital market by examining how dividend per share (DPS) and dividend payout ratio (PPR) affect changes in annual market price per share and share-price volatility and the study also controlled the moderating effect of macroeconomic factor like the inflation rate, gross domestic product (GDP) growth, and the interest rate. There is empirical evidence suggesting that DPS has a strong positive influence on share-price growth (= 0.68, p = 0.01) and strong negative influence on share-price volatility (= -0.42, p = 0.01) to support the signalling theory and the bird-in-the-hand

theory. Likewise, the effect of PPR on share-price movements (= 0.24, = 0.05) is positive whereas the impact on volatility is not significant, which implies that the investors respond more to full-amount dividend cash payments compared to pro rata distributions of earnings. Therefore, the outcomes suggest that dividend distribution increases the share market value and stability in Nepal banking stocks.

The moderation tests also show that the dividendprice relationship is significantly influenced by macroeconomic conditions. The benefits of dividends on share-price growth are weakened in the high-inflation (DPS × INF = -0.12, $p < 0.05$) and high-interest-rate (DPS × INT = -0.08, $p < 0.05$) markets whereas economic growth enhances the dividend signalling effects (DPS × GDP = 0.09, $p < 0.05$). Furthermore, inflation (=0.08, p =0.05) and interest rate effects (= 0.05, p =0.03) reduce the stabilizing effect of dividends to volatility. These results support the fact that the effectiveness of the dividend policy depends on the existing economic environment, and thus clarifies the existing heterogeneous evidence documented in the past dividend studies. On the whole, the research contributes to the existing literature on dividend policies, showing that the effects of dividends depend on the context, especially in the developing market contexts of information asymmetry and macroeconomic instability that determine investor behaviour.

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