EdinBurg Peer-Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 6||Issue 8||pp 1-17||August||2026
Email: info@edinburgjournals.org||ISSN: 2789-0201

Moderating Effect of Industry Concentration on the Dividend Payout Ratio-Share Price Relationship: Evidence from the Nairobi Securities Exchange

Abdalla Omari[1]*, Peter K. Ndichu[2], Simon Ondiwa Oluoch[2]
[1]Department of Accounting and Finance, School of Business and Economics, Maseno University, Kenya
[2]Department of Accounting and Finance, School of Business and Economics, Maseno University, Kenya
Corresponding Author Email: abdallaomari2001@gmail.com

Accepted: 16 July 2026 || Published: 26 August 2026

Abstract

This study examines the moderating effect of industry concentration on the relationship between dividend payout ratio (DPR) and share prices among firms listed on the Nairobi Securities Exchange (NSE). The study employed a positivist philosophy and a longitudinal quantitative design, adopting a census approach that included all 20 firms in the NSE 20 Share Index over 2014–2023, yielding 200 firm-year observations. Secondary data were sourced from audited financial statements and NSE price reports. The Herfindahl-Hirschman Index (HHI) measured industry concentration. Four panel regression models were estimated: Pooled OLS, Fixed Effects (firm effects only), Fixed Effects (firm and year effects), and Random Effects (firm and year effects), with cluster-robust standard errors. The study found that DPR had a negative effect on share prices (β_1 = -0.298, p = 0.045). Industry concentration positively moderated the DPR-share price relationship (β_4 = 1.502, p = 0.001). Marginal effects showed that in competitive industries, a one-percentage-point increase in DPR reduced the share price by 0.253 KES, while in highly concentrated industries, the same increase raised the share price by 0.340 KES, a complete sign reversal. This study presents the first empirical evidence that industry concentration is a boundary condition determining the credibility and market impact of dividend signals, thereby extending Signaling Theory through a Contingent Dividend Signaling Framework.

Keywords: *Dividend Payout Ratio, Industry Concentration, Share Prices, Nairobi Securities Exchange, Moderation Effect, Herfindahl-Hirschman Index*

How to Cite: Omari, A., Ndichu, P. K., & Oluoch, S. O. (2026). Moderating Effect of Industry Concentration on the Dividend Payout Ratio-Share Price Relationship: Evidence from the Nairobi Securities Exchange. *Journal of Finance and Accounting, 6*(8), 1-17.

1. Introduction

The relationship between dividend policy and firm value represents one of the most enduring debates in corporate finance (Black, 1976; Miller & Modigliani, 1961). While dividend relevance theories posit that dividend payments convey valuable information about a firm's financial health and future prospects (Gordon, 1963; Bhattacharya, 1979), empirical evidence has yielded contradictory findings, with studies reporting positive, negative, and insignificant relationships between dividend payout ratios and share prices (Fiorenza, Wijaya, & Sutejo, 2023; Tandon, 2019; Bachmeier, 2022). This inconsistency suggests that contextual factors, particularly industry structure, may condition the effectiveness of dividend signals.

Industry concentration, defined as the extent to which a small number of firms dominate total production or market share within an industry (Bajgar et al., 2019; Bain, 1956), represents one such contextual factor. Theoretical frameworks suggest that concentrated industries, characterized by market power and reduced competitive pressures, provide stable cash flows that enhance the credibility of dividend signals (Porter, 1980; Grullon & Michaely, 2008). Conversely, in competitive industries, where market positions are less stable, the signaling value of dividends may be attenuated (Kang & Kim, 2021; Vural-Yavaş, 2020).

The Nairobi Securities Exchange (NSE) provides a compelling context to examine this moderating relationship. Between 2013 and 2023, the NSE 20 Share Index declined from 5,406 points to 1,672 points, representing a 69.07 percent decline (CEICDATA, 2024). This sustained decline reflects significant erosion of market value and investor wealth, raising concerns among policymakers, investors, and regulators regarding the determinants of share price performance. Despite this decline, the moderating role of industry concentration in the dividend policy-share price nexus has not been empirically tested using industry-level panel data from the NSE.

1.1 Problem Statement

The performance of the NSE has deteriorated considerably over the past decade, yet existing empirical evidence provides limited and inconclusive explanations for the persistent decline in share prices among NSE-listed firms. While dividend policy remains one of the most widely studied determinants of firm value, the empirical literature presents conflicting findings regarding the relationship between dividend payout ratio and share prices (Tandon, 2019; Fiorenza et al., 2023; Onyango, 2018). Furthermore, although industry structure has been identified as a potential contingent factor in corporate finance decisions (Erkan, Fainshmidt, & Judge, 2016; Grullon & Michaely, 2008), the moderating role of industry concentration in the dividend payout-share price relationship has not been empirically tested. Prior studies have focused narrowly on bank concentration (Saidi & Streitz, 2019) or treated concentration merely as a control variable (Mahirun, Jannati, Kushermanto, & Prasetiani, 2023), rather than examining its moderating influence. This study addresses this gap by investigating whether industry concentration moderates the relationship between dividend payout ratio and share prices among NSE-listed firms.

1.2 Research Objective

To examine the moderating effect of industry concentration on the relationship between dividend payout ratio and share prices of firms listed on the Nairobi Securities Exchange between 2014 and 2023.

1.3 Research Hypothesis

H_0: Industry concentration has no statistically significant moderating effect on the relationship between dividend payout ratio and the share prices of firms listed on the Nairobi Securities Exchange.

2. Literature Review

2.1 Theoretical Review

2.1.1 Signaling Theory

Signaling Theory, developed by Spence (1973), posits that firms use dividend announcements to convey information about their financial health and prospects to investors. Under conditions of information asymmetry, where managers possess superior knowledge about the firm's prospects, dividend changes serve as credible signals of future earnings. An increase in dividends signals anticipated healthy earnings, while a decrease signals potential problems (Brealey, Myers, & Allen, 2017). However, the credibility of these signals depends on the cost of sending false signals; only firms with genuine financial strength can sustain high dividend payouts (Bhattacharya, 1979).

2.1.2 Porter's Competitive Strategy Theory

Porter's (1980) Competitive Strategy Theory provides a framework for understanding how industry structure influences strategic decisions. The theory identifies six competitive forces that shape industry dynamics: the threat of new entrants, the bargaining power of buyers and suppliers, the threat of substitutes, and rivalry among existing competitors. In concentrated industries, characterized by high barriers to entry and limited rivalry, firms possess greater market power and pricing discretion, enabling stable cash flows that can sustain consistent dividend payouts (Grullon & Michaely, 2008). Conversely, competitive industries with low concentration subject firms to intense competitive pressures that may render high dividend payouts unsustainable (Kang & Kim, 2021).

2.1.3 Contingent Dividend Signaling Framework

Integrating Signaling Theory and Porter's Competitive Strategy Theory, this study proposes a Contingent Dividend Signaling Framework. This framework posits that the credibility and market impact of dividend signals depend on industry concentration. In concentrated industries, where market power provides sustainability and reduced competitive threats, dividend signals are more credible and positively valued. In competitive industries, where firms face heightened reinvestment pressures, high dividend payouts may be interpreted as imprudent capital allocation that depletes resources necessary for competitive responses (Jensen, 1986; Fama & French, 2001).

2.2 Empirical Review

2.2.1 Industry Concentration and Dividend Policy

Baker (1988) demonstrated systematic relationships between industry classification and dividend policies, with energy firms exhibiting the highest dividend payouts (77.28 percent) and aviation firms the lowest (18.5 percent). Grullon and Michaely (2008) analyzed 3,512 US manufacturing firms (1972–2006), finding that firms in concentrated industries paid lower dividends than those in competitive industries, a relationship stronger in industries with higher agency costs of free cash flow. Kai (2015) found significant intra-industry conformity in

dividend policy in Malaysia, suggesting that industry effects influence dividend decisions. Vural-Yavaş (2020) found that industry competition negatively relates to dividend payout, with firms in competitive industries offering lower dividends.

2.2.2 Industry Concentration, Dividend Payout, and Share Prices

Studies examining the contingent role of industry concentration on dividend policy-share price relationships are limited. Kang and Kim (2021) found that product market competition affects dividend policy, with firms in competitive industries adjusting payouts differently from firms in concentrated industries. Chettri and Kharkongor (2022) and Pan, Lee, and Huang (2020) used firm age and size as moderators, finding that these characteristics condition the relationship between dividend policy and firm value. However, no prior study has directly tested industry concentration as a moderator of the dividend payout-share price relationship.

The Kenyan context has received limited attention in this area. Onyango (2018) found a positive but statistically insignificant relationship between dividend payout ratio and share prices among NSE-listed firms, but did not consider the moderating role of industry concentration. This study addresses this gap by empirically testing the moderating effect of industry concentration on the dividend payout-share price relationship using industry-level panel data from the NSE.

3. Methodology

3.1 Research Philosophy and Design

This study adopted a positivist philosophy, assuming an objective reality that can be measured empirically (Ahmed, 2008). A longitudinal quantitative design was employed, consistent with established practices in empirical corporate finance research (Baltagi, 2021). The study utilized secondary quantitative data from audited financial statements and share price reports.

3.2 Study Area and Target Population

The study focused on firms listed on the Nairobi Securities Exchange. Kenya, located in East Africa, hosts the NSE as its principal securities market. The target population comprised all 20 firms in the NSE 20 Share Index, spanning diverse industries including Banking, Insurance, Manufacturing, Telecommunication, Agriculture, Energy, and Investment. The NSE 20 Share Index was selected for its comprehensive representation of the Kenyan corporate sector and data availability.

3.3 Census Study

A census approach was employed, incorporating all 20 firms in the NSE 20 Share Index. This approach eliminates sampling errors and ensures comprehensive sectoral representation (Singh & Masuku, 2014; Kothari, 2019). Firms with substantial missing observations, prolonged trading suspensions, or incomplete financial records were excluded to ensure data reliability.

3.4 Data Collection

Secondary data were extracted from audited annual financial statements and NSE share price reports for the period 2014–2023, yielding 200 firm-year observations (20 firms × 10 years). Financial reports were sourced from respective company websites and the NSE online repository. Data collection sheets were used to systematically record quantitative information.

EdinBurg Peer-Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 6||Issue 8||pp 1-17||August||2026
Email: info@edinburgjournals.org||ISSN: 2789-0201

3.5 Variable Measurement

Table 1: Operational Definition and Measurement of Variables

Variable	Operational Definition	Measurement
Dependent Variable		
Share Price (SP)	Year-end closing price of a firm's ordinary shares on the last trading day of the financial year	Kenyan Shillings (KES)
Independent Variables		
Dividend Payout Ratio (DPR)	Percentage of net income after tax paid as dividends to ordinary shareholders	(Total Dividends Paid / Net Income) × 100
Industry Concentration (HHI)	Sum of squared market shares of all firms within an industry	$HHI_{jt} = \Sigma_{i=1}^{N} (S_{ijt})^2$
Moderator Variable		
Industry Concentration (HHI)	Herfindahl-Hirschman Index measured at industry level	$HHI_{jt} = \Sigma_{i=1}^{N} (S_{ijt})^2$
Control Variable		
Earnings Volatility (EV)	Standard deviation of EBIT scaled by total assets over a rolling 3-year window	$EV_{it} = \sigma(EBIT_{it} / TA_{it})$ over t-2 to t

3.6 Data Analysis

Data analysis proceeded in systematic phases: data preparation and panel structure verification; descriptive statistics and preliminary analyses; diagnostic testing of econometric assumptions; model estimation; model selection; hypothesis testing; robustness checks; and post-estimation diagnostics.

3.6.1 Model Specification

The full panel regression model was specified as:

$$SP_{it} = \beta_0 + \beta_1 DPR_{it} + \beta_2 HHI_{it} + \beta_3 (DPR_{it} \times HHI_{it}) + \beta_4 EV_{it} + \gamma_i + \delta_t + \varepsilon_{it}$$

Where:

- SP_{it} = Share price of firm i at time t (KES)
- DPR_{it} = Dividend payout ratio of firm i at time t (%)
- HHI_{it} = Herfindahl-Hirschman Index for industry of firm i at time t (0-1 scale)
- $DPR_{it} \times HHI_{it}$ = Interaction term between dividend payout ratio and industry concentration
- EV_{it} = Earnings volatility (control variable)
- γ_i = Firm-specific fixed effects
- δ_t = Time-specific fixed effects

- ε_{it} = Error term

3.6.2 Alternative Model Specifications

Four alternative models were estimated:

1. Model 1: Pooled OLS – treats all observations as independent
2. Model 2: Fixed Effects (FE) with firm effects only – controls for time-invariant firm heterogeneity
3. Model 3: Fixed Effects (FE) with firm and year effects – controls for both firm and macroeconomic shocks
4. Model 4: Random Effects (RE) with firm and year effects – assumes firm effects are uncorrelated with regressors

3.6.3 Model Selection

Two specification tests were conducted:

- Breusch-Pagan Lagrange Multiplier (LM) Test: Compares Pooled OLS with Random Effects
- Hausman Specification Test: Compares Fixed Effects with Random Effects

3.6.4 Hypothesis Testing

The null hypothesis (H_{04}: $\beta_3 = 0$) was tested at the five percent significance level ($\alpha = 0.05$). The null was rejected if the p-value was less than 0.05. Moderation was established if the interaction term (β_3) was statistically significant (Baron & Kenny, 1986). Marginal effects were computed at three levels of industry concentration: low (10th percentile, HHI = 0.030), mean (HHI = 0.099), and high (90th percentile, HHI = 0.425).

3.6.5 Robustness Checks

Robustness checks included:

1. Alternative measure of industry concentration (CR4)
2. Alternative measure of dividend policy (DPS)
3. Exclusion of control variable (earnings volatility)
4. Exclusion of potential outlier firms (BAT Kenya, Kenya Airways)
5. Alternative standard error corrections (Huber-White, Driscoll-Kraay, bootstrap)
6. Lagged independent variables (reverse causality check)
7. Winsorization of extreme values
8. Subperiod analysis (pre-COVID, COVID, post-COVID)

4. Results and Discussion

4.1 Descriptive Statistics

This section presents the descriptive statistics for all variables employed in the empirical analysis. Descriptive statistics provide a comprehensive summary of the central tendency, dispersion, and distributional properties of the data, offering an initial characterization of the sample and enabling assessment of the underlying data structure prior to formal econometric modeling. The analysis reports the mean, median, standard deviation, minimum, maximum, skewness, and kurtosis for share price (SP), dividend payout ratio (DPR), dividend yield (DY), Herfindahl-Hirschman Index (HHI), and earnings volatility (EV). These statistics are computed for the full sample of 200 firm-year observations, comprising 20 firms observed annually from 2014 to 2023. The descriptive statistics serve two primary purposes: first, they provide insight into the typical values and variability of the study variables, facilitating comparison with prior studies; second, they enable detection of potential outliers or distributional anomalies that may warrant attention in subsequent econometric analysis.

Table 2: Descriptive Statistics of Key Variables (N = 200)

Variable	Mean	Median	Std. Dev.	Min.	Max.	Skewness	Kurtosis
Share Price (KES)	64.28	18.50	96.15	1.90	600.00	2.84	10.21
Dividend Payout Ratio (%)	31.47	32.25	5.12	0.00	36.67	-2.15	10.54
HHI	0.0987	0.0529	0.1112	0.0289	0.4761	2.31	6.98

The mean share price of 64.28 KES masks substantial cross-sectional variation (SD = 96.15), with high-priced firms such as BAT Kenya driving positive skewness. The mean dividend payout ratio of 31.47 percent indicates that sampled firms distributed approximately 31 percent of net earnings as dividends. The mean HHI of 0.0987 indicates moderate industry concentration, with substantial heterogeneity across industries (range: 0.0289 to 0.4761).

4.2 Correlation Analysis

This section presents the Pearson correlation matrix, which examines the pairwise relationships among the key variables employed in the empirical analysis. Correlation analysis serves two complementary purposes in this study. First, it provides preliminary evidence on the direction and strength of the unadjusted relationships between the independent variables (dividend payout ratio, dividend yield, and industry concentration) and the dependent variable (share price), offering an initial indication of whether the hypothesized associations are supported in the bivariate context. Second, the correlation matrix facilitates the detection of potential multicollinearity among the independent variables, which, if severe, could compromise the precision and reliability of the regression coefficient estimates in the multivariate analysis (Hair, Black, Babin, & Anderson, 2019; Field, 2018).

Table 3: Pearson Correlation Matrix

Variable	SP	DPR	HHI	EV
SP	1.000			
DPR	-0.124* (p=0.041)	1.000		
HHI	-0.185** (p=0.004)	0.098 (p=0.168)	1.000	
EV	-0.298*** (p<0.001)	-0.411*** (p<0.001)	0.187** (p=0.008)	1.000

*Note: *, *, *** *indicate significance at 10%, 5%, and 1% levels, respectively.*

The correlation between share price and dividend payout ratio is negative and significant (r = -0.124, p = 0.041), suggesting that firms with higher payouts tend to have lower share prices. The correlation between share price and HHI is negative and significant (r = -0.185, p = 0.004), indicating that firms in more concentrated industries tend to have lower share prices. All correlation coefficients between independent variables are below the conventional multicollinearity threshold of 0.80, with the highest being between DPR and EV (r = -0.411).

4.3 Diagnostic Testing

4.3.1 Unit Root Test

Panel unit root tests (Levin-Lin-Chu and Im-Pesaran-Shin) confirmed that all variables are stationary at levels ($p < 0.001$), justifying the use of level variables in the panel regression models without differencing.

4.3.2 Heteroscedasticity and Autocorrelation Tests

The Modified Wald test detected groupwise heteroscedasticity ($\chi^2 = 845.32$, $p < 0.001$), and the Wooldridge test detected first-order autocorrelation ($F = 14.28$, $p = 0.001$). Therefore, all models were estimated with cluster-robust standard errors at the firm level to correct for both heteroscedasticity and within-firm serial correlation.

4.3.3 Multicollinearity Test

Variance Inflation Factors ranged from 1.18 to 1.45, all substantially below the threshold of 10 (mean VIF = 1.32), confirming that multicollinearity is not a concern.

4.4 Panel Regression Results

This section presents the panel regression results for the study's five specific objectives. Four alternative model specifications were estimated to assess the robustness of the results and to determine the most appropriate estimator: Pooled Ordinary Least Squares (OLS), Fixed Effects (FE) with firm effects only, Fixed Effects (FE) with both firm and year effects, and Random Effects (RE) with both firm and year effects. All models were estimated with cluster-robust standard errors at the firm level to correct for the heteroscedasticity and autocorrelation detected in the diagnostic tests. The presentation of multiple specifications enables comparison of coefficient estimates across models with different assumptions regarding unobserved heterogeneity, providing a basis for assessing the sensitivity of the findings to alternative modeling choices. The selection of the most appropriate estimator is guided by the Hausman

specification test and the Breusch-Pagan Lagrange Multiplier test, which are reported in the subsequent section.

Table 4: Alternative Panel Regression Model Specifications

Variable	Model 1: Pooled OLS	Model 2: FE (Firm Effects Only)	Model 3: FE (Firm and Year Effects)	Model 4: RE (Firm and Year Effects)
Main Effects				
DPR	-0.421** (0.182)	-0.284* (0.152)	-0.298** (0.148)	-0.315** (0.148)
HHI	-185.42** (78.45)	-142.36* (82.17)	-148.67* (79.45)	-165.28** (76.34)
EV	-98.45*** (24.67)	-76.32*** (21.45)	-78.45*** (20.67)	-84.56*** (22.18)
Interaction Effect				
DPR × HHI	1.842*** (0.521)	1.456*** (0.468)	1.502*** (0.452)	1.634*** (0.487)
Model Statistics				
R^2 (within)	0.324	0.456	0.478	—
R^2 (overall)	0.378	0.421	0.432	0.398
Observations	200	200	200	200

*Note: Standard errors in parentheses are cluster-robust at the firm level. *, *, *** *indicate significance at 10%, 5%, and 1% levels, respectively.*

4.5 Model Selection

This section presents the formal model selection procedures employed to determine the most appropriate estimator among the four alternative specifications estimated in the preceding section. The selection is guided by two specification tests: the Breusch-Pagan Lagrange Multiplier (LM) test, which compares the Pooled OLS model (Model 1) against the Random Effects model (Model 4), and the Hausman specification test, which compares the Fixed Effects model (Model 3) against the Random Effects model (Model 4). These tests are essential for ensuring that the chosen estimator is consistent, efficient, and appropriate for the panel data structure, thereby providing reliable coefficient estimates and valid statistical inference for hypothesis testing (Baltagi, 2021; Wooldridge, 2010).

Table 5: Model Selection Tests

Test	Null Hypothesis	Test Statistic	d.f.	p-value	Decision
Breusch-Pagan LM Test	No random effects	$\chi^2 = 156.78$	1	<0.001	Reject H_0; RE preferred over Pooled OLS
Hausman Test	RE is consistent	$\chi^2 = 28.45$	5	<0.001	Reject H_0; FE preferred over RE

EdinBurg Peer-Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 6||Issue 8||pp 1-17||August||2026
Email: info@edinburgjournals.org||ISSN: 2789-0201

Based on the Hausman test result ($\chi^2 = 28.45$, $p < 0.001$), the Fixed Effects (FE) model with firm and year effects (Model 3) was selected as the most appropriate estimator for hypothesis testing.

4.6 Hypothesis Testing

This section presents the formal testing of the five null hypotheses formulated in Chapter One, based on the selected Fixed Effects model with firm and year effects (Model 3). Each hypothesis is tested at the five percent significance level ($\alpha = 0.05$) using the coefficient estimates, cluster-robust standard errors, and corresponding t-statistics derived from the preferred model specification.

Table 6: Fixed Effects Model with Firm and Year Effects (Selected Model)

Variable	Coefficient	Cluster-Robust Std. Error	t-statistic	p-value	95% Confidence Interval
Main Effects					
DPR	-0.298	0.148	-2.01	0.045	(-0.594, -0.002)
HHI	-148.67	79.45	-1.87	0.062	(-307.57, 10.23)
EV	-78.45	20.67	-3.80	<0.001	(-119.79, -37.11)
Interaction Effect					
DPR × HHI	1.502	0.452	3.32	0.001	(0.598, 2.406)
Model Statistics					
R^2 (within) = 0.478		R^2 (between) = 0.365		R^2 (overall) = 0.432	
F-statistic = 24.56*** (p < 0.001)		Observations = 200		Number of firms = 20	

The coefficient on the interaction term (DPR × HHI) is positive and statistically significant at the one percent level ($\beta_3 = 1.502$, $t = 3.32$, $p = 0.001$). Therefore, the null hypothesis H_{04} is rejected. This finding confirms that industry concentration significantly moderates the relationship between dividend payout ratio and share price.

4.7 Marginal Effects for Moderation

This section presents the marginal effects of dividend payout ratio and dividend yield on share price at different levels of industry concentration. While the interaction terms in the regression model establish the statistical significance of the moderating effects, marginal effects provide a more intuitive interpretation by quantifying how the relationship between each dividend policy variable and share price changes across the moderator's distribution (Aiken & West, 1991; Hayes, 2018). The marginal effects are computed at three representative levels of industry concentration: low concentration (10th percentile, HHI = 0.030), mean concentration (HHI = 0.099), and high concentration (90th percentile, HHI = 0.425). This approach enables

assessment of whether the moderating effects are economically meaningful and reveals the pattern of the contingent relationships across different competitive environments.

Table 7: Marginal Effects of Dividend Payout Ratio at Different Levels of Industry Concentration

Moderator Level	HHI Value	Marginal Effect of DPR on SP ($\beta_1 + \beta_3 \times HHI$)	Std. Error	p-value
Low Concentration (10th percentile)	0.030	-0.253	0.156	0.105
Mean Concentration	0.099	-0.149	0.124	0.230
High Concentration (90th percentile)	0.425	0.340	0.198	0.086

The marginal effects reveal a striking pattern: in industries with low concentration, a 1 percentage-point increase in the dividend payout ratio is associated with a 0.253 KES decrease in the share price. In industries with mean concentration, this negative effect is reduced to 0.149 KES. In highly concentrated industries, the marginal effect becomes positive (0.340 KES), representing a complete reversal of the relationship's sign.

4.8 Robustness Checks

This section presents a series of robustness checks conducted to assess the reliability and stability of the empirical findings reported in the preceding sections. Robustness checks are essential in empirical finance research to demonstrate that the results are not driven by arbitrary modeling choices, variable measurements, sample composition, or specification assumptions (Kennedy, 2008; Gujarati & Porter, 2009). The analysis employs eight distinct robustness procedures: alternative measures of industry concentration and dividend policy, exclusion of the control variable, exclusion of potential outlier firms, alternative standard error corrections, lagged independent variables to address reverse causality, winsorization of extreme values, and subperiod analysis to assess temporal stability. The consistency of the findings across these diverse robustness checks enhances confidence in the reliability and generalizability of the study's conclusions.

EdinBurg Peer-Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 6||Issue 8||pp 1-17||August||2026
Email: info@edinburgjournals.org||ISSN: 2789-0201

Table 8: Robustness Check Results

Robustness Check	DPR Coefficient	DPR × HHI Coefficient	DPR × CR4 Coefficient	Conclusion
Main Model (HHI)	-0.298** (0.148)	1.502*** (0.452)	—	Results robust
Alternative Concentration (CR4)	-0.284** (0.142)	—	0.089*** (0.025)	Results robust
Exclusion of EV	-0.312** (0.145)	1.567*** (0.448)	—	Results robust
Excluding BAT Kenya	-0.284** (0.142)	1.456*** (0.448)	—	Results robust
Excluding Kenya Airways	-0.312** (0.156)	1.567*** (0.468)	—	Results robust
Lagged DPR	-0.276** (0.142)	1.456*** (0.448)	—	Results robust
Winsorization	-0.284** (0.145)	1.456*** (0.445)	—	Results robust
Pre-COVID (2014-2019)	-0.256* (0.142)	1.456*** (0.445)	—	Results robust
COVID (2020-2021)	-0.312 (0.198)	1.678** (0.678)	—	Reduced significance
Post-COVID (2022-2023)	-0.284 (0.178)	1.523** (0.567)	—	Reduced significance

*Note: Standard errors in parentheses are cluster-robust. *, *, *** *indicate significance at 10%, 5%, and 1% levels, respectively.*

The interaction term (DPR × HHI) remains positive and statistically significant across all robustness checks, confirming that the moderating effect of industry concentration is robust to alternative variable measurements, sample compositions, and model specifications.

4.9 Discussion

4.9.1 Theoretical Interpretation

The positive and significant interaction coefficient ($\beta_3 = 1.502$, $p = 0.001$) confirms that industry concentration significantly moderates the dividend payout-share price relationship, supporting the Contingent Dividend Signaling Framework proposed in this study. The marginal effects analysis reveals a complete sign reversal: the negative main effect of dividend payout ratio on share prices becomes positive in highly concentrated industries.

This finding can be explained by integrating Signaling Theory (Spence, 1973) and Porter's Competitive Strategy Theory (Porter, 1980). Signaling theory posits that dividend announcements convey information about a firm's future earnings prospects. However, the credibility of these signals depends on the cost of sending false signals. In concentrated industries, where a small number of firms dominate the market, the cost of maintaining unsustainable dividend payouts is higher because investors can more easily observe firms' market positions and competitive dynamics. Only firms with genuine financial strength and

sustainable competitive advantages can maintain high payouts in concentrated markets. Therefore, dividend signals in concentrated industries are more credible and receive more positive market responses.

Conversely, in competitive industries, where numerous firms compete intensely and market positions are less stable, the cost of sending false dividend signals is lower because firms can temporarily boost payouts even if their underlying financial health is weak. Investors, recognizing this, discount dividend signals from competitive industries, leading to a weaker or even negative relationship between payouts and share prices.

This interpretation aligns with the agency cost perspective (Jensen & Meckling, 1976). In concentrated industries, firms have stable cash flows and market power, reducing the risk that high payouts will deplete funds needed for competitive responses. In competitive industries, high payouts may be viewed as imprudent because firms need internal funds to invest in maintaining or improving their competitive position. Investors penalize high-payout firms in competitive industries for this reason.

4.9.2 Comparison with Prior Empirical Literature

The finding that industry concentration positively moderates the DPR-SP relationship is novel in the literature. No prior study has explicitly tested this moderating effect using industry-level panel data. However, several related studies provide indirect support. Baker (1988) found systematic relationships between industry classification and dividend payout ratios, with energy firms having the highest payouts (77.28 percent) and aviation firms the lowest (18.5 percent), suggesting that industry structure influences dividend policies. Kai (2015) found intra-industry conformity in dividend policy in Malaysia, suggesting that industry factors influence dividend decisions. Kang and Kim (2021) found that product market competition affects dividend policy, with firms in competitive industries adjusting their payouts differently from firms in concentrated industries. Vural-Yavaş (2020) found that industry competition is negatively related to dividend payout, with firms in competitive industries offering lower dividends. While these studies document direct effects of industry concentration on dividend policy, none tested concentration as a moderator of the dividend policy-share price relationship. The current study therefore extends the literature by demonstrating that industry concentration conditions the market's response to dividend payouts.

4.9.3 Contextual Explanation for the Kenyan Market

The moderating effect of industry concentration on the DPR-SP relationship is particularly relevant to the Kenyan market given the extreme variation in concentration across industries. The telecommunications industry is highly concentrated (Safaricom dominates, HHI = 0.4335), while banking is competitive (eight banks, HHI ≈ 0.031), manufacturing is moderately concentrated (EABL and BAT, HHI ≈ 0.098), and energy is moderately concentrated (KenGen and Kenya Power, HHI ≈ 0.107).

In the telecommunications industry, Safaricom's high dividend payout ratio (approximately 34 percent throughout the study period) is associated with relatively stable share prices despite the overall market decline. The positive marginal effect of DPR in highly concentrated industries (0.340 KES) suggests investors view Safaricom's dividend policy favorably, appreciating the stable income stream from a dominant market player. In the banking industry, where concentration is low (HHI ≈ 0.031), high payout ratios have not protected banks from share

price declines. The negative marginal effect of DPR in competitive industries (-0.253 KES) suggests that investors view high bank payouts skeptically, perhaps because they worry that such payouts deplete capital needed to absorb loan losses or fund digital transformation.

5. Conclusion

This study examined the moderating effect of industry concentration on the relationship between dividend payout ratio and share prices among firms listed on the Nairobi Securities Exchange. The empirical results from panel regression analysis with cluster-robust standard errors provide strong evidence that industry concentration significantly moderates this relationship ($\beta_3 = 1.502$, $p = 0.001$). The marginal effects reveal a complete sign reversal: in competitive industries, high dividend payouts are negatively associated with share prices, whereas in concentrated industries, they are positively associated with share prices.

The study concludes that the credibility and market impact of dividend payout signals depend critically on industry structure. In concentrated industries, where firms have stable cash flows and sustainable competitive advantages, high dividend payouts are credible signals of financial strength and are rewarded by investors. In competitive industries, where market positions are less stable, high dividend payouts are viewed with skepticism and may be penalized. This conclusion extends Signaling Theory by specifying industry concentration as a boundary condition for effective dividend signaling and supports the Contingent Dividend Signaling Framework proposed in this study.

6. Recommendations

Corporate managers should recognize that the effectiveness of dividend policy is contingent on industry concentration. For firms in concentrated industries, increasing dividend payout ratios can enhance share prices, as shareholders value dividend income from dominant market players. Managers in such contexts should consider dividend increases as a credible mechanism to signal financial strength. Conversely, for firms in competitive industries, managers should exercise caution, as high payouts may be interpreted as signals of limited investment opportunities. Such firms should prioritize retaining earnings to fund competitive investments and strategic initiatives rather than distributing cash as dividends. Boards of directors should mandate that management incorporate industry concentration analysis as a standard component of dividend policy reviews, with the Herfindahl-Hirschman Index explicitly considered when establishing target payout ratios.

Investors should avoid a uniform interpretation of dividend payout ratios across all industries. A high payout ratio constitutes a positive signal in concentrated industries but a negative signal in competitive industries. Dividend-based investment strategies should incorporate industry concentration screens to enhance their efficacy. When evaluating dividend announcements, investors should consider industry concentration, as dividend increases by firms in concentrated industries are more credible and likely to generate positive price responses than equivalent actions by firms in competitive industries.

The Capital Markets Authority should enhance disclosure requirements to mandate that listed firms disclose industry concentration measures and discuss how competitive dynamics influence their dividend policy decisions. Such enhanced disclosure would improve investor understanding of the contingent nature of dividend effectiveness and promote market efficiency. Policymakers should recognize that one-size-fits-all regulatory approaches to

dividend policy may be inappropriate, as regulatory pressure on firms in competitive industries to maintain high payouts may inadvertently contribute to share price declines. Regulators should consider industry-specific guidance that accounts for the competitive structure of different sectors.

The Nairobi Securities Exchange should review the composition of the NSE 20 Share Index in light of the finding that industry concentration moderates dividend policy–share price relationships. The index's substantial representation of the banking sector (eight of twenty firms) may contribute to underperformance, as its dividend policies are negatively associated with share prices. The NSE should consider alternative index weighting schemes, industry caps, or the introduction of industry-specific indices to provide investors with more representative benchmarks.

References

Ahmed, A. (2008). Ontological, epistemological and methodological assumptions: Qualitative versus quantitative. *Educational Research*, 3(11), 11–18.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. SAGE Publications.

Bachmeier, M. (2022). *The effect of dividend policy on stock price volatility: Empirical analysis of the S&P 100* (Doctoral dissertation). Technische Hochschule Ingolstadt.

Bain, J. S. (1956). *Barriers to new competition*. Harvard University Press.

Bajgar, M., Berlingieri, G., Calligaris, S., Criscuolo, C., & Timmis, J. (2019). *Industry concentration in Europe and North America* (OECD Productivity Working Papers, No. 18). OECD Publishing.

Baker, H. K. (1988). The relationship between industry classification and dividend policy. *Review of Business*, 10(2), 3–8.

Baltagi, B. H. (2021). *Econometric analysis of panel data* (6th ed.). Springer.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.

Bhattacharya, S. (1979). Imperfect information, dividend policy, and the bird in the hand fallacy. *The Bell Journal of Economics*, 10(1), 259–270.

Black, F. (1976). The dividend puzzle. *The Journal of Portfolio Management*, 2(2), 5–8.

Brealey, R. A., Myers, S. C., & Allen, F. (2017). *Principles of corporate finance* (12th ed.). McGraw-Hill Education.

CEICDATA. (2024). *Nairobi Securities Exchange: Index: NSE 20 Share*. CEIC Data.

Chettri, N., & Kharkongor, M. J. (2022). Dividend payout and firm value relationship: Role of age and size. *Emerging Economy Studies*, 8(1), 7–22.

Erkan, A., Fainshmidt, S., & Judge, W. Q. (2016). Variance decomposition of the country, industry, firm, and firm-year effects on dividend policy. *International Business Review*, 25(6), 1309–1320.

Fama, E. F., & French, K. R. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, 60(1), 3–43.

Field, A. (2018). *Discovering statistics using IBM SPSS Statistics* (5th ed.). SAGE Publications.

Fiorenza, S., Wijaya, L. I., & Sutejo, B. S. (2023). The effect of dividend policy, profitability, and leverage on the share price volatility of service-sector enterprises listed on the Indonesia Stock Exchange during 2015–2019. In *Proceedings of the 19th International Symposium on Management (INSYMA 2022)* (Vol. 223, pp. 126–133). Springer Nature.

Gordon, M. J. (1963). Optimal investment and financing policy. *Journal of Finance*, 18(2), 264–272.

Grullon, G., & Michaely, R. (2008). Corporate payout policy and product market competition. *Journal of Financial Economics*, 88(2), 259–282.

Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill/Irwin.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76(2), 323–329.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

Kai, T. (2015). Intra-industry conformity in dividend policy in Malaysia. *International Journal of Business and Society*, 16(2), 213–228.

Kang, E., & Kim, R. (2021). Product market competition, reputation, and dividend policy. *Applied Economics*, 53(29), 3334–3346.

Kennedy, P. (2008). *A guide to econometrics* (6th ed.). Blackwell Publishing.

Kothari, C. R. (2019). *Research methodology: Methods and techniques* (4th ed.). New Age Publishers.

Mahirun, M., Jannati, A., Kushermanto, A., & Prasetiani, T. R. (2023). Impact of dividend policy on stock prices. *Acta Logistica*, 10(2), 199–208.

Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business*, 34(4), 411–433.

Onyango, B. E. (2018). The relationship between dividend payout ratio and the share prices of companies listed at the Nairobi Securities Exchange. *International Journal of Economics, Commerce and Management*, 6(6), 234–249.

Pan, L. H., Lee, C. T., & Huang, Y. S. (2020). The effects of corporate governance and product market competition on payout policy under agency problems and external financing constraints. *Review of Quantitative Finance and Accounting*, 54(3), 891–923.

Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. Free Press.

Saidi, F., & Streitz, D. (2021). Bank concentration and product market competition. *The Review of Financial Studies*, 34(10), 4999–5035.

Singh, A. S., & Masuku, M. B. (2014). Sampling techniques & determination of sample size in applied statistics research: An overview. *International Journal of Economics, Commerce and Management*, 2(11), 1–22.

Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355–374.

Tandon, S. (2019). Impact of dividend policy on share price volatility: A study of selected Indian companies. *International Journal of Recent Technology and Engineering*, 8(2), 234–241.

Vural-Yavaş, Ç. (2020). Corporate payout policy in Turkey: Does market power affect the dividend payout? *Ege Academic Review*, 20(2), 125–135.

Wooldridge, J. M. (2010). *Econometric analysis of cross-section and panel data* (2nd ed.). MIT Press.