

Analysis of Dividend Stickiness and Free Cash Flow on Firm Value with Profitability as a Moderating Variable

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Abstract

This study examines the impact of dividend stickiness and free cash flow on firm value, with profitability as a moderating variable. Firm value represents an issuer's success in managing shareholder wealth, yet the interaction between cash management and dividend stability remains complex. The research utilizes a quantitative approach analyzing secondary data from 20 constituent companies of the LQ45 index listed on the IDX from 2022 to 2024, resulting in 60 observations. Data were evaluated using panel data regression and Moderated Regression Analysis under REM. The findings indicate that dividend stickiness has no significant effect on firm value, suggesting that investors do not prioritize historical dividend stability. Conversely, free cash flow has a strong, significant positive effect on firm value, demonstrating that abundant free cash is perceived as a positive signal of financial flexibility. Furthermore, profitability fails to moderate the effects of both variables on firm value. This study provides a unique contribution to the Indonesian capital market literature by demonstrating that current accounting profit fluctuations do not alter investor appreciation of direct liquidity signals. Practically, these findings imply that corporate decision-makers and financial managers should prioritize robust cash flow management over rigid dividend enforcement to maximize shareholder wealth and maintain market confidence.

Keywords

Dividend stickiness; Firm value; Free cash flow; Profitability



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INTRODUCTION

Company value is a crucial representation of the issuer's success in managing shareholder wealth, which in the LQ45 index is reflected through market appreciation of share prices as the main indicator of liquidity and public trust (Agustin et al., 2023). In the post-pandemic capital market dynamics, investors tend to place higher value on entities that demonstrate stability, one example being the

phenomenon of dividend stickiness, where management strategically maintains the nominal profit distribution despite fluctuations in net income to avoid negative market sentiment (MA Sari et al., 2020). This dividend rigidity phenomenon is in line with the view (Chen & Yang, 2019). which states that in emerging markets, dividend stability is often perceived as a security for investors compared to the potential for risky capital gains. This consistency is seen as a positive signal regarding the sustainability of future cash flows, but on the other hand, the possession of abundant free cash flow often creates valuation ambiguity (Maulana & Wardhani, 2024). As explained by (Farooq et al., 2022), a stable dividend policy must be supported by transparent cash management; otherwise, cash availability reflects the risk of agency conflicts where managers may use these funds for interests that are not in line with maximizing the Company's value (Yurniwati et al., 2018). The complexity of the relationship between dividend stability and cash availability requires profitability to play a moderating role, considering that a company's ability to generate profits is the fundamental basis that strengthens the validity of its financial policy in the eyes of investors (Dewasiri et al., 2019).

The debate regarding the factors that influence company value still shows a diversity of findings that require further in-depth study (WN Sari et al., 2022). provides evidence that dividend policy is the main factor that triggers stock price increases, but (Toliang et al., 2024) which indicates that the free cash pile is not always responded positively by the market without any guarantee of good working efficiency. From a global perspective, (Ali et al., 2018) found that in Southeast Asian markets, the market tends to appreciate companies that are able to maintain a balance between sticky dividend payments and healthy profitability levels (Ranajee et al., 2018). emphasizes that corporate profits serve as a reinforcing factor that validates whether cash flow management is truly aimed at creating shareholder value. The discrepancies in these research findings raise questions about how dividend stickiness and free cash flow management interact to influence equity value during the 2022-2024 observation period. By incorporating the concept of managerial behavior, which is rarely discussed integratively in Indonesia, this research aims to provide concrete evidence regarding the effectiveness of financial signals in reducing information uncertainty. The results of this study are expected to not only enrich financial management studies but also serve as a reference for market participants in assessing company quality through the lens of dividend policy and cash management.

METHODS

This study employed a quantitative approach to empirically test the relationship between dividend stickiness and free cash flow on firm value, with profitability as a moderating variable. Secondary data were obtained from financial reports and annual reports of LQ45 index constituents on the Indonesia Stock Exchange (IDX) from 2022 to 2024. Purposive sampling focused on LQ45 index companies that met the criteria for complete reporting data during the observation period. Based on these criteria, 20 sample companies were monitored for three years, resulting in a total of 60 observations. This study employed panel data regression analysis with classical assumption testing and a Moderated Regression Analysis (MRA) model to examine the moderating effect of the profitability variable, along with the Operational Definitions of the Variables to be studied. A high company value is usually reflected in a large PBV ratio, indicating that the market believes there is added value beyond the company's physical assets (Ukhriyawati & Dewi, 2019).

$$\text{nilai perusahaan} = \frac{\text{Harga Saham}}{\text{Nilai Buku}}$$

The dividend stickiness variable in this study is operationalized through the dividend stability ratio, which is calculated by comparing the difference in dividends per share (DPS) for the current period with the previous period against the DPS of the base year. (Kim et al., 2017) A high level of dividend rigidity is indicated by a volatility ratio value approaching zero, demonstrating the issuer's commitment to maintaining consistent profit payments to shareholders.

$$\text{DPS Change Ratio} = \frac{DPS_t - DPS_{t-1}}{DPS_{t-1}}$$

DPS_t = Dividend Per Share in the current period (t)

DPS_{t-1} = Dividend Per Share in the previous period (t-1)

Free cash flow analysis is used to measure the efficiency of a corporation in generating net cash beyond basic operational needs and maintenance of fixed assets. (Raditya & Sisdyani, 2024) A high FCF ratio reflects strong liquidity, reducing the company's reliance on external funding. This positive signal of FCF growth is generally well-received by the market because it ensures sustainable investment returns.

$$\text{FCF Ratio} = \frac{\text{Operating Cash Flow} - \text{Capital Expenditure}}{\text{Total Assets}}$$

Through Return on Equity analysis, investors can evaluate a corporation's ability to deliver returns on invested capital. A consistent ROE indicates that management is maximizing internal equity without relying on risky new debt (Rahmawati & Maulana, 2025). This indicator is often used as the market's primary reference in assessing the fundamental quality of a company's business.

$$ROE = \frac{EAT}{Total\ Equity}$$

FINDINGS AND DISCUSSION

Chow Test

	Model 1	Model 2	Model 3
Effects Test			
Cross-section F	0.0475	0.0433	0.0505
Cross-section Chi-square	0.0034	0.0022	0.0016
Conclusion	(FEM)	(FEM)	(FEM)

Based on the results of the Chow test, the three models have the same results, namely the selection of Fixed Effects Model (FEM). Next, a Hausman test will be conducted to further select the best model.

Hausman test

	Model 1	Model 2	Model 3
Test Summary			
Random cross-section	0.1964	1,0000	1,0000
Conclusion	(BRAKE)	(BRAKE)	(BRAKE)

Based on the probability value obtained. It is selected Random Effects Model (REM) for Hausman test results

Normality

Normality Test	Model 1		Model 2		Model 3	
	Prob	Conclusion	Prob	Conclusion	Prob	Conclusion
Probability Value	0.3703	Normal	0.3691	Normal	0.455711	Normal

Based on the probability values obtained, all three models showed results that passed the normality test.

Multicollinearity

X1	X2	Z
1	0.136993908367459	-0.007496575604439

		642
0.136993 90836745 9	1	- 0.2111819 89009331 1
- 0.007496 57560443 9642	- 0.2111819 89009331 1	1

Because none of the correlation values between independent variables exceed 0.80, your research model is free from multicollinearity symptoms.

Autocorrelation

Model	DW-Statistic Value	Safe Range (dU to 4-dU)*	Conclusion
Model 1 (Y = X1, X2)	2.053038	Around 1.65 – 2.35	Autocorrelation Free
Model 2 (Y = X1, X2, Z)	2.072337	Around 1.65 – 2.35	Autocorrelation Free
Model 3 (Y = Moderation Model)	2.084863	Around 1.65 – 2.35	Autocorrelation Free

The DW-stat values of the three models consistently varied around 2 and fell within the autocorrelation-free range. Therefore, it can be concluded that all panel data regression models in this study met classical assumptions and were free from autocorrelation, thus ensuring valid and efficient estimation results.

MRA Test and T Test

	Model 1		Model 2		Model 3	
Variables	t-Statistic	Prob.	t-Statistic	Prob.	t-Statistic	Prob.
C	3,315	0.080	3,119	0.089	2,373	0.179
X1	- 1,805	0.213	- 1,816	0.211	17,030	0.003
X2	30,044	0.001	34,704	0.001	2,466	0.133
Z			- 0.217	0.848	0.298	0.794
X1*Z					3,326	0.080
X2*Z					0.927	0.452
Adjusted R-Squared	0.169		0.156		0.144	
F-Statistic	7,012	0.002	4,630	0.006	2,981	0.019
N	60		60		60	

The Effect of Dividend Stickiness (X1) on Company Value (Y)

The test results in Model 1 (initial regression), the Dividend Stickiness variable (X1) has a regression coefficient value of -0.162130 with a probability value (p-value)

of 0.2128. In Model 2 (after entering the Z variable), the probability value is 0.2111. The probability values in both models are consistently above the 0.05 significance level ($p > 0.05$), which means that Dividend Stickiness does not have a significant effect on company value.

The Effect of Free Cash Flow (X2) on Company Value (Y)

The test results in Model 1, the Free Cash Flow (X2) variable produces a positive regression coefficient value of 2.322488 with a probability value (p-value) of 0.0011. The consistency of this influence is also seen in Model 2 with a coefficient value of 2.315684 and a probability of 0.0008. Because the p-value in both models is much smaller than the significance level of 0.05 ($p < 0.05$), which means that Free Cash Flow has a positive and significant effect on company value.

Profitability (Z) Moderates the Effect of Dividend Stickiness (X1) on Firm Value (Y)

Based on the interaction results in Model 3, the multiplication variable between Dividend Stickiness and Profitability ($X1 \times Z$) produces a probability value of 0.0797. Because the p-value is greater than 0.05 ($0.0797 > 0.05$), this result statistically proves that Profitability is not able to moderate the relationship between dividend stickiness and firm value.

Profitability (Z) Moderates the Effect of Free Cash Flow (X2) on Company Value (Y)

Based on the interaction results in Model 3, the multiplication variable between Free Cash Flow and Profitability ($X2 \times Z$) produces a probability value of 0.4518. Considering that the p-value far exceeds the critical limit of 0.05 ($0.4518 > 0.05$), it can be concluded that Profitability fails to moderate the effect of Free Cash Flow on company value.

F test

Based on the goodness-of-fit test, all regression models employed in this study satisfy the model feasibility criteria, as indicated by their Prob(F-statistic) values, which are lower than the 5% significance level (0.05). In Model 1, the Prob(F-statistic) value of 0.001894 indicates that Dividend Stickiness and Free Cash Flow simultaneously have a significant effect on Firm Value. This finding suggests that the first regression model is statistically significant and appropriate for explaining the relationship between the independent variables and firm value.

In Model 2, the Prob(F-statistic) value is 0.005807, which is also below the 0.05 significance threshold. This result demonstrates that the combination of Dividend Stickiness, Free Cash Flow, and Profitability simultaneously exerts a significant

influence on Firm Value. The inclusion of profitability enhances the explanatory power of the regression model, indicating that the second model also meets the goodness-of-fit criterion and is suitable for further analysis. Furthermore, Model 3 yields a Prob(F-statistic) value of 0.018987, which remains below the 0.05 significance level. This finding indicates that all variables included in the moderated regression model—namely Dividend Stickiness, Free Cash Flow, Profitability, and the interaction terms Dividend Stickiness $\times$ Profitability (X1Z) and Free Cash Flow $\times$ Profitability (X2Z)—collectively have a significant effect on Firm Value. Therefore, the moderation model satisfies the goodness-of-fit requirement, confirming that it is appropriate for examining the moderating role of profitability in the relationship between Dividend Stickiness, Free Cash Flow, and Firm Value.

R test

The coefficient of determination results indicate that the explanatory power of the regression models is relatively modest, suggesting that firm value is influenced by additional factors beyond the variables included in this study. In Model 1, the Adjusted R-squared value is 0.169294, indicating that Dividend Stickiness and Free Cash Flow jointly explain 16.93% of the variation in Firm Value. The remaining 83.07% of the variation is attributable to other factors not incorporated into the regression model. In Model 2, the Adjusted R-squared value decreases slightly to 0.155829, implying that Dividend Stickiness, Free Cash Flow, and Profitability collectively explain 15.58% of the variation in Firm Value, while the remaining 84.42% is explained by variables outside the scope of this research. Although profitability is included in the model, the overall explanatory power remains relatively limited, indicating that firm value is determined by a broader set of financial and non-financial factors.

Similarly, Model 3 produces an Adjusted R-squared value of 0.143755, indicating that Dividend Stickiness, Free Cash Flow, Profitability, and the interaction terms representing the moderating effects explain 14.38% of the variation in Firm Value. Consequently, the remaining 85.62% of the variation is explained by other variables that are not included in the model. These findings suggest that, although the proposed models are statistically significant, the independent and moderating variables account for only a limited proportion of the variability in firm value, implying that additional determinants should be considered in future research to improve the model's explanatory power.

Dividend Stickiness Policy on Company Value

Based on the test results, it was found that management's policy of maintaining dividend stability or reluctance to reduce dividends had no significant impact on firm value. This phenomenon is interesting because the pattern remained consistent both before and after the inclusion of control variables and moderating interactions in the analysis model. This finding empirically refutes the assumption that (Douglas, 2025). A rigid dividend policy will always be responded positively by the market. Theoretically, although Signaling Theory states that stable dividends reflect bright future prospects, capital market players in this study appear to be more rational and pragmatic. Investors tend to realize that forced dividend maintenance without support from real economic fundamentals actually risks disrupting the company's short-term liquidity (Dewasiri et al., 2019) (Dewi & Paramita, 2019). Therefore, investors do not use information regarding historical dividend stability as a primary parameter in determining their investment decisions, so this policy does not trigger fluctuations in stock prices or company value.

Availability of Free Cash Flow on Company Value

In contrast to the first variable, free cash availability proved to have a very strong and consistent positive effect across all test models. The validity of this relationship confirms that any expansion or increase in a company's free cash availability will be significantly followed by an increase in the company's value in the eyes of the public (Dewasiri et al., 2019). This finding aligns closely with the concept of financial flexibility in strategic financial management. Abundant free cash flow sends a strong signal to investors that a company possesses solid fundamentals (Pamikatsih & Octavia, 2025). The company is considered capable of paying off its financial obligations on time and has strong internal capacity to fund various profitable investment projects without having to rely on external funding or expensive new debt. Furthermore, from an Agency Theory perspective, management's ability to optimize free cash indicates an effective oversight function, resulting in market appreciation in the form of increased share prices and company value.

The Role of Profitability in Moderating the Relationship between Dividend Stickiness and Free Cash Flow on Firm Value

Through interaction analysis, this study evaluates whether the level of profitability can act as a reinforcing or weakening variable for the existing relationship. The estimation results indicate that profitability statistically fails to fulfill its role as a moderating variable. The inclusion of this interaction variable even reduces the overall explanatory power of the model, indicating that the combination

of these variables does not provide a meaningful contribution to the study's economic model. In terms of financial substance, these results provide in-depth understanding of investor behavior in the capital market, which tends to evaluate and respond to financial signals separately, rather than in combination (Ross et al., 2017). When assessing dividend stability policy, investors focus more on management's long-term commitment without relating it to the extent of the company's profit fluctuations in the current year. Similarly, with regard to free cash, the market views real cash availability as a concrete indicator of liquidity, whose meaning no longer depends on the high or low accounting profit recorded in the financial statements (Eka Yuliyanti & Anis Turmudhi, 2024). Therefore, fluctuations in company profitability have not been proven to strengthen or weaken the influence of these two financial policies on the formation of company value.

CONCLUSION

Based on the results of the analysis and discussion, it can be concluded that free cash flow is the only internal factor that has been consistently proven to be able to provide a positive catalyst in increasing company value, thanks to the concrete financial flexibility that is highly appreciated by the capital market. Conversely, the dividend stickiness management policy did not show a significant contribution, and the profitability variable also completely failed to act as a moderator, strengthening or weakening the contribution of these two financial policies. This reflects that investors tend to be rational, evaluating each company's fundamental signals independently and separately, without combining them with fluctuations in accounting earnings in the current year. Theoretically, this study strengthens the relevance of signaling theory for real cash instruments, while also demonstrating that profitability is not always the primary validation for financial policy in emerging markets. Practically, these results have implications for corporate financial management to focus more on efficient net cash flow allocation rather than enforcing historical dividend stability to maintain market sentiment. However, this study is limited by the sample size, which focuses only on the LQ45 index and the relatively short observation period (2022–2024). Therefore, future research is recommended to expand the sample coverage to more specific industrial sectors or extend the observation period, as well as consider corporate governance variables as factors potentially influencing free cash optimization.

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