

## The Effect of ESG, Earnings Per Share, and Dividend Payout Ratio on Stock Returns of the ESG Quality 45 Kehati Index, Moderated by Stock Liquidity

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### ABSTRAK

This study aims to examine the influence of ESG, Earnings Per Share, and Dividend Payout Ratio, moderated by Stock Liquidity, on Stock Returns. The population of this research consists of the ESG Quality 45 Kehati Index companies listed on the Indonesia Stock Exchange (IDX) from 2021 to 2024. The sampling technique used in this research is purposive sampling. The sample consists of 22 companies. The data analysis methods used are panel data regression analysis and moderation regression analysis (MRA). The results show that ESG, both in aggregate and as individual pillars, and the Dividend Payout Ratio have a significant influence on stock returns. In contrast, Earnings Per Share does not have a significant influence on Stock Returns. The results also indicate that stock liquidity strengthens the influence of ESG, both in aggregate and as individual pillars, on Stock Returns. Therefore, the impact of ESG on stock returns tends to be stronger for more liquid stocks.

## **INTRODUCTION**

The concept of sustainable finance introduced by the United Nations Environment Programme (UNEP) emerged as a response to various global challenges related to environmental degradation, economic instability, and deepening social inequality, which have become real threats to the sustainability of life on Earth (UNEP Inquiry, 2015). This concept emphasizes the importance of integrating Environmental, Social, and Governance (ESG) factors into corporate investment and operational decision-making (Luo, 2022). The implementation of ESG principles is not only aimed at sustainability but has also been shown to affect overall investment performance and corporate attractiveness (Aydogmus et al., 2022).

The findings of Luo (2022) indicate that although ESG has a significant effect in the United Kingdom, firms with lower ESG scores actually generate higher returns. Similarly, the study by Hsu et al. (2023) finds that in the U.S. stock market, firms with high emission intensity (low Environmental scores) deliver higher stock returns than low-emission firms—a phenomenon known as the pollution premium. High-emission portfolios record annual returns of 11.32% compared to 6.90% for low-emission portfolios, resulting in a premium of 4.42%, which indicates superior profitability.

This divergence from the view that companies integrating ESG consistently perform better is also evident in the ESG Quality 45 KEHATI Index. This sustainability-oriented index does not fully outperform conventional stock market indices during the 2021–2024 period, during which the Jakarta Composite Index (JCI) recorded a cumulative return of 18.1%, while the ESG Quality 45 KEHATI achieved only 9.4%. On an annual basis, the ESG Quality 45 KEHATI Index also experienced a decline of –12.7% in 2024. These variations in empirical findings and the observed inconsistencies make the impact of ESG on stock returns an important issue for further investigation.

Previous studies have tended to measure ESG in aggregate, using overall ESG scores without separately analyzing the contribution of each ESG pillar. In fact, each pillar (E, S, and G) may affect financial performance differently, allowing for a deeper understanding of the individual contribution of each pillar to stock returns. Therefore, further research will examine the effects of each ESG pillar in greater detail.

In addition to ESG, fundamental factors such as Earnings Per Share (EPS) and Dividend Payout Ratio (DPR) also play a crucial role in determining stock returns. According to Signaling Theory, high EPS sends a positive signal regarding a firm's financial health and future prospects, potentially increasing investor demand and stock returns, although empirical evidence remains mixed, showing both significant and insignificant effects. Meanwhile, the Bird-in-the-Hand Theory (Gordon, 1959) suggests that investors tend to prefer dividends over capital gains because dividends are more certain and perceived as less risky. However, empirical findings regarding the effect of DPR are also inconsistent, showing both significant and insignificant relationships. These inconsistencies indicate the presence of both research and theoretical gaps, particularly in applying and integrating signaling theory and the Bird-in-the-Hand theory to

explain how financial policy decisions interact. Therefore, these inconsistent results warrant further investigation.

Stock liquidity is an important component of capital markets. Market Liquidity Theory suggests that more liquid stocks allow investors to enter and exit the market more easily, thereby reducing uncertainty and price volatility. The Efficient Market Hypothesis (EMH) proposed by Fama (1970) states that stock prices quickly and accurately reflect all available information in the market. High liquidity can accelerate market responses to new information, including information related to ESG performance, EPS, and dividends. Research on the moderating role of liquidity remains very limited. Therefore, this study will analyze the effects of ESG, E, S, G, EPS, and DPR on stock returns, with stock liquidity acting as a moderating variable.

## LITERATURE REVIEW

### **Sustainable Development Goals and Sustainable Finance**

The *Our Common Future* report (the Brundtland Report), prepared by the World Commission on Environment and Development (WCED) in 1987, defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This definition emphasizes the importance of long-term planning and future impacts. Based on this concept, the United Nations established the Sustainable Development Goals (SDGs) as a universal agenda to end poverty, protect the planet, and ensure peace and prosperity by 2030. The SDGs consist of 17 goals, 169 targets, and 241 indicators, emphasizing interlinkages among goals and the balance of social, economic, and environmental dimensions.

### **Stakeholder Theory**

Stakeholders are defined as any group or individual who can affect or be affected by the achievement of a company's objectives (Freeman, 1984). Stakeholder theory emphasizes that a firm's success and sustainability depend not only on shareholders but also on its ability to create value for various stakeholders (Tsang et al., 2022).

Attention to stakeholder interests is considered capable of enhancing firm value and market performance in a sustainable manner. This is reflected in increased demand for stocks, which subsequently leads to higher returns, both in actual terms and in investors' expectations (Hillman & Keim, 2001; Jo & Harjoto, 2011).

Numerous studies indicate that the relationship between ESG and stock returns is contextual and highly influenced by investor perceptions and market conditions. Anselmi and Petrella (2025) emphasize that the impact of ESG on returns depends on how investors perceive ESG as a proxy for firm quality, risk, and long-term prospects. Empirical findings vary across markets. In the United Kingdom, Luo (2022) finds that firms with lower ESG scores tend to generate higher returns. In contrast, studies by Aditama (2022), Yin et al. (2023) in China, and Takahashi and Yamada (2023) in Japan show that higher ESG scores are positively associated with stock returns, including during the COVID-19

pandemic period. These mixed findings indicate the existence of a research gap that warrants further exploration.

H1: ESG has a positive effect on stock returns.

H2: The Environmental pillar has a positive effect on stock returns.

H3: The Social pillar has a positive effect on stock returns.

H4: The Governance pillar has a positive effect on stock returns.

### **Signaling Theory**

Signaling theory explains that firms convey information to investors through observable signals in order to reduce information asymmetry between management and external parties (Spence, 1973). According to Mirayani et al. (2024), signaling theory describes how companies use information to signal their prospects and performance to investors. Furthermore, Priyambudi and Thamrin (2021) argue that disclosed information is crucial in shaping investment decisions, as investors seek to predict and monitor potential returns.

Gharaibeh et al. (2022) demonstrate an empirically verifiable relationship between earnings per share (EPS), net income, and stock prices. Accordingly, the relationship between EPS and stock prices justifies the contribution of EPS to stock returns. An increase in EPS leads the market to value the firm more highly, resulting in rising stock prices and higher returns for investors. Previous studies by Sari and Hermuningsih (2020, 2021), Mirayani et al. (2024), and Gharaibeh et al. (2022) consistently report that EPS has a positive effect on stock returns.

H5: Earnings per Share has a positive effect on stock returns.

### **Bird-in-the-Hand Theory**

The Bird-in-the-Hand theory proposed by Gordon (1959) states that “many investors view current dividends as more certain than future capital gains.” This theory explains investor preferences for current dividend payments over potential capital gains that may be realized in the future, reflecting investors’ risk preferences related to dividends and capital gains.

The Bird-in-the-Hand theory supports the notion that a higher Dividend Payout Ratio (DPR) can increase firm value (Setyoko et al., 2020). This is because investors prefer dividends paid in the present rather than earnings retained for reinvestment, which may not generate returns commensurate with the associated risks. Consequently, firms with higher DPRs are perceived as more attractive by investors, particularly when retained earnings are viewed as risky or uncertain.

In corporate finance, dividend policy plays a crucial role in shaping investor perceptions and overall firm value (Fathony, 2021). Karmilah and Komara (2024) argue that a high DPR signals strong cash flow resilience and financial discipline, which, particularly across business cycles, enhances investor confidence and returns. Additionally, Palupi et al. (2024) find that higher DPR levels increase market attention and trading activity, improve information transmission into prices, and consequently enhance stock returns.

H6: Dividend Payout Ratio has a positive effect on stock returns.

### **Efficient Market Hypothesis**

The Efficient Market Hypothesis (EMH) posits that security prices in capital markets fully reflect all available information, implying that investors cannot consistently earn abnormal returns (Fama, 1970). According to Adnyana (2020), the core premise of EMH is that in an efficient market, no investor can consistently achieve abnormal returns or profits exceeding risk-adjusted average returns, as all information capable of generating such returns is already incorporated into stock prices.

Huang and Ho (2020) argue that higher liquidity is associated with greater market efficiency, as distorted information is absorbed more rapidly, resulting in more predictable returns. Furthermore, Liu et al. (2023) provide empirical evidence of a positive relationship between market liquidity and stock returns across several international markets. Supporting this view, Stereńczak and Marszałek (2025) show that the use of measurable liquidity indicators can lead to investment strategies that generate favorable returns.

H7: Stock liquidity has a positive effect on stock returns.

H8: Stock liquidity positively moderates the effect of ESG on stock returns.

H9: Stock liquidity positively moderates the effect of the Environmental pillar on stock returns.

H10: Stock liquidity positively moderates the effect of the Social pillar on stock returns.

H11: Stock liquidity positively moderates the effect of the Governance pillar on stock returns.

H12: Stock liquidity positively moderates the effect of Earnings per Share on stock returns.

H13: Stock liquidity positively moderates the effect of Dividend Payout Ratio on stock returns.

### **METHODOLOGY**

This study uses a quantitative approach to examine the influence of ESG, Earnings Per Share, and Dividend Payout Ratio, moderated by Stock Liquidity, on stock returns. The population in this study is the ESG Quality 45 Kehati Index listed on the Indonesia Stock Exchange (IDX) from 2021 to 2024. The sampling technique used in this study was purposive sampling. The sample size for this study was 22 companies. The data analysis methods used were panel data regression analysis and moderated regression analysis.

The conceptual framework is shown in Figure 1.

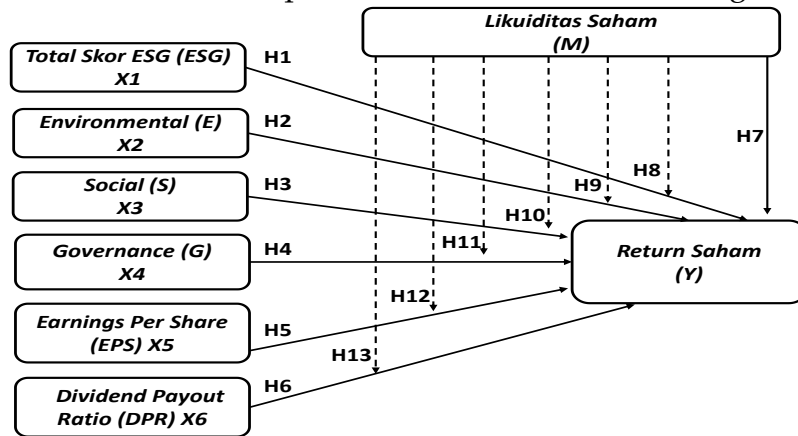


Figure 1. Framework

## RESEARCH RESULTS

### Panel Data Regression Model Selection Results

The panel data regression model selection process involved three testing stages: the Chow Test, the Hausman Test, and the Breusch-Pagan Lagrange Multiplier (LM) Test. Based on the Chow Test results, the selected model was the Common Effect Model (CEM) (Table 1). With the CEM selected, the Hausman Test was eliminated and the LM Test was continued. Based on the LM Test results, the selected model was the CEM (Table 2). Therefore, the selected model was the CEM.

Table 1. Chow Test Results

Test	Statistics	P-value	Decision
Uji Chow (CEM vs FEM)	F(21,53) = 1.73	0.0544	Choose CEM

Source: Researcher Processed Data (2025)

Table 2. Lagrange Multiplier (LM) Test Results

Test	Statistics	P-value	Decision
Uji Breusch-Pagan LM (REM vs CEM)	Chibar2(01) = 0.00	0.4961	Choose CEM

Source: Researcher Processed Data (2025)

### Classical Assumption Test Results

Classical Assumption Tests include normality tests, heteroscedasticity tests, and multicollinearity tests. The results of the normality test indicate that the normality assumption is met, meaning the model residuals follow a normal distribution (Table 3). The results of the multicollinearity test indicate that the mean VIF is 3.24, which is still below the critical limit of 10, thus concluding that multicollinearity does not occur (Table 4). The heteroscedasticity test concludes that there is no heteroscedasticity in the model, meaning that the residual variance is constant for each independent variable value (Table 5).

The results of the classical assumption tests indicate that the panel regression model satisfies all the required assumptions; therefore, the estimations are considered unbiased, efficient, and consistent. Accordingly, the model is

appropriate for the characteristics of the data and is suitable for addressing the research questions and testing the proposed hypotheses.

**Table 3. Normality Test Results**

Test Type	Statistic/Method	Value	P-value	Conclusion
Normality	Shapiro-Wilk W	0.9895	0.7145	Data are normally distributed

Source: Processed Data by the Authors (2025)

**Table 4. Multicollinearity Test Results**

Variabel	VIF	1/VIF
X1 (ESG)	7.56	0.1323
MX1 (M*ESG)	5.23	0.1913
X3 (Social)	4.16	0.2401
MX5 (M*EPS)	3.85	0.2600
MX3 (M*Social)	3.60	0.2779
M (Likuiditas)	3.04	0.3287
X5 (EPS)	2.75	0.3635
X2 (Environmental)	2.65	0.3768
MX2 (M*Environmental)	2.40	0.4172
X4 (Governance)	2.22	0.4495
MX6 (M*DPR)	2.12	0.4725
MX4 (M*Governance)	1.30	0.7689
X6 (DPR)	1.25	0.7998
Mean VIF	3.24	multicollinearity does not occur

Source: Processed Data by the Authors (2025)

**Table 5. Heteroskedasticity Test Results**

Test Type	Statistic/Method	Value	P-value	Conclusion
Heteroskedasticity	Breusch-Pagan	Chi <sup>2</sup> (1) = 0.30	0.5849	No heteroskedasticity detected

Source: Processed Data by the Authors (2025)

### Model Feasibility Test

The model feasibility test includes the overall model significance test (Wald test) and the coefficient of determination (R-squared). The results of the model feasibility test indicate that the estimated model demonstrates very strong performance and is reliable for addressing the research questions and testing the proposed hypotheses (Table 6).

**Table 6. Model Feasibility Test Results**

Indicator	Value	Interpretation
Wald chi <sup>2</sup> (13)	325.66	Model is statistically significant overall
Prob > chi <sup>2</sup>	0.0000	Significant at $\alpha = 1\%$
R-squared (within)	0.8231	Very good (82.31%)
R-squared (between)	0.7680	Good (76.80%)

Indicator	Value	Interpretation
R-squared (overall)	0.8088	Very good (80.88%)
Number of observations	88	Adequate sample size
Number of groups	22	Adequate number of firms

Source: Processed Data by the Authors (2025)

**Hypothesis Testing (t-test / z-statistic)**

Hypothesis testing and the identification of the type of moderation were conducted using two panel regression models. The first model estimates the baseline relationship without interaction terms, while the second model incorporates interaction terms to examine the moderating effect.

$$SR_i = a + \beta_1 ESG_i + \beta_2 E_i + \beta_3 S_i + \beta_4 G_i + \beta_5 EPS_i + \beta_6 DPR_i + \beta_7 SL_i + \varepsilon_i. \quad (1)$$

$$SR_i = a + \beta_1 ESG_i + \beta_2 E_i + \beta_3 S_i + \beta_4 G_i + \beta_5 EPS_i + \beta_6 DPR_i + \beta_7 SL_i + \beta_8 (ESG_i * SL_i) + \beta_9 (E_i * SL_i) + \beta_{10} (S_i * SL_i) + \beta_{11} (G_i * SL_i) + \beta_{12} (EPS_i * SL_i) + \beta_{13} (DPR_i * SL_i) + \varepsilon_i. \quad (2)$$

The hypothesis testing results indicate that the majority of the proposed hypotheses are supported by empirical evidence, with 10 out of 13 hypotheses found to be statistically significant. A hypothesis support rate of 76% suggests that the theoretical framework developed in this study demonstrates strong empirical validity and is well aligned with the conditions of the capital market.

Specifically, the results show that ESG (H1), Environmental (H2), Social (H3), Governance (H4), Dividend Payout Ratio (H6), and stock liquidity (H7) have a significant positive effect on stock returns. In contrast, Earnings per Share (EPS) (H5) does not have a significant effect on stock returns (Table 7).

The moderation test results further indicate that stock liquidity significantly strengthens the effects of ESG, Environmental, Social, and Governance on stock returns, exhibiting a **quasi-moderation** type, where both the interaction term (X×M) and the direct effect of the moderator (M) on the dependent variable (Y) are significant. However, stock liquidity does not moderate the relationships between EPS and stock returns, nor between DPR and stock returns (Table 7).

**Table 7. z-test Results for Research Hypotheses and Moderation Effects**

Hypothesis	Variable	Coefficient	t/z-stat	P-value	Status	Decision
H1	ESG → Stock Returns	4.8703	6.91	0.000	Significant	Accept H1
H2	Environmental → Stock Returns	2.4629	6.73	0.000	Significant	Accept H2
H3	Social → Stock Returns	1.9770	6.20	0.000	Significant	Accept H3
H4	Governance → Stock Returns	0.9584	5.27	0.000	Significant	Accept H4

Hypothesis	Variable	Coefficient	t/z-stat	P-value	Status	Decision
H5	EPS → Stock Returns	0.0000	-1.09	0.275	Not Significant	Reject H5
H6	DPR → Stock Returns	0.4240	3.55	0.000	Significant	Accept H6
H7	Liquidity → Stock Returns	1.9740	3.69	0.000	Significant	Accept H7
H8	Liquidity × ESG → Stock Returns	17.7169	5.68	0.000	Significant	Accept H8
H9	Liquidity × Environmental → Stock Returns	8.5747	6.00	0.000	Significant	Accept H9
H10	Liquidity × Social → Stock Returns	7.3980	5.65	0.000	Significant	Accept H10
H11	Liquidity × Governance → Stock Returns	3.9902	5.25	0.000	Significant	Accept H11
H12	Liquidity × EPS → Stock Returns	0.0002	1.40	0.162	Not Significant	Reject H12
H13	Liquidity × DPR → Stock Returns	0.2115	0.69	0.491	Not Significant	Reject H13

Source: Processed Data by the Authors (2025)

## DISCUSSION

### *The Positive and Significant Effects of Aggregate ESG, Environmental, Social, and Governance Pillars on Stock Returns*

The hypothesis testing results demonstrate that aggregate ESG (H1), the Environmental pillar (H2), the Social pillar (H3), and the Governance pillar (H4) all have a significant positive effect on stock returns. These findings confirm that the higher the quality of a firm's ESG practices and disclosures – both holistically (aggregate ESG) and within each individual pillar – the more likely the market is to respond positively, as reflected in higher stock returns.

At the aggregate level, ESG exhibits the largest coefficient, indicating that a holistic approach to ESG implementation generates a stronger impact than emphasizing only one individual pillar. In other words, the market perceives ESG as a comprehensive signal of firm quality, encompassing risk management, corporate reputation, and long-term performance sustainability. The observed ranking of effect magnitudes – ESG > Environmental > Social > Governance – suggests that while all pillars are important, environmental and social issues exert a relatively stronger influence on investor perceptions compared to governance aspects.

The strong effect of aggregate ESG is consistent with the view that firms with superior ESG management tend to be perceived as more resilient in periods of economic uncertainty, more attractive for investment, and more committed not only to environmental sustainability but also to responsibility toward multiple stakeholders (Giantari, 2024; Luo, 2022; Aydogmus et al., 2022). This finding is also aligned with Stakeholder Theory and Signaling Theory: ESG implementation reduces risk, enhances corporate reputation, and serves as a quality signal in the presence of information asymmetry. The high level of statistical significance indicates that the Indonesian capital market increasingly values sustainability practices as an important factor in firm valuation. This result is consistent with prior studies that document a positive relationship between ESG performance and stock returns (Luo, 2022; Brandon et al., 2021; Anselmi & Petrella, 2025; Yin et al., 2023; Takahashi & Yamada, 2023).

At the pillar level, the Environmental dimension exerts the strongest impact on stock returns. This result can be explained by the growing investor attention to climate change, energy transition, and increasingly stringent environmental regulations. Superior environmental practices are no longer perceived merely as compliance costs but rather as strategic investments that enhance efficiency, mitigate risks, and support sustainable growth prospects. Within the framework of Stakeholder Theory, environmental commitment affects a wide range of stakeholders – including investors, customers, regulators, and communities – thereby strengthening corporate legitimacy and acceptance. From the perspective of Signaling Theory, strong environmental performance provides a credible signal of a firm's intrinsic quality, risk management capability, and long-term business sustainability, which in turn drives positive stock returns. These findings are consistent with Jimenez and Grima (2023), Luo (2022), Brandon et al. (2021), and Shanti and Putri (2025).

The Social pillar also shows a positive and significant effect on stock returns, reinforcing the notion that corporate relationships with employees, customers, suppliers, and communities represent tangible drivers of financial performance rather than merely ethical obligations. Strong social practices foster operational stability, loyalty, productivity, and reputational capital, which are ultimately interpreted by the market as signals of sustainable profitability and firm value. From the Stakeholder Theory perspective, addressing stakeholder interests builds a foundation for long-term profitability. Under Signaling Theory, proactive social engagement functions as a positive signal of managerial quality, the ability to manage non-financial risks, and growth potential, thereby attracting investors and increasing stock prices. These findings are consistent with Dewanti et al. (2023), Luo (2022), Shirasu and Kawakita (2021), and Luo and Balvers (2021). Finally, the Governance pillar also exhibits a positive and significant effect on stock returns, although its impact is relatively smaller compared to the other pillars. This suggests that good governance remains essential as a baseline for market confidence, yet investors may perceive its effect as more indirect or less salient than environmental and social issues, which currently dominate sustainability discourse. In Stakeholder Theory, strong governance mechanisms balance the interests of multiple stakeholders through accountability,

transparency, and conflict-of-interest controls, thereby strengthening trust and creating sustainable value. Consistent with Signaling Theory, effective governance practices signal shareholder protection, transparency, and sound risk management, which reduce perceived risk and support positive stock returns. This finding aligns with Parikh et al. (2023), Tamarisa et al. (2021), and Dewri (2021).

Overall, the confirmation of H1–H4 implies that the market assigns a premium to firms that excel in ESG performance, particularly when ESG is implemented in an integrated manner. The Environmental and Social pillars appear to exert a stronger influence on investor perceptions, while Governance remains critical as a prerequisite for credibility and risk management. The implication is that firms cannot rely on emphasizing a single dimension; the most effective strategy is to strengthen aggregate ESG quality while ensuring consistent and verifiable performance and disclosure across all pillars.

### ***Earnings per Share Does Not Affect Stock Returns***

Hypothesis H5, which posits that EPS has a positive effect on stock returns, is rejected because the empirical results show that the effect of EPS on stock returns is very small and statistically insignificant. This finding suggests that investors in the ESG Quality 45 KEHATI Index may not prioritize accounting profitability per share as the primary driver of their investment decisions.

The lack of significance of EPS in this model can be interpreted from several perspectives. First, in a model that already controls for ESG factors, the impact of traditional financial metrics may become less pronounced, as investors increasingly incorporate forward-looking sustainability considerations. Second, EPS, as a backward-looking indicator, may be less relevant in an investment environment that emphasizes long-term sustainable value creation. Third, in an emerging and relatively volatile market, investors may rely more heavily on ESG practices as key indicators rather than historical earnings performance.

The insignificant effect of EPS on stock returns is consistent with the findings of Mahirun (2023) and Lestari et al. (2023), who also conclude that EPS does not significantly influence stock returns.

### ***The Positive and Significant Effect of Dividend Payout Ratio on Stock Returns***

Hypothesis H6, which states that DPR has a positive effect on stock returns, is supported by the empirical results. This finding confirms that dividend policy remains an important consideration for investors and contributes positively to stock returns.

This result supports the Bird-in-the-Hand Theory proposed by Gordon (1959), which argues that investors tend to prefer dividends over capital gains because dividends are relatively more certain than future price appreciation. Accordingly, firms with higher dividend payout ratios are more attractive to shareholders seeking certainty of returns, which ultimately enhances stock returns.

In the Indonesian stock market context, dividend policy serves as a particularly important signal amid persistent uncertainty. These findings

highlight the strategic role of dividend policy in financial management. Careful determination of the DPR can effectively influence stock returns, maximize shareholder value, and enhance market credibility, especially among investors who value sustainability and transparency.

This study's finding that DPR positively affects stock returns is consistent with prior research by Karmilah and Komara (2024), Mirayani et al. (2024), Palupi et al. (2024), and Budhathoti and Khadka (2024).

### *The Positive and Significant Effect of Stock Liquidity on Stock Returns*

Hypothesis H7, which posits that stock liquidity positively affects stock returns, is supported by the empirical evidence. This finding confirms that stock liquidity remains an important factor for investors and contributes positively to stock returns.

The positive effect of stock liquidity on stock returns is consistent with Liu et al. (2023) and Huang and Ho (2020), who document a positive relationship between liquidity and stock returns. Similarly, Angelo and Johnston (2022), in their study of the German market, find that market liquidity has a significant positive effect on stock returns. This positive relationship may reflect investors' strong preference for liquid assets, which leads to increased demand, higher prices, and higher short-term returns.

The results also indicate that stock liquidity significantly affects firm value, which ultimately influences stock returns (Liu et al., 2023). High stock liquidity is often associated with larger market capitalization, greater investor interest, and more stable or rising stock prices (Huang & Ho).

### *Stock Liquidity Moderates the Effects of ESG on Stock Returns*

The moderation test results show that stock liquidity consistently strengthens the effects of aggregate ESG, the Environmental pillar, the Social pillar, and the Governance pillar on stock returns. Therefore, hypotheses H8, H9, H10, and H11 are supported. Statistically, the interaction terms ( $X \times M$ ) in all four models are significant, and the direct effect of stock liquidity on stock returns is also significant. This pattern classifies stock liquidity as a **quasi-moderator**, meaning that it plays a dual role: (1) exerting a direct effect on stock returns, and (2) strengthening the relationship between ESG variables and stock returns.

Theoretically, these findings are consistent with liquidity theory and the Efficient Market Hypothesis (EMH). In more liquid markets, stocks can be traded more easily without causing large price changes, transaction costs are lower, and information is incorporated into prices more rapidly. Consequently, ESG-related information—both aggregate and pillar-specific—is more quickly reflected in firm valuations, amplifying its impact on stock returns. From the perspective of Stakeholder Theory, strong ESG practices enhance stakeholder relationships and reduce non-financial risks, while Signaling Theory explains that credible ESG disclosure and performance signal managerial quality and long-term prospects—signals that are more effectively translated into prices when liquidity is high.

Mechanistically, the strengthening effect of liquidity on ESG operates through three main channels. First, faster price discovery, whereby high liquidity

accelerates price responses to ESG information. Second, investor preference and activity, as institutional and sustainability-oriented investors tend to concentrate on liquid stocks, increasing demand for high-ESG firms. Third, portfolio rebalancing flexibility, as lower transaction costs allow investors to adjust ESG exposure more efficiently. These channels explain why the moderating effect of liquidity is strongest for aggregate ESG and similarly evident for the Environmental and Social pillars. The Social pillar result is also consistent with arguments that social performance—such as labor practices, community engagement, and diversity—more readily attracts ESG-mandated investors when stocks are liquid (Chen et al., 2023; Wang et al., 2023).

For the Governance pillar, the moderating effect of liquidity remains significant but relatively weaker. A plausible interpretation is that governance quality is often reflected through more formal information channels (e.g., financial transparency, audit quality, regulatory compliance), limiting its incremental impact on returns. However, in liquid markets, reduced information asymmetry allows governance quality to be more quickly and accurately incorporated into prices (Kashani & Shiri, 2022). Prior literature also suggests a reinforcing cycle: good governance enhances investor trust and liquidity, while higher liquidity makes markets more responsive to governance quality (Saygili et al., 2021; Berglund, 2020; Biswas, 2020).

Overall, these findings carry important managerial implications. Firms seeking to maximize the economic benefits of ESG strategies should adopt an integrated approach—enhancing ESG performance across all pillars while simultaneously managing stock liquidity through improved disclosure quality, broader investor outreach, and consistent market communication. This approach ensures that ESG efforts are more effectively translated into superior and sustainable stock returns. Empirically, these findings are consistent with Luo (2022) regarding the role of liquidity in strengthening the ESG–stock performance relationship.

### ***Stock Liquidity Does Not Moderate the Effect of EPS on Stock Returns***

Hypothesis H12, which posits that stock liquidity strengthens the effect of EPS on stock returns, is rejected because the interaction coefficient is very small and statistically insignificant. This indicates that stock liquidity does not moderate the relationship between EPS and stock returns, consistent with the insignificant direct effect of EPS.

Under the semi-strong form of the Efficient Market Hypothesis, publicly disclosed fundamental information such as EPS is rapidly incorporated into stock prices (Kashani & Shiri, 2022). In this context, the rejection of the liquidity moderation hypothesis suggests that the market efficiently processes EPS information without requiring liquidity to amplify its impact. In other words, regardless of trading ease, the fundamental value conveyed by EPS is quickly reflected in prices. While liquidity may influence the speed of information dissemination, it does not necessarily strengthen the intensity of market reactions to specific fundamental signals such as EPS.

### ***Stock Liquidity Does Not Moderate the Effect of Dividend Payout Ratio on Stock Returns***

Hypothesis H13, which posits that stock liquidity strengthens the effect of DPR on stock returns, is also rejected due to an insignificant interaction coefficient. This result indicates that although DPR has a significant direct effect on stock returns, its impact is global and does not depend on the level of stock liquidity.

In the context of dividend policy, liquidity does not function as a signal enhancer. This may be because DPR information, as a transparent and widely understood financial decision, already provides a sufficiently strong signal to investors (Said, 2024). Consequently, the dividend signal is self-contained, and additional liquidity does not materially amplify its effect on stock returns. Moreover, the non-significant moderation effect suggests that the benefits of dividend policy are generally realized by all investors regardless of stock liquidity. Dividend payments represent tangible cash flows, the value of which does not depend on trading ease. Dividend-oriented investors also tend to adopt buy-and-hold strategies and trade infrequently, making liquidity a less relevant consideration in their decision-making. In addition, dividend policies are often relatively rigid and do not require rapid price adjustments that would depend on high liquidity.

Consistent with the Efficient Market Hypothesis, stock prices efficiently reflect all available information (Shternshis et al., 2022). If the ESG Quality 45 KEHATI Index operates in an efficient market environment, publicly announced DPR information is quickly absorbed into prices. Thus, liquidity facilitates transactions based on these valuations but does not strengthen the informational effect itself. This finding provides empirical confirmation that liquidity does not universally moderate all financial signals; for dividend policy, its effect on stock returns appears to be largely independent. Theoretically, this enriches the understanding of market complexity and suggests that management decisions focusing on the substance of dividend policy may be sufficient to elicit positive investor responses, regardless of stock liquidity.

### **CONCLUSION**

This study analyzes the effects of aggregate ESG performance, the Environmental, Social, and Governance pillars, Earnings per Share (EPS), Dividend Payout Ratio (DPR), and stock liquidity on stock returns of firms included in the ESG Quality 45 KEHATI Index, with stock liquidity also examined as a moderating variable. The hypothesis testing results indicate that the majority of the proposed hypotheses are supported by empirical evidence, with 10 out of 13 hypotheses found to be statistically significant.

Although the ESG Quality 45 KEHATI Index does not consistently outperform the conventional stock market index (Jakarta Composite Index/JCI) during the 2021–2024 period, this study provides deeper insights into the key drivers of stock returns within this sustainability-oriented index. The positive effects of ESG and its individual pillars, as well as the Dividend Payout Ratio, together with the strengthening role of stock liquidity in amplifying the impact

of ESG, offer important implications for both investors and firms with a sustainability focus. While EPS is found to be insignificant and stock liquidity does not moderate the effects of EPS and DPR, these results highlight the complexity of the stock market and suggest that investors in the ESG Quality 45 KEHATI Index are more responsive to sustainability performance and dividend policy than to earnings per share and the liquidity-driven amplification of earnings- and dividend-related signals.

### **SUGGESTIONS FOR FUTURE RESEARCH**

From an academic perspective, this study contributes to the literature on financial management and sustainable investment by emphasizing the moderating role of stock liquidity in the ESG-stock return relationship. The finding that liquidity strengthens the impact of ESG variables but does not moderate the effects of EPS and DPR provides a nuanced extension of the Efficient Market Hypothesis and Signaling Theory, indicating that liquidity's role as an information transmission mechanism is not uniform across different types of financial signals.

These findings underscore the need for further research to explore why EPS does not exhibit a significant effect in ESG-oriented markets and to identify potential factors that may moderate the relationships between EPS or DPR and stock returns. Future studies may expand the scope by comparing these results with other sustainability indices across different countries, employing alternative liquidity proxies, or conducting more in-depth investigations into the underlying reasons for the non-significance of EPS in explaining stock returns within ESG-focused markets.

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