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## STOCK RETURNS IN THE DIGITAL ERA: SUSTAINABILITY AND FINANCIAL PERFORMANCE OF JAKARTA ISLAMIC INDEX COMPANIES

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### Article history:

Submitted: 23 December 2025

Revised: 26 January 2026

Accepted: 24 February 2026

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### Keywords:

Digital Transformation;

ESG;

Financial Performance;

JII

Stock Return;

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### Abstract

*Stock returns are a key indicator considered by investors in evaluating investment performance, particularly in the Islamic capital market. Growing attention to sustainability issues and rapid digitalisation has further influenced investor behaviour toward Sharia-compliant instruments. This study examines the effect of Environmental, Social, and Governance (ESG) performance and financial indicators, Return on Assets (ROA) and Tobin's Q on the stock returns of firms listed in the Jakarta Islamic Index (JII) during 2020–2024. It also investigates the moderating role of digital transformation. A quantitative approach is employed using panel data regression analysis with the Fixed Effect Model. The sample is selected through purposive sampling, resulting in 15 firms observed over five years, yielding 75 observations. Moderated Regression Analysis (MRA) is applied to assess the moderating effect of digital transformation. The findings indicate that ESG and ROA do not have a significant impact on stock returns, whereas Tobin's Q shows a positive and significant effect. Digital transformation does not moderate the relationship between ESG, ROA, Tobin's Q, and stock returns. This study contributes to the literature by integrating ESG, financial performance, and digital transformation within the context of the Islamic capital market, particularly the Jakarta Islamic Index, which remains relatively underexplored.*

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## INTRODUCTION

According to the Otoritas Jasa Keuangan (OJK), investment is the placement of capital, usually for the long term, to purchase shares and other securities to earn profits (Qothrunnada, 2022). Investors choose capital investment alternatives with the primary goal of optimising their return, namely obtaining the highest possible return in accordance with the risk profile they are willing to bear. Return is used as a measure to assess the profit of an investment instrument relative to the initial costs incurred. One of the most commonly traded securities products in the capital market is stock, an equity instrument representing ownership in a company (Jaya & Kuswanto, 2021). To minimise the risk of losses, investors generally conduct a comprehensive analysis from both financial and non-financial perspectives.

Current developments in the global capital market are characterised by growing attention to sustainability issues and rapid digital transformation. Instead of being evaluated solely by their financial outcomes, companies are increasingly assessed on how effectively they manage environmental, social, and governance impacts, as reflected in Environmental, Social, and Governance (ESG) practices. This shift in perspective has also shaped investor behaviour, with more investors now incorporating non-financial considerations into their investment decisions, including in the Islamic capital market context.

Environmental, Social, and Governance (ESG) represents a company's approach to sustainability, integrated into its investment-related activities, and encompasses environmental responsibility, social commitment, and sound corporate governance. In recent years, ESG has increasingly been regarded as an important non-financial consideration for investors when evaluating potential risks and returns of an investment (Nanda & Ratnadi, 2024). Companies that provide ESG disclosures in a clear and accountable manner are generally perceived as more credible by investors and stakeholders. Moreover, transparent ESG reporting may contribute to long-term financial advantages by fostering trust and strengthening relationships with various stakeholder groups (Margana & Wiagustini, 2024). Based on signalling theory, ESG disclosure can function as a signal of managerial quality and the firm's prospects. (Nilawati & Arizah, 2025). Such disclosures may enhance investor confidence, increase market interest, stimulate stock demand, and eventually be reflected in higher stock returns. Several empirical studies, including Paranita *et al.* (2025) and Lestari *et al.* (2024), provide evidence that ESG has a positive and significant influence on investment decisions and stock returns.

Financial performance continues to serve as an essential foundation in stock investment analysis. It reflects a company's capability to utilise its resources efficiently and sustainably in line with applicable accounting standards (Purwanti, 2021). Under the Efficient Market Hypothesis (EMH), fundamental information reflected in financial reports, such as company profitability and valuation, will be incorporated in stock prices (Sulaiman *et al.*, 2025). Profitability measures such as Return on Assets (ROA) indicate how efficiently a company uses its assets to generate profits. In contrast, Tobin's Q captures the market's assessment of a firm's growth prospects. Companies that demonstrate high ROA and Tobin's Q values are generally perceived as financially robust and capable of sustaining future performance, which in turn enhances investor interest and supports higher stock returns. Empirical evidence from Kusumawardhani & Nugroho (2021) confirms that Tobin's Q exerts a significant influence on stock prices, implying that higher returns for investors will follow an increase in stock prices. Akbar *et al.* (2023) report that ROA positively affects stock returns, further emphasising the role of financial performance in shaping investor outcomes.

Technological developments have propelled Indonesia's capital market into a dynamic digital era, bringing significant changes in access, behaviour, and investment strategies among the public (M. Z. Putri *et al.*, 2025). Digital transformation is not only about technology adoption but also reflects a company's capabilities in innovating in operational aspects, reporting, and communication with stakeholders (Shimizu, 2020). Based on the Resource-Based View (RBV) perspective, digital capabilities are unique and difficult to imitate as strategic resources that can create sustainable competitive advantages (Lubis, 2023). These capabilities enable companies to implement, measure, and communicate ESG initiatives more effectively, thereby strengthening the sustainability signals received by the market.

Digital transformation also plays a role in improving the quality of financial information disclosure by reducing information asymmetry and increasing transparency. Companies with a high level of digitisation can disclose financial and non-financial information more quickly and accurately, thereby strengthening investor confidence in the company's performance and prospects (Ismail, 2023). This condition indicates that digital transformation has the potential to strengthen the relationship among

ESG, financial performance, and stock returns, as companies' positive signals become more credible and accessible to the market.

Several previous studies have examined the effect of ESG, ROA, and Tobin's Q on stock returns with relatively diverse results. Paranita *et al.* (2025) and Lestari *et al.* (2024) document a positive association between ESG and stock returns, while in the study by Yin *et al.* (2023), find no significant effect. The study by Akbar *et al.* (2023) demonstrate that ROA positively influences stock returns, while Astuti (2025) report insignificant results. Research by Lestari & Erdiana (2024) and Butt *et al.* (2023) found that Tobin's Q does not affect stock returns. However, most of these studies still examine these variables separately and have not integrated digital transformation as a contingency factor into a comprehensive analytical framework, especially in the context of the Islamic capital market.

To strengthen the study of the Islamic capital market, appropriate sample selection is essential to ensure valid and representative results. The Jakarta Islamic Index (JII) serves as one of the Islamic stock indices comprising the 30 most liquid Sharia-compliant stocks listed on the Indonesia Stock Exchange (IDX) (Fauzi & Puspitasari, 2021). Along with increasing investor interest in Islamic investment instruments aligned with sustainability principles, the JII has seen significant development and has become an interesting subject for research (Yuniarto, 2024). The integration of ESG values that are in line with Sharia principles has the potential to strengthen investment attractiveness and increase investor confidence.

Based on the above description, there is a clear research gap, namely the limited number of studies that integrate ESG, financial performance, and digital transformation into a single analytical framework to explain stock returns in the Islamic capital market. In addition, empirical findings on the moderating role of digital transformation remain relatively underexplored, particularly among firms listed in the Jakarta Islamic Index. Accordingly, this study seeks to investigate the impact of ESG and financial performance proxied by Return on Assets (ROA) and Tobin's Q on the stock returns of companies included in the JII during the 2020–2024 period, while also assessing the moderating effect of digital transformation.

This study is expected to make an academic contribution by enriching Islamic finance and capital market literature through empirical evidence that integrates sustainability aspects, financial performance, and corporate digitalisation. In practice, the results are expected to provide valuable insights for investors, corporate managers, and capital market regulators in developing strategies to enhance firm value and foster a sustainable Islamic investment ecosystem. Based on the theoretical framework and prior empirical findings, the research hypotheses are formulated as follows:

H<sub>1</sub>: ESG is expected to positively influence the stock returns of firms listed on the Jakarta Islamic Index (JII).

H<sub>2</sub>: ROA is expected to positively influence the stock returns of firms listed on the Jakarta Islamic Index (JII).

H<sub>3</sub>: Tobin's Q is expected to positively influence the stock returns of firms listed on the Jakarta Islamic Index (JII).

H<sub>4</sub>: Digital transformation is expected to strengthen the relationship between ESG and the stock returns of JII companies.

H<sub>5</sub>: Digital transformation is expected to strengthen the relationship between ROA and the stock returns of JII companies.

H<sub>6</sub>: Digital transformation is expected to strengthen the relationship between Tobin's Q and the stock returns of JII companies.

## RESEARCH METHODS

This study is a quantitative research with a descriptive design to test the causal relationship between the variables studied. The research variables consist of a dependent variable in the form of stock returns, independent variables including ESG performance and financial performance, and a moderating variable in the form of digital transformation. In addition, this study includes a control variable, namely firm size. The population in this study consists of all companies listed on the Jakarta Islamic Index (JII) for the period 2020–2024.

The sampling technique used was purposive sampling with the following criteria: (1) Companies consistently included in the JII during the 2020–2024 period, (2) Companies published complete annual reports and sustainability reports during the research period, and (3) Financial, ESG, and digital

transformation data were available in full. The type of data used is secondary data, which was collected through documentation methods including annual reports and sustainability reports for ESG and digital transformation variables, company financial reports for measuring ROA, Tobin's Q and firm size, and stock price data from the Indonesia Stock Exchange (IDX), Yahoo Finance, and other official sources for stock returns.

**Table 1.**  
**Operational Definition and Variable Measure**

Variable	Operational Definition	Measure
ESG (X <sub>1</sub> )	Level of disclosure of environmental, social, and corporate governance practices.	ESG performance is measured using an ESG Disclosure Index based on the Global Reporting Initiative (GRI) Standards, including GRI 300 (Environmental), GRI 400 (Social), and GRI 2/102 (Governance). The measurement applies a dummy scoring method, where each disclosure item is assigned a value of 1 if disclosed in the company's annual or sustainability report and 0 otherwise. The ESG index is calculated as:  $\text{ESG Index} = \frac{\sum \text{Disclosure Items}}{\text{Total GRI Disclosure Items}}$ (Musta'anah, 2024)
ROA (X <sub>2</sub> )	An indicator that reflects how efficiently a company utilises its total assets to generate net income.	- ROA = $\frac{\text{Net Profit}}{\text{Total Asset}}$ (Susanti <i>et al.</i> , 2022)
Tobin's Q (X <sub>3</sub> )	Represents the ratio between a company's market value and the replacement value of its assets, which is commonly used to evaluate market performance and future growth prospects.	-Tobin's Q = $\frac{\text{Market Value} + \text{Book Value of Liabilities}}{\text{Total Book Value of Assets}}$ (Abdul Ghani <i>et al.</i> , 2023)
Digital Transformation (Moderator, M)	The degree to which a company adopts and implements digital innovation and reports its digital initiatives.	Adoption from the research by Zou <i>et al.</i> (2024) which includes: <ul style="list-style-type: none"> <li>- Company digital investment</li> <li>- Information technology infrastructure or digital tools</li> <li>- Digital intangible assets</li> <li>- Digital transformation strategy</li> <li>- Implementation of digital systems in business processes</li> <li>- Digital training for employees</li> <li>- Efficiency or innovation resulting from digitisation</li> <li>- Development of digital platform services</li> <li>- Digital patent applications</li> </ul> The measurement applies a dummy scoring method, where each disclosure item is assigned a value of 1 if disclosed in the company's annual or sustainability report and 0 otherwise. The Digital Transformation index is calculated as:  $\text{DT Index} = \frac{\sum \text{Digital Disclosure Items}}{\text{Total Digital Indicators}}$
Stock Return (Y)	The level of return obtained by investors from their stock investments.	Stock Return = $\frac{P_t - P_{(t-1)}}{P_{(t-1)}}$ (P <sub>t</sub> = stock price at time t, P <sub>(t-1)</sub> = stock price in the previous period)  (Alghifani, 2024)
Firm Size (Control Variable, Z)	The size of a company is reflected in the size of its assets	- Size (Ln Total Assets) (Suandewi & Sukartha, 2025)

Source: Processed Data, 2025

This study applies descriptive statistical techniques to summarise the characteristics of the research variables through frequency distribution tables and key statistical measures, including minimum, maximum, mean, and standard deviation. (Hapsoro *et al.*, 2020). Descriptive statistics are used to provide an initial overview of data patterns and facilitate the interpretation of further analysis results.

Since the data used are panel data (a combination of cross-sectional and time-series data), this study applies panel data regression analysis (Sihombing *et al.*, 2024). The estimation models include the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The most appropriate model is selected using the Chow and Hausman tests (Setyowati & Prasetyo, 2020).

After determining the best model, classical assumption tests are conducted, including multicollinearity tests to detect potential correlations among independent variables and heteroscedasticity tests to examine the consistency of residual variances. Hypothesis testing is then performed using the t-test to assess the partial effects of independent variables, the F-test to assess their joint influence on the dependent variable, and the coefficient of determination ( $R^2$ ) to measure the model's explanatory power.

To examine the moderating role of digital transformation, this study employs Moderated Regression Analysis (MRA). This method assesses whether digital transformation alters the strength of the relationship between the independent variables and stock returns by incorporating interaction terms into the regression model. Firm size is included as a control variable without interaction effects. All statistical analyses are conducted using EViews software.

This study estimates two regression models: a baseline model and a moderation model. The baseline model analyses the direct effects of the independent variables on stock returns, while the moderation model examines whether digital transformation moderates these relationships.

Baseline model:

$$\text{Stock Return} = \alpha + \beta_1\text{ESG} + \beta_2\text{ROA} + \beta_3\text{Tobin's Q} + \beta_4\text{Firm Size} + \varepsilon \dots \dots \dots (1)$$

This model evaluates the direct influence of ESG performance, ROA, Tobin's Q, and firm size on stock returns.

Moderation model:

$$\text{Stock Return} = \alpha + \beta_1\text{ESG} + \beta_2\text{ROA} + \beta_3\text{Tobin's Q} + \beta_4\text{Firm Size} + \beta_5\text{DT} + \beta_6(\text{ESG} \times \text{DT}) + \beta_7(\text{ROA} \times \text{DT}) + \beta_8(\text{Tobin's Q} \times \text{DT}) + \varepsilon \dots \dots \dots (2)$$

The moderation model was estimated using Moderated Regression Analysis (MRA) by incorporating interaction terms between digital transformation and the independent variables.

## RESULT AND DISCUSSION

The sample selection employed purposive sampling based on predetermined criteria, resulting in companies that consistently met the inclusion requirements during the 2020–2024 observation period and provided complete financial, ESG, and digital transformation data.

**Table 2.**  
**Recapitulation of Sample Collection**

No	Criteria	Number of Companies
1	Companies listed on the JII during the 2020-2024 period	55
2	Companies that were not consistently listed on the JII during the 2020-2024 period	(40)
3	Companies that published incomplete annual reports and sustainability reports during the research period	(0)
4	Companies with incomplete financial, ESG, and digital transformation data	(0)
	Number of Samples	15
	Number of Years of Observation	5
	Amount of Research Data	75

Source: Research Data, 2025

Descriptive statistics are used to summarize the characteristics of the data by reporting the mean, standard deviation, and the minimum and maximum values. The outcomes of this descriptive analysis are presented in the table below.

**Table 3.**  
**Descriptive Statistics**

	<b>Return</b>	<b>ESG</b>	<b>ROA</b>	<b>Tobin's Q</b>	<b>Firm Size</b>	<b>DT</b>
Mean	-0.005	0.612	8.871	2.260	0.000	0.832
Median	-0.065	0.660	7.100	1.216	0.270	0.889
Maximum	1.303	1.000	34.800	14.414	1.620	1.000
Minimum	-0.485	0.000	-3.510	0.634	-2.620	0.000
Std. Dev.	0.287	0.289	7.842	2.605	1.006	0.127
Skewness	1.479	-0.567	1.331	2.713	-0.553	-4.051
Kurtosis	7.590	2.291	4.573	10.338	2.576	26.120

Source: Research Data, 2025

Based on descriptive statistics, the stock returns variable shows an average value of  $-0.005$  with a standard deviation of  $0.287$ , indicating that stock returns during the study period fluctuated relatively. The maximum value of  $1.303$  and the minimum value of  $-0.485$  indicate that there are significant differences between observations.

The ESG variable has an average value of  $0.612$  and a standard deviation of  $0.289$ , indicating that the data distribution is relatively stable. ESG values range from  $0$  to  $1$ , so the distribution tends to be limited. The ROA variable has an average of  $8.871$  with a standard deviation of  $7.842$ , indicating that this variable has quite high data variation. The value range from  $-3.510$  to  $34.800$  indicates the presence of observations with extreme values.

The Tobin's Q variable has an average value of  $2.260$  and a standard deviation of  $2.605$ , which indicates a fairly large level of variation between companies. The Tobin's Q value ranges from  $0.634$  to  $14.414$ . Firm size shows an average value close to zero with both positive and negative values. This condition indicates that the firm size variable has been standardized using z-score transformation. The standardization was conducted to improve data comparability across firms and to minimize potential scale differences in the regression analysis.

This study applies panel data regression using three alternative estimation approaches: the Common Effect Model, the Fixed Effect Model, and the Random Effect Model. The selection of the most suitable estimation model is based on the results of model specification tests, specifically the Chow and Hausman tests.

**Table 4.**  
**Model Selection Test Results**

<b>Test</b>	<b>Probability Value</b>	<b>Conclusion</b>
Chow	0.022	FEM is better than CEM
Hausman	0.001	FEM is better than REM

Source: Research Data, 2025

The results of the model selection procedures indicate that the Fixed Effect Model (FEM) is the most appropriate approach for estimating the panel data in this study. Therefore, all regression analyses, including the baseline and moderation models, were estimated using the Fixed Effect Model (FEM). After selecting the Fixed Effect Model (FEM), classical assumption tests were performed to ensure that the model satisfies the BLUE (Best Linear Unbiased Estimator) criteria and produces reliable estimators. The tests included multicollinearity and heteroscedasticity.

Multicollinearity testing is performed to identify potential correlations among independent variables in the regression model. Ideally, independent variables should not be highly correlated with each other. Multicollinearity is considered to be present when the correlation coefficient between independent variables is greater than  $0.80$ , whereas coefficients below this threshold indicate that multicollinearity is not a concern (Shafitri & Astuti, 2023).

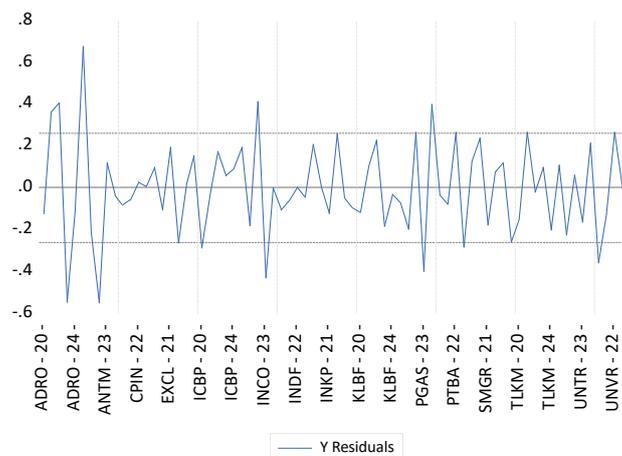
**Table 5.**  
**Multikolinearitas Test Result**

	<b>ESG</b>	<b>ROA</b>	<b>Tobin's Q</b>	<b>Firm Size</b>	<b>Digital Transformation</b>
ESG	1.000	0.079	-0.111	-0.135	0.253
ROA	0.079	1.000	0.541	-0.214	0.260
Tobin's Q	-0.111	0.541	1.000	-0.679	0.068
Firm Size	-0.135	-0.214	-0.679	1.000	-0.066
Digital Transformation	0.253	0.260	0.068	-0.066	1.000

Source: Research Data, 2025

The results indicate that the independent variables are not highly correlated, as all correlation coefficients are below 0.80. This suggests that there is no strong relationship among the independent variables.

To determine whether heteroscedasticity is present in the model, a heteroscedasticity test was conducted. The residual graph of this study illustrates the application of a heteroscedasticity test to the residual pattern in the estimated values. The following are the results of the heteroscedasticity test.



Source: Research Data, 2025

**Figure 1. Heteroscedasticity Test Results**

Based on the residual plot, the residuals are within an acceptable range and do not exhibit a specific pattern, indicating that the variance is relatively constant. This suggests that the model does not exhibit heteroscedasticity and therefore satisfies the heteroscedasticity assumption.

The t-test is employed to examine the individual effect of each predictor variable on the dependent variable.

**Table 6.  
T-Test Result**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.068	0.320	0.212	0.833
ESG	0.123	0.165	0.746	0.459
ROA	0.016	0.012	1.406	0.165
Tobin's Q	0.094	0.035	2.710	0.009
Firm Size	-0.341	0.261	-1.304	0.198
Digital Transformation (DT)	-0.607	0.348	-1.745	0.087

Source: Research Data, 2025

The t-test results indicate that not all independent variables have a significant partial effect on stock returns. Specifically, the ESG variable records a t-statistic below the critical value and a probability exceeding 0.05, suggesting that ESG does not significantly influence the stock returns of firms listed in the Jakarta Islamic Index. This result suggests that ESG information has not been a major factor in determining stock returns in the Islamic capital market. From a signalling-theoretic perspective, ESG performance is expected to convey positive information about a firm's management quality and long-term sustainability. However, the empirical results indicate that such signals have not been fully reflected in market reactions, as evidenced by the absence of a significant increase in stock returns.

Several factors can explain the ESG's insignificant effect. First, ESG disclosure in Indonesia is still heterogeneous and tends to be normative, which does not fully reflect the substantive quality of sustainability performance among companies (Qodary & Tambun, 2021; Trisnowati *et al.*, 2022). ESG disclosure is primarily undertaken to meet regulatory requirements and achieve institutional legitimacy, rather than as a market-oriented value creation strategy (Deegan, 2019).

Second, in the Islamic capital market, the application of ESG is often perceived as an obligation to comply with Islamic principles and sustainability regulations, so it is not yet seen as a source of competitive advantage that can create short-term added value. As a result, investors tend not to respond to ESG information as a key signal in short-term investment decision-making. (Broadstock *et al.*, 2021; Eccles *et al.*, 2014). These results are in line with prior studies indicating that ESG does not consistently

exert a direct influence on stock returns, especially in emerging markets and Sharia-compliant stock indices.

The estimation results indicate that the ROA variable has no statistically significant effect on stock returns, as evidenced by a t-statistic below the critical value and a probability greater than 0.05. This indicates that firm profitability, proxied by ROA, does not play a decisive role in explaining variations in stock returns among firms included in the Jakarta Islamic Index. Although ROA theoretically represents operational efficiency and profit-generating capability, investors in the Islamic capital market do not appear to focus solely on short-term profitability when making investment decisions.

The insignificant effect of Return on Assets (ROA) can be attributed to the characteristics of investors in the Islamic capital market, who tend to prioritise stability, compliance with Islamic principles, and long-term value rather than short-term profitability (Hoepner *et al.*, 2011; Rahman *et al.*, 2010). In addition, ROA is a backwards-looking financial performance indicator, so it does not fully reflect expectations of future growth and prospects, which are the main concerns of investors (Kothari *et al.*, 2006). In dynamic, uncertain market conditions, investors tend to respond more to valuation indicators and growth expectations than to historical profit ratios. This explains why valuation variables such as Tobin's Q have a more significant influence on stock returns than ROA (Baker & Wurgler, 2007; Trisnowati *et al.*, 2022).

Unlike the two variables, Tobin's Q has a t-value greater than the t-table value and a probability value less than 0.05, indicating a statistically significant effect on stock returns. This result suggests that investors place greater emphasis on market-based valuation measures that capture expectations regarding a firm's growth potential and long-term prospects. As a market indicator, Tobin's Q provides a more informative signal because it reflects investors' assessments of a company's future value (Chung & Pruitt, 1994; Lang *et al.*, 1989; Tobin, 1969).

These results are consistent with signal theory and the efficient market hypothesis, which posits that information about a company's market value is quickly reflected in stock prices and affects investors' returns (Brigham & Houston, 2019; Fama, 1970). In the Islamic capital market, these findings suggest that although ethical and sustainability considerations are a concern, investment decisions are still primarily driven by rational assessments of the company's growth prospects and valuation (Ho *et al.*, 2014).

The firm size variable shows a t-value below the t-table value at a probability above 0.05, indicating that firm size does not affect stock returns. Neither large nor small companies can guarantee consistently high or low returns (Suliyani & Benarda, 2023). The results of this study are in line with those of Fitroh & Fauziah (2022); Ramdiani & Iradianty (2022) which states that firm size has no significant effect on stock returns.

The study's results indicate that digital transformation has no significant impact on stock returns. This finding indicates that investors do not yet fully perceive corporate digitalisation as a factor that directly creates market value. In the context of capital markets, digital transformation is often viewed as a long-term strategic investment aimed at improving operational efficiency, business process flexibility, and organizational capabilities, resulting in an indirect and delayed impact on market performance, such as stock prices and returns (Brynjolfsson & Hitt, 2000; Verhoef *et al.*, 2021). This condition causes investors not to yet treat digital transformation as a strong signal in short-term investment decision-making.

The F test, commonly referred to as the simultaneous test, is a statistical test that assesses the effects of interactions among all independent factors and the dependent variable.

**Table 7.**  
**F Test Result**

F-statistic	1.798
Prob(F-statistic)	0.047

Source: Research Data, 2025

The F-test results indicate that the F-statistic is significant at the 0.05 level. This indicates the independent variables jointly have a significant effect on stock returns.

The coefficient of determination ( $R^2$ ) measures how much variation in the dependent variable is explained by the independent variables in the model. The results of the  $R^2$  analysis are reported in Table 8.

**Table 8.**  
**R Test Result**

R-squared	0.383
Adjusted R-squared	0.170

Source: Research Data, 2025

Based on the results, the coefficient of determination (Adjusted R<sup>2</sup>) in this study is 0.170. This means that the independent variables explain approximately 17.01 per cent of the variation in stock returns, while variables outside the model explain the remaining 82.99 per cent.

This study uses moderated regression analysis to examine the role of digital transformation as a moderator between ESG and financial performance on stock returns, with digital transformation as the moderating variable. This study uses an interaction test characterized by the presence of an interaction element (the product of two or more variables that are independent of each other) (Shafitri & Astuti, 2023). The moderation model was estimated using the Fixed Effect Model (FEM), consistent with the baseline model.

**Table 9.**  
**MRA Test Results**

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.650	0.679	-0.958	0.343
ESG	0.114	0.652	0.174	0.862
ROA	-0.022	0.070	-0.318	0.752
Tobin's Q	0.990	0.555	1.785	0.080
Firm Size	-0.049	0.316	-0.153	0.879
Digital Transformation	0.290	0.789	0.367	0.715
ESG* DT	-0.043	0.797	-0.054	0.957
ROA* DT	0.041	0.079	0.527	0.600
Tobin's Q* DT	-1.050	0.650	-1.616	0.112

Source: Research Data, 2025

The results of the moderated regression analysis indicate that digital transformation does not moderate the relationships among ESG, ROA, Tobin's Q, and stock returns. This is indicated by all t-values being smaller than the t-table (1.992) and probability values above the 5 per cent significance level. These results suggest that the current level of corporate digital transformation has not been sufficient to alter the relationship among sustainability, financial performance, and market outcomes.

This result indicates that the current level of corporate digitalization has not been sufficiently developed to meaningfully shape the relationship between sustainability and financial performance variables and market reactions. While digital transformation is theoretically expected to enhance transparency, accelerate information dissemination, and reduce information asymmetry, such advantages are largely internal in nature and realized over the long term. Consequently, these effects are not immediately observable in short-term stock returns (Ritter & Pedersen, 2020). Digital transformation in the context of public companies in developing countries often serves as an operational enabler rather than as a value signal explicitly considered by investors. This finding aligns with Wang *et al.* (2022), who found that the impact of digital transformation on company performance is gradual and more substantial on operational efficiency than on market performance.

In addition, the failure of digital transformation to moderate the relationship can be attributed to the homogeneity of technology adoption levels among the sample companies. When most companies have adopted digital technology to relatively similar levels, digital transformation is no longer a differentiating factor in terms of value relevance. This condition causes variation in digital variables to be low, thereby failing to strengthen the relationship between ESG and financial performance in stock returns.

## CONCLUSION AND SUGGESTION

The results of this study indicate that ESG and ROA do not affect the stock returns of companies listed on the Jakarta Islamic Index (JII) for the period 2020–2024. Conversely, Tobin's Q is shown to have a significant impact on returns, suggesting that investors are more responsive to valuation indicators and company growth prospects than to sustainability performance or short-term profitability.

Furthermore, company size was not found to affect returns, so firm size was not a major consideration for investors in this study. This study also found that digital transformation was unable to moderate the relationship between ESG, ROA, and Tobin's Q on stock returns. These findings suggest that the level of corporate digitalization during the study period was not yet strong enough to reinforce the influence of these variables on returns. Digitalisation appears to be even more beneficial on the internal operational side of companies, so it has not yet been accepted as a market signal influencing stock returns.

This study has limitations, including a small sample size, a relatively short research period, and the use of disclosure-based ESG measurements that may not fully reflect actual ESG implementation. Additionally, the level of digitization employed may not accurately reflect the extent of a company's digital transformation. For future research, it is recommended to expand the sample size, increase the observation period, and use more diverse or performance-based ESG and digitization indicators. Future research may also consider other moderating variables such as corporate governance, financial risk, or digital maturity. Practically, the results of this study provide an overview that investors currently place more consideration on valuation indicators, such as Tobin's Q. Therefore, companies need to maintain long-term growth prospects while continuing to improve ESG and digitalization quality to support future competitiveness.

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