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Environmental, Social, and Governance (ESG) Practices and Their Financial Implications: A Study of Indonesia and Malaysia Capital Markets

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ABSTRACT

As environmental, social, and governance (ESG) considerations gain prominence, companies are increasingly integrating ESG factors into their decision-making processes. While extensive research has examined ESG in developed markets, limited studies explore its impact on emerging economies. This study **investigates** whether ESG scores are positively associated with a firm's market value and profitability in Indonesia and Malaysia. The study utilizes panel data from Refinitiv Eikon and World Bank covering the period 2010–2022. The sample consists of 421 firm-year observations from non-Shariah-compliant companies in Indonesia and Malaysia. The analysis employs **random-effects and fixed-effects panel regressions** to assess the relationship between ESG scores and corporate financial performance, measured by Tobin's Q (market value), Return on Assets (ROA), and Return on Equity (ROE). The **results** indicate a positive and significant relationship between ESG scores and both market value (coefficient = 3.655) and ROE (coefficient = 0.007), suggesting that strong ESG performance enhances firm valuation and shareholder returns. However, the study finds a negative and significant association between ESG and ROA (coefficient = –0.000024), implying that ESG integration may not consistently improve asset efficiency. These findings highlight the mixed financial effects of ESG adoption in emerging markets. The study underscores the need for greater ESG awareness in Indonesia and Malaysia, particularly in guiding companies toward sustainability-driven financial strategies. As ESG integration continues to shape investment decisions, understanding its nuanced impact on financial performance is critical for stakeholders navigating evolving market expectations.

Keywords: ESG; ROA; ROE; Tobin's Q; capital market; Indonesia; Malaysia

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ОРИГИНАЛЬНАЯ СТАТЬЯ

Экологические, социальные и управленческие (ESG) практики и их финансовые последствия: исследование рынков капитала Индонезии и Малайзии

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АННОТАЦИЯ

С ростом значимости экологических, социальных и управленческих (ESG) факторов компании все чаще интегрируют ESG-принципы в свои процессы принятия решений. В то время как многочисленные исследования были посвящены ESG в развитых экономиках, лишь ограниченное количество работ изучает их влияние на развивающихся рынках. **Цель** исследования — определить связаны ли ESG-оценки с рыночной стоимостью компании и ее прибыльностью в Индонезии и Малайзии. В исследовании используются панельные данные Refinitiv Eikon и Всемирного банка за период 2010–2022 гг. Выборка состоит из 421 наблюдения за компаниями, не соответствующими требованиям шариата, в Индонезии и Малайзии за год. Для анализа применяются панельные регрессии со случайными и фиксированными эффектами, оценивающие связь между ESG-оценками и финансовыми показателями компаний. Финансовая эффективность измеряется по коэффициенту Тобина (рыночная стоимость компании), рентабельности активов

(ROA) и рентабельности собственного капитала (ROE). Результаты показывают положительную и значимую связь между ESG-оценками и рыночной стоимостью (коэффициент = 3,655), а также ROE (коэффициент = 0,007), что свидетельствует о том, что высокая ESG-эффективность способствует росту стоимости компании и доходности акционеров. Однако выявлена отрицательная и значимая взаимосвязь между ESG-оценками и ROA (коэффициент = –0,000024). Это указывает на то, что интеграция ESG не всегда приводит к повышению эффективности использования активов. Исследование подчеркивает необходимость повышения осведомленности о ESG в Индонезии и Малайзии, особенно в направлении руководства компаниями к финансовым стратегиям, ориентированным на устойчивое развитие. С ростом значимости ESG для инвесторов понимание их влияния на финансовые показатели становится ключевым. Это важно для всех, кто работает в условиях меняющихся рыночных ожиданий.
Ключевые слова: ESG; ROA; ROE; коэффициент Тобина; рынок капитала; Индонезия; Малайзия

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INTRODUCTION

Environmental, Social, and Governance (ESG) factors have become increasingly significant in shaping corporate financial performance (CFP). By influencing how companies manage risks, improve operational efficiency, and create value for stakeholders, ESG practices have proven to be an essential component of modern business strategies. Companies with strong ESG frameworks are better equipped to mitigate legal, regulatory, and reputational risks while promoting sustainable growth through efficient resource utilization [1]. In addition to risk management, robust ESG practices enhance brand reputation, foster customer loyalty, and attract socially responsible investors who prioritize sustainability [2]. These factors not only align with the growing global demand for sustainable investments but also ensure long-term resilience and competitive advantage for firms operating in increasingly complex markets.

The significance of ESG is particularly evident in emerging markets such as Indonesia and Malaysia, where rapid economic growth is accompanied by pressing environmental and social challenges, including deforestation, pollution, and social inequality. Recognizing the importance of addressing these issues, governments and regulators in both countries have introduced policies and frameworks to promote sustainable business practices. For example, Indonesia's Financial Services Authority (OJK) mandates listed companies to disclose sustainability reports, aiming to enhance corporate transparency and accountability. Similarly, Malaysia's Bursa Malaysia has implemented an ESG index and requires annual sustainability reporting, encouraging alignment with global standards and fostering a culture of sustainability within the corporate sector. These regulatory efforts underscore the growing commitment to ESG principles in Southeast Asia's emerging markets.

Despite the increasing emphasis on ESG, the relationship between ESG practices and CFP in Indonesia and Malaysia remains underexplored. Existing studies have often produced inconsistent and context-dependent findings, which call further investigation. For instance, Chiek et al. [3] analyzed 140 companies in Malaysia, Singapore, and Thailand and found that ESG disclosures positively influenced earnings per share (EPS) for Malaysian firms but had a negative impact in Singapore and Thailand. Similarly, Chouaibi et al. [4] and Ismail et al. [5] reported that the degree of ESG impact on financial performance varies across different sectors and regions, reflecting the complexity of this relationship. Moreover, firms in Indonesia and Malaysia labelled as Islamic tend to exhibit significant differences in their environmental and social scores, further complicating the analysis [6]. These findings suggest that local economic, cultural, and regulatory factors play a crucial role in shaping how ESG influences financial performance.

Given these inconsistencies, this study aims to provide new insights into the relationship between ESG and CFP by focusing on Indonesian and Malaysian firms. These countries offer a unique context due to their resource-intensive economies, evolving regulatory frameworks, and increasing awareness of sustainability issues. Unlike developed markets, where ESG practices are well established, emerging markets like Indonesia and Malaysia face distinct challenges and opportunities in implementing ESG principles. Understanding how these local dynamics shape the adoption and impact of ESG practices is critical for investors, policymakers, and corporate leaders striving to align financial performance with sustainable development goals.

This study seeks to address the existing knowledge gap by examining how ESG practices affect corporate financial performance in the capital markets of Indonesia and Malaysia. The findings will not only enhance our understanding of ESG adoption in emerging markets but also provide valuable insights into how sustainability practices can drive financial competitiveness and long-term growth in these regions.

THEORETICAL FRAMEWORK

The relationship between Environmental, Social, and Governance (ESG) scores and corporate financial performance (CFP) is rooted in stakeholder theory [7, 8]. Stakeholder theory posits that organizations should consider the needs and expectations of various stakeholders — such as customers, suppliers, employees, and investors — when managing their operations and ethical practices. By addressing these diverse interests, firms can build trust, secure resources, and create value for stakeholders. This theory provides a foundation for understanding how ESG practices contribute to corporate resilience and financial success [9].

Environmental (E) Dimension

The environmental component of ESG emphasizes sustainable practices, resource efficiency, and innovation. Gangi et al. [10] argue that environmental engagement and green product innovation are key drivers of corporate reputation, bridging the gap between sustainable development and financial outcomes. Empirical evidence supports this notion, Chouaibi et al. [11] demonstrating a positive and significant relationship between environmental disclosures and financial performance among 523 companies in North America and Western Europe. Strong environmental disclosures are shown to enhance financial performance, while weak disclosures have the opposite effect. The hypothesis for the E dimension is developed as below:

H1: E scores have a significant impact on corporate financial performance.

Social (S) Dimension

As framed by stakeholder theory, the social dimension highlights the strategic importance of corporate social responsibility (CSR). CSR enables firms to address social and environmental concerns while pursuing economic objectives [12]. Liu et al. [13] underscore the importance of minimizing negative externalities in social and natural environments to maintain stakeholder trust. Empirical findings indicate that social performance is closely linked to ESG disclosure, as seen in Shabbir et al. [14], who identified a significant relationship between ESG and social performance. However, their study also revealed a U-shaped relationship between CFP and governance, suggesting a complex interaction between these components. Candio [15], in a study of 6600 firm-year observations from STOXX Europe 600, found inconsistencies in the moderating effect of CSR committees on ESG and financial performance, with a negative impact on ROA and share prices. The development of H dimension of ESG is shown below:

H2: S scores have a significant impact on corporate financial performance.

Governance (G) Dimension

Corporate governance, as defined by the Organization for Economic Co-operation and Development,[1] is a system to direct and regulate company operations in line with stakeholder expectations. Strong governance practices, such as board independence and commitment, enhance decision-making and corporate transparency [16]. Several studies highlight the positive impact of governance on CFP. Al-Matari [17] identified significant relationships between board independence, board size, and CFP in the financial sector, while Zureigat et al. [18] demonstrated similar findings in Jordanian companies. On the other hand, some studies reveal mixed results. For instance, Kiptoo et al. [19] observed a significant impact of governance on the financial performance of Kenyan firms, while Cardoso et al. [20] found that firms in Brazil with strong governance were better insulated from short-term market fluctuations.

H3: G scores have a significant impact on corporate financial performance.

ESG as an Integrated Framework

While many studies examine the individual components of ESG, research on the composite impact of ESG performance on CFP has yielded mixed results. For instance, Kurniawan & Rokhim [21] found a negative relationship between ESG performance and market value in ASEAN countries, particularly in the banking sector. Similarly, Nazarova [22] concluded that while ESG performance does not guarantee investment attractiveness, disaggregating the environmental, social, and governance pillars provides nuanced insights. In contrast, Ji et al. [23] found that strong ESG performance enhances firm value, suggesting that ESG integration can contribute to financial and market competitiveness.

Empirical studies also highlight regional and contextual variations. For instance, Peng and Isa [24] noted that ESG scores positively correlate with CFP in Shariah-compliant firms, while Qoyum et al. [25] found that governance scores negatively impacted financial performance in Islamic firms in Indonesia and Malaysia. Other studies, such as Duque-Grisales and Aguilera-Caracuel [26], reveal a negative relationship between ESG and CFP in Latin American firms, underscoring the importance of contextual factors in ESG performance.

[1] OECD Analytical Report on Investment Governance and the Integration of ESG Factors. 2017;(June):1–6.

H4: ESG scores have a significant impact on corporate financial performance.

In summary, stakeholder theory provides the foundation for understanding the relationship between ESG scores and CFP. The environmental, social, and governance dimensions each play unique roles in shaping corporate outcomes, while the composite ESG framework highlights the interplay of these factors. However, mixed findings in the literature underscore the need for further investigation, particularly in emerging markets like Indonesia and Malaysia, where contextual factors may significantly influence ESG adoption and its financial impacts.

Research Design

This study investigates the impact of ESG scores on corporate financial performance using 421 firm-year observations from companies listed in Indonesia and Malaysia between 2010 and 2022. The ESG and CFP data are obtained from Refinitiv, while macroeconomic variables are sourced from the World Bank. Accounting-based (ROA, ROE) and market-based (Tobin's Q) performance measures are used as dependent variables, with ESG components (E, S, G) as independent variables. Various firm-specific and macroeconomic controls are incorporated into the panel data regression model. The Hausman test guides the selection of random effects vs. fixed effects models, ensuring robust and appropriate estimations.

Data Source, Sample, and Period

This study utilizes secondary data from reputable sources to ensure accuracy and reliability in assessing the relationship between ESG scores and corporate financial performance. The primary data on ESG scores and corporate financial metrics are retrieved from the Refinitiv database, a widely recognized source for ESG ratings, financial data, and corporate disclosures. Refinitiv provides standardized ESG scores based on ten broader categories, including emissions, resource use, innovation, human rights, and CSR strategy. These scores serve as the independent variables in this study, representing the environmental, social, and governance dimensions of corporate sustainability.

The study covers a sample of 60 publicly listed companies from Indonesia and Malaysia, yielding a total of 421 firm-year observations collected over a 13-year period from 2010 to 2022. The selection of companies is based on their listing status in the Indonesia Shariah Stock Index and Bursa Malaysia, ensuring that the sample represents firms operating under similar market and regulatory environments. The sample period allows for a longitudinal analysis, capturing trends and potential shifts in the impact of ESG performance on corporate financial outcomes. By focusing on firms from Indonesia and Malaysia, the study aims to provide a nuanced understanding of ESG adoption in emerging markets and its implications for corporate financial performance.

The dependent variables of the study include accounting performance (ROA and ROE), and market performance (Tobin's Q). This follows the prior literature of Nguyen and Wong [27, 28]. The independent variables of the study are E scores [29], S scores [30], G scores [31], and the combined ESG scores [32] of each company. Consistent with the previous studies [33, 34], the study used firm size, firm age, HHI, munificence, dynamism, inflation and GDP (*Table 1*).

Model Specification

To examine the relationship between ESG scores and corporate financial performance, the study employs a panel data regression analysis. The model is estimated using fixed effects and random effects models, with the appropriate model selection determined through the Hausman test [34]. The baseline regression equations are as follows:

$$\begin{aligned} \textit{Tobin's Q} = {} & \beta 0 + \beta 1 \textit{EScores} + \beta 2 \textit{SScores} + \\ & + \beta 3 \textit{GScores} + \beta 4 \textit{ESGScores} + \beta 5 \textit{SINDScores} + \\ & + \gamma 1 \textit{Firm Age} + \gamma 2 \textit{Leverage} + \gamma 3 \textit{Firm Size} + \gamma 4 \textit{HHI} + \\ & + \gamma 5 \textit{Munificence} + \gamma 6 \textit{Dynamism} + \gamma 7 \textit{Inflation} \\ & + \gamma 8 \textit{GDP} + \epsilon; \end{aligned} \quad (1)$$

$$\begin{aligned} \textit{ROA} = {} & \beta 0 + \beta 1 \textit{EScores} + \beta 2 \textit{SScores} + \beta 3 \textit{GScores} + \\ & + \beta 4 \textit{ESGScores} + \beta 5 \textit{SINDScores} + \gamma 1 \textit{Firm Age} + \\ & + \gamma 2 \textit{Leverage} + \gamma 3 \textit{Firm Size} + \gamma 4 \textit{HHI} + \\ & + \gamma 5 \textit{Munificence} + \gamma 6 \textit{Dynamism} + \gamma 7 \textit{Inflation} + \\ & + \gamma 8 \textit{GDP} + \epsilon; \end{aligned} \quad (2)$$

$$\begin{aligned} \textit{ROE} = {} & \beta 0 + \beta 1 \textit{EScores} + \beta 2 \textit{SScores} + \beta 3 \textit{GScores} + \\ & + \beta 4 \textit{ESGScores} + \beta 5 \textit{SINDScores} + \gamma 1 \textit{Firm Age} + \\ & + \gamma 2 \textit{Leverage} + \gamma 3 \textit{Firm Size} + \gamma 4 \textit{HHI} + \gamma 5 \textit{Munificence} + \\ & + \gamma 6 \textit{Dynamism} + \gamma 7 \textit{Inflation} + \gamma 8 \textit{GDP} + \epsilon. \end{aligned} \quad (3)$$

Hausman Test

The *Table 2* summarizes the statistical tests for three financial performance metrics, Tobin's Q, ROA, and ROE, using either random effects or fixed effects models to assess their relationship with various predictors.

As shown in *Table 2*, the results indicate that random effects models are appropriate for Tobin's Q and ROA, as their p-values exceed 0.05, suggesting no significant correlation between the random effects and independent variables. However, the fixed effects model is more suitable for ROE, as its p-value is below 0.05,

Table 1

Summary of Variables

Variable	Description	Measurement
Tobin's Q	Q Ratio	Measured by total of market value of equities plus book value of liabilities divided by total assets
ROA	Return on Assets	Measured by net income divided by total assets
ROE	Return on Equity	Measured by net income divided by total equities
E	Environmental score	Refinitiv environmental score
S	Social score	Refinitiv social score
G	Governance score	Refinitiv governance score
ESG	Environmental, social, and governance score	The Refinitiv Eikon ESG score reflecting the company's score in environment, social, and governance dimensions
Firm Size	Firm Size	Measured by ln (total assets)
Leverage	Leverage	Measured by total liabilities divided by total assets
Firm Age	Firm Age	Years since IPO
HHI		A sum of the squares of market shares (sales) of firms within a given industry for the year
Munificence	Munificence	Regressing time against sales of industry over the 5 years of the period under analysis and (2) taking the ratio of the regression slope coefficient to the mean value of sales over the same period
Dynamism	Dynamism	Standard error of the munificence regression slope coefficient divided by the mean value of sales over the same period
Inflation	Inflation	Annual inflation (consumer price rate)
GDP	GDP	Natural log of total gross domestic product

Source: Prepared by authors.

Table 2

Hausman Test

Dependent Variable	Test Summary	Chi-Square Statistic	P-Value
Tobin's Q	Random effects model	17.16	0.1032
ROA	Random effects model	11.29	0.419
ROE	Fixed effects model	23.4	0.0155

Source: Prepared by authors.

indicating that time-invariant firm-specific factors must be accounted for in explaining ROE variations.

Findings

Descriptive Statistics

The dataset consists of 421 observations, encompassing financial, organizational, and macroeconomic variables, offering insights into firm-level performance, market dynamics, and broader economic conditions. Descriptive statistics in *Table 3* highlight considerable variability across the variables. For instance, Tobin's Q, a measure of firm valuation, has a mean of 13.86 and an exceptionally high standard deviation of 182.78, indicating substantial variation across firms and the presence of outliers. Profitability metrics, such as Return on Assets (ROA) and Return

Table 3

Summary Statistics of Variables

Variable	Obs	Mean	Std. dev.	Min	Max
TobinsQ	421	13.86341	182.7789	0.0026774	2770.391
ROA	421	0.088338	0.6762515	−0.3869154	13.79199
ROE	421	0.224555	0.4809012	−2.23799	4.569591
E	421	34.96884	23.43895	0	90.54
S	421	52.21174	23.48009	2.41	94.42
G	421	54.85504	21.24835	4.05	95.13
ESG	421	49.10864	19.79447	0.61	88.35
FirmSize	421	21.39566	4.903218	2.605648	26.09582
Leverage	421	1.936216	10.27749	0	153.7718
FirmAge	421	48.30404	27.271	10	128
HHI	421	0.1635296	0.0538983	0.0697337	0.2970188
Munificence	421	0.010247	0.0122588	−0.0202441	0.0439163
Dynamism	421	0.0046836	0.0030412	0.0010759	0.0161242
Inflation	421	2.492421	1.848702	−1.138702	6.412513
GDP	421	4.037221	3.838796	−5.456847	8.650344

Source: Prepared by authors.

on Equity (ROE), also exhibit notable dispersion, with averages of 8.83% and 22.46%, respectively, and wide ranges from negative to highly positive values.

The ESG components — Environmental (E), Social (S), and Governance (G) scores — along with the aggregate ESG score (mean = 49.11), suggest moderate levels of sustainability performance across the sample. Firm-specific characteristics, such as Size (mean = = 21.4) and Age (mean = 48.3 years since IPO), exhibit significant variability, reflecting differences in company maturity and scale. Industry-level measures, including HHI (market concentration), Munificence (resource richness), and Dynamism (market volatility), provide further insights into external market conditions. Finally, macroeconomic variables such as Inflation (mean = = 2.49%) and GDP growth (mean = 4.04%) contextualize the economic environment during the study period. This diverse dataset captures the heterogeneity of firms and market conditions, making it well-suited for exploring the complex interplay between ESG performance and financial outcomes.

Correlation Results

The correlation matrix as shown in *Table 4* provides an overview of the relationships between key variables, including ESG dimensions (E, S, and G) and firm-level and market-level factors. As expected, the Environmental (E) score exhibits a strong positive correlation with both the Social (S) and Governance (G) scores, indicating that firms performing well in one ESG dimension often excel in others. This underscores the integrated nature of ESG practices, where environmental, social, and governance initiatives are interrelated. Interestingly, firm-level variables such as Leverage and Firm Age show weak or negative correlations, with older firms appearing less reliant on debt financing. Furthermore, HHI (market concentration) is negatively correlated with profitability measures such as ROE, suggesting that increased market competition may enhance firm profitability by encouraging operational efficiency. However, multicollinearity risks arise from the high correlations between ESG dimensions, potentially complicating regression analyses. To address this, a composite ESG score is used in some models to mitigate multicollinearity and streamline the analysis. Overall, the correlation matrix provides valuable insights into variable interactions, helping refine regression models to better capture the factors influencing corporate financial performance.

Table 4

Correlation Matrix of Independent Variables

	TobinsQ	ROA	ROE	E	S	G	ESG	FirmSize	Leverage	FirmAge	HHI	Munificence	Dynamism	Inflation	GDP
TobinsQ	1														
ROA	0.0197	1													
ROE	-0.0025	0.0815	1												
E	-0.095	-0.0274	0.0322	1											
S	-0.143	-0.0063	0.0801	0.6447	1										
G	-0.1341	-0.08	0.0254	0.39	0.4932	1									
ESG	-0.151	-0.042	0.0772	0.7511	0.9092	0.7533	1								
FirmSize	0.0057	-0.0518	-0.0026	0.307	0.187	0.2107	0.2793	1							
Leverage	0.0266	-0.006	0.0274	-0.0664	-0.0337	-0.0533	-0.0619	-0.0651	1						
FirmAge	0.0122	-0.0115	-0.1385	0.2168	0.0974	0.1693	0.1644	0.2128	-0.0339	1					
HHI	-0.0214	-0.0315	-0.0603	0.0966	0.0397	0.0708	0.0846	0.3672	-0.0107	0.1619	1				
Munificence	0.1434	0.0649	-0.021	-0.0978	-0.1726	0.0029	-0.1295	0.1999	-0.0475	0.0668	0.1608	1			
Dynamism	0.0715	0.0347	-0.0053	-0.1746	-0.2738	-0.3436	-0.3438	-0.2029	0.0935	-0.0452	-0.0888	0.1542	1		
Inflation	0.1035	-0.0151	0.0163	-0.0906	-0.0612	0.0044	-0.0587	0.4475	0.0142	0.1534	0.3549	0.3074	0.0796	1	
GDP	0.0409	0.0247	0.0694	-0.02	-0.0689	0.0159	-0.0326	0.519	0.0229	0.0222	0.0938	0.261	0.1069	0.6881	1

Source: Author calculations.

Regression Results

The regression results for Tobin's Q, a measure of firm valuation, reveal significant relationships with certain predictors (*Table 5*). Munificence (coefficient = 1878.03, p = 0.017) and Inflation (coefficient = 16.26, p = 0.03) are positively associated with Tobin's Q, indicating that resource-rich environments and inflationary conditions contribute to higher firm valuations. In contrast, HHI (market concentration) has a marginally insignificant negative effect (p = 0.09), suggesting that greater market competition may support higher valuations, though the relationship lacks statistical significance.

Other variables, including ESG dimensions (E, S, G, and the composite ESG score), Firm Size, Firm Age, Leverage, and Dynamism, do not exhibit significant effects (p > 0.05). These findings suggest that while macroeconomic conditions and market resource richness influence firm valuation, ESG scores and firm-specific characteristics are less impactful in this model.

In addition, the analysis of ROA, a measure of profitability, shows limited evidence of significant relationships (*Table 6*). Most variables, including ESG dimensions and macroeconomic indicators, exhibit weak or negligible effects on ROA, with high p-values indicating a lack of statistical significance. The only exception is Munificence, which shows a marginally positive effect (coefficient = 5.07, p = 0.087), suggesting that resource-rich environments might slightly enhance profitability. These results imply that profitability, as measured by ROA, may depend on factors outside the scope of the included variables, such as operational efficiency or industry-specific dynamics. The lack of strong relationships between ESG and ROA suggests that while ESG practices may contribute to other aspects of firm performance, their direct impact on profitability is less pronounced in this context.

For ROE, a profitability measure focused on equity returns, significant relationships are observed with Firm Age and HHI (*Table 7*). Firm Age has a negative coefficient (–0.027, p = 0.001), indicating that older firms tend to have lower ROE, potentially due to outdated practices, reduced growth opportunities, or increased competition. Similarly, HHI (coefficient = –2.135, p = 0.041) negatively impacts ROE, suggesting that higher market concentration (reduced competition) is associated with lower profitability, possibly due to a lack of competitive pressure. ESG dimensions (E, S, G, and the composite ESG score) and other firm-level characteristics, such as Firm Size and Leverage, do not show significant effects on ROE (p > 0.05). However, Dynamism (market volatility) approaches significance (p = 0.06), hinting at a possible relationship between market instability and profitability. These findings highlight the importance of market competition and firm characteristics in shaping ROE, while ESG factors appear to have limited direct influence.

DISCUSSION

This study investigated the relationship between Environmental, Social, and Governance (ESG) scores and corporate financial performance (CFP) for companies listed on the Indonesia Shariah Stock Index (ISSI) and Bursa Malaysia. Using pooled data from the Refinitiv database covering the period from 2010 to 2022, the analysis focused on 60 companies across 12

Table 5

Random Effects Model, Tobin's Q

Tobin's Q	Coefficient	Std. error	z	P-Value
E	−0.5147446	0.8341413	−0.62	0.537
S	−2.446038	1.704224	−1.44	0.151
G	−2.154314	1.286029	−1.68	0.094
ESG	3.655808	3.377761	1.08	0.279
FirmSize	0.7660375	2.567499	0.3	0.765
Leverage	0.5362243	0.8636983	0.62	0.535
FirmAge	0.1030588	0.3450539	0.3	0.765
HHI	−326.3442	192.2659	−1.7	0.09
Munificence	1878.027	785.088	2.39	0.017
Dynamism	−172.3401	3279.725	−0.05	0.958
Inflation	16.26364	7.509883	2.17	0.03
GDP	−5.409018	3.660614	−1.48	0.14
_cons	92.04394	58.90007	1.56	0.118

Source: Author calculations.

Table 6

Random Effect Models, ROA

ROA	Coefficient	Std. error	z	P−value
E	−0.0005266	0.0031448	−0.17	0.867
S	0.0025336	0.006425	0.39	0.693
G	−0.0034753	0.0048484	−0.72	0.473
ESG	−0.0000235	0.0127344	0	0.999
FirmSize	−0.0126084	0.0096796	−1.3	0.193
Leverage	−0.0006938	0.0032562	−0.21	0.831
FirmAge	0.0005782	0.0013009	0.44	0.657
HHI	0.0658459	0.7248534	0.09	0.928
Munificence	5.068296	2.959827	1.71	0.087
Dynamism	−3.995187	12.36475	−0.32	0.747
Inflation	−0.0285441	0.0283127	−1.01	0.313
GDP	0.0194441	0.0138007	1.41	0.159
_Cons	0.3580886	0.2220566	1.61	0.107

Source: Author calculations.

Table 7

Fixed Effects Model, ROE

ROE	Coefficient	Std. error	t	P–Value
E	–0.002471	0.0018974	–1.3	0.194
S	–0.0010133	0.0047711	–0.21	0.832
G	–0.0033911	0.0035372	–0.96	0.338
ESG	0.0077935	0.0091035	0.86	0.393
FirmSize	0.0020832	0.0056066	0.37	0.71
Leverage	0.000598	0.0022592	0.26	0.791
FirmAge	–0.0270103	0.0082558	–3.27	0.001
HHI	–2.135508	1.0423	–2.05	0.041
Munificence	–2.314208	1.677898	–1.38	0.169
Dynamism	12.31945	6.52879	1.89	0.06
Inflation	0.0004487	0.014342	0.03	0.975
GDP	0.0013309	0.0062778	0.21	0.832
_Cons	1.734874	0.401623	4.32	0

Source: Author calculations.

years, culminating in 410 firm-year observations. The study's dependent variables were firm performance indicators — Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q — while the independent variables comprised the E, S, G, and combined ESG scores. Additionally, the model incorporated control variables at three levels: firm-specific (Size, Leverage, and Age), industry-specific (HHI, Munificence, and Dynamism), and macroeconomic (Inflation and GDP growth). The significant variability in the dataset, as seen in Tobin's Q and profitability measures, underscores the diverse nature of the firms studied, aligning with Barney's (1991) resource-based view. High variability suggests that firm-specific resources and market conditions play critical roles in driving performance outcomes. Notably, the average ESG score (49.11) indicates moderate engagement with sustainability practices, though the wide range highlights disparities in ESG integration across firms.

The regression results highlighted key findings. ESG scores had a positive but modest influence on Tobin's Q (coefficient = 3.656), reflecting a potential link between ESG performance and market valuation. These findings align with Dess and Beard [35] argument that resource-abundant environments facilitate organizational success by reducing operational constraints. However, other factors, such as ESG scores, firm size, and leverage, exhibit weak or negligible effects, suggesting that firm valuation may depend more on external resources than internal attributes in this context. The marginally insignificant negative impact of market concentration (HHI) suggests that competition may drive higher valuations, resonating with the [36, 37] structure-conduct-performance paradigm.

However, the impact of ESG scores on accounting-based performance metrics such as ROA and ROE was minimal. Firm-specific factors also played a critical role, with Firm Size positively influencing Tobin's Q, while Firm Age had a significant negative effect on ROE (coefficient = –0.027). Among industry-level factors, HHI (market concentration) reduced ROE (coefficient = –2.136), suggesting that less competitive markets may limit profitability. Market Munificence, reflecting resource-rich environments, strongly enhanced Tobin's Q (coefficient = 1878.027), while Inflation also positively affected Tobin's Q (coefficient = 16.264). Conversely, GDP growth showed negligible effects on corporate financial performance. Despite these findings, the explanatory power of the model was modest (R^2 = 0.069), indicating that much of the variation in financial performance remains unexplained by the included variables. The negative effect of Firm Age supports the maturity stage theory (Miller & Friesen, 1984), which posits that older firms often experience reduced growth opportunities and operational inefficiencies. Similarly, the negative impact

of HHI on ROE suggests that firms in concentrated markets prioritize stability over profitability, consistent with findings from prior studies on market competition [38]. The near significance of market Dynamism on ROE underscores the need for further exploration into how firms adapt to changing market conditions.

Despite growing attention to ESG factors in the literature [38], this study finds limited evidence of their direct influence on financial performance measures. This supports the argument that the financial benefits of ESG practices are often context-dependent and may take time to materialize. Firms may benefit from adopting a long-term perspective in integrating ESG practices into their strategies, focusing not only on immediate financial returns but also on sustainability and resilience in dynamic market environments. Future research should explore sector-specific ESG impacts and consider longitudinal approaches to better capture the long-term implications of sustainability initiatives.

CONCLUSIONS

This study contributes to the growing body of literature on ESG and corporate financial performance by offering insights into the nuanced relationship between sustainability practices and firm valuation in the context of emerging markets. While ESG scores exhibit a modest impact on market-based performance (Tobin's Q), their influence on accounting-based measures (ROA and ROE) remains limited, highlighting the need for tailored strategies that consider firm-specific, industry-level, and macroeconomic dynamics. These findings provide valuable implications for policymakers, corporate managers, and investors seeking to align ESG integration with financial objectives. Moving forward, a deeper exploration of contextual factors and advanced methodologies is essential for uncovering the full potential of ESG practices in driving sustainable and financial success.

The study has several limitations that warrant attention. First, the low explanatory power ($R^2 = 0.069$) suggests that additional variables or alternative models may be required to capture the complexities of the ESG-CFP relationship. Second, the dataset exhibited high variability and potential outliers, particularly in Tobin's Q, which may skew results and limit generalizability. Third, multicollinearity among variables, especially ESG components, Firm Size, and Leverage, could complicate the interpretation of regression coefficients. Fourth, the use of static macroeconomic indicators like inflation and GDP growth may not fully reflect dynamic economic conditions that could influence firm performance. Finally, the limited representation of industries and the lack of temporal depth in the dataset may overlook sector-specific or time-dependent trends that could impact ESG-CFP relationships. Future research should address these limitations by employing advanced models and incorporating additional variables to enhance the explanatory power of the analysis.

REFERENCES

1. Reber B., Gold A., Gold S. ESG disclosure and idiosyncratic risk in initial public offerings. *Journal of Business Ethics*. 2022;179(3):867–886. DOI: 10.1007/s10551–021–04847–8
2. Espinosa-Méndez C., Maquieira C., Arias J.T. ESG performance on the value of family firms: International evidence during COVID-19. *Humanities & Social Sciences Communications*. 2024;11(1):586. DOI: 10.1057/s41599–024–03074–6
3. Chiek A.N., Kean C.C., Loo H.L.P., Ling N.S. The cyclic relationship between environmental, social and governance (ESG) disclosure and corporate financial performance (CFP) in a regional economy. *Journal of Contemporary Issues and Thought*. 2021;11(1):79–93. DOI: 10.37134/jcit.vol11.7.2021
4. Chouaibi S., Chouaibi J., Rossi M. ESG and corporate financial performance: The mediating role of green innovation. UK common law versus Germany civil law. *EuroMed Journal of Business*. 2022;17(1):46–71. DOI: 10.1108/EMJB-09–2020–0101
5. Ismail A.M., Azman K.B.B. The impact of environmental, social and governance performance on financial performance: Evidence from Japanese companies. *Edelweiss Applied Science and Technology*. 2024;8(3):236–258. DOI: 10.55214/25768484.v8i3.950
6. Lee M.T., Suh I. Understanding the effects of environment, social, and governance conduct on financial performance: Arguments for a process and integrated modelling approach. *Sustainable Technology and Entrepreneurship*. 2022;1(1):100004. DOI: 10.1016/j.stae.2022.100004
7. Freeman R.E. Stakeholder theory: The state of the art. Cambridge: Cambridge University Press; 1984. 362 p.
8. Freeman R.E., Dmytriyev S. Corporate social responsibility and stakeholder theory: Learning from each other. *Symphonia: Emerging Issues in Management*. 2017;(1)7–15. DOI: 10.4468/2017.1.02freeman.dmytriyev
9. Sternberg E. The defects of stakeholder theory. *Corporate Governance*. 1997;5(1):3–10. DOI: 10.1111/1467–8683.00034

10. Gangi F., Daniele L.M., Varrone N. How do corporate environmental policy and corporate reputation affect risk-adjusted financial performance? *Business Strategy and the Environment*. 2020;29(5):1975–1991. DOI: 10.1002/bse.2482
11. Chouaibi S., Rossi M., Siggia D., Chouaibi J. Exploring the moderating role of social and ethical practices in the relationship between environmental disclosure and financial performance: Evidence from ESG companies. *Sustainability*. 2022;14(1):209. DOI: 10.3390/su14010209
12. Russo M.V., Fouts P.A. A resource-based perspective on corporate environmental performance and profitability. *The Academy of Management Journal*. 1997;40(3):534–559. DOI: 10.2307/257052
13. Zhou G., Liu L., Luo S. Sustainable development, ESG performance and company market value: Mediating effect of financial performance. *Business Strategy and the Environment*. 2022;31(7):3371–3387. DOI: 10.1002/bse.3089
14. Shabbir M.S., Aslam E., Irshad A., et al. Nexus between corporate social responsibility and financial and non-financial sectors' performance: A non-linear and disaggregated approach. *Environmental Science and Pollution Research*. 2020;27(31):39164–39179. DOI: 10.1007/s11356–020–09972-x
15. Candio P. The effect of ESG and CSR attitude on financial performance in Europe: A quantitative re-examination. *Journal of Environmental Management*. 2024;354:120390. DOI: 10.1016/j.jenvman.2024.120390
16. Aslam E., Haron R. The influence of corporate governance on intellectual capital efficiency: Evidence from Islamic banks of OIC countries. *Asian Journal of Accounting Research*. 2020;5(2):195–208. DOI: 10.1108/AJAR-05–2020–0030
17. Al-Matari E.M. Do corporate governance and top management team diversity have a financial impact among financial sector? A further analysis. *Cogent Business & Management*. 2022;9(1):2141093. DOI: 10.1080/23311975.2022.2141093
18. Zureigat B.N., Al-hazimeh A.M., Batayneh R., Alrawashedh N.H. Does board of directors affect financial performance? A study of the Jordanian companies. *Uncertain Supply Chain Management*. 2024;12(3):1441–1450. DOI: 10.5267/juscm.2024.007
19. Kiptoo I.K., Kariuki S.N., Ocharo K.N. Corporate governance and financial performance of insurance firms in Kenya. *Cogent Business & Management*. 2021;8(1):1938350. DOI: 10.1080/23311975.2021.1938350
20. Cardoso G., Carr D.D., Rogers P. Does corporate governance matter for stock returns volatility in the Brazilian context? *Corporate Governance*. 2019;19(6):1236–1252. DOI: 10.1108/CG-03–2019–0083
21. Kurniawan I., Rokhim R. Is ESG companies' performance influenced by ownership structure? Evidence in ASEAN. *Interdisciplinary Social Studies*. 2023;2(9):2397–2413. DOI: 10.55324/iss.v2i9.485
22. Nazarova V., Lavrova V. Do ESG factors influence investment attractiveness of the public companies? *Journal of Corporate Finance Research.* 2022;16(1):38–64. DOI: 10.17323/j.jcfr.2073–0438.16.1.2022.38–64
23. Ji L., Sun Y., Liu J., Chiu Y. Environmental, social, and governance (ESG) and market efficiency of China's commercial banks under market competition. *Environmental Science and Pollution Research*. 2023;30(9):24533–24552. DOI: 10.1007/s11356–022–23742-x
24. Peng L.S., Isa M. Environmental, social and governance (ESG) practices and performance in Shariah firms: Agency or stakeholder theory? *Asian Academy of Management Journal of Accounting and Finance*. 2020;16(1):1–34. DOI: 10.21315/aamjaf2020.16.1.1
25. Qoyum A., Al Hashfi R.U., Zusryn A.S., Kusuma H., Qizam I. Does an Islamic-SRI portfolio *really* matter? Empirical application of valuation models in Indonesia. *Borsa Istanbul Review*. 2021;21(2):105–124. DOI: 10.1016/j.bir.2020.08.002
26. Duque-Grisales E., Aguilera-Caracuel J. Environmental, social and governance (ESG) scores and financial performance of Multilatinas: Moderating effects of geographic international diversification and financial slack. *Journal of Business Ethics*. 2019;168(2):315–334. DOI: 10.1007/s10551–019–04177-w
27. Nguyen H.T. How ESG activities improve corporate stock performance during the COVID-19 crisis. Master's theses. Nijmegen: Radboud Universiteit; 2022. 46 p. URL: https://theses.ubn.ru.nl/server/api/core/bitstreams/b3e5cf09-c70c-44e4–89cb-d4a25b31b4d8/content
28. Wong W.C., Batten J.A., Ahmad A.H., et al. Does ESG certification add firm value? *Finance Research Letters*. 2021;39:101593. DOI: 10.1016/j.frl.2020.101593
29. Al-Hiyari A., Ismail A.I., Kolsi M.C., Kehinde O.H. Environmental, social and governance performance (ESG) and firm investment efficiency in emerging markets: The interaction effect of board cultural diversity. *Corporate Governance*. 2023;23(3):650–673. DOI: 10.1108/CG-03–2022–0133
30. Habermann F., Fischer F.B. Corporate social performance and the likelihood of bankruptcy: Evidence from a period of economic upswing. *Journal of Business Ethics*. 2023;182(1):243–259. DOI: 10.1007/s10551–021–04956–4

31. Rooh S., Zahid M., Malik M.F., Tahir M. Corporate governance characteristics and environmental, social & governance (ESG) performance: Evidence from the banking sector of Pakistan. *Journal of Business and Tourism*. 2021;7(1):35–50. DOI: 10.34260/jbt.v7i1.218
32. Zhou G., Liu L., Luo S. Sustainable development, ESG performance and company market value: Mediating effect of financial performance. *Business Strategy and the Environment*. 2022;37(7):3371–3387. DOI: 10.1002/bse.3089
33. Ray R.S., Goel S. Impact of ESG score on financial performance of Indian firms: Static and dynamic panel regression analyses. *Applied Economics*. 2023;55(15):1742–1755. DOI: 10.1080/00036846.2022.2101611
34. Baltagi B.H. Econometric analysis of panel data. 5th ed. New York, NY: John Wiley & Sons, Inc.; 2005. 317 p.
35. Dess G.G., Beard D.W. Dimensions of organizational task environments. *Administrative Science Quarterly*. 1984;29(1):52–73. DOI: 10.2307/2393080
36. Talan G., Sharma G.D. From business goals to societal goals via sustainable investment: An integrative review and research agenda. *World Review of Entrepreneurship, Management and Sustainable Development*. 2020;16(1):108–124. DOI: 10.1504/WREMSD.2020.105530
37. Friede G., Lewis M., Bassen A., Busch T. ESG & corporate financial performance: Mapping the global landscape. London: Deutsche Asset &Wealth Management; 2015. 16 p. URL: https://finansdanmark.dk/media/bvdirlmm/k15090_academic_insights_us_rz_online_151216.pdf

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