

ENHANCING THE ESG-FINANCIAL PERFORMANCE DYNAMICS: DOES AUDIT QUALITY MATTER?

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Abstract: This study explores the impact of Environmental, Social, and Governance (ESG) performance on a firm's financial performance. Utilizing a sample of 49 companies from 2019 to 2023, with 245 firm-year observations, the research employs panel data estimations to explore the direct effects of ESG performance on financial metrics. The findings reveal that ESG performance significantly enhances Return on Equity (ROE), highlighting its potential to increase shareholder value through sustainable business practices. The study further examines the moderating role of Big Four auditors, finding that their presence weakens the positive relationship between ESG and ROE, possibly due to stricter reporting standards. To further validate the findings, a robustness test was also conducted using Return on Assets (ROA), which shows that ESG's influence on asset efficiency is not immediately significant, likely due to the longer time required for operational efficiencies to materialize. These findings contribute to the existing literature by offering fresh insights into how ESG initiatives affect financial performance in the Malavsian context, emphasizing the distinct impact on equity returns while suggesting that the benefits to asset efficiency may take longer to emerge. Additionally, the study highlights the critical role of audit quality in shaping the financial impact of ESG practices, indicating that the involvement of Big Four auditors can alter the effectiveness of ESG strategies on shareholder value.

Keywords: Big Four, Audit Quality, Financial Performance, ESG



Introduction

The growth of responsible investment around the world has been fuelled by a focus on Environmental, Social, and Governance (ESG) performance, which refers to a firm's non-financial metrics. ESG criteria are used by socially conscious investors to identify socially responsible companies for investment (Deng et al., 2013). The rationale is that stakeholders are more interested in sustainability performance (Zahid et al., 2024). Previous studies indicate that investors reward good ESG firms, while poorly disclosed ESG firms are viewed as indicators of idiosyncratic risks (Mohammad & Wasiuzzaman, 2021). On the other hand, market regulators also include ESG disclosure in their listing criteria, either voluntary or mandatory, to improve financial reporting quality and transparency (Kamaludin et al., 2022). As a result, firms are now increasingly disclosing their ESG performance to meet investor and regulatory requirements (Hua & Alam, 2021).

The emphasis on environmental, social, and governance (ESG) factors is growing on a global scale. Like every other country intending to export products and attract foreign direct investment, Malaysia has to adjust to meet international standards¹. As an important player in Southeast Asia, Malaysia has witnessed the adoption of ESG frameworks by its authorities, corporations, and government in order to meet both local and global requirements. The Malaysian government, alongside regulatory bodies such as Bursa Malaysia and the Securities Commission Malaysia, has been proactive in encouraging companies to integrate ESG considerations into their operations and disclosures. As part of this effort, Bursa Malaysia launched the FTSE4Good Bursa Malaysia (F4GBM) in December 2014, in collaboration with FTSE Russell, to promote best practice disclosures among publicly traded Malaysian companies. This initiative was further strengthened in 2015 when Bursa Malaysia updated its listing standards to include sustainability-related initiatives. Additionally, in 2018, Bursa Malaysia published a Sustainability Reporting Guide to help Malaysian firms enhance their ESG practices, marking a continued commitment to improving corporate sustainability in the country. The Malaysian Code on Corporate Governance (MCCG) also plays a pivotal role by outlining principles and best practices for corporate governance, including the adoption of ESG practices. It emphasizes the importance of transparency, accountability, and ethical behaviour, aiming to enhance the overall quality of corporate governance and effectively manage ESG risks. However, despite this effort, as of the financial year 2020, only 75 Malaysian companies were involved in ESG reporting, despite market regulators' efforts to promote the practice (The Edge, $2021)^2$.

As Malaysia continues to navigate its ESG journey, firms in Malaysia still face significant challenges in sustaining their market positions due to ESG-related issues. For instance, Top Glove Corporation, the world's largest rubber glove manufacturer, faced a major setback when the U.S. Customs and Border Protection (CBP) issued a ban on its products in 2020, citing concerns over forced labour practices. This ban not only damaged Top Glove's reputation but also led to a loss of significant market share in one of its key export markets. Similarly, Sime Darby Plantation, one of the largest palm oil producers in Malaysia, encountered ESG-related difficulties when the CBP imposed a ban on its palm oil products in 2020, based on allegations related to deforestation and the destruction of biodiversity-rich areas. Another notable example is FGV Holdings Berhad, a leading palm oil company, which also faced scrutiny over labour rights abuses, including accusations of forced labour, leading to import bans by the CBP in

¹ https://www.skrine.com/insights/alerts/january-2024/six-global-trends-in-esg-to-watch-out-for-in-malay

² https://theedgemalaysia.com/node/718512



2020. These cases highlight the broad spectrum of ESG challenges, from labour practices to environmental sustainability, that Malaysian firms must navigate, often with significant repercussions on their global competitiveness and market sustainability.

The ESG challenges faced by Malaysian firms, such as the forced labour allegations against Top Glove Corporation and deforestation concerns with Sime Darby Plantation, highlight significant gaps in ESG reporting and management. These issues have not only damaged their reputations but also resulted in significant financial consequences, emphasizing the close relationship between ESG performance and financial outcomes. Firms that neglect ESG responsibilities often face sanctions, bans, and loss of market access, which can severely impact profitability and long-term sustainability. Despite ongoing efforts to address these concerns, substantial ESG-related threats persist, suggesting potential deficiencies in the accuracy and reliability of ESG disclosures. Research supports this connection, indicating that audit quality has a direct positive effect on ESG transparency (Moalla & Dammak, 2023), suggesting that lower audit quality is associated with less reliable ESG reporting, which can adversely affect both ESG scores and financial performance. Vaz Ferreira (2019) highlights that auditors play a crucial role in ensuring corporate governance by protecting shareholders' interests and enhancing the credibility of reports. This context underscores the need to investigate how audit quality, proxied by Big Four auditors influences ESG reporting and its impact on financial performance.

This study makes a significant contribution by examining the direct relationship between ESG performance and financial outcomes, with a focus on understanding how strong ESG practices may enhance financial performance in the Malaysian context. Emphasizing the importance of sustainability, the research highlights how firms prioritizing ESG are better positioned to attract capital, secure favourable terms, and maintain a competitive edge, especially in Malaysia, where regulatory frameworks and investor awareness around sustainability are increasingly prominent. Additionally, the study explores the moderating role of audit quality, suggesting that high-quality audits could enhance ESG scores by improving the accuracy and reliability of ESG disclosures. This, in turn, strengthens the positive relationship between ESG performance and financial outcomes, as higher ESG scores attract more investors and enhance the company's market perception. This approach helps fill gaps in understanding the interplay between ESG practices and financial performance, offering valuable guidance for policymakers, investors, and corporate managers in fostering sustainable business practices. Through this comprehensive analysis, the study aims to advance knowledge in ESG research and offer practical recommendations for enhancing ESG reporting quality and its impact on firm financial performance.

Literature Review and Hypothesis Development

ESG Performance

The terms CSR and ESG are often used interchangeably, as they share similar foundations (Christensen et al., 2021). The term Environmental Social Governance (ESG) refers to a collection of practices or activities that link organizations to their natural surroundings, their coexistence, and interactions with all living things, including humans, animals, and plants. It also includes a corporate system of central controls and procedures (laws, customs, policies, rules, and regulations) aimed at directing and managing organizational issues with the goal of considering the interests of all stakeholders (Jamal et al., 2021). According to Li et al. (2021), ESG is not only a statutory obligation for listed firms in some industrialized countries but also



a crucial factor for long-term value generation, sustainable performance, and responsible corporate growth. Huseyin (2017) further elaborates that ESG reporting serves as a communication tool that helps stakeholders analyze an organization's sustainability efforts. These sustainability disclosures include non-financial information on a company's social, environmental, governance, and societal aspects.

ESG performance encompasses three key pillars: Environmental, Social, and Governance. Environmental performance assesses a company's impact on the natural environment, focusing on metrics such as carbon emissions, energy consumption, waste management, and adherence to environmental regulations. Social performance evaluates how a company manages its relationships with employees, customers, suppliers, and communities, including aspects like labor practices, diversity, and community engagement. Governance performance examines the effectiveness of a company's management structures, including board composition, executive compensation, and transparency. Collectively, these pillars provide a comprehensive view of a company's commitment to ethical practices and sustainable operations. As Berg et al. (2015) note, environmental activities can help companies improve their reputation and expand into new markets. Similarly, strong social performance enhances consumer perceptions and employee productivity, positively impacting both the top and bottom lines (Chaudary et al., 2016). Additionally, good governance standards reduce regulatory risk and increase asset efficiency, ultimately delivering long-term value (Khan, 2019).

A company's ESG performance is frequently evaluated using data from several ESG rating sources. In a study by Dorfleitner et al. (2015), three popular ESG rating sources were assessed, one of which is employed in the present study. The databases utilized in this analysis include the ESG data set from Bloomberg Sustainability, the KLD ratings provided by MSCI ESG STATS, and the Thomson Reuters DataStream. ESG ratings are crucial for firms looking to attract ethical investors and gain insights into the status of their corporate social responsibility initiatives, as well as for investors making sustainable investment decisions. Dorfleitner et al. (2015) emphasize that ESG ratings become especially important when investors follow a positive screening strategy, where they select companies that are performing well in terms of ESG performance. Furthermore, ESG ratings serve as a motivation for companies; when a company receives a low ESG score, it is driven to improve its practices to achieve better scores (Jarvinen, 2022).

ESG Performance and Firm Financial Performance

Stakeholder theory, as proposed by Freeman (1984), posits that organizations should create value for all their stakeholders, not just shareholders, to achieve sustainable success. This theory is increasingly relevant in the context of ESG performance, where companies are expected to consider the broader impacts of their actions on various stakeholder groups, including employees, customers, communities, and the environment. By aligning corporate strategies with stakeholder interests, firms can enhance their reputation, mitigate risks, and ultimately drive financial performance.

Numerous studies have investigated the relationship between ESG performance and financial performance, with many finding a positive correlation. For instance, Xie et al. (2019) explored the connection between specific ESG initiatives and the financial performance of a broad, international sample of firms, concluding that most of these ESG initiatives are positively linked to financial performance. On the other hand, Ahmad et al. (2021) analyzed the impact of ESG on the financial performance of 351 FTSE 350 companies from 2002 to 2018, finding that the



overall ESG score has a significant and positive effect on financial performance. Similarly, Naeem et al. (2021) examined the impact of ESG performance on financial outcomes. Their findings reveal that both individual and combined ESG scores are positively and significantly associated with firm value, as measured by Tobin's Q, and profitability, as indicated by ROA.

However, some researchers have identified negative relationships between ESG performance and financial outcomes. For instance, Landi and Sciarelli (2019) examined 54 publicly listed Italian companies from 2007 to 2015, discovering a negative correlation between their ESG scores and financial performance. Similarly, Duque-Grisales and Aguilera-Caracuel (2021) analyzed 104 multinational firms in Latin America from 2011 to 2015, also reporting a negative relationship between ESG scores and the financial performance of these firms. Consistent with these findings Singh et al. (2022), using a sample of BSE-200 companies and applying multiple regression techniques, found that ESG performance is negatively associated with financial outcomes.

In contrast, some studies have reported mixed or no significant effects of ESG performance on financial performance. For instance, Giannopoulos et al. (2022) examined Norwegian listed firms from 2010 to 2019 and found that ESG scores had a positive relationship with firm value, as measured by Tobin's Q, but a negative relationship with profitability, indicated by ROA. Similarly, Behl et al. (2022) investigated the connection between ESG reporting and firm value in the Indian energy sector, also finding mixed results. Furthermore, Naimy et al. (2021) found no significant relationship between ESG performance and corporate financial performance when using accounting measures such as ROA and ROE, suggesting that the costs associated with being socially responsible may outweigh the benefits to the firm.

The literature review indicates that the results concerning the relationship between ESG performance and financial performance remain inconclusive. Given Malaysia's ongoing challenges with ESG issues, as highlighted previously, further research is essential to clarify this relationship, despite the extensive body of existing studies in the field. Based on these considerations, the following hypothesis is proposed:

H1: ESG performance positively influences the financial performance of Malaysian firms.

The moderating effect of Audit Quality on the relationship between ESG Performance and financial performance.

Disclosing ESG information is crucial for organizations as it allows them to share non-financial data, reduce knowledge asymmetry, and improve investment efficiency (Lins et al., 2017). However, the effectiveness of these disclosures relies on the accuracy and credibility of the information provided, which in turn requires robust mechanisms to build stakeholder trust. Vaz Ferreira (2019) emphasizes the pivotal role of external auditors in this process, as they safeguard shareholders' interests and enhance the reliability of management reports. By leveraging their independence and objectivity, external auditors ensure high-quality ESG disclosures. This is essential, as positive impacts of auditing supervision on the development of ESG have been observed (Iatridis, 2011).

The effectiveness of external auditing is closely tied to audit quality, which significantly influences the reliability of ESG reporting (Kausar et al., 2016). Firms prioritize high-quality auditing not only to signal their commitment to transparency but also to mitigate financing constraints, lower agency costs, and enhance investment efficiency (Jones & Raghunandan,



1998). Consequently, firms with strong ESG performance are more inclined to engage highquality accounting firms, which in turn boosts stakeholder trust in their ESG information (Wang et al., 2022).

Previous research has used several criteria to evaluate auditor quality, including the presence of Big Four auditors. Bacha et al. (2021) argue that larger, well-known auditors prioritize maintaining independence from clients and protecting their brand by providing higher audit quality. Big Four firms, in particular, may offer superior audits due to their extensive expertise, higher ethical standards, broader skill sets, and increased audit effort (Hay, 2017). Research suggests that clients of Big Four accounting firms often experience better financial outcomes (Phan et al., 2020). Accredited audit firms, adhering to high-quality auditing standards, contribute to the reliability, transparency, and value of audited companies' financial statements, thus promoting sound corporate governance and enhancing financial performance. However, Ado et al. (2020) caution that Big Four organizations may be hesitant to deviate from strict auditing standards to protect their brand.

While much of the existing literature has focused on the relationship between audit quality and CSR, it is important to recognize that ESG factors not only encompass but also expand upon CSR. ESG is considered a broader, more evolved form of CSR, addressing specific environmental, social, and governance issues that align with growing stakeholder expectations. Therefore, insights from CSR-related audit quality studies are relevant to understanding audit quality within the ESG framework. Previous research suggests that clients of Big Four auditors tend to demonstrate superior CSR performance and disclosure (Agyei-Mensah, 2018; Timbate & Park, 2018). Big Four audit firms may provide higher-quality audits due to their investment in human capital and technology (Francis, 2011), which enhances the reliability of disclosed information, including CSR. Empirical studies, such as Bacha et al. (2021), support the notion that firms audited by high-quality auditors, particularly the Big Four, are more likely to engage in innovative practices like CSR, leading to better performance.

The influence of audit quality on financial and governance dynamics, particularly in the context of ESG performance and corporate financial outcomes, has attracted significant interest in recent years. For example, Zahid et al. (2024) examined the role of audit quality in shaping the relationship between ESG performance and capital financing in Chinese firms. Their findings indicated that while the credibility of disclosures and stakeholder confidence is strengthened by the reputation and resources of Big Four auditors, audit quality did not significantly affect the link between ESG performance and capital financing decisions in the Chinese context. Similarly, Zahid et al. (2022) highlighted the pivotal role of audit quality in Western European companies, showing that the adverse impact of ESG on corporate financial performance is more pronounced in firms audited by the Big Four, thus underscoring audit quality as a key governance attribute. This contrasts with other research, such as Dakhli (2022), which found that audit quality, particularly by Big Four auditors, substantially enhances the positive influence of CSR on firm financial performance. In this context, audit quality emerges as a critical governance mechanism, ensuring strong corporate governance, elevating investor confidence, and positively impacting financial outcomes.

These diverse findings across different regions and contexts underscore the complex nature of audit quality's moderating function, suggesting that its effectiveness may be contingent on specific corporate environments and governance frameworks. Based on the literature review presented, the following hypothesis is proposed:



H2: Audit Quality moderates the relationship between ESG performance and firm financial performance of Malaysian firms.

Research Methodology

Sample Selection

The sample for this study comprises publicly listed firms in Malaysia, selected based on the availability of complete ESG performance scores from 2019 to 2023, as provided by the Refinitiv ESG database. Previous research has demonstrated that Refinitiv ESG data is widely used as a reliable measure of ESG performance (Mohammad & Wasiuzzaman, 2021). The accessibility of ESG data in the Eikon database serves as strong evidence that corporations are actively engaging in ESG and sustainability initiatives. The process of selecting the final sample involved several steps. First, publicly listed companies (PLCs) in Malaysia, as of 31 December 2023 were identified. Second, a filter was applied in the Refinitiv database to include only those companies with available ESG data. Third, firms lacking complete 5-year ESG data or exhibiting missing information were excluded from the sample. This selection process resulted in a final sample comprising 245 observations across 49 companies.

Measurement of Variables

The study evaluates the financial performance of selected Malaysian firms using Return on Equity (ROE) as the primary dependent variable. ROE, defined as a company's net income divided by its total shareholders' equity, is widely used in recent empirical research to assess the efficiency with which firms generate profits from equity. Studies such as those by Alareeni and Hamdan (2020) and Bhaskaran et al. (2020) have employed ROE to explore the relationship between various ESG factors and financial performance. The ROE data for this study is sourced from the Refinitiv Eikon database, ensuring that the measurement aligns with current standards in financial analysis.

ESG performance, serving as the independent variable, is measured using ESG ratings provided by the Refinitiv Eikon database. These ratings reflect the extent of firms' engagement in ESG activities and their disclosure practices. ESG ratings are increasingly utilized in recent studies, such as by Strekalina et al., (2023) to assess the impact of sustainability initiatives on firm performance. The use of these established ratings eliminates the need for additional computations and allows for a direct analysis of the relationship between ESG performance and financial outcomes.

Audit quality is included as a moderating variable, following the approach of Zahid et al. (2022), who used the presence of Big Four accounting firms, Deloitte, Ernst & Young, KPMG, and PricewaterhouseCoopers as a proxy for high audit quality. These firms are recognized for their rigorous audit processes, which can influence the credibility of financial and non-financial disclosures. The study operationalizes this variable as a dummy variable, with a value of 1 if the firm's financial statements are audited by a Big Four firm, and 0 otherwise. Recent research, such as that by Dakhli (2022) supports the use of this proxy in analysing the how audit quality moderate the CSR and firm performance relationship.

The study also incorporates several control variables informed by recent literature, including firm size, firm age, financial leverage, and firm risk. Firm size is measured by the natural logarithm of total assets, following the approach used in studies by Bacha et al. (2021), which highlights its relevance in assessing economies of scale and firm performance. Firm age is



calculated based on the number of years since the firm's incorporation, with older firms potentially having more established ESG practices, as discussed in the research by Habib & Mourad (2023). Financial leverage is represented by the debt-to-equity ratio, a widely used measure in corporate finance, as evidenced in studies like Riguen et al. (2021), to evaluate the impact of capital structure on firm performance. Lastly, firm risk is proxied by the firm's beta and weighted average cost of capital (WACC), consistent with methodologies used in recent studies such as those by Ghannadighomi et al. (2023) and Turunen (2021), which control for the influence of market risk on financial outcomes. Table 1 summarize the variables and measurement used in this study.

_	Table 1: Su	mmary of variables and Measuren	nent
Abbreviated Name	Full Name	Measurement/Data Source	References
Dependent Variable			
ROE	Return On Equity	Data Obtained from Refinitiv Eikon	Alareeni & Hamdan (2022)
Independent Variable			
ESG Score	ESG Performance	ESG Combined Score Sourced from Refinitiv Eikon	Aydogmus Et Al. (2022)
Moderating Variable			
Audit Quality	Big Four Auditor	Dummy Variable: 1 For Big Four Auditor, 0 For Non-Big Four Auditor, Based on Refinitiv Eikon Data	Zahid Et Al. (2022)
Control Variables			
Age	Firm Age	Number Of Years Since Incorporation, Sourced from Refinitiv Eikon	Habib & Mourad (2023)
Size	Firm Size	Log Of Total Assets, Sourced from Refinitiv Eikon	Abdi Et Al. (2022)
Leverage	Leverage	Ratio of Total Liabilities to Total Assets, Sourced from Refinitiv Eikon	Riguen Et Al. (2021)
Beta	Beta	Measure Of Stock Volatility and Firm Riskiness, Sourced from Refinitiv Eikon	Turunen (2021)
Wacc%	Weighted Average Cost of Capital	Sourced From Refinitiv Eikon	Ghannadighomi Et Al. (2023)



Results

Descriptive Statistics

Table 2 presents a summary of the statistics for all the variables involved, with a primary focus on Return on Equity (ROE). The ROE values in the sample range from a minimum of -332.08 to a maximum of 214.96, with an average ROE of 15.50 and a substantial standard deviation of 39.23. This variability underscores significant differences in how effectively firms are utilizing their equity to generate profits, reflecting the diverse financial performance across the sample. The descriptive statistics for ESG Scores indicate a notable range among Malaysian firms, with scores varying from a minimum of 23.07 to a maximum of 91.65. The mean ESG Score is 60.92, accompanied by a standard deviation of 14.58, signifying considerable variation in ESG performance among the firms.

The control variables also demonstrate significant variability within the sample. Firm size, measured by the natural logarithm of total assets, ranges from 9.01 to 12.01, with a mean of 10.30. Firm age averages 36 years, with a range from 7 to 100 years, reflecting varying levels of operational experience. The mean debt-to-equity ratio is 139.47, with a substantial standard deviation of 821.41, indicating differing leverage practices among firms. The average beta is 1.11, suggesting varied levels of market risk exposure. Lastly, the mean Weighted Average Cost of Capital (WACC) is 7.45%, with a standard deviation of 2.12%, reflecting differences in financing costs across firms.

Table 2. Descriptive Statistics of Variables					
Variable	Observation	Mean	Std. Dev.	Min	Max
ESG Score	200	60.917	14.576	23.073	91.652
ROA	200	5.408	9.692	-24.030	84.959
ROE	200	15.503	39.226	-332.082	214.968
Big Four Auditor	200	0.472	0.500	0	1
Firm Size (log of Total Assets)	200	10.302	0.659	9.01	12.01
Firm age (years)	200	36	18.133	7	100
Leverage (Debt-to-Equity Ratio)	200	139.472	821.409	0	12562.5
Beta	200	1.105	0.423	0.28	1.97
WACC	200	7.446	2.123	5.00	18.90

Table 2: Descriptive Statistics of Variables

Regression Analysis and Discussion

Table 3 presents the regression results using Pooled OLS to predict the relationship between ESG performance and ROE, with ESG Score as the independent variable. The model demonstrates strong predictive power, as indicated by an R-squared value of 0.6463, suggesting that the variables in the model explain approximately 64.63% of the variance in ROE.

The regression results show that ESG performance has a significant positive effect on ROE, with a coefficient of 0.413^{***} (p < 0.01), indicating that higher ESG scores are associated with better financial performance in terms of equity returns. This finding aligns with previous studies, such as by Ghannadighomi et al., (2023), which also found a significant positive relationship between ESG scores and financial performance. The significant impact on ROE can be attributed to investor perceptions of ESG-compliant companies as lower-risk and more sustainable in the long term. Such perceptions can lead to increased investor confidence and



demand for the company's shares, thereby elevating stock prices and enhancing equity returns. Moreover, strong ESG performance can provide a strategic advantage by aligning firms with global sustainability trends, facilitating access to new markets, and attracting customers who prioritize corporate responsibility. This strategic positioning not only improves the firm's reputation but also contributes to higher revenues and profitability, further bolstering ROE. Hypothesis H1 is supported as ESG performance does show a significant positive effect on ROE within the study period.

Control variables show varying effects on ROE. Firm size, measured by total assets, has a significant negative effect on ROE (-17.93***, p < 0.01), suggesting that larger firms may face diminishing returns on equity. Firm age shows a positive and significant impact on ROE (0.335***, p < 0.01), indicating that older firms, likely with more established business practices, tend to perform better in terms of equity returns. Leverage also has a significant positive effect on ROE (0.196***, p < 0.01), implying that firms with higher debt levels may generate higher returns on equity. Market risk, as measured by beta, has a significant negative impact on ROE (-30.78***, p < 0.01), while WACC shows a significant positive effect on ROE (8.693***, p < 0.01).

Variable	ROE
ESG Score	0.413***
	(0.000)
Control Variables:	
Total Assets	-17.930***
	(0.000)
Firm Age	0.335***
	(0.001)
Leverage	0.196***
	(0.000)
Beta	-30.775***
	(0.000)
WACC	8.693***
	(0.000)
R-squared	0.6463

Table 3. Regression Results for Financial Performance (ROE)

*Note: t statistics in parentheses, ***p<0.01, **p<0.05, *p*<0.10

Table 4 presents the results of the regression analysis examining the moderating effect of Audit Quality on the relationship between ESG Scores and ROE using Pooled OLS. The regression results indicate that ESG performance alone does not have a statistically significant direct effect on ROE, with a coefficient of 0.210 (p = 0.161). However, when the interaction term between ESG Score and Big Four Auditor is introduced, the coefficient becomes 0.430 (p = 0.068), indicating a marginally significant positive moderating effect. This suggests that the presence of a Big Four auditor may enhance the positive impact of ESG performance on ROE, potentially due to the increased credibility and thoroughness of ESG reporting associated with high-quality audits.



On the other hand, the direct effect of having a Big Four auditor on ROE is negative, with a coefficient of -20.413 (p = 0.181), though this effect is not statistically significant. This could imply that while Big Four auditors may not independently improve ROE, their influence on the relationship between ESG performance and ROE is more complex, potentially amplifying the benefits of robust ESG practices through better reporting standards. Overall, the results suggest that while ESG performance alone may not strongly influence ROE, the involvement of a Big Four auditor can play a crucial role in enhancing this relationship through more credible and thorough ESG reporting. This indicates that high-quality audits can significantly impact the financial outcomes of robust ESG practices.

Variable	ROE
ESG Score	0.210
	(0.161)
Big Four Auditor	-20.413
	(0.181)
ESG Score * Big Four Auditor	0.430*
	(0.068)
Control Variables	
Total Assets	-19.384***
	(0.000)
Firm Age	0.258**
	(0.012)
Leverage	0.190***
	(0.000)
Beta	-27.787***
	(0.000)
WACC	7.826***
	(0.000)
R-squared	0.6620

Table 4: Moderating Effect of Audit Quality on the Relationship Between ESG Scores and Financial Performance (ROE)

*Note: p-values in parentheses, ***p<0.01, **p<0.05, *p*<0.10

Robustness Test

Direct Relationship Between ESG Performance and Financial Performance (ROA) In this section, the robustness of the relationship between ESG performance and financial outcomes is tested by using Return on Assets (ROA) as an alternative dependent variable. This test is conducted to verify whether the findings related to ROE can be generalized to another financial performance metric. Table 4 presents the results of the regression analysis examining the direct effect of ESG performance on ROA. The results in table 5 indicate that ESG performance does not have a statistically significant effect on ROA, with a coefficient of 0.048 and a p-value of 0.332. This suggests that, unlike ROE, ESG performance does not significantly influence asset efficiency.



One potential explanation for this lack of significance is that the benefits of ESG initiatives may require a longer time horizon to materialize. Investments in environmentally friendly technologies or improvements in labour practices often involve substantial upfront costs, such as acquiring new equipment or implementing employee training programs (KPMG, 2022; McKinsey, 2022). These costs can temporarily reduce profitability and diminish the immediate impact on asset efficiency. Over time, however, these initiatives are expected to yield benefits, such as cost savings from lower energy consumption or reduced employee turnover, which could eventually improve ROA (McKinsey, 2022). However, within the timeframe of this study, these longer-term benefits may not have fully manifested, leading to the observed non-significant relationship between ESG performance and ROA.

(ROA	.)
Variable	ROA
ESG Score	0.048
	(0.332)
Control Variables	
Total Assets	-5.450***
	(0.000)
Firm Age	0.037
	(0.396)
Leverage	0.007
	(0.232)
Beta	-7.772***
	(0.000)
WACC	2.249***
	(0.002)
R-squared	0.2525

Table 5: Direct Relationship Between ESG Performance and Financial Performance (BOA)

*Note: p-values in parentheses, ***p<0.01, **p<0.05, p<0.10

Robustness Test

Direct Relationship Between ESG Performance and Financial Performance (ROA) Table 4 presents the results of the regression analysis examining the moderating effect of Audit Quality on the relationship between ESG Scores and ROE using Pooled OLS. The regression results indicate that ESG performance alone does not have a statistically significant direct effect on ROE, with a coefficient of 0.210 (p = 0.161). However, when the interaction term between ESG Score and Big Four Auditor is introduced, the coefficient becomes 0.430 (p = 0.068), indicating a marginally significant positive moderating effect. This suggests that the presence of a Big Four auditor may enhance the positive impact of ESG performance on ROE, potentially due to the increased credibility and thoroughness of ESG reporting associated with high-quality audits.



Variable	ROA
ESG Score	0.048
	(0.332)
Big Four Auditor	-3.941
	(0.560)
ESG Score * Big Four Auditor	0.068
	(0.516)
Control Variables	
Total Assets	-5.636***
	(0.000)
Firm Age	0.031
	(0.490)
Leverage	0.007
	(0.266)
Beta	-7.371***
	(0.000)
WACC	2.181***
	(0.003)
R-squared	0.2545

Table 6: Moderating Effect of Audit Quality on Financial Performance (ROA)

Conclusion, Implication and Future Research

The significant positive relationship between ESG performance and Return on Equity (ROE) observed in this study underscores the strategic importance of robust ESG practices for enhancing financial performance. Firms with strong ESG commitments benefit from improved stakeholder relations, better access to capital, and more effective risk management, all contributing to higher equity returns. In the context of Malaysia, where sustainability regulations and investor awareness are on the rise, companies that prioritize ESG are better positioned to attract investment and maintain a competitive edge in the marketplace.

Conversely, the lack of a significant relationship between ESG performance and Return on Assets (ROA) suggests that the benefits of ESG initiatives may not pay off immediately but only after a certain threshold of ESG achievement is reached (Alareeni & Hamdan, 2020). This finding highlight that while ESG practices can enhance equity performance, they do not necessarily lead to better utilization of a firm's assets in the short term. One reason for this could be the substantial upfront costs associated with ESG investments, such as acquiring new equipment or implementing employee training programs, which can temporarily reduce profitability and delay improvements in asset efficiency (KPMG, 2022; McKinsey, 2022). Over time, these investments are expected to generate cost savings and operational efficiencies, which could eventually improve ROA. However, within the timeframe of this study, these longer-term benefits may not have fully manifested, leading to the observed non-significant relationship between ESG performance and ROA. Additionally, stakeholders, particularly investors, are encouraged to increase their understanding of ESG and its importance in business to make more informed investment choices (Alareeni, 2019).



The implications of these findings are multifaceted. For corporate managers, the results emphasize the strategic value of integrating ESG initiatives into their business models, despite the potential delay in realizing asset efficiency gains. This insight is crucial for long-term planning and maintaining a competitive strategy in an increasingly ESG-focused market environment. For policymakers, these findings highlight the importance of creating supportive frameworks that encourage ESG investments. By offering incentives or reducing barriers to sustainable practices, policymakers can help ensure that the long-term benefits of ESG investments are realized, without compromising short-term financial performance. For academics, this study adds to the existing literature by providing evidence from the Malaysian context, particularly focusing on the differing impacts of ESG on various financial performance metrics. The study underscores the need for further research to understand why ESG practices might not immediately influence ROA and how these effects evolve over time.

While the results confirm that higher ESG performance positively impacts firm financial performance, specifically ROE, the anticipated moderating influence of Big Four auditors is less pronounced. The findings suggest that while Big Four auditors ensure compliance and rigorous reporting, their presence does not significantly alter the positive relationship between ESG performance and ROE. This indicates that the primary financial benefits of ESG efforts remain robust, regardless of audit quality. Future research could explore alternative measures of audit quality beyond the presence of Big Four auditors, providing a more comprehensive understanding of how audit quality influences the relationship between ESG performance and financial outcomes. Expanding the scope of research to include a broader, more diverse sample of firms across different regions would also enhance the generalizability of the findings, offering deeper insights into the nuanced role that audit quality plays in shaping the financial impacts of ESG practices.



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