

4-1-2024

The Impact of Environmental, Social and Governance (ESG) Practices on the Financial Performance of Green Companies in Malaysia: An Empirical Analysis

Zaemah Zainuddin

Universiti Utara Malaysia, zaemah@uum.edu.my

Norazlina Abd. Wahab

Universiti Utara Malaysia, Malaysia, norazlina.aw@uum.edu.my

Wahidah Shari

Universiti Utara Malaysia, wahidah@uum.edu.my

Muhamad Abrar Bahaman

Universiti Utara Malaysia, muhamadabrar@uum.edu.my

Rosylin Mohd Yusof

University Utara Malaysia, rosylin@uum.edu.my

Follow this and additional works at: <https://scholarhub.ui.ac.id/icmr>

 See next page for additional authors

Part of the [Finance and Financial Management Commons](#)

Recommended Citation

Zainuddin, Zaemah; Abd. Wahab, Norazlina; Shari, Wahidah; Bahaman, Muhamad Abrar; Yusof, Rosylin Mohd; and Abdul Karim, Norzitah (2024) "The Impact of Environmental, Social and Governance (ESG) Practices on the Financial Performance of Green Companies in Malaysia: An Empirical Analysis," *The Indonesian Capital Market Review*. Vol. 16: No. 1, Article 5.

DOI: 10.21002/icmr.v16i1.1177

Available at: <https://scholarhub.ui.ac.id/icmr/vol16/iss1/5>

This Article is brought to you for free and open access by the Faculty of Economics & Business at UI Scholars Hub. It has been accepted for inclusion in The Indonesian Capital Market Review by an authorized editor of UI Scholars Hub.

The Impact of Environmental, Social and Governance (ESG) Practices on the Financial Performance of Green Companies in Malaysia: An Empirical Analysis

Cover Page Footnote

This research is part of matching research grant between UUM and UiTM. We would like to thank our partner (UiTM) for this collaboration and UUM Research Management Center for the management of this research grant.

Authors

Zaemah Zainuddin, Norazlina Abd. Wahab, Wahidah Shari, Muhamad Abrar Bahaman, Rosylin Mohd Yusof, and Norzitah Abdul Karim

INDONESIAN CAPITAL MARKET REVIEW

The Impact of Environmental, Social and Governance (ESG) Practices on the Financial Performance of Green Companies in Malaysia: An Empirical Analysis

Zaemah Zainuddin¹, Norazlina Abd Wahab², Wahidah Shari², Muhamad Abrar Bahaman², and Rosylin Mohd Yusof²

¹Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, Kuala Lumpur Campus, Malaysia

²Institute of Shariah Governance and Islamic Finance, Universiti Utara Malaysia

(Received: April 2024 / Revised: May 2024 / Accepted: June 2024 / Available Online: June 2024)

This study examines the relationship between Environmental, Social, and Governance (ESG) performance and the financial performance of green companies in Malaysia. Analyzing 280 observations from 56 green companies listed in Bursa Malaysia from 2016 to 2020, the study employs rigorous regression analysis. The results indicate that ESG performance does not significantly influence the financial performance of these green companies. Instead, total sales and liability significantly impact both Return on Asset (ROA) and Return on Equity (ROE). These findings suggest that, despite the growing emphasis on ESG in the business sphere, other internal factors may have a more substantial effect on financial outcomes. While ESG considerations may not directly financial performance, their importance for social welfare and sustainable resource management remains indisputable.

Keywords: ESG performance; financial performance; green companies; regression analysis, ROA; ROE

JEL Classification: Q56, Q29

Introduction

Investors are increasingly interested in businesses that are not only financially successful but also socially viable in the long run. Many capital providers now consider Environmental, Social, and Governance (ESG) factors when making investment decisions. Traditional fund managers have already incorporated ESG investment strategies into their portfolios (Duuren et al., 2015). Investors aim to achieve financial returns while generating a positive societal im-

pact. Companies that implement ESG strategies are perceived as having a more sustainable, long-term vision compared to traditional companies, potentially outperforming those without ESG strategies (Ramić, 2019).

Research on the impact of ESG on financial performance presents inconclusive findings, highlighting the dynamic nature of the relationship (Brammer & Millington, 2008; Lu et al., 2014; Margolis & Walsh, 2003). In his 1970

*Corresponding author's email: norazlina.aw@uum.edu.my

work, Friedman proposed that supporting social responsibility initiatives decreases shareholder returns (Friedman, 1970). From his perspective, the relationship between ESG and financial performance is negative. Conversely, Friedman's shareholder theory (2010) argues that companies should maximize the well-being of all stakeholders, not just financial shareholders. According to Freeman (2010), the link between ESG performance and financial performance is not inherently negative. The success of a company's products and services depends on how well it meets the needs of its diverse stakeholders (Freeman, 2010).

Porter & Van der Linde (1995) stated that environmental laws not only help businesses mitigate externalities like pollution but also foster innovation, potentially reducing operating costs. Regarding social issues, Kaplan & Norton's (1992) Balanced Scorecard concept suggests including and measuring the demands of various stakeholders, not just shareholders, using a mix of financial and non-financial indicators. Consequently, business managers should prioritize the interests and requirements of all stakeholders, which can enhance financial performance in the long run.

According to the Agency Theory proposed by Jensen and Meckling in 1976, ESG practices are seen as unproductive expenditures that negatively impact financial performance, as businesses may engage in ESG initiatives to further management's interests at the expense of shareholder value (Jensen and Meckling, 2019). However, Nakamura (2015) indicates a bidirectional relationship between ESG and financial performance, suggesting both positive and negative synergies.

Many theoretical studies have found a positive bidirectional association between corporate social conduct and firm performance (Allouche and Laroche, 2005; Ambec and Lanoie, 2008; Anderson et al., 2014; Nollet et al., 2016; Chollet & Sandwidi, 2018; Kang et al., 2016; Han et al., 2016; Li et al., 2018; Alareeni and Hamdan, 2020). According to Lin et al. (2019), there is a

positive relationship between ESG scores and a company's financial performance. Their findings suggest that higher financial performance leads to more ESG engagement. Although increased ESG engagement does not always translate into improved financial performance, Lin et al.'s work is limited to accounting-based performance measurements and overall ESG rating scores.

Some studies indicate negative or non-significant results regarding the impact of ESG on financial performance (Nollet, Fillis & Mitrokostas, 2016; Margolis and Walsh, 2003; Orlitzky et al., 2001). For instance, Nollet, Filis, & Mitrokostas (2016) revealed that both linear and nonlinear relationships between accounting-based measures (Return on Asset and Return on Capital) and market-based measures (Excess stock returns) on corporate social responsibility (CSR) for Standard and Poor (S&P) 500 companies were negative. Additionally, Orlitzky et al. (2001) indicated a company's corporate social performance (CSP) is inversely related to financial risk. These varied outcomes are due to the different ways of measuring ESG and financial performance relationship are due to the different ways of measuring these two variables (Wu, 2006). Some researchers use CRS reporting, CSR ranking, or charitable donations as ESG proxies, while financial performance is often measured with accounting-based variables (ROA and ROE) and market-based metrics like Tobin's Q.

In Malaysia, few studies have examined the impact of ESG on financial performance from different perspectives and methodologies (Anas, 2015; Zahid, Rehman, & Khan, 2019; Jasni et al 2020; Peng Lee & Isa, 2020; Ismail et al, 2022; Kamaruddin et al 2022). For example, Peng Lee & Isa (2020) focused on the impact of ESG on Shariah-compliant companies listed on Bursa Malaysia, while Ismail et al (2022) employed fixed effect (FE) and pooled Ordinary Least Square (OLS) methods to determine the relationship between ESG practices and financial performance for 24 listed companies, finding a positive relationship for both independent and

dependent variables. However, this study did not include other financial indicators such as company size or debt.

Anas et al. (2015) found that CSR disclosure in Malaysian companies in 2008 was of very low quality and had no connection to financial performance. Jasni et al (2020) indicated that ESG disclosures in the Malaysian telecommunications industry allow firms to gain a competitive advantage. Zahid, Rahman & Khan, 2019 noted that from 2011 to 2013, the level of ESG practices in Malaysia's publicly listed companies showed slight improvement. Ju Ahmad et al. (2017) demonstrated that the level of CSR reporting among Malaysian companies was 21.7% during the period from 2008 to 2013.

Due to the mixed findings and implications from the literature, further research is needed to provide insight into green companies from the perspective of a developing country like Malaysia. As stated above, ESG concerns are becoming increasingly important to a company's performance. Therefore, this study investigates the impact of ESG pillars on the financial performance (ROA and ROE) of green companies, considering other control variables such as company size, leverage, and company growth. This study aims to add valuable insights to the growing research on the relationship between ESG and financial performance, with a particular focus on green companies listed in Bursa Malaysia. By exploring this intersection, the study seeks to unravel the complex dynamics between sustainability and financial success. The findings are expected to illuminate current correlations and stimulate further research, enhancing our understanding of how ESG considerations impact economic outcomes in the green sector.

This paper is structured as follows: the next section discusses the existing literature and hypothesis development, followed by the research methodology. Subsequently, the results and discussion are presented, and the final section provides the conclusion and policy implications.

Literature Review and Hypothesis Development

The Effect of Environment, Social, and Governance (ESG) on Firm Performance

The relationship between ESG and financial performance has been a subject of extensive debate among scholars. Most researchers have found a positive association between ESG and firm value or financial performance across various countries and industries (Karagiorgos, 2010; Ahamed et al., 2014; Van Dijken, 2017). Velte (2017) and Bhaskaran et al. (2020) demonstrated that ESG positively affects firm value as measured by Tobin's Q and ROA. Similar findings were reported by Dalal and Thaker (2019) in India and Fatemi et al. (2018) in the United States, who discovered a positive effect of ESG scores on financial performance. Zhao et al. (2018) explored China's listed energy enterprises and found that higher ESG performance can boost a company's financial performance. Yoon et al. (2018) found that CSR initiatives positively influence the market value of firms in Korea, although the effect may vary based on firm characteristics. De Lucia et al. (2020) investigated European companies and found a positive association between ESG variables and financial performance.

In a more comprehensive study, Xie et al. (2019) found that ESG initiatives have a positive association with financial performance globally. In emerging countries, Naeem et al. (2022) that firms with high ESG performance tend to create more value. Chairani and Siregar (2021) studied firms in ASEAN countries and found that ESG enhances the impact of enterprise risk management on firm value and that enterprise risk management has a positive relationship with both firm value and profitability. Li et al. (2018) found a strong relationship between ESG reporting and firm value among the Financial Times Stock Exchange (FTSE)-listed companies. Ahmad et al. (2021) explored the effect of ESG on financial performance in FTSE 350 companies and found an overall positive impact, although individual ESG performances had mixed results.

In contrast, several country-based studies found a negative relationship between ESG performance and firm value. For instance, Brammer et al. (2006) found that companies with low social scores outperformed the market in the United Kingdom. This finding is consistent with Landi and Sciarelli (2019), who reported a negative relationship between ESG scores and the financial performance of Italian companies. Similarly, Nollet et al. (2016) investigated S&P 500 companies and found evidence of a negative relationship in linear models between social and financial performance. Marsat and Williams (2011) reported a negative relationship between CSR ratings and firm value using worldwide Morgan Stanley Capital International (MSCI) ESG ratings. Duque-Grisales and Aguilera-Caracuel (2021) examined multinational firms in Latin America and found a negative association between ESG scores and financial performance. Garcia and Orsato (2020) compared emerging and developed countries, revealing a negative relationship between ESG scores and financial performance in emerging markets.

In a more recent study, Giannopoulos et al. (2022) investigated the effect of ESG scores on the financial performance of Norwegian listed firms between 2010 and 2019. They revealed mixed results, indicating a negative relation between ESG scores and profitability (measured by ROA) and a positive relationship between ESG scores and firm value (measured by Tobin's Q). Mixed results were also reported by Behl et al. (2022) in India and Saygili et al. (2021) in Türkiye.

The Effect of Company size, Leverage, and Company growth on firm performance.

In analyzing the performance of green companies, additional control variables have been considered, namely: (1) company size (total sales); (2) leverage (total liabilities); and (3) company growth (total equity).

Firm size is an essential control variable in measuring company performance. As a company's size increases, the impact of scale effects

becomes more pronounced, making the enterprise more receptive to enhancing its financial performance through mechanisms such as corporate governance (Zhou, G., Liu, L., & Luo, S., 2022). Several studies have mentioned that the size of a company positively influences its financial performance (Zhou, Sun, Luo, & Liao, 2021; Thomas et al., 2022; and Xi et al., 2022). The size of a company (denoted as SIZE) is connected to the concept of economies of scale. When a company reaches economies of scale, it can lower operational costs and enhance overall financial performance (Xi et al., 2022). According to Zhou et al. (2021), size is important for boosting financial performance. They argued that larger state-owned companies excel over small and medium-sized ones in profitability, profit quality, and risk management. Consistent with the literature, this study postulates that:

The leverage effect arises when companies employ debt to enhance the efficient utilization of their capital, leading to improved management of debt and increased profits (Xi, Wang & Yang, 2021). Xi et al. (2022) showed that leverage has a significant positive relationship with financial performance, particularly when considering the impact of green credit on the financial performance of listed banks. Evidence from Malaysia by Thomas, Tuyon, Matahir, and Dixit (2021) also reported a positive and significant relationship between financial leverage and firm financial performance (measured by ROA, ROE, and Tobin's Q). Similarly, Dincer, Keskin, and Dincer (2023) found a positive and significant relationship between financial leverage and firm financial performance, measured by Tobin's Q. Accordingly, this study posits that:

The relationship between total equity and company performance is crucial in corporate finance and management. Total equity, representing the residual interest in the assets of a company after deducting liabilities, plays a significant role in shaping a firm's financial health and overall performance. Total equity also represents company growth. Research suggests a positive relationship between company growth and company performance. Higher company growth

typically indicates a stronger financial position, which can contribute to improved performance through various channels. For instance, sufficient equity can provide a buffer against financial distress, enabling the company to withstand economic downturns and unexpected challenges (Fama & French, 1988). Astutiningrum (2019) found that company growth positively affects firm value.

The theoretical model is underpinned by two major theories: stakeholder theory and agency theory. Stakeholder theory suggests that successful management hinges on fostering positive relationships with stakeholders. Specifically, the concept of ‘stakeholder,’ as defined by Freeman (2010), encompasses individuals or groups capable of influencing a company’s performance or being impacted by its accomplishments. Since 1984, stakeholder theory has gained significant traction within management literature (Elijido-Ten, 2007). This theory posits that firms benefit from social responsibility through enhanced stakeholder relationships (Barnett and R. M. Salomon, 2012). It offers an alternative perspective on corporate governance and business ethics, advocating for decision-makers to consider all stakeholders’ interests (Mohammed, 2013). Given the evolving business landscape, CSR has gained prominence (Ullmann, 1985). This shift is driven by firms recognizing their responsibility to address broader societal concerns beyond their shareholders, prompting them to tackle critical social issues.

Agency theory, on the other hand, asserts that agents (managers) are inclined to prioritize CSP and environmental considerations more than principals (stockholders). This is because agents do not have direct ownership of a firm’s earnings (Waddock and S. B. Graves, 1997). Agents may exhibit greater concern for the environment as they are not personally investing capital. Furthermore, driven by their self-interest, agents are more likely to pursue philanthropic goals to safeguard their positions, such as in the case of their company’s environmental protection efforts. Pursuing non-profit

objectives can enhance managers’ reputations and public esteem. This alignment of corporate governance with agency theory underscores the framework’s foundation. This theoretical framework and the corresponding hypotheses below provide a structured approach to empirically analyze the impact of ESG practices on the financial performance of green companies in Malaysia.

H1: Environmental scores have a positive and significant impact on firm financial performance.

H2: Social scores have a positive and significant impact on firm financial performance.

H3: Governance scores have a positive and significant impact on firm financial performance.

H4: Company size has a positive and significant impact on firm financial performance.

H5: Leverage has a positive and significant impact on firm financial performance.

H6: Company growth has a positive and significant impact on firm financial performance.

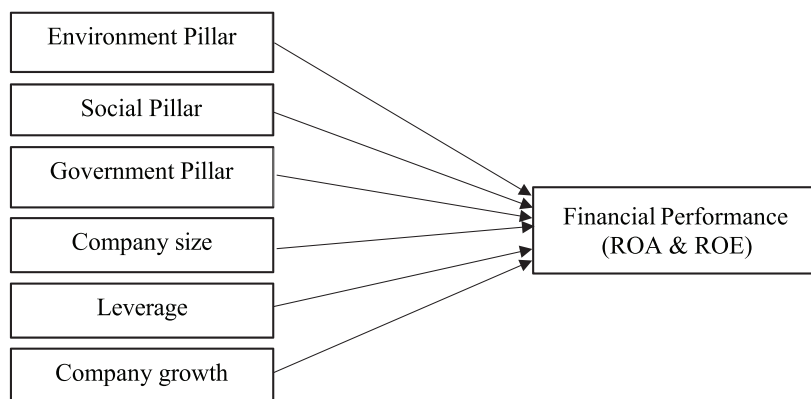
Research Method

Theoretical Background and Research Model

The research framework underpinning this study is depicted in Figure 1. This study draws on concepts from the interconnected literature streams of ESG initiatives and corporate performance to propose a research framework suggesting a positive correlation between ESG and company financial performance. In this framework, the dependent variable is the company’s financial performance, while the independent variables are the environmental pillar, social pillar, and governance pillar.

It is important to note that other factors potentially affecting overall firm performance are also considered in this study. These factors include company size (measured by total sales), leverage (measured by total liabilities), and company growth (measured by total equity).

Figure 1. Research Model



Source: Authors' own

Table 1. Category of Green Companies by Sector

Sector	No. of Companies	Percentage (%)
1. Financial Services	9	16
2. Telecommunication & Media	6	10.7
3. Industrial Products & Services	5	8.9
4. Consumer Products & Services	13	23.2
5. Energy Sector	5	8.9
6. Plantation	2	3.57
7. Construction	2	3.57
8. Health Care	3	5.35
9. Property	4	7.14
10. Transportation & Logistics	3	3.57
11. Utilities	4	7.14
TOTAL	56	100

Source: Authors' own

Data

This study uses financial data from 56 green companies listed in Bursa Malaysia from 2016 to 2020. The study period was selected due to the constant disclosure of ESG data by DataStream. Environmental, social, and governance performance is reflected in the scores of each company on the ESG composite indexes provided by Datastream. The data are categorized into 11 sectors according to Bursa Malaysia's classification.

Based on Table 1, most of the data used in this study are derived from the consumer products and services sector, representing 23.2% (13 companies). This is followed by the financial services sector at 16% and the telecommunication & media sector at 10.7%. The lowest representation comes from the plantation, construction, and transportation & logistics sectors, each with only 3.57% (2 companies).

Data Analysis

The study uses regression analysis to examine the impact of ESG elements on the financial performance of green companies in Malaysia. Both ROE and ROA are the dependent variables, while company size, leverage, and company growth are included as control variables. The measurement of the variables used in this study is presented in Table 2.

To examine the impact of ESG on company financial performance, this study employed multiple regression analysis, constructing two models using ROA (model 1) and ROE (model 2) as dependent variables. All data used in this study are measured using natural logarithms. The constructed models are as follows:

Model 1:

$$ROA = \alpha + \beta_1 \ln(\text{Environment Pillar}) + \beta_2 \ln(\text{Social Pillar})$$

Table 2. Measurement of Variables and Expected Sign.

Variables		Measurement	Source	Expected Sign
Dependent Variables				
Return on Asset (ROA)	Net Income/ Total Asset		Annual report	
Return on Equity (ROE)	Net Income/ Total Shareholder’s Equity			
Independent Variables				
Environment Pillar	Extracted from the database, the measurement ranges from 0 to 100 as a percentage, indicating the company's involvement in environmental practices		Datastream	+
Social Pillar	Extracted from the database, the measurement ranges from 0 to 100 as a percentage, indicating the company's involvement in social practices		Datastream	+
Government Pillar	Extracted from the database, the measurement ranges from 0 to 100 as a percentage, indicating the company's involvement in governance practices		Datastream	+
Control Variables				
Company size	Total Sales		Bloomberg	+
Leverage	Total Liabilities		Bloomberg	+
Company growth	Total Equity		Bloomberg	+

Source: Authors' own

Table 3. Summary Descriptive of Statistic

Variables	Mean	Median	Standard Deviation
Return on Asset	1.29	1.52	1.49
Return on Equity	1.75	1.99	1.19
Environment pillar	3.37	3.78	1.12
Social pillar	3.80	4.03	0.88
Governance pillar	3.69	3.93	0.85
Company size	13.49	13.40	1.61
Leverage	14.14	14.77	3.43
Company growth	15.54	15.67	1.29

Source: Authors' calculation

$$\begin{aligned}
& +\beta_3 \ln(\text{Government Pillar}) \\
& +\beta_4 \ln(\text{Company size}) + \beta_5 \ln(\text{Leverage}) \\
& +\beta_6 \ln(\text{Company growth}) + \varepsilon_{it} \quad (1)
\end{aligned}$$

Model 2:

$$\begin{aligned}
ROE = & \alpha + \beta_1 \ln(\text{Environment Pillar}) \\
& + \beta_2 \ln(\text{Social Pillar}) \\
& + \beta_3 \ln(\text{Government Pillar}) \\
& + \beta_4 \ln(\text{Company size}) + \beta_5 \ln(\text{Leverage}) \\
& + \beta_6 \ln(\text{Company growth}) + \varepsilon_{it} \quad (2)
\end{aligned}$$

Results and Discussions

Descriptive Statistics

Table 3 presents the descriptive statistics of the dependent, independent, and control variables for our entire sample of 280 observations. Analysis of the results reveals that the mean values of ROA and ROE over the five years for green companies in Malaysia are RM1.29 million and RM 1.75 million, respectively. These figures

indicate relatively low performance for green companies in Malaysia, possibly attributed to the limited involvement of listed companies in the green industry, supporting previous findings by Zahid, Rahman & Khan (2019) which indicated a small improvement in ESG practices among publicly listed companies in Malaysia.

The standard deviations of ROA and ROE are RM1.49 million and RM1.19 million, respectively, which are close to the means for both dependent variables, suggesting relatively low risk for this green industry. Additionally, the average values of ROA and ROE range from RM0.03 million to RM3.01 million and RM0.8 million to RM3.18 million, respectively, indicating relatively modest values. This result could be influenced by the post-pandemic impact of Covid-19 on green companies' financial performance.

The proxy for the size of green companies in Malaysia, total sales, has an average value of

Table 4. Results of Multiple Regression

Variables	Model 1 (ROA)			Model 2 (ROE)		
	Coefficient	t	Sig.	Coefficient	t	Sig.
Environment	0.034	0.322	0.747	0.130	-1.279	0.202
Social	-0.376	-1.880	0.061*	-0.125	-0.656	0.512
Governance	0.138	0.765	0.444	0.066	0.388	0.698
Company size	0.358	6.658	0.000**	0.190	3.708	0.000**
Leverage	-0.228	-8.641	0.000**	-0.059	-2.370	0.018**
Company growth	-0.116	-1.640	0.102	-0.040	-0.654	0.514
Adjusted R ²		0.317			0.065	

Note: Sales and Liabilities are significant for both model ROA and ROE at least at a 5% significance level

Source: Authors analysis

RM13.49 million with a standard deviation of RM1.61 million, resulting in an average value ranging from RM11.79 million to RM15 million. This indicates that the size of green companies involved in green activities or projects is generally small. It is noteworthy to analyze the result of green companies' debt through total liabilities, with a mean value of RM14.14 million and a standard deviation of RM 3.43 million, resulting in an average value ranging from RM 11.34 million to RM18.2 million.

Regarding companies' growth, the mean value of total equity is RM15.54 million with a standard deviation of RM1.29 million, producing an average value ranging from RM 14.38 million to RM 16.96 million. For other independent variables such as ESG pillars, the mean is reported to be 3.37, 3.80, and 3.69, with standard deviations of 1.12, 0.88, and 0.85, respectively. These ESG pillars have average values ranging from 2.26 to 4.9 for Environment, 3.88 to 4.91 for Social, and 2.58 to 4.28 for Governance.

The reluctance of Malaysian green public listed companies to adopt strong ESG practices may stem from managerial concerns about the short-term costs and risks associated with green investments as opposed to focusing on sustainability and long-term benefits. Managers may prioritize short-term financial performance to enhance incentives, as stated in Agency Theory (Jensen & Macking, 2019 and McNally et al, 2017). Agency Theory suggests that managers might not always act in the best interests of shareholders, addressing conflicts of interest that arise between managers (agents) and shareholders (principals).

Additionally, the low performance of Malaysian public-listed green companies may be related to the challenges these businesses face in managing the diverse and often conflicting demands of their stakeholders. While improving environmental performance is a goal shared among green companies, achieving it often requires significant investments and adjustments to operational procedures that might not yield immediate returns. Consequently, these businesses might experience a temporary decline in their financial performance. Furthermore, Stakeholder Theory suggests that these companies might experience lower financial risks because they proactively manage potential environmental liabilities and foster positive relationships with stakeholders who value sustainability.

Regression Analysis

The multiple regression equations of Model 1 and Model 2 are applied to EViews 12 software, as displayed in Table 4.

Model 1 examines the financial performance of listed green companies in Malaysia, focusing on the ROA. The results reveal that 31.7% of the independent variables in this study explain the influence on the financial performance of these companies. This finding suggests that the operating performance of green companies in Malaysia is significantly affected by company size (proxied by sales) and debt, as both variables are statistically significant with a p-value of 0.00, lower than the significance level of 0.05.

The coefficient of 0.358 for total sales indicates a positive relationship between company size and ROA, supporting the economies of scale theory, where larger companies can produce at a lower cost per unit, thereby increasing operating profit and income. Conversely, the coefficient of -0.228 for liabilities indicates a negative relationship between debt and ROA. This negative relationship suggests that as the operating performance of green companies improves, their debt decreases. Implementing ESG practices may reduce the information gap between investors and managers, lowering the risks investors bear and providing businesses with access to new funding sources, thereby reducing their reliance on debt finance (Lai, & Zhang, 2022).

Additionally, in Model 1-ROA, the social pillar is slightly significant at the 10% significant level, with a p-value of 0.061 and a negative coefficient of -0.376. As the social pillars involve a company's efforts to manage and improve its impact on society, including areas such as employee relations, community engagement, employee practices, and social responsibility, these efforts may create a more favorable operating environment that enhances efficiency and reduces risk, ultimately contributing to an improvement in ROA.

However, Model 2, which examines ROE, has a lower adjusted R-squared value, with only 6% of the independent variables explaining the impact of ESG elements, total sales, total equity, and total liabilities on the financial performance of green companies in Malaysia. This result indicates a very weak relationship between these independent variables and ROE. Among the six independent variables, only total sales (β_4) and liabilities (β_5) have a significant relationship with ROE, with p-values of 0.000 and 0.001, respectively, which are lower than the significance level of 0.05. The coefficient of 0.190 indicates that sales are positively associated with ROE, while the coefficient of -0.059 indicates that liabilities are negatively associated with ROE.

The implementation of green projects or activities by Malaysia's green companies through debt could potentially harm shareholders' perspective by reducing the dividend payouts due to increased indebtedness. However, the positive relationship of sales with ROE suggests that increased income from sales contributes to the increased income available to shareholders. Other ESG variables do not significantly affect the ROE of green-listed companies in Malaysia at the 5% significant level. This may indicate that other factors, such as corporate culture, corporate images, and brand have a greater impact on shareholder returns than ESG elements (Yin, Li, & Su, 2023).

Conclusions and Implications

This study investigated the relationship between Environmental, Social, and Governance (ESG) factors, total sales, total equity, and total liabilities among 56 green companies listed on Bursa Malaysia. Using multiple regression in two models (Model 1-ROA and Model 2-ROE), the study assessed the impact of ESG elements on the financial performance of these green companies.

The results from both Model 1 and Model 2 revealed that ESG elements did not demonstrate a significant influence on the financial performance of the green companies. Despite the growing importance of ESG considerations in the corporate world, the findings suggest that other factors may play a more dominant role in determining the financial outcomes of these companies. This result may be due to diverse industry effects or measurement challenges, which make it difficult to accurately quantify the impact of ESG on financial performance.

Looking ahead, it is recommended that future research in this area explore the inclusion of Research and Development (R&D) costs as an independent variable. R&D expenses are vital drivers of innovation and competitiveness for green companies. Incorporating them into the analysis could provide a deeper understanding of their financial performance and shed more

light on the interplay between sustainability practices and economic success.

This study contributes to the growing body of research on the relationship between ESG factors and financial performance in the context of green companies in Bursa Malaysia. The findings are intended to inspire further investigation, leading to a more comprehensive understanding of the complex dynamics at the intersection of sustainability and financial success. By focusing on green companies listed on Bursa Malaysia, the study offers valuable insights specific to the Malaysian context, which can guide local companies and policymakers in their ESG strategies. The results suggest that internal factors like total sales and liabilities have a more significant impact on financial performance (ROA and ROE) than ESG factors, emphasizing the need for companies to consider a broader range of variables when assessing their financial health.

Several policy implications can be drawn from these findings. The Malaysian government,

through regulators such as the Securities Commission Malaysia and Bursa Malaysia, should encourage companies to adopt more holistic and standardized ESG reporting frameworks. Enhancing current guidelines to include more industry-specific metrics and clearer definitions of ESG criteria can improve the accuracy and comparability of ESG performance data. Additionally, companies are encouraged to establish robust ESG policies and practices that align with their values and mission. By implementing these policy implications, Malaysia can better leverage ESG factors to enhance the financial performance of green companies, supporting sustainable economic growth and development.

Acknowledgments

This research is part of a matching research grant between Universiti Utara Malaysia (UUM) and Universiti Teknologi Mara (UiTM). We would like to thank our partner, UiTM, for this collaboration and the UUM Research Management Center for managing this research grant.

References

- Anas, A., Abdul Rashid, H. M., & Annuar, H. A. (2015). The effect of award on CSR disclosures in annual reports of Malaysian PLCs. *Social Responsibility Journal*, 11(4), 831-852.
- Alareeni, B. A., & Hamdan, A. (2020). ESG impact on performance of US S&P 500-listed firms. *Corporate Governance: The International Journal of Business in Society*, 20(7), 1409-1428.
- Allouche, J., & Laroche, P. (2005). A meta-analytical investigation of the relationship between corporate social and financial performance. *Revue de gestion des ressources humaines*, (57), 18.
- Ambec, S., & Lanoie, P. (2008). Does it pay to be green? A systematic overview. *The Academy of Management Perspectives*, 45-62.
- Barnett, M. L., & Salomon, R. M. (2012). Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. *Strategic management journal*, 33(11), 1304-1320.
- Brammer, S., & Millington, A. (2008). Does it pay to be different? An analysis of the relationship between corporate social and financial performance. *Strategic management journal*, 29(12), 1325-1343.
- Dincer, B., Keskin, A. I., & Dincer, C. (2023). Nexus between Sustainability Reporting and Firm Performance: Considering Industry Groups, Accounting, and Market Measures. *Sustainability*, 15(7), 5849.
- Friedman, M. (1970). A theoretical framework for monetary analysis. *Journal of Political Economy*, 78(2), 193-238.
- Han, J. J., Kim, H. J., & Yu, J. (2016). Empirical study on relationship between corporate social responsibility and financial performance in Korea. *Asian Journal of Sustain-*

- ability and Social Responsibility*, 1, 61-76.
- Jasni, N. S., Yusoff, H., Zain, M. M., Md Yusoff, N., & Shaffee, N. S. (2020). Business strategy for environmental social governance practices: evidence from telecommunication companies in Malaysia. *Social Responsibility Journal*, 16(2), 271-289.
- Ju Ahmad, N. B., Rashid, A., & Gow, J. (2017). Board meeting frequency and corporate social responsibility (CSR) reporting: Evidence from Malaysia.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: measures that drive performance.
- Lai, X., & Zhang, F. (2022). Can ESG certification help company get out of over-indebtedness? Evidence from China. *Pacific-Basin Finance Journal*, 76, 101878.
- Peng, L. S., & Isa, M. (2020). Environmental, social and governance (ESG) practices and performance in Shariah firms: agency or stakeholder theory?. *Asian Academy of Management Journal of Accounting & Finance*, 16(1).
- Lin, W. L., Law, S. H., Ho, J. A., & Sambasivan, M. (2019). The causality direction of the corporate social responsibility–Corporate financial performance Nexus: Application of Panel Vector Autoregression approach. *The North American Journal of Economics and Finance*, 48, 401-418.
- Li, Y., Gong, M., Zhang, X. Y., & Koh, L. (2018). The impact of environmental, social, and governance disclosure on firm value: The role of CEO power. *The British Accounting Review*, 50(1), 60-75.
- Lu, W., Chau, K. W., Wang, H., & Pan, W. (2014). A decade's debate on the nexus between corporate social and corporate financial performance: a critical review of empirical studies 2002–2011. *Journal of cleaner production*, 79, 195-206.
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48(2), 268-305.
- Jensen, M. C., & Meckling, W. H. (2019). The theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate governance* (pp. 77-132). Gower.
- McNally, M. A., Cerbone, D., & Maroun, W. (2017). Exploring the challenges of preparing an integrated report. *Meditari Accountancy Research*, 25(4), 481-504.
- Mohammed, M. (2013). Corporate accountability in the context of sustainability—a conceptual framework. *EuroMed Journal of Business*, 8(3), 243-254.
- Nakamura, E. (2015). The bidirectional CSR investment–economic performance relationship. *Journal of Global Responsibility*, 6(1), 128-144.
- Nollet, J., Filis, G., & Mitrokostas, E. (2016). Corporate social responsibility and financial performance: A non-linear and disaggregated approach. *Economic Modelling*, 52, 400-407.
- Orlitzky, M., & Benjamin, J. D. (2001). Corporate social performance and firm risk: A meta-analytic review. *Business & Society*, 40(4), 369-396.
- Porter, M. E., & Linde, C. V. D. (1995). Toward a new conception of the environment-competitiveness relationship. *Journal of economic perspectives*, 9(4), 97-118.
- Ramić, H. (2019). Relationship between ESG performance and financial performance of companies: an overview of the issue. *University of Lausanne*.
- Thomas, C. J., Tuyon, J., Matahir, H., & Dixit, S. (2021). The impact of sustainability practices on firm financial performance: Evidence from Malaysia. *Management & Accounting Review (MAR)*, 20(3), 211-243.
- Ullmann, A. A. (1985). Data in search of a theory: A critical examination of the relationships among social performance, social disclosure, and economic performance of US firms. *Academy of Management Review*, 10(3), 540-557.
- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance–financial performance link. *Strategic Management Journal*, 18(4), 303-319.
- Wu, M. L. (2006). Corporate social performance, corporate financial performance, and firm size: A meta-analysis. *Journal of Amer-*

- ican Academy of Business*, 8(1), 163-171.
- Xi, B., Wang, Y., & Yang, M. (2022). Green credit, green reputation, and corporate financial performance: evidence from China. *Environmental Science and Pollution Research*, 29, 2401-2419.
- Yin, X. N., Li, J. P., & Su, C. W. (2023). How does ESG performance affect stock returns? Empirical evidence from listed companies in China. *Heliyon*, 9(5).
- Zahid, M., Rehman, H. U., & Khan, M. A. (2019). ESG IN FOCUS: THE MALAYSIAN EVIDENCE. *City University Research Journal (CURJ)*, 9(1).
- Zhou, G., Sun, Y., Luo, S., & Liao, J. (2021). Corporate social responsibility and bank financial performance in China: The moderating role of green credit. *Energy Economics*, 97, 105190.
- Zhou, G., Liu, L., & Luo, S. (2022). Sustainable development, ESG performance and company market value: Mediating effect of financial performance. *Business Strategy and the Environment*, 31(7), 3371-3387.