

Does ESG Performance Affect Financial Performance? Evidence from Indonesia

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ABSTRACT

Economic, social, and environmental issues are currently becoming major worldwide issues. Geopolitical, social, and economic power streams have focused on ESG goals, encouraging companies, investors, and governments to apply them to every aspect of business. The current constraint is that Indonesian business stakeholders are still typically focused on short-term profits, which are intended to transform towards long-term sustainability. This study examines the effect of ESG performance on corporate financial performance. The primary analysis tool in this study uses panel data regression analysis with the Random Effect Regression Model. The sample was selected from 23 companies listed on the Indonesia Stock Exchange, with an observation period of 2018-2020. The results of this study indicate that the performance of ESG and its sub-dimensions has a positive effect on the financial performance of accounting-based companies as measured using ROA. However, on a market-based proxy with Tobin's Q, ESG performance and its sub-dimensions have not been able to influence the corporate financial performance. Some important reasons companies are involved in environmental, social, and governance activities are to create competitive advantage, reduce company risk, improve market performance, and enhance the company's sustainable development capabilities.

Keywords: ESG Performance, Environmental, Social, Governance, Financial Performance.



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INTRODUCTION

The economic, social, and environmental challenges of today are getting more serious. The use of fossil fuel energy contributes to climate change, which causes drought; illegal exploitation of workers with low wages; and bad corporate governance, which causes the death of a person. These are some of the problems the world is currently facing (ILO, 2013; Spinaci, 2021). Important steps have been taken globally by adopting the UN Sustainable Development Goals and the Paris Climate Agreement with full commitment and growing awareness of global issues (European Commission, 2017). Today's geopolitical, social, and economic power flows have focused on ESG goals that encourage companies, investors, and governments to apply them to every aspect of business (Thomson Reuters Institute, 2022). Attention to sustainable finance is also increasing very fast



among investors around the world. Policymakers also actively participate in launching regulatory and non-regulatory initiatives at the global and local levels (Spinaci, 2021).

Indonesia has set a set of ambitious goals that are in line with the UN SDGs and the Paris Climate Agreement. Through the OJK, it launched the Phase I Sustainable Finance Roadmap (2015–2019), which focuses on the introduction stage, and phase II (2021–2025), which focuses on developing a green taxonomy, implementing aspects of ESG, developing real green financing programs, product innovation, sustainable financial services, and a national campaign for sustainable finance (OJK, 2014, 2021). In addition, the Indonesian government issued several regulations, such as OJK Regulation Number 51 of 2017, which states that financial service institutions, issuers, and public companies are required to implement sustainable finance in their business activities by integrating ESG aspects and reporting their sustainability reports (OJK, 2017b, 2017a).

Several publicly listed companies in Indonesia have implemented ESG practices, for example PT United Tractors Tbk (UNTR) and PT Unilever Indonesia Tbk (UNVR). UNTR, in the environmental aspect, applies new and renewable energy business practices, environmentally friendly waste management, and energy use efficiency, while in other aspects, UNTR supports diversity, equality, and inclusiveness of employees also at the executive, director, and board of commissioner levels (UNTR, 2022). Taking part in environmental issues, UNVR reduces the use of plastic-based content by 3,800 tons in 2021, improves waste recycling management, reduces CO2 emissions, and reduces energy use. Besides that, in other aspects, UNVR pays attention to the health aspects of its products, pays attention to employee rights, gender equality, and the implementation of good governance practices by implementing an anti-bribery management system and increasing transparency (UNVR, 2021). Nevertheless, according to the OJK, the implementation of sustainable finance in Indonesia still faces several obstacles, including: 1. the level of participation and understanding of sustainable finance is still low; business actors are generally still oriented towards short-term profits and have the perception that sustainable business implementation (ESG integration) may incur additional costs; 2. the lack of standardization in assessing the implementation of ESG aspects; and 3. a lack of adequate infrastructure support (OJK, 2021).

Theoretically, the company's view of profit orientation in the short term and its assumption that involvement in ESG activities will incur additional costs that have the potential to reduce company profits are in line with the views of shareholder theory (Friedman, 1970). However, the majority of company executives, company managers, and investment managers still agree with Friedman's stance, but in the following decades, they will think that this view has not completely answered the problem (Hill, 2020). Today's business is no longer only oriented towards maximizing profit as a short-term goal but is also oriented towards long-term sustainable goals with ESG goals (Zhao et al., 2018). Unlike the view of shareholder theory, in the view of stakeholder theory, which refers to Freeman (1984), the application of ESG to company business activities can increase company profitability. In order to achieve company goals, it is necessary to consider the interests of all stakeholders related to the company, both internally and externally. Research on the topic of ESG performance and the performance of financial companies has been carried out with different metrics and geographic coverage, which in the last five years has shown inconsistent results. As for example the negative results found by Nollet et al. (2016) and Ruan & Liu (2021). The positive results shown by several researchers, such as Qiu et al. (2016), Wang & Sarkis (2017), Velte (2017), Zhao et al. (2018), and Kim & Li (2021). Several other studies conducted by Şeker & Güngör (2022) show that there is no significant effect between ESG performance on the performance of financial companies.

This paper will focus on analyzing the influence of environmental, social, and governance performance and a company's total ESG on a company's financial performance by proposing a focus on geographic coverage and available ESG metric data in Indonesia, which is different from previous research. In proposing some differences in this study, it is hoped that the results obtained will allow for a comparison with previous studies. as stated by Cunha et al. (2021), who suggest



applying to different geographic scopes, integrating theory, and adopting innovative methods and data.

Literature Review

Table 1. Studies in the literature

Table 1. Studies in the literature									
Authors	Sample	ESG Metric Method		Results					
Qiu et al. (2016)	FTSE350 Index London (2005-2009)	Bloomb erg	Panel Data Regression Analysis	Social performance and total ESG have a positive effect on financial performance; environmental performance has no effect.					
Nollet et al. (2016)	S&P500 Index US (2007-2011)	Bloomb	Panel Data Regression Analysis	ESG performance has a negative effect on the corporate financial performance					
Wang & Sarkis (2017)	500 Green Companies US (2009-2013)	Bloomb	Panel Data Regression Analysis	Environmental, social and total ESG performance have a positive effect on ROA and Tobin's Q, but governance performance has no effect					
Velte (2017)	Companies listed on the German Prime Standard (2010-2014)	Thomso n Reuters	Panel Data Regression Analysis	ESG performance and its sub- dimensions have a positive effect on ROA, but have no effect on Tobin's Q					
Zhao et al. (2018)	Energy Sector Companies in China (2007-2016)	PSR	Panel Data Regression Analysis	ESG performance has a positive effect on the corporate financial performance					
Kim & Li (2021)	S&P Capital IQ US (1991-2013)	MSCI	Multiple Regression Analysis	ESG performance and its sub- dimensions have a positive effect on the corporate financial performance					
Ruan & Liu (2021)	China's A-share Listed Companies (2015-2019)	SynTao ESG Rating	Multiple Regression Analysis	ESG performance has a negative effect on the corporate financial performance					
Şeker & Güngör (2022)	325 Global Companies in The Utilities Sector (2010-2019)	Thomso n Reuters	Panel Data Regression Analysis	ESG performance and its sub- dimensions have no effect on ROA and Tobin's Q					

Source: Data Processed (2023)

The inconsistency in the results of previous studies is caused by differences in several factors, such as the number of sample data, the period of observation, geographic coverage, and policies in each country. In addition, different theoretical bases, statistical methods, and evaluation standards—most of which still use qualitative standards compared to quantitative ones—are one of the reasons why research results still do not reach consensus (Ruan & Liu, 2021). Results that do not have a significant effect, for example, were found by Velte (2017), who conducted a performance study of ESG companies on market-based financial performance as measured by Tobin's Q, but positive results were found on an accounting-based basis as measured by ROA. The study was conducted on companies registered with the German Prime Standard for the period 2010–2014, using a sample of



412 observations using the Thomson ESG metric. Velte (2017) explained that these results were obtained due to several factors, namely the development of regulations related to the application of ESG in Germany, the short observation period, the fact that there are still subjective assessment standards, and the ineffective implementation of stakeholder management, where reports on ESG performance are still seen as a marketing tool.

Şeker & Güngör (2022) conducted a study on 325 global companies in the utility sector for the period 2010 - 2019 using Thomson ESG metrics which show that ESG performance has no significant effect on company financial performance. Seker & Güngör (2022) stated that it is possible that these findings cannot be generalized to other sectors, in which the research focus is only on the utility sector, and is also not valid for the period before 2010. The findings of Nollet et al. (2016) show that ESG performance has a negative effect on a company's financial performance. The study was conducted on companies listed on the S&P 500 Index for the period 2007–2011 using the Bloomberg ESG metric. Nollet et al. (2016) stated that there are two types of CSR (altruistic and strategic CSR), and the implementation of altruistic CSR into integrating ESG is associated with high costs of involvement in ESG, which can reduce company profits, thereby reducing shareholder value. Ruan & Liu (2021) conducted a study on companies listed on China's A-share for the 2015-2019 period using the SynTao ESG Rating, which shows that ESG performance has a negative effect on the company's financial performance. Ruan & Liu (2021) explains that regulations in China are still in the development stage, and companies in China are still at the stage of suppressing the relatively high costs of ESG involvement. It is hoped that gradually the costs of ESG involvement will decrease, and in the long term, ESG involvement will have a positive effect.

Several other studies have found that ESG performance improves corporate financial performance (Kim & Li, 2021; Qiu et al., 2016; Wang & Sarkis, 2017; Zhao et al., 2018). Kim & Li (2021) conducted a study that used relatively large data on 4708 companies listed on the S&P from 1991 to 2013. According to the findings of Qiu et al. (2016), geographic coverage, politics, regulation, and public awareness all contribute to positive outcomes in the UK context. Then, Zhao et al. (2018) evaluated ESG metrics using the PSR concept on power generation companies registered in China.

Theoretical Framework and Hypothesis Development

The primary theories that underpin this research are shareholder theory and stakeholder theory. Shareholder theory focuses on the point where the owner of the company is the center of attention and the company's sole responsibility is to increase its profits by focusing on being involved in profit-generating activities under the legal umbrella and basic norms that apply (Friedman, 1970). Stakeholder theory emphasizes not only the interests of the company's owner, but also the interests of each stakeholder involved, both internally and externally, who are influenced or directly influence the achievement of company goals (Freeman, 1984). The concept of the "triple bottom line" states that success or failure in a company's sustainability goals is measured not only by the company's economic profits or losses but also by looking at the surrounding social welfare and the health of the surrounding environment (Elkington, 2018). In the concept of sustainable finance, the corporate paradigm evolves broadly, from creating shareholder value to stakeholder value, or the triple bottom line (people, planet, profit), to the end stages, namely creating value for the common good. Aside from that, vulnerability is extended from the short to the long term. medium- to long-term (Dirk Schoenmaker & Willem Schramade, 2019).

The important reasons why companies are involved in environmental, social, and governance activities are to reduce company risk, improve market performance, and increase the company's sustainable development capabilities. With good ESG commitments, companies will be more stable in their operational and financial activities, and based on the perspective of stakeholder theory and sustainable concepts, ESG activities can form a company's competitive advantage, besides being a source of opportunity and company innovation (Ruan & Liu, 2021).



Companies that pay attention to environmental aspects are more capable of dealing with environmental risks and have innovations related to the use of new and renewable energy, thereby having a competitive advantage in cost efficiency, which can improve the company's financial performance (Hart, 1995). Companies that pay attention to social aspects by paying attention to welfare, trust, fairness, security, and loyalty with their workforce, customers, communities, and other interests can have a direct impact on company productivity and can contribute to company competitiveness (Commission Of The European Communities, 2001), which besides that it can reduce the company's business risk (Vogel, 2005). For example, satisfied employees will be more motivated to work, which makes them more productive, and satisfied suppliers will provide discounts so that companies can obtain materials at lower prices, thus improving the company's financial performance (Şeker & Güngör, 2022). Companies that pay attention to aspects of good governance ensure that members of the board and executives act in the best interest of shareholders and other stakeholders. Effective company operations, good ESG risk management governance and transparency reports on company performance can improve company reputation so that effective corporate governance can improve company financial performance (Ruan & Liu, 2021; Şeker & Güngör, 2022; Vishwanathan et al., 2020).

The research results of Nollet et al. (2016) and (Ruan & Liu, 2021) are in line with shareholder theory, which states that high ESG values are associated with high costs of involvement in ESG, which can reduce company profits, thereby reducing shareholder value. In addition, the application of ESG integration tends to have risks related to the adoption of new technology and low returns (Sachs et al., 2019). While the results of other previous studies conducted by Qiu et al. (2016), Wang & Sarkis (2017), Velte (2017), Zhao et al. (2018), and Kim & Li (2021) show that companies with good ESG performance are able to improve company financial performance, this is in line with stakeholder theory.

Based on the description of the line of thought above, it is explained how the relationship between the company's ESG performance can affect the company's financial performance, therefore we develop research hypotheses as follows:

- H1: Environmental performance has an impact on the corporate financial performance.
- H2: Social performance has an impact on the corporate financial performance.
- H3: Governance performance has an impact on the corporate financial performance.
- H4: ESG performance has an impact on the corporate financial performance.



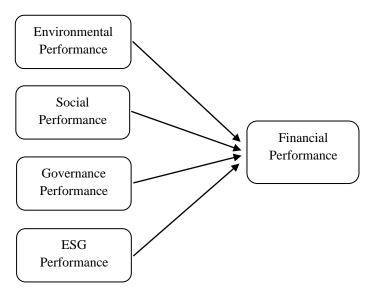


Figure 1. Research Conceptual Framework Source: Data Processed (2023)

METHODS

This study uses a positivistic-deductive approach using quantitative methods with descriptive and inferential statistical data analysis. The main analysis tool in this study was panel data regression analysis with statistical tools Eviews 12. The model selection test was carried out by carrying out the Chow test, Hausman test, and Lagrange multiplier test. There are three main methods for modeling panel data (Wooldridge, 2019; Zulfikar, 2018): 1. common effect model (CE) or pooled least squares (PLS); 2. fixed effect regression model (FE); and 3. random effect regression model (RE). The sample was selected from as many as 23 companies listed on the Indonesia Stock Exchange, with an observation period from 2018–2020. The sample selection technique used purposive sampling with the following criteria: (1) companies listed on the IDX that report or have ESG performance information based on BGK data; (2) exclude financial sector companies; and (3) exclude samples of companies that have a lack of ESG data. Data obtained from BGK, IDN Financials, and IDX sites.

Variables and Regression Model

The dependent variable in this study is the company's financial performance. This study adopts ROA as an accounting-based measure of a company's financial performance (Kim & Li, 2021; Nollet et al., 2016; Şeker & Güngör, 2022; Velte, 2017; Wang & Sarkis, 2017) and Tobin's Q as a measure of financial performance companies on a market-based (Ruan & Liu, 2021; Şeker & Güngör, 2022; Velte, 2017; Wang & Sarkis, 2017). To test the effect of ESG performance on company financial performance, this study adopts Velte (2017), which uses a one-year lagged variable of company financial performance on the basis that ESG performance will not directly impact the company's financial performance in the same year. Therefore, the authors compare the ESG scores for year t, starting from 2018–2020, with the ROA and Tobin's Q for years t + 1, starting from 2019–2021. The independent variables in this study are environmental performance, social performance, governance performance, and total ESG performance. The metric used to measure this performance is the BGK Foundation ESG score, which is expressed as a percentage ranging from 0 to 100%.

As for this study, it adopted a relevant control variable for this research, namely company size, in which company size is one of the essential control variables in testing the effect of ESG performance



on company financial performance (Nollet et al., 2016). Previous research has shown that company size can be related to the extent to which stakeholder interests are related to the company's ESG activities (Velte, 2017). The natural logarithm of total assets is used as a company measure to reduce potential data errors caused by large data sizes or extreme data (Kim & Li, 2021; Velte, 2017; Wang & Sarkis, 2017).

Table 2. Operational Variables

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Variable	Measure	Foundations						
Dependent Variable	ROA	$ROA t + 1 = \frac{Net Income}{Total Asset}$	(Kim & Li, 2021; Nollet et al., 2016; Şeker & Güngör, 2022; Velte, 2017; Wang & Sarkis, 2017)					
Financial Performance	Tobin's Q	Tobin's Q t + 1 $= \frac{\text{Market Value Equity + Debt}}{\text{Total Asset}}$	(Ruan & Liu, 2021; Şeker & Güngör, 2022; Velte, 2017; Wang & Sarkis, 2017)					
	ENV	∑(GHG Emissions, GHG Intensity, Energy Usage, Energy Intensity, Energy Mix, Water Usage, Environmental Operations, Climate Oversight / Management, Climate Oversight/Board, Climate Risk Mitigation, Forestry Corporate Social Responsibility (CSR)	(Kim & Li, 2021; Nollet et al., 2016; Qiu et al., 2016; Şeker & Güngör, 2022; Velte, 2017; Wang & Sarkis, 2017)					
Independent Variable ESG Performance	SOC	∑(CEO Pay Ratio, Gender Pay Ratio, Employee Turnover, Temporary Worker Ratio, Non-Discrimination, Injury Rate, Global Health and Safety, Child and Forced Labor, Human Rights, Social Corporate Social Responsibility (CSR))	(Kim & Li, 2021; Nollet et al., 2016; Qiu et al., 2016; Şeker & Güngör, 2022; Velte, 2017; Wang & Sarkis, 2017)					
	GOV	∑(Board Diversity, Board Independence, Incentivized pay, Collective Bargaining, Supplier Code of Conduct, Ethics & Anti-Corruption Compliance, Data Privacy, ESG Reporting, Disclosure Practices, External Assurance, Tax Transparency)	(Kim & Li, 2021; Nollet et al., 2016; Şeker & Güngör, 2022; Velte, 2017; Wang & Sarkis, 2017)					
	ESG	The average environmental, social and governance scores	(Kim & Li, 2021; Nollet et al., 2016; Qiu et al., 2016; Ruan & Liu, 2021; Şeker & Güngör, 2022; Velte, 2017; Wang & Sarkis, 2017; Zhao et al., 2018)					
Control Variable Company Size	LnTA	Logaritma natural Total Asset	(Kim & Li, 2021; Nollet et al., 2016; Qiu et al., 2016; Ruan & Liu, 2021; Şeker & Güngör, 2022; Velte,					



2017; Wang & Sarkis, 2017; Zhao et al., 2018)

Source: Data Processed (2023).

The panel data regression equation model is written as follows:

Financial Performance (ROA & Tobin's Q)_{i,t+1} =
$$\alpha + \beta_1$$
(ENV, SOC, GOV, ESG)_{i,t} + β_2 LnTA_{i,t} + $e_{i,t}$

where performance is the dependent variable measured by ROA and Tobin's Q separately; α is the intercept or constant value; $\beta 1$ is the regression coefficient of the independent variables ENV, SOC, GOV, and ESG individually; $\beta 2$ is the regression coefficient of the control variable firm size as measured by LnTA; i is an individual or company; t is the period or time, and e is the error. The model is presented with the basic regression model, therefore, there are 8 different models in this study.

RESULTS AND DISCUSSION

Table 3. Descriptive statistics

	ENV	SOC	GOV	ESG	LnTA	ROA	Tobin's Q
Mean	0.264	0.281	0.295	0.280	17.210	0.052	1.769
Maximum	0.890	0.720	0.680	0.727	19.679	0.309	16.559
Minimum	0.010	0.020	0.100	0.063	14.877	-0.127	0.633
Std. Dev.	0.194	0.183	0.152	0.163	1.089	0.073	2.638
Observations	69	69	69	69	69	69	69

Source: Data Processed (2023).

The results of the descriptive statistics in Table 3 contain the mean, maximum, minimum, and standard deviation of each variable in the observed sample data, while the explanation will be discussed as follows:

The environmental performance obtained from the ESG BGK score on the company's environmental performance has a mean value of 0.264, which means that the average value of the company's environmental performance in the research sample data is 26.4% with a standard deviation value of 0.194. The average corporate environmental performance in this research sample with the observation period of 2018-2020 is still quite low; on a 0-100% rating scale, the average corporate environmental performance is only 26.4%. The maximum value is 0.890 or 89%, which is the maximum environmental performance value shown by PT Indo Tambangraya Megah Tbk in 2020, while the minimum value is 0.010 or 1%, which is the minimum environmental performance value shown by PT Elnusa Tbk in 2018. The social performance obtained from the ESG BGK score on corporate social performance has a mean value of 0.281, which means that the average value of corporate social performance in the research sample data is 28.1% with a standard deviation value of 0.183. The average corporate social performance in this study sample with the observation period of 2018-2020 is still quite low; on a rating scale of 0-100%, the average corporate social performance is only 28.1%. The maximum value is 0.720, or 72%, which is the maximum social performance value obtained by PT Austindo Nusantara Jaya Tbk in 2020, while the minimum value is 0.020, or 2%, which is the minimum social performance value obtained by PT Kalbe Farma Tbk in 2019.

Governance performance obtained from the ESG BGK score on corporate governance performance has a mean value of 0.295, which means that the average value of corporate governance performance



in the research sample data is 29.5% with a standard deviation value of 0.152. The average corporate governance performance in this study sample with the observation period of 2018–2020 is still quite low; on a rating scale of 0–100%, the average corporate governance performance is only 29.5%. The maximum value is 0.680 or 68%, which is the maximum value for governance performance obtained by PT Perusahaan Gas Negara Tbk in 2019, while the minimum value is 0.100 or 10%, which is the minimum value for governance performance obtained by PT Elnusa Tbk in 2018. The ESG performance obtained from the BGK ESG score on the company's ESG performance in total has a mean value of 0.280, which means that the average value of the company's ESG performance in the research sample data is 28.0% with a standard deviation value of 0.163. The average company ESG performance in this study sample with the observation period of 2018–2020 is still quite low, which is that on a rating scale of 0–100%, the average company ESG performance is only 28.0%. The maximum value is 0.727, or 72.7%, which is the maximum ESG performance value obtained by PT Austindo Nusantara Jaya Tbk in 2020, while the minimum value is 0.063, or 6.3%, which is the minimum ESG performance value obtained by PT Elnusa Tbk in 2018.

Firm size as measured by the natural logarithm of total assets has a mean value of 17,210 in the research sample data with a standard deviation value of 1,089. The maximum value is 19,679, or total assets worth IDR 351.96 trillion, which is the maximum value of company size obtained by PT Astra International Tbk in 2019, while the minimum value is 14,877, or total assets worth IDR 2.89 trillion, which is the minimum value of company size obtained by PT Total Bangun Persada Tbk in 2020. The company's financial performance is measured on an accounting-based, namely ROA, which has a mean value of 0.052 or 5.2% in the research sample data with a standard deviation value of 0.073. The companies in this research sample with an observation period of 2018–2020 have fairly good company financial performance as measured by ROA, with an average of 5.2%. The maximum value is 0.309 or 30.9%, which is the maximum ROA value obtained by PT Unilever Indonesia Tbk in 2019, while the minimum value is -0.127 or -12.7%, which is the minimum ROA value obtained by PT Waskita Karya (Persero) Tbk in 2019. The company's financial performance is measured on a market-based, namely Tobin's Q, which has a mean value of 1,769 in the research sample data with a standard deviation value of 2,638. The companies in this research sample with the observation period of 2018–2020 have fairly good company financial performance as measured by Tobin's Q with an average of 1,769, which indicates that the company's market value is valued more expensively by 1.7 times. The maximum value is 16,559, which means that the company's value is appreciated by the market by 16 times its book value; the maximum value of Tobin's Q was obtained by PT Unilever Indonesia Tbk in 2019; the minimum value is 0.633, which means that the company's value is appreciated by the market by 0.6 times its book value; the minimum value of Tobin's Q was obtained by PT Austindo Nusantara Jaya Tbk in 2020.

Table 4.	Data 1	Panel	Regression	Analysis	Outcome
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	(1) ROA	(2) ROA	(3) ROA	(4) ROA	(5) Tobin's Q	(6) Tobin's Q	(7) Tobin's Q	(8) Tobin's Q
ENV	0.1096***				-0.3027			
EIV	(0.0002)				(0.7071)			
SOC		0.0802**				0.0811		
SOC		(0.0363)				(0.9373)		
COV			0.0954**				-0.2179	
GOV			(0.0373)				(0.8598)	
ESG				0.1192***				-0.2049
				(0.0024)				(0.8490)
LnTA	-0.0194	-0.0194	-0.0189	-0.0197	-0.1783	-0.1783	-0.1760	-0.1761
	(0.1427)	(0.1421)	(0.1466)	(0.1353)	(0.7164)	(0.7201)	(0.7216)	(0.7216)
Constant	0.3571	0.3628	0.3499	0.3575	4.9186	4.8144	4.8627	4.8570
	(0.1184)	(0.1112)	(0.1206)	(0.1163)	(0.5618)	(0.5748)	(0.5687)	(0.5692)



R-squared	0.2038	0.0852	0.0843	0.1451	0.0042	0.0021	0.0025	0.0026

Notes: P-values are in parentheses (*p < 0.1, **p < 0.05, ***p < 0.01).

Source: Data Processed (2023).

Based on the results of the Chow test, Hausman, and Lagrange multiplier tests, it was determined that the random effect regression model (RE) was the right model for this study. In addition, the RE model was selected because it uses the Generalized Least Square (GLS) principle, also known as the Error Component Model (ECM) technique. The RE model estimates panel data where interference variables can be related to each other over time and between individuals. In the RE model, the difference in intercept is accommodated by the error terms of each individual, the advantage of using the RE model is that it eliminates heteroscedasticity (Wooldridge, 2019).

Hypothesis 1: The independent variable of environmental performance in model (1) has a p-value of 0.0002 with the dependent variable of the company's financial performance as measured by ROA. This indicates that the p-value is smaller than the significance level at the 1% level (0.0002 < 0.01), then it can be decided whether H0 is rejected or HA is accepted. Statistically, this means that there is an effect of environmental performance on the company's financial performance (ROA). Whereas in model (5), the company's financial performance as measured by Tobin's Q has a p-value of 0.7071, meaning that the p-value is greater than the significance level of 10% (0.7071 > 0.10), it can be concluded that H0 is accepted or HA is rejected, which statistically means that there is no effect of environmental performance on the company's financial performance (Tobin's Q). In models (1) and (5), the control variable has no significant effect, as indicated by the p-value, which is higher than the 10% significance level (0.1427 > 0.10) and (0.7164 > 0.10). Statistically, the results show that environmental performance has a positive effect on the financial performance of accounting-based companies in the future as a proxy for ROA. Meanwhile, on a market-based as measured by Tobin's Q, environmental performance has not been able to influence the company's financial performance in the future.

The results of this study are in line with the views of stakeholder theory, which states that by considering the interests of each stakeholder, including in this case the environmental aspect as one of the important aspects, the company will have a competitive advantage, which can improve the company's financial performance. The natural-resource-based view as a theory of competitive advantage explains how competitive advantage is formed based on the company's relationship with the natural environment. In this view, it consists of three strategies that are interconnected with one another, namely: 1. pollution prevention with a competitive advantage has strength in cost efficiency; 2. product management with a competitive advantage has the power to overtake competitors; and 3. sustainable development with a future position as a competitive advantage. Companies that pay attention to environmental aspects are more capable of dealing with environmental risks and have innovations related to the use of new and renewable energy, thereby having a cost-efficiency competitive advantage that can improve the company's financial performance. This result is also in line with research conducted by Kim & Li (2021), Velte (2017), and Wang & Sarkis (2017), which states that environmental performance has a positive effect on accounting-based company financial performance measured with a ROA proxy. Meanwhile, environmental performance has no effect on market-based company financial performance as measured by Tobin's Q in line with research conducted by Seker & Güngör (2022) and Velte (2017).

Hypothesis 2: The independent variable social performance in model (2) has a p-value of 0.0363 with the dependent variable of company financial performance as measured by ROA. This indicates that the p-value is smaller than the significance level at the 5% level (0.0363 < 0.05), then it can be concluded that H0 is rejected or HA is accepted, which statistically means that there is an effect of social performance on company financial performance (ROA). Whereas in model (6), the company's financial performance as measured by Tobin's Q shows a p-value of 0.9373, meaning that the p-value is greater than the significance level of 10% (0.9373 > 0.10), it can be concluded that H0 is



accepted or HA is rejected, which statistically means that there is no effect of social performance on the company's financial performance (Tobin's Q). In models (2) and (6), the control variable has no significant effect, as indicated by the p-value, which is higher than the 10% significance level (0.1421 > 0.10) and (0.7201 > 0.10). The statistical results show that social performance has a positive effect on the company's financial performance in the future on an accounting-based which is proxied by ROA. Meanwhile, on a market-based, as measured by Tobin's Q, social performance has no effect on the company's financial performance in the future.

In the perspective of stakeholder theory, in order to achieve company goals, companies need to consider the interests of all stakeholders related to the company, both internally (owners, managers, externally suppliers, and (consumers, government, creditors, environmentalists). Adopting CSR and involving the interests of stakeholders is a source of a company's competitive advantage. The more responsible a company is, the fewer business risks it will face. There are four benefits of implementing a CSR strategy to balance the interests of stakeholders, namely: 1. increasing the company's reputation; 2. increasing stakeholder reciprocity; 3. corporate risk mitigation; and 4. strengthening innovation capacity. Companies that pay attention to social aspects by paying attention to welfare, trust, fairness, security, and loyalty with workers, customers, communities, and other interests can have a direct impact on company productivity and can contribute to company competitiveness, which in addition can reduce company business risks. For example, satisfied employees will be more motivated to work, which makes them more productive, and satisfied suppliers will provide discounts so that companies can obtain materials at lower prices, thus improving the company's financial performance. These results are in line with research conducted by Kim & Li (2021), Velte (2017), Wang & Sarkis (2017), and Qiu et al. (2016), which states that social performance has a positive effect on accounting-based company financial performance with a proxy for ROA. Meanwhile, social performance has no effect on market-based company financial performance as measured by Tobin's Q in line with research conducted by Seker & Güngör (2022) and Velte (2017).

Hypothesis 3: The independent variable of governance performance in model (3) has a p-value of 0.0373 with the dependent variable of corporate financial performance as measured by ROA. This indicates that the p-value is smaller than the significance level at the 5% level (0.0373 < 0.05), so it can be concluded that H0 is rejected or HA is accepted, which statistically means that there is an effect of governance performance on company financial performance (ROA). Whereas in model (7), the company's financial performance as measured by Tobin's Q has a p-value of 0.8598, meaning that the p-value is greater than the significance level of 10% (0.8598 > 0.10), it can be concluded that H0 is accepted or HA is rejected, which statistically means that there is no effect of governance performance on company financial performance (Tobin's Q). In models (3) and (7), the control variable has no significant effect, as indicated by the p-value, which is higher than the 10% significance level (0.1466 > 0.10) and (0.7216 > 0.10). Statistically, the results show that governance performance has a positive effect on future company financial performance, as an accounting-based which is proxied by ROA. Meanwhile, on a market-based as measured by Tobin's Q, governance performance has no effect on the company's financial performance in the future.

In the perspective of stakeholder theory, it focuses not only on company owners or shareholders but also on the interests of each stakeholder involved, both internally and externally, who are influenced by or directly influence the achievement of company goals. Implementing a strategy of stakeholder management practices by adopting CSR as part of a corporate strategy in which companies integrate social and environmental considerations into their business operations and in their interactions with various stakeholders can have a direct impact on company productivity and can contribute to company competitiveness.

Companies that pay attention to aspects of good governance ensure that their board members and executives act in the best interest of shareholders and other stakeholders. Effective company



operations, ESG risk management governance, anti-corruption systems, gender equality and diversity at the board of directors and employees, as well as transparency of company performance reports, can improve the company's reputation, so that effective corporate governance can improve the company's financial performance. The results of this study are in line with research conducted by Kim & Li (2021) and Velte (2017), which states that governance performance has a positive effect on accounting-based company financial performance with a ROA proxy. Meanwhile, governance performance has no effect on market-based company financial performance as measured by Tobin's Q in line with research conducted by Şeker & Güngör (2022) and Velte (2017).

Hypothesis 4: The independent variable ESG performance in model (4) has a p-value of 0.0024, with the dependent variable being the company's financial performance as measured by ROA. This indicates that the p-value is smaller than the significance level at the 1% level (0.0024 < 0.01), and then it can be concluded that H0 is rejected or HA is accepted, which statistically means that there is an effect of ESG performance on the company's financial performance (ROA). Whereas in model (8), the company's financial performance as measured by Tobin's Q shows a p-value of 0.8490, meaning that the p-value is greater than the significance level of 10% (0.8490 > 0.10), it can be concluded that H0 is accepted or HA is rejected, which statistically means that there is no effect of ESG performance on the company's financial performance (Tobin's Q). In models (4) and (8), the control variable has no significant effect, as indicated by the p-value, which is higher than the 10% significance level (0.1353 > 0.10) and (0.7216 > 0.10). The statistical results show that ESG performance in total has a positive effect on the company's financial performance in the future, as an accounting-based measure that is proxied by ROA. Meanwhile, on a market-based measured by Tobin's Q, total ESG performance does not affect the company's financial performance in the future.

The positive influence here explains that the findings of this study contradict the shareholder theory, which assumes that any expenditure outside the company's core activities will incur costs that can reduce the company's financial performance, which, besides that in view of shareholder theory, is still focused on short-term profits. In contrast to shareholder theory, stakeholder theory sees business as a set of relationships that create value between stakeholders who work together between customers, suppliers, employees, investors (shareholders, bondholders, banks, etc.), society, and management to achieve the goal. Understanding the business means understanding how these relationships work, and the manager's job is to shape and direct these relationships. The concept of the "triple bottom line" as a sustainable framework, states that the success or failure of a company's sustainability goals is not only measured by the company's profit or loss economically but also by looking at the surrounding social welfare and the health of the surrounding environment. In the concept of sustainable finance, the corporate paradigm evolves broadly, from creating shareholder value to stakeholder value, or the triple bottom line (people, planet, profit), to the final stage, namely creating value for the common good. Besides that, the horizon is expanded from the short term to the long term.

An important reason why companies are involved in environmental, social, and governance activities is to reduce corporate risk, improve market performance, and enhance the company's sustainable development capabilities. With a good ESG commitment, the company will be more stable in its operational and financial activities and based on the perspective of stakeholder theory and sustainable concepts, the integration of ESG as a company's strategic move can create a competitive advantage, thereby increasing the company's financial performance.

The results of this study indicate that ESG performance has a positive effect on accounting-based financial performance with a proxy for ROA; this is in line with research conducted by Qiu et al. (2016), Wang & Sarkis (2017), Velte (2017), Zhao et al. (2018), and Kim & Li (2021). Meanwhile, on a market-based basis proxied by Tobin's Q, ESG performance has no effect on the company's financial performance. These results are in line with research conducted by Şeker & Güngör (2022) and Velte (2017). ESG performance has not been able to influence the company's financial performance on a market-based basis with Tobin's Q proxy, considering the development of ESG



practices in Indonesia is still in the development stage. OJK stated that in Indonesia itself there are still several obstacles related to the implementation of sustainable finance: the level of participation and understanding of sustainable finance is still low, business actors are generally still oriented towards short-term profits, and they have the perception that implementing sustainable business (ESG integration) can incur additional costs; the lack of standardization in assessing the implementation of ESG aspects; and the lack of adequate infrastructure support.

Indonesia sets policies and a set of ambitious goals and develops a financial system that is in line with the UN SDGs and the Paris Climate Agreement. In the early stages, through the Financial Services Authority (OJK), Indonesia launched the Phase I Sustainable Finance Roadmap (2015-2019), which contains activities to strengthen sustainable finance focused on the basic regulatory framework and reporting system, increasing understanding, knowledge, and competence of human resources in the financial services industry, providing incentives, and coordinating with relevant agencies. Furthermore, the Phase II Sustainable Finance Roadmap (2021-2025) focuses on developing a green taxonomy, implementing ESG aspects, developing real green financing programs, product innovation, sustainable financial services, and a national sustainable finance campaign. Several regulations were issued, such as OJK Regulation Number 51 of 2017. The regulation states that financial service institutions, issuers, and public companies are required to implement sustainable finance in their business activities by integrating ESG aspects. In supporting the implementation of sustainable finance, financial services institutions and public companies are required to allocate a portion of their funds for the implementation of corporate social and environmental responsibility, which in addition requires them to prepare a sustainability report regarding their ESG performance.

Companies listed on the Indonesia Stock Exchange that make or report sustainability reports are still relatively few. Of the population in this study, namely the 810 companies listed on the IDX, around 101 companies are reporting sustainability reports in 2021 based on those recorded in the BGK database for calculating ESG scores. Sustainability reporting policies and standardization are still developing; access to sustainable reports is still limited; the level of participation in sustainable reporting by public companies is still relatively low; the public or investors in Indonesia still do not seem to consider ESG aspects in their investment decisions; in addition, campaigns regarding the importance of implementing ESG aspects in every economic activity are still being echoed.

CONCLUSION

Some of the important reasons why companies are involved in environmental, social, and governance activities are to create competitive advantages, reduce company risk, improve market performance, and increase their ability to develop sustainable companies. The results of this study indicate that the performance of ESG and its sub-dimensions has a positive effect on the performance of accounting-based financial companies as measured using ROA. However, on a market-based proxied by Tobin's Q, ESG performance and its sub-dimensions have no effect on the performance of financial companies. This study has limitations on ESG data because it only covers the period 2018-2020, which is better for reviewing the effect of ESG performance on the performance of financial companies requiring long-term observations. Therefore, we suggest that future research use a longer observation period. The current availability of ESG company data in Indonesia using the BGK ESG metric is still limited. Due to these limitations, a sample of companies listed on the IDX was obtained using several sample selection criteria, but only 23 companies were obtained as a sample. Therefore, as the data increases, we suggest adding more samples of companies and opening up the possibility of grouping them by industry type. This study uses the ESG metric from BGK, which allows the results of this study to be different from similar studies using other ESG metrics. Therefore, we suggest that future research can use several different ESG metrics with observations of the same data sample in order to be able to compare results between the metrics.



This study only uses the independent variable ESG performance, the dependent variable company financial performance with ROA and Tobin's Q proxies, and the control variable company size. To develop variables that might affect financial performance, we suggest that future research can elaborate on possible variables that can be used as independent, control, mediating, or moderating variables so that the resulting model is even better.

Based on the results of this study, it is stated that the better the company's ESG performance, the better its financial performance. In addition, in line with the world's agenda regarding sustainable goals, we suggest that investors and/or the public in general support the sustainable agenda, one of which is by considering the ESG aspect in their stock selection decisions. Today, company involvement in ESG activities is no longer seen solely as an ethical matter, which is still considered to incur only additional costs, but rather as an important factor that can be adopted as part of the company's strategy. Companies with good ESG performance can have a competitive advantage, which can make them more resilient in productivity, overcoming risks, cost efficiency, and reputation, all of which can improve the company's financial performance. Thus, companies in Indonesia can be more actively involved in ESG activities and see the further importance of sustainability reports, which, besides implementing ESG practices, means that companies are participating in sustainable goals in dealing with current global issues.

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