

The Impact of Esg Disclosure, Environmental Cost, and Corporate Reputation on Financial Performance

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Abstract

This study was conducted to analyze the influence of ESG Disclosure, Environmental Costs, and Corporate Reputation on Financial Performance. Alareeni's study (2022) shows that ESG disclosure has an impact. This research uses companies listed on the Indonesia Stock Exchange in 2018-2022 as the population. The sample that meets the criteria in this study is 34 companies. The data analysis used is panel regression using E-Views 13 Application. The analysis results show the influence of ESG Disclosure, Environmental Cost, and Corporate Reputation variables simultaneously on the Company's Financial Performance. However, individually, only the Environmental Disclosure variable has a significant negative impact on the Company's Financial Performance variable.

Keywords: ESG Disclosure, Environmental Costs, Corporate Reputation, Company Financial Performance

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1. Background

Proper ESG implementation by companies is part of achieving the 2030 sustainable development goals set by the UN. Companies ignoring ESG issues can decrease investor trust, as seen in the case of the Bakrie Group, whose stock price plummeted when entangled in environmental issues. ESG implementation by companies can be seen through ESG Disclosure in the company's Sustainability Report. Alareeni's findings (2022) show that there is a significant impact of ESG on performance measurements. This research sample includes companies listed on the S&P 500 in the US during the period 2009 to 2018. These findings are also consistent with the research results of Almeyda (2019), which found a positive relationship between ESG Disclosure and ROA and ROC. ESG performance measurement of companies can be done through various approaches. According to Clement (2022), about 10% of existing research related to the use of disclosure methods in determining ESG Performance, while other methods include Sustainability Implementation (15%), Corporate Social Responsibility (28%), ESG Scores related to Finance (45%), and ESG Scores with multidisciplinary assessment (3%).

Amina Buallay (2019), Al Waeli (2020), and Septiadi (2016) conducted research on the Costs and Benefits of Sustainability Reporting on company performance. Buallay and other researchers found that ESG disclosure positively affects market performance, supporting value creation theory. Conversely, ESG implementation can negatively affect Financial Performance, as revealed in the capital cost reduction theory. This is reflected in the research of Evita (2019) and Nengzih (2022), showing that the allocation of environmental-related costs and CO2 emissions does not significantly affect the Financial Performance of companies.

The ups and downs of financial performance, in terms of market performance, are also influenced by the company's reputation. A company's reputation can affect the perception of customers, investors, business partners, and the general public towards the company. This, in turn, can affect financial performance, such as increased investor trust resulting in rising share prices, revenue growth driven by customers who trust a certain product's reputation, cost control driven by competent employees attracted because of the company's reputation, and other factors such as ease of capital acquisition due to the company's reputation. This statement is in line with the findings of Setiawan et al. (2020), Silvija Vig et al. (2017), Wu Xiaoman (2018), Cocis (2021), and Kartawinata (2022).



2. Theory and Hypothesis

a. Theory

Stakeholder Theory

Stakeholder Theory posits that companies need to account for their business activities to all involved parties (stakeholders) and not just focus on their profits. A company's success depends on its ability to build good relationships with stakeholders.

Signaling Theory

Signaling Theory explains how management conveys information about the company's prospects to investors. This information is important in bridging the gap of information asymmetry between managers and external parties such as investors and creditors. ESG disclosure in annual reports or sustainability reports can be a positive signal for investors and other stakeholders.

Legitimacy Theory

Legitimacy Theory views that companies need social legitimacy to operate. Legitimacy is obtained by conducting operations aligned with the prevailing social norms and values. Implementing ESG helps companies meet societal expectations and maintain social legitimacy.

ESG (Environmental, Social, and Governance)

ESG represents three main factors in assessing the sustainability performance and social responsibility of companies. The Environmental dimension includes sustainability practices and natural resource management, the Social dimension emphasizes the company's relationships with employees and the community, while the Governance dimension relates to business ethics and transparency.

Environmental Disclosure

Environmental Disclosure refers to the disclosure of a company's environmental activity information to stakeholders, covering waste management and pollution control. This disclosure is crucial for accountability and transparency in the company's environmental performance. Research indicates that good environmental disclosure can enhance a company's financial performance.

Social Disclosure

Social Disclosure involves the disclosure of information about a company's social impact, such as labor fairness and human rights. This disclosure provides transparency about how companies affect society and meet the information demands of stakeholders concerned with sustainable business practices.

Governance Disclosure

Governance Disclosure involves disclosing information about a company's governance structure, board composition, and decision-making policies. Appropriate governance disclosure can increase the trust and loyalty of stakeholders.

Environmental Cost

Environmental Cost relates to the costs associated with managing a company's environmental impact, including costs for pollution prevention, detection, and remediation. Measuring environmental costs is important for understanding the fiscal impact of a company on the environment.

Corporate Reputation

A company's reputation is the public's perception of the company's image, integrity, and performance. A good reputation can strengthen stakeholder trust and loyalty, while a poor reputation can damage trust and company performance.

Financial Performance

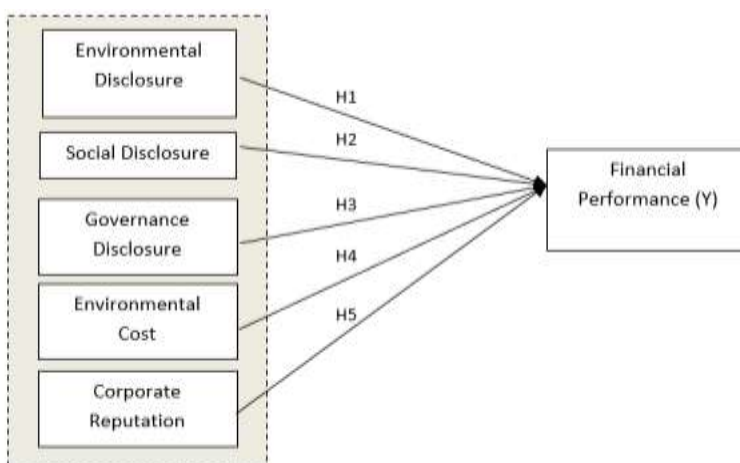
Financial Performance is a tool to measure a company's financial achievements. Financial ratios, such as Tobin's Q, are used to assess a company's stock market performance, linking ESG disclosures, environmental costs, and corporate reputation to financial performance.

b. Hypotheses

Research by Griffin and Sun (2013) and Kumar and Firoz (2018) found that environmental disclosures have a positive relationship with financial performance in 44 Indian companies. Purwanto et al. (2018) showed that transparency in environmental and social disclosure significantly affects financial performance in 72 hospitality companies in Indonesia, Malaysia, and Thailand. Toti and Johan (2022) also found that good Environmental Disclosure scores benefit profitability and company value. Friede et al. (2015) summarized more than 2200 studies and found that 90% show a positive relationship between Social Disclosure scores and Financial Performance. Alareeni et al. (2020) and Fernandez (2016) also support the significant influence of these variables, with Corporate Governance Disclosure allowing for the assessment of a company's management structure and transparency in decision-making. Esteban-Sanchez et al. (2017), Jamali et al. (2008), and Velte (2017) showed a positive significant relationship between better corporate governance and financial performance.

Amina Buallay (2019) showed that the implementation of ESG can positively affect market performance but has a negative impact on operational financial performance. Research by Evita (2019) and Nengzih (2022) showed that the allocation of costs related to environmental management and CO2 emissions does not have a significant effect, whereas Al Waeli (2020) and Septiadi (2016) found a significant influence between environmental costs and financial performance. Company reputation influences stakeholder perceptions related to financial performance. Wu Xiaoman (2018) found that corporate reputation enhances customer satisfaction and loyalty, contributing to better financial performance. This is supported by research from Cocis (2021), Setiawan (2020), Vig (2017), and others.

Research by Almeyda (2019) showed a significant influence between ESG Disclosure and financial performance. Friede et al. (2015) and Alareeni et al. (2020) showed that ESG scores have a positive relationship with financial performance. Buallay et al. (2020) also support these findings. Research by Al Waeli (2020) and Septiadi (2016) showed a significant influence between environmental costs and financial performance, while Evita (2019) and Nengzih (2022) did not find a significant influence. Wu Xiaoman (2018) and other studies show that corporate reputation significantly improves financial performance. Research by Naeem et al. (2022) showed that the ESG performance of companies in environmentally sensitive industries has a significant positive influence on return on equity and Tobin's Q.



- H1: Environmental Disclosure significantly affects Financial Performance
H2: Social Disclosure significantly affects Financial Performance
H3: Governance Disclosure significantly affects Financial Performance
H4: Environmental Cost significantly affects Financial Performance
H5: Corporate Reputation significantly affects Financial Performance

3. Research Method

The researcher employs a quantitative method in the study, which is of a causality nature. Causality research aims to test the influence, relationship, or impact of the independent variable on the dependent variable. By studying the relationship model between the concerned variables, it is possible to predict the effect that will occur on the dependent variable if the independent variable changes.

a) Operationalization of Variables

Independent Variable	Formula
Environmental Disclosure (ED)	Environmental Disclosure/Total Environmental Disclosure that required by GRI x100%
Social Disclosure (SD)	Social Disclosure/Total Social Disclosure that required by GRI x100%
Governance Disclosure (GD)	Governance Disclosure/Total Governance Disclosure that required by GRI x100%
Environmental Cost (EC)	Environmental Cost/Net Profitx100%
Corporate Reputation (CR)	Total Award received by the company

Dependent Variable	Formula
Tobins'Q Ratio	$Tobin's\ Q = \frac{Market\ Value\ of\ Firm's\ Equit}{Replacement\ Cost\ of\ Firm\ Asset's} \times 100\%$

b) Population and Research Sample

The population is companies listed on the Indonesia Stock Exchange (IDX) for the years 2018-2022. The sample was taken using a purposive sampling method, with specific criteria such as companies that consistently publish annual and sustainability reports, and include environmental costs.

c) Data Collection Technique

Data were collected through documentation methods and content analysis of the companies' annual and sustainability reports. Data were processed in the form of ratios and indexes according to the operational definition of the research variables.

d) Data Analysis Method

Descriptive Statistical Analysis was conducted to find out the level of disclosure of sustainability reports, company value, and management ownership. In addition, Panel Data Regression Analysis Using Common Effect, Fixed Effect, and Random Effect techniques to estimate the regression model with panel data. F test (Chow), Hausman test, and Langerange Multiplier test were used to select the most suitable regression model.

e) Hypothesis Testing

Hypothesis testing was conducted using the coefficient of determination (R²) to measure how well the regression model, F test for the influence of independent variables together, and T test for the influence of independent variables individually. Data were analyzed using multiple linear regression to test the effect of independent variables on company value.

The regression equation is:

$$TQ = \alpha + \beta_1 ED + \beta_2 SD + \beta_3 GD + \beta_4 EC + \beta_5 CR + e$$

TQ = Tobins'Q Ratio

α = Constant

β_1 - β_5 = Regression Coefficients

ED = Environmental Disclosure

SD = Social Disclosure

GD = Governance Disclosure

EC = Environmental Cost

CR = Corporate Reputation

e = Error rate

4. HResults and Discussion

a. Research Object

The research object used in this study is companies listed on the Indonesia Stock Exchange (IDX) in the years 2018-2022 with the following sample criteria:

Tabel 1. Sample Selection

No	Criteria	Number
1	Companies listed on the Indonesia Stock Exchange in 2022	828
2	Not listed consecutively during the period 2018-2022	(243)
3	Companies that do not publish Annual & Sustainability Reports consecutively during 2018-2022	(540)
4	Companies that do not disclose environmental costs on financial statements, annual reports, and sustainability reports consecutively during 2018-2022	(29)
5	Companies on the special monitoring list	(6)
Total Research Sample		34
Total Research Sample over 5		170

The limited number of samples obtained was mainly due to the minimal number of companies that published Sustainability Reports consecutively from 2018-2022. This was mainly because the implementation of the POJK no 51 Year 2017 only started from the Fiscal Year 2019, in accordance with the provisions of Chapter IV POJK 51 Year 2017 regarding the Submission of Sustainable Finance Action Plans, Reporting, and Publication.

b. Model Suitability Test

In the regression technique approach using panel data, three simple regression tests were performed with the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To determine a good and accurate model for interpretation, three stages of model estimation testing were performed using Chow test & Hausman test.

Chow Test

Model		Result	Notes	
Redundant Fixed Effects Tests		H0	Fixed	Effect
Equation: Untitled		rejected	Model	
Test cross-section fixed effects				
Effects Test	Statistic	d.f.	Prob.	
Cross-section F	33.487352	(33,131)	0.0000	
Cross-section Chi-square	381.565878	33	0.0000	

Hausman Test

Model		Result	Notes	
Correlated Random Effects - Hausman Test		H0 rejected	Fixed	Effect
Equation: Untitled			Model	
Test cross-section random effects				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	4.925706	5	0.0015	

c. T test

The regression analysis results are as follows

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.533384	0.118304	12.96138	0.0000
ED	-0.825658	0.342458	-2.410977	0.0173
SD	0.495057	0.364042	1.359891	0.1762
GD	-0.052252	0.143403	-0.364374	0.7162
EC	0.004526	0.003133	1.444827	0.1509
CR	-0.000733	0.002537	-0.288831	0.7732

Variable	Probability	Coefficient	Result	Notes
Environmental Disclosure (ED)	0.0173	-0.825658	H1 accepted	Environmental Disclosure has a significant negative effect on Tobin's Q
Social Disclosure (SD)	0.1762	0.495057	H2 rejected	Social Disclosure does not have a significant effect on Tobin's Q
Governance Disclosure (GD)	0.7162	-0.052252	H3 rejected	Governance Disclosure does not have a significant effect on Tobin's Q
Environmental Cost (EC)	0.1509	0.004526	H4 rejected	Environmental Cost does not have a significant effect on Tobin's Q
Corporate (CR)	0.7732	-0.000733	H5 rejected	Corporate Reputation does not have a significant effect on Tobin's Q

d. F Test

The regression analysis results are as follows:

F-statistic	31.58426
Prob(F-statistic)	0.000000

Using this decision basis, the value on F statistic is 31.584 with a probability of 0.0000, which is smaller than 0.05; thus, it can be concluded that there is a significant effect Environmental Disclosure, Social Disclosure, Governance Disclosure, Environmental Cost, and Corporate Reputation.

5. Conclusion, Limitations & Recommendations

a. Conclusion

This study aims to identify and examine the influence of ESG Disclosure, Corporate Reputation, and Environmental Cost on Financial Performance. Based on the hypothesis testing and data analysis results, the following conclusions are reached:

1. Environmental Disclosure has a significantly negative influence on Financial Performance. The more environmental disclosures are made, the worse its effect on the stock price, which will decrease a company's Financial Performance.
2. Social Disclosure does not have a significant effect on Financial Performance.
3. Governance Disclosure does not have a significant effect on Financial Performance.
4. Environmental Cost does not have a significant effect on Financial Performance.
5. Corporate Reputation does not have a significant effect on Financial Performance.

b. Research Limitations

This study has several limitations that could provide opportunities for future research:

- Only using data from companies that publish GRI standard sustainability reports with a 5-year observation period, resulting in a limited sample of 34 companies, which could affect the research results.
- Using Tobin's Q Ratio, related to market performance and the short duration of the study. Other measurements such as Return on Asset (ROA) and Return on Equity (ROE) could be considered.
- Only using disclosures in the company's sustainability report, due to limitations of data sources. Trusted institutions that measure ESG scores with more comprehensive methods could be used.
- Using the number of awards received by a company due to sources limitation and inconsistency. Institutions measuring Corporate Reputation in Indonesia could be an alternative data source.

c. Recommendations

Based on the results and conclusions, the researcher provides the following recommendations:

- Increase the number of samples with longer observation years, as the impact of ESG Disclosure, Environmental Cost, and Corporate Reputation on Financial Performance usually cannot be felt in a relatively short time.

- The study could use other operationalization of variables in measuring Financial Performance such as Return on Asset and Return on Equity.
- Future studies are recommended to use ESG measurement in terms of risk like already done by Institutions such as MSCI, Bloomberg, and Morning Star Sustainalytics.
- Future research could use Corporate Reputation measurement already measured by credible institutions like IICD, Frontier, or media like Fortune100.
- The company disclosing the most Environmental Disclosure in this study is PT Timah Tbk in the year 2022, which turned out to face an environmental issue in 2024. The board of PT Timah Tbk was arrested on alleged corruption cases of Mining Business License (IUP). This reflects a tendency for companies to disclose more to cover up existing environmental issues. Future research could link the relationship between corporate compliance with regulations to environmental disclosures made and their impact on financial performance.

References

- Alareeni, Bahaaeddin Ahmed, dan Allam Hamdan. 2020. "ESG impact on performance of US S&P 500-listed firms." *Corporate Governance (Bingley)* 20(7): 1409–28. doi:10.1108/CG-06-2020-0258.
- Albertini, Elisabeth. 2013. "Does Environmental Management Improve Financial Performance? A Meta-Analytical Review." *Organization and Environment* 26(4): 431–57. doi:10.1177/1086026613510301.
- Almeyda, Raisa, dan Asep Darmansyah. The Influence of Environmental, Social, and Governance (ESG) Disclosure on Firm Financial Performance.
- Basuki, Basuki, dan Riasty Dewi Irwanda. 2018. "Environmental cost analysis and reporting to measure environmental performance in realizing eco-efficiency at PT Industri Kereta Api (Persero)." *Asian Journal of Accounting Research* 3(2): 169–80. doi:10.1108/AJAR-06-2018-0013.
- Buallay, Amina. 2019. "Between cost and value: Investigating the effects of sustainability reporting on a firm's performance." *Journal of Applied Accounting Research* 20(4): 481–96. doi:10.1108/JAAR-12-2017-0137.
- Chouaibi, Salim, Jamel Chouaibi, dan Matteo Rossi. 2022. "ESG and corporate financial performance: the mediating role of green innovation: UK common law versus Germany civil law." *EuroMed Journal of Business* 17(1): 46–71. doi:10.1108/EMJB-09-2020-0101.
- Clément, Alexandre, Élisabeth Robinot, dan Léo Trespeuch. 2023. "The use of ESG scores in academic literature: a systematic literature review." *Journal of Enterprising Communities*. doi:10.1108/JEC-10-2022-0147.
- Cocis, Andreas Daniel, Larissa Batrancea, dan Horia Tulai. 2021. "The link between corporate reputation and financial performance and equilibrium within the airline industry." *Mathematics* 9(17). doi:10.3390/math9172150.
- Cohen, Gil. 2023. "The impact of ESG risks on corporate value." *Review of Quantitative Finance and Accounting* 60(4): 1451–68. doi:10.1007/s11156-023-01135-6.
- Friede, Gunnar, Timo Busch, dan Alexander Bassen. 2015. "ESG and financial performance: aggregated evidence from more than 2000 empirical studies." *Journal of Sustainable Finance and Investment* 5(4): 210–33. doi:10.1080/20430795.2015.1118917.
- Griffin, Paul A, dan Yuan Sun. 2012. *Going Green: Market Reaction to CSR Newswire Releases*. <http://ssrn.com/abstract=1995132><http://ssrn.com/abstract=1995132>.

- Jumaah, Abbas, Al-Wae Li, Azam Abdelhakeem Khalid, Abbas Jumaah Al-Waeli, dan Zuriadah Ismail. 2020. "Article ID: IJM_11_10_184 Cite this Article: Abbas Jumaah Al-Waeli, Zuriadah Ismail and Azam Abdelhakeem Khalid, The Impact of Environmental Costs on the Financial Performance of Industrial Companies in Iraq." *International Journal of Management (IJM)* 11(10): 1955. doi:10.34218/IJM.11.
- Kartawinata, Budi Rustandi, dan Dyah Maharani. Corporate Reputation on Financial Performance (Study on Member of The Indonesian Chamber of Commerce for West Java).
- Khanifah, Khanifah, Udin Udin, Nor Hadi, dan Fitri Alfiana. 2020. "Environmental performance and firm value: Testing the role of firm reputation in emerging countries." *International Journal of Energy Economics and Policy* 10(1): 96–103. doi:10.32479/ijeep.8490.
- Kim, Ryumi, dan Bonha Koo. 2023. "The impact of ESG rating disagreement on corporate value." *Journal of Derivatives and Quantitative Studies* 31(3): 219–41. doi:10.1108/JDQS-01-2023-0001.
- Naeem, Nasruzzaman, Serkan Cankaya, dan Recep Bildik. 2022. "Does ESG performance affect the financial performance of environmentally sensitive industries? A comparison between emerging and developed markets." *Borsa Istanbul Review* 22: S128–40. doi:10.1016/j.bir.2022.11.014.
- Nengzih, Nengzih. 2022. "Carbon Emissions Intensity and Environmental Cost Effect to Corporate Financial Performance." *Jurnal ASET (Akuntansi Riset)* 14(2): 245–54. doi:10.17509/jurnal.
- Pulino, Silvia Carnini, Mirella Ciaburri, Barbara Sveva Magnanelli, dan Luigi Nasta. 2022. "Does ESG Disclosure Influence Firm Performance?" *Sustainability (Switzerland)* 14(13). doi:10.3390/su14137595.
- Rodriguez-Fernandez, Mercedes. 2016. "Social responsibility and financial performance: The role of good corporate governance." *BRQ Business Research Quarterly* 19(2): 137–51. doi:10.1016/j.brq.2015.08.001.
- Rounaghi, Mohammad Mahdi. 2019. "Economic analysis of using green accounting and environmental accounting to identify environmental costs and sustainability indicators." *International Journal of Ethics and Systems* 35(4): 504–12. doi:10.1108/IJOES-03-2019-0056.
- Semenova, Natalia, dan Lars G Hassel. 2013. The Added Value of Environmental, Social and Governance Performance and Sustainable and Responsible Investment on Company and Portfolio Levels-What Can We Learn from Research? The Added Value of ESG/SRI on Company and Portfolio Levels-What Can We Learn From Research? <https://www.researchgate.net/publication/259452763>.
- Setiawan, Roy, Vijay D Kulkarni, Mahmoud Al-Odeh, Nordiana Ahmad Nordin, SSam Santhos, Ismail Raisal, Girish Bagale, S Suman Rajest Authors Roy Setiawan, dan S Suman Rajest. 2020. 25 The Impact of Corporate Reputation on Organizational Performance. GITO Verlag.
- Setiyawati, Hari. 2014. 5 Research Journal of Finance and Accounting www.iiste.org ISSN The Effect of the Implementation of Good Corporate Governance Principles and the Effectiveness of Internal Control System Disclosure of Environmental accounting and Its Implications On the Company Performance (Studies in State-Owned and Private Hospitals in Jakarta). www.iiste.org.
- Tischer, Sven, dan Lutz Hildebrandt. 2014. "Linking corporate reputation and shareholder value using the publication of reputation rankings." *Journal of Business Research* 67(5): 1007–17. doi:10.1016/j.jbusres.2013.08.007.
- Toti, Gladys Kerenhapukh, dan Suwinto Johan. 2022. "The Effect of Enviromental, Social, Governance (ESG) Disclosure on Company's Profitability & Value in The Sri-Kehati Index

2015-2020.” *Journal of Entrepreneurship, Management and Industry (JEMI)* 5(2). doi:10.36782/jemi.v5i2.2271.

Tri Aprilyana, Wiwin, dan Erna Setiany. “Corporate Governance and Financial Performance: A Comparative Study of South East Asia’s Hospitality Industries.” www.economy.okezone.com.

Wasiuzzaman, Shaista, dan Wan Masliza Wan Mohammad. 2020. “Board gender diversity and transparency of environmental, social and governance disclosure: Evidence from Malaysia.” *Managerial and Decision Economics* 41(1): 145–56. doi:10.1002/mde.3099.

Xiaoman, Wu, Liang Tongying, dan Liu Xiaolong. 2018. “Corporate Reputation and Financial Performance: The Moderating Effects of Industry competitiveness and Environmental uncertainty.” Dalam *IOP Conference Series: Materials Science and Engineering*, Institute of Physics Publishing. doi:10.1088/1757-899X/439/3/032055.