

The Effect of Environmental Social Governance on the Company's Financial Performance with Company Size as a Moderating Variable

Rohmawati Qofi'ah^{1*}, Lismawati²

Universitas Bengkulu

Corresponding Author: Rohmawati Qfi'ah rqofiah@gmail.com

ARTICLE INFO

Keywords: Financial Performance, ESG, Firm Size

Received : 5, March

Revised : 19, March

Accepted: 20, April

©2025 Qofi'ah, Lismawati : This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This study aims to determine how the impact of ESG on the financial performance of manufacturing companies in Indonesia. The population of this study is 35 companies in a 4-year period, so the sample includes 140 companies. This study applies a quantitative approach with data analysis through panel data regression and Moderated Regression Analysis (MRA) is implemented to determine whether the company size variable can strengthen or weaken the correlation of ESG's influence on financial performance with Eviews 12. The test results with panel data regression implementing the Fixed Effect Model (FEM) indicate the t-statistic value for the ESG variable is -2.153039 which indicates that ESG has a negative impact on financial performance and company size as moderation is able to weaken the correlation of ESG to the financial performance of manufacturing companies in Indonesia listed on the IDX during the 2020-2023 period.

INTRODUCTION

Achieving the maximum level of profit is the main objective of operating a business. In addition to showing the company's ability to earn profits from its sales, profitability also reflects the effectiveness in managing assets, capital, and labor. However, many factors can affect profitability, ranging from macroeconomic conditions, competition in the industry, to internal company policies. Companies that are unable to adapt to market changes or that fail to implement effective strategies in managing costs and increasing revenue will face serious challenges in maintaining their profitability. In addition, pressure to meet the expectations of investors and other stakeholders can force companies to make decisions that may not always support long-term sustainability (Setiawan, 2024). In the context of doing business, companies are expected to continue to grow and achieve optimal financial performance, companies are also expected to be responsible for the environment and society. The concept of Environmental, Social, and Governance (ESG) emerged as a response to this problem. Since it was first introduced in a UN report in 2004, the ESG concept has developed into a major cornerstone in corporate impact reporting and investment decision-making. (Frecilia Adenina et al., 2024). ESG can be used as a metric to assess the success of a company not only from its financial performance, but also from its impact on the environment and society.

A company's financial performance is strongly influenced by the ESG risks it faces. Because in their operations, companies cannot run alone, therefore the long-term survival of companies depends on how they adopt good corporate governance practices and pay attention to social environmental aspects in their operations, by this the company shows a commitment to sustainability. To provide transparency to stakeholders about these sustainability efforts, companies need to release sustainability reports that include detailed information about the company's social, environmental performance and management (Anggraeni, 2022).

ESG practices in Indonesia can currently be seen in OJK regulation number 51/PJOK.03/2017 which contains the implementation of sustainable finance principles in the operations of financial services institutions, public companies, and issuers. This regulation focuses on realizing environmentally friendly sustainable development through maintaining a balanced proportion between socio-economic aspects, as well as an adequate environment. For investors, ESG is a principle that can be used to evaluate the investment potential of a company based on its operational activities. For companies themselves, ESG can be a potential driver to obtain sustainable economic benefits. Companies that adopt ESG principles are generally seen as having a superior reputation in the eyes of the public and will increase investor confidence. As public concern for social and environmental issues increases, companies that ignore their ESG responsibilities risk losing considerable market share, emphasizing the importance of exploring how much influence ESG practices have on a company's financial performance. It is expected that companies will benefit from improving their performance through effective ESG implementation. By implementing ESG, companies can improve their ability to identify risks, drive business innovation,

capitalize on business opportunities, and increase management transparency. It is expected that the improvement of long-term business sustainability can also be ensured smoothly, and improved financial performance can be achieved.

Firm size acts as a moderating factor between ESG and a firm's financial success by reflecting the firm's growth and encouraging investors and stakeholders to respond to it, which in turn improves performance. Larger companies can implement ESG initiatives more effectively as they generally have greater financial and human resources. The implementation of optimal ESG practices can enhance the company's reputation as well as investor confidence, which ultimately contributes to improved financial performance. Research by (D'Amato, A., 2020) as well as a study by (Abdi et al., 2022) support these findings, where firm size is found to be an aspect that amplifies the positive correlation between ESG disclosure and firm financial performance. Large companies with more resources can be more effective in implementing ESG practices, which in turn improves their financial performance.

Hazardous waste that can damage the environment is generated by the manufacturing sector (Hidayat, 2022). The cost of rehabilitating contaminated areas along the Surabaya River forced PT Garudafood Putra Putri Jaya Tbk (GOOD), PT Indofood Sukses Makmur Tbk (INDF), and PT Wings Surya to pay Rp4 billion in compensation (IDNfinancials, 2020). This emphasizes how urgent it is for industrial companies to implement ESG in their waste management. In order for companies to demonstrate their compliance with environmental obligations, these implementations must be publicly disclosed. (Prabowo & Djastuti, 2021). This is important because companies need community approval for operations to run. Environmental priorities in the long run will affect the company's profits and going concern (Ghazali and Ulmaita, 2020).

Research conducted by (Fu & Li, 2023) shows that the implementation of ESG principles is positively and strongly correlated with improved corporate financial performance, and digital transformation drives the positive impact. This finding is in line with previous studies conducted by (Agustin & Deliana, 2023), (Gao et al., 2022), (Shang, 2024) with the results of the analysis that the impact of ESG on financial performance is highly statistically significant. These consistent findings from various studies strengthen the hypothesis that the application of ESG principles is not just a trend, but a sustainable and profitable business strategy.

The purpose of this study is to examine manufacturing businesses listed on the Indonesia Stock Exchange (IDX) between 2020 and 2023. The manufacturing sector plays an important role in Indonesia's economic growth. This sector demonstrates its ability to earn profits from assets, equity, and liabilities. In addition, manufacturing companies are also among the largest contributors to environmental and social impacts, as they are often involved in intensive resource use and have a significant carbon footprint.

This research has novelty in several aspects that distinguish it from previous studies. The main difference lies in the financial performance measurement applied. While previous studies generally apply Return on Assets (ROA) as an indicator of financial performance (Sunday et al., 2023; D'Amato, A.,

2020), this study uses Tobin's Q as the main measurement tool. The use of Tobin's Q contributes novelty as this metric not only reflects asset-based financial performance, but also captures the overall market value of the company.

Based on the above background, this study is expected to provide wider theoretical and practical participation related to analyzing the impact of ESG variables on the financial performance of manufacturing companies listed on the IDX, especially in understanding the role of company size in moderating the relationship between ESG and market value-based financial performance.

LITERATURE REVIEW

Teori Stakeholder

Stakeholder theory (Freeman, 1984) states that companies are not only responsible to shareholders, but also to all interested parties (stakeholders), including staff, customers, communities, and the environment. This concept is the basis for the application of ESG (Environmental, Social, Governance), where companies are expected to create sustainable value by paying attention to social, environmental, and management aspects. According to this theory "an effective corporate strategy must meet the expectations of all parties affected by its decisions". ESG, as a practical manifestation of stakeholder theory, is believed to increase public trust and drive long-term performance. This makes the implementation of ESG in Indonesia crucial, as it can help companies build a good reputation, increase public trust, and contribute to sustainable development amidst the social and environmental challenges facing the country.

Environmental, Social, Governance (ESG)

Proactively apply esg initiative helps the company find trust and reputation in the eyes of the stakeholders, that would improve financial performance and profitability. This is in line with the stakeholders theory, said that business should take into account the interests of all parties involved, such as the people, workers, customers, and investors. To meet these expectations, organization can be developed a more closely with the stakeholders, and contribute to an increase in financial success.

Previous research by (Eliwa et al., 2021) yielded results indicating that ESG disclosure ratings have a positive impact on financial performance and market value. These findings are reinforced by the research results of (Abdi et al., 2022), which indicate that corporate accountability through ESG disclosure positively impacts company financial performance. Similarly, research by (Alareeni & Hamdan, 2020) with Tobin's Q as a proxy for financial performance, also supports this. Several studies have found a positive impact from the relationship between ESG and company financial performance. Based on stakeholder theory and previous study findings, the researcher assumes that ESG has a positive impact on company financial performance. However, research by (Zidane Ramadhan et al., 2024) and studies by (Tanjaya & Ratmono, 2024) also show that high ESG scores can have a less favorable impact on companies, indicating that investments in ESG practices do not always result in increased financial performance. Based on the differences in these study findings, to examine the relationship between ESG and financial performance, the following hypothesis is formulated:

H1: ESG has a positive effect on financial performance.

Firm Size

Larger companies tend to have more adequate resources to implement and manage ESG initiatives effectively. This allows large companies to derive greater benefits from ESG practices, such as enhanced reputation, operational efficiency, and better access to capital. Consequently, the positive impact of ESG on financial performance will be more significant in larger-scale companies compared to smaller ones.

Research by (D'Amato, A., 2020), as well as studies by (Abdi et al., 2021), support these findings, where company size was found to be a factor that strengthens the positive correlation between ESG disclosure and company financial performance. However, studies by (Cipto et al., 2024) and (Rousilita Suhendah, 2020) indicate that company size does not moderate the relationship between ESG and financial performance. These findings may provide a perspective that company size cannot always be a moderating variable for the ESG-financial performance relationship. Based on the differences in these research results, the hypothesis formulated to examine the effect of company size as a moderator of the ESG-financial performance relationship is:

H2: Company size has a positive effect on the impact of ESG on financial performance.

Conceptual Framework

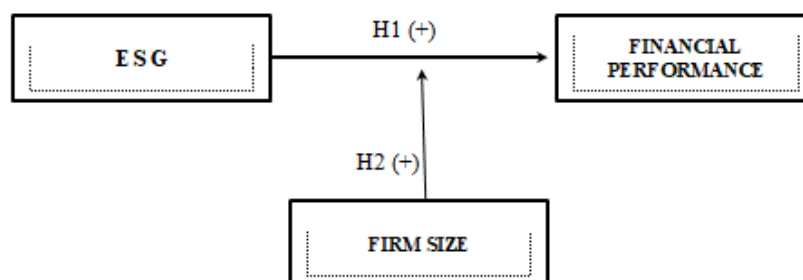


Figure 1. Conceptual Framework

METHODOLOGY

Population refers to the entire set of elements that are the object of research and possess similar characteristics, which can include individuals within a group, events, or objects being studied (Rahim, 2021). Manufacturing companies listed on the IDX that have released sustainability reports and ESG scores constitute the population in this study. The data used in this research originates from annual financial reports over the past four years, specifically 2020, 2021, 2022, and 2023. The population of this study comprises 35 companies over a 4-year period, resulting in a sample size of 140 companies. This research employs a purposive sampling technique in sample selection, where samples are chosen based on relevant characteristics. This study uses panel data regression and Moderated Regression Analysis (MRA) to see the relationship between ESG and financial performance and to see the effect of moderating variables with the EvIEWS 12 tool.

Operational Definition of Variables

Financial Performance

The dependent variable in this study is company financial performance, which is evaluated using a market-based measurement, namely the Tobin's Q ratio. Tobin's Q is a ratio introduced by economist James Tobin to compare the market value of a company's assets with the replacement cost or book value of those assets. This ratio is evaluated by dividing the total market value of the company (including equity and debt) by the total replacement value of the company's assets.

Environmental, Social, Governance (ESG)

ESG performance is considered an independent variable in this research. Bloomberg scores are used to measure ESG disclosure. Companies that only disclose minimal ESG data receive a score of zero, while companies that provide the most comprehensive data in the Bloomberg database receive a score of one hundred. The Bloomberg ESG score is the percentage of disclosure items reported by a company compared to Bloomberg's standard disclosure items. Due to Bloomberg's copyright restrictions, the weighting calculations for the ESG disclosure score cannot be published. Bloomberg's ESG disclosure indicators cover 120 aspects related to environmental, social, and governance.

Firm Size

Company size reflects the total assets owned by a business entity. According to (D'Amato, A., 2020), compared to large corporations, small businesses have limitations in implementing ESG activities. Furthermore, because small businesses are less well-known, they receive less media coverage, which reduces stakeholder attention towards them. Consequently, the relationship between ESG ratings and financial success differs between large and small companies. Due to these factors influencing future company performance, large companies tend to attract investors, which proves that corporate performance is affected by company size.

RESEARCH RESULT

Descriptive Statistics

Table 1. Descriptive Statistics Result

	ESG	Tobin's	Size
Mean	44.88421	1.718786	3072.000
Min	21.72000	0.340000	2748.000
Max	72.80000	14.41000	3373.000
Std. Dev.	11.20531	1.851978	125.0909
Observations	140	140	140

Source: Data output processed with Eviews 12, 2024

Table 1 indicates that, based on statistical data, the average ESG variable is 44.88421, or 44.88%, demonstrating the average level of ESG practice adoption among the companies in the research sample. This reflects that most companies are still in the early stages of implementing sustainable practices or have not yet optimally met comprehensive ESG standards. The average size variable is

3072.000, or 3000%, based on statistical data. The unit of measurement used, which is total assets in billions of rupiah, shows that the companies in the research sample are predominantly large-sized, reflecting significant operational scale and resources. Tobin's Q is 1.718786, or 1.71%, indicating that the research sample companies are rated quite positively by the market.

Chow Test and Housman Test Result

Table 2. Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	25.508909	(34,103)	0.0000
Cross-section Chi-square	314.003106	34	0.0000

Source: Data output processed with Eviews 12, 2024

Table 3. Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section Random	6.003503	2	0.0497

Source: Data output processed with Eviews 12, 2024

Based on the Chow test, the Prob. value of 0.0000, which is <0.05 , indicates that the selected model is the Fixed Effect Model (FEM). In the Hausman test, the obtained Prob. score is 0.0497, which is <0.05 . Therefore, the Fixed Effect Model (FEM) is implemented in this study.

Classic Assumption Testing

According to (Basuki Imamudin et al., 2014), multicollinearity and heteroscedasticity tests are the only classical assumption tests required in panel data regression, not all of which are used in the OLS method. Essentially, normality tests are not required for BLUE (Best Linear Unbiased Estimator), and some perspectives do not consider them as a mandatory prerequisite.

Table 4. Multicollinearity Test Result

	ESG	Size	Tobin's Q
ESG	1.000000	0.273214	0.249071
Size	0.273214	1.000000	-0.078374
Tobin's Q	0.249071	-0.078374	1.000000

Source: Data output processed with Eviews 12, 2024

Table 5. Heteroscedasticity Test Result

F-statistic	0.665110	Prob. F(1,138)	0.4162
Obs*R-squared	0.671512	Prob. Chi-square (1)	0.4125
Scaled explained SS	0.601111	Prob. Chi-square (1)	0.4382

Source: Data output processed with Eviews 12, 2024

When multicollinearity occurs in a regression model, it means that two or more variables within the model have a significant correlation with each other. Table 4 shows that there is no multicollinearity problem among the independent variables. A variable is considered free from multicollinearity if the correlation between variables is less than 0.80, and the correlation between ESG and size is $0.273214 < 0.80$. Through the heteroscedasticity test results data, the regression model is free from heteroscedasticity because the probability value of 0.6715 indicates a number above 0.05, thus proving that heteroscedasticity does not occur for all variables in the study.

Hypothesis Testing

Table 6. t Test

Variable	t-Statistic	Prob.
C	9.669206	0.0000
ESG	-2.153039	0.0336
Size	-8.460840	0.0000
(ESG*Size)	-2.916488	0.0044
R-square	0.869574	
F-statistic	26.74263	
Prob. (F-statistic)	0.000000	

Source: Data output processed with Eviews 12, 2024

H1: The t-statistic has a value of -2.153039 and a probability of 0.0336, indicating that ESG has a negative effect on financial performance.

H2: The t-statistic has a value of -2.916488 and a probability of 0.0044, indicating that firm size does not moderate the effect of ESG on financial performance.

Test Result F

The F-statistic, with a value of 26.74263 and a probability value of 0.000000, indicates that the ESG and company size variables collectively have a significant effect on financial performance. In other words, the regression model used is adequate to explain the relationship between these variables.

DeterminationCoefficient Test (R2)

Based on Table 6, the R-squared value shows 0.869574, or equivalent to 86%. This result indicates that 86% of the variation occurring in company financial performance can be explained by the variation occurring in ESG practices. This means that the regression model used has excellent ability in predicting financial performance based on company ESG performance. The remaining 14% indicates the presence of other factors outside the model that also affect financial performance.

DISCUSSION

Table 7 shows a t-statistic for the ESG variable of -2.153039, indicating that ESG has a negative effect on financial performance. Consistent with the analysis results for the ESG variable on financial performance, with a t-statistic of -2.153039, hypothesis 1 is rejected. The results of this hypothesis align with research by (Tanjaya & Ratmono, 2024), (Muhammad Zidane Ramadhan et al.,

2024), (Zaneta et al., 2023), which indicate that ESG has a significant negative impact on financial performance. They assume that high ESG implementation can increase operational costs, investments in sustainability, and other expenses that may burden company profitability in the short term. The findings of this study indicate that the implementation of ESG practices in the short term may be considered an additional cost burden for companies, especially in emerging markets like Indonesia, where sustainability awareness is still relatively low. Costs incurred to adopt ESG practices, such as waste management, social programs, or stricter corporate governance, may not yet be fully offset by directly visible financial benefits. This can reduce company profitability in the short term. In emerging markets, the pressure to adopt ESG practices may not yet be balanced by adequate incentives from the market or regulators. Investors and consumers in emerging markets may not fully appreciate the value of ESG practices, so companies that incur large costs for ESG do not receive proportional returns in the form of increased reputation or investor confidence. Consequently, ESG practices can actually reduce company financial performance. This study applies data over a 4-year period, which may not be sufficient to capture the long-term positive impact of ESG. The positive impact of ESG, such as increased reputation, operational efficiency, and investor confidence, is usually only visible after a longer period. In the short term, ESG implementation costs may be more dominant than the benefits, so the analysis results show a negative effect. Stakeholder theory explains that companies must meet the expectations of various stakeholders, including society, the environment, and investors. However, these results indicate that in the context of emerging markets, meeting stakeholder expectations through ESG practices may not provide direct financial benefits. Instead, the costs incurred to meet these expectations can reduce company financial performance in the short term.

Meanwhile, the MRA results show a t-statistic value of -2.916488 and a probability value of 0.0044, indicating that company size has a negative impact on the relationship between ESG impact and financial performance. This means that large companies actually experience a sharper decline in market value when implementing ESG. This contradicts the initial hypothesis, so Hypothesis 2 is rejected. This aligns with (Cipto et al., 2024), (Rousilita Suhendah, 2020), (Khairunnisa, 2024), whose research found that larger companies tend to face pressure in adopting ESG, thereby negatively impacting their financial performance. High ESG implementation costs allow large companies to face operational complexities and high fixed costs in adopting ESG practices, thus reducing profitability. Different investor expectations may consider ESG as "greenwashing" or irrelevant to the core strategy of large companies, so market response is also negative. These findings provide a contradiction to stakeholder theory, but are consistent with several empirical studies in emerging markets that show that ESG is not necessarily positively correlated with financial performance. In the context of emerging markets with low sustainability awareness, ESG investment is considered a cost burden, not a competitive differentiation..

Furthermore, large company size can actually become a burden in the context of ESG, especially in emerging markets. Large companies tend to have higher exposure to regulatory risks and stakeholder pressures. They are more often in the public and regulatory spotlight, so any errors or failures in managing ESG issues can have a significant impact on their reputation and financial performance. On the other hand, large companies also have greater resources to implement ESG practices effectively, which should strengthen the positive relationship between ESG and financial performance. However, in the context of emerging markets, high regulatory pressure and stakeholder expectations can actually worsen the perception of ESG-related risks, so large company size may not always strengthen the positive relationship between ESG and financial performance, but rather add complexity and risk. Thus, the hypothesis that company size has a positive effect on the impact of ESG on financial performance may not fully apply. Although large companies have greater resources to implement ESG practices, high regulatory pressure and stakeholder expectations can be a challenge in themselves. Therefore, in the short term, company size may not always strengthen the positive relationship between ESG and financial performance, especially if ESG benefits are not yet significantly visible and ESG implementation costs are considered a burden.

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study indicate that the implementation of ESG practices has a negative impact on company financial performance in the short term. In emerging markets like Indonesia, the cost of ESG implementation is perceived as an additional burden that has not provided direct financial benefits due to low sustainability awareness and minimal market incentives. The moderation analysis of company size reveals that company size actually weakens the correlation between ESG and financial performance. Large companies face challenges such as high implementation costs, operational complexity, and high investor expectations, which increase reputation and regulatory risks. These findings highlight that, although large companies have adequate resources, external pressures in emerging markets can weaken the relationship between ESG and financial performance, especially in the short term.

ADVANCED RESEARCH

This research, while providing valuable insights, is not without several limitations that need to be considered. One of the main limitations is the exclusion of important control variables such as leverage and R&D intensity, which could potentially affect the research results. Therefore, further research is recommended to address these limitations by including these control variables, thereby providing a more comprehensive picture of the relationship between ESG and Tobin's Q. Additionally, future research is also expected to investigate potential mediation mechanisms, such as the influence of operational costs or company reputation, to more deeply understand the identified negative pathways between ESG and Tobin's Q. To capture the long-term effects of ESG practices on company performance, it is advisable to extend the research period,

allowing for a more in-depth analysis of the temporal impact of sustainability initiatives.

ACKNOWLEDGMENT

On this occasion, I would like to express my deepest gratitude to all parties who have assisted and supported me in completing this research. First and foremost, to my Mother and Father, who have never tired of giving prayers, motivation, and invaluable sacrifices. Thank you for always being there, supporting every step, and striving for the best for me. To my younger and older siblings, thank you for the support and spirit that always inspire. To my friends, thank you for the friendship, support, and togetherness that made this research process lighter and more enjoyable. Without the support of all of you, this research would not have been completed successfully.

REFERENCES

- Abdi, Y., Li, X., & Càmara-Turull, X. (2022). Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: the moderating role of size and age. *Environment, Development and Sustainability*, 24(4), 5052–5079. <https://doi.org/10.1007/s10668-021-01649-w>
- Agustin, M., & Deliana, M. (2023). A Review Gender diversity dan Environmental, Social, and Governance (ESG) terhadap financial performance. *Journal Business Administration: Entrepreneurship and Creative Industry*, 2(2), 96–103. <https://doi.org/10.32734/jba.v2i2.13299>
- Alareeni, B. A., & Hamdan, A. (2020). ESG impact on performance of US S&P 500-listed firms. *Corporate Governance (Bingley)*, 20(7), 1409–1428. <https://doi.org/10.1108/CG-06-2020-0258>
- Anggraeni, M. (2022). BAB 1 UPI Pengaruh Environmental, Social and Governance (ESG) Disclosure Terhadap Kinerja Keuangan Perusahaan di Indonesia. 85. <http://repository.upi.edu/id/eprint/84219>
- Aulia Fadilah, & Yuni Rosdiana. (2024). Pengaruh Environmental, Social dan Governance (ESG) Disclosure terhadap Kinerja Perusahaan. *Bandung Conference Series: Accountancy*, 4(1), 300–306. <https://doi.org/10.29313/bcsa.v4i1.11584>
- BASUKI Imamudin, Agus Tri & Yuliadi, I. (2014). Electronic Data Processing (SPSS 15 dan EVIEWS 7). In *Archives of Environmental Health* (Vol. 3, Issue 5). <https://doi.org/10.1080/00039896.1961.10663066>
- Cipto, N. S., Vol, O., & Oktober, 2024. (2024). Pengaruh ESG (Environmental, Social, and Governance) 1 terhadap Kinerja dan Nilai Perusahaan dengan Ukuran Perusahaan sebagai Variabel Moderasi. 7(2).

- D'Amato, A., & F. (2020). Corporate social responsibility and firm value: Do firm size and age matter? Empirical evidence from European listed companies. *Sustainability (Switzerland)*, 11(1), 1–14. http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regs-ciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_Sistem_Pembetulan_Terpusat_Strategi_Melestari
- Dangnga, M. T., & Haeruddin, M. I. M. (2018). Kinerja Keuangan Perbankan: Upaya Untuk Menciptakan Sistem Perbankan yang Sehat. In *Pustaka Taman Ilmu*.
- Eliwa, Y., Aboud, A., & Saleh, A. (2021). ESG practices and the cost of debt: Evidence from EU countries. *Critical Perspectives on Accounting*, 79. <https://doi.org/10.1016/j.cpa.2019.102097>
- Frecilia Adenina, A., Ekonomi, F., Bisnis, D., & Lampung, U. (2024). Analysis Of the Influence of Environmental, Social, Governance (ESG) Disclosure and Research & Development Intensity on Financial Performance in Manufacturing Companies Listed on the Indonesia Stock Exchange. *Management Studies and Entrepreneurship Journal*, 5(2), 9251–9269. <http://journal.yrpioku.com/index.php/msej>
- Fu, T., & Li, J. (2023). An empirical analysis of the impact of ESG on financial performance: the moderating role of digital transformation. *Frontiers in Environmental Science*, 11(August), 1–11. <https://doi.org/10.3389/fenvs.2023.1256052>
- Gao, W., Li, M., & Zou, C. (2022). Analysis of the Impact of ESG on Corporate Financial Performance under the Epidemic Based on Static and Dynamic Panel Data. *Wireless Communications and Mobile Computing*, 2022. <https://doi.org/10.1155/2022/6851518>
- Jamil, E., & Siddiqui, D. A. (2020). Assessing Firms' Environmental, Social and Governance Performance (ESGP) and Its Effect on Financial Performance: Evidence from Pakistan. *SSRN Electronic Journal*, 1–46. <https://doi.org/10.2139/ssrn.3681226>
- Khairunnisa, K. (2024). Peranan Ukuran Perusahaan Dalam Memoderasi Pengaruh Pengungkapan Environmental, Social, Governance (ESG) dan Kinerja Keuangan Terhadap Nilai Perusahaan. *Ayan*, 15(1), 37–48.
- Lahjie, A. A., Iskandar, R., & Sambe, R. (2022). Pengaruh Corporate Social Responsibility Dan Asimetri Informasi Terhadap Kinerja Keuangan Perusahaan Di Indonesia. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, 6(4), 562–584. <https://doi.org/10.24034/j25485024.y2022.v6.i4.5040>

- Minggu, A. M., Aboladaka, J., & Neonufa, G. F. (2023). Environmental, Social dan Governance (ESG) dan Kinerja Keuangan Perusahaan Publik di Indonesia. *Owner*, 7(2), 1186–1195. <https://doi.org/10.33395/owner.v7i2.1371>
- Penulis Muhammad Zidane Ramadhan, K., Zidane Ramadhan, M., & Kurnianti, D. (2024). □ 602 Pengaruh Environmental, Social, dan Governance (ESG) Terhadap Kinerja Perusahaan pada Sektor Aneka Industri yang Terdaftar pada Bursa Efek Indonesia Periode 2018-2022. *Jurnal Serambi Ekonomi Dan Bisnis*, 7(2), 602–619. www.idx.co.id,
- Prabowo, A., & Djastuti, I. (2021). Jurusan Manajemen Fakultas Ekonomika dan Bisnis Universitas Diponegoro Jl. Prof. Soedharto SH Tembalang, Semarang 50239, Phone: +622476486851. *Journal of Management ISSN (Online): 2337-3792*, 4(2), 1–12.
- Rahim, R. (2021). Metodologi Penelitian (Teori dan Praktik). *Cemerlang Indonesia*, 1(1), 1–216. www.rcipress.rcipublisher.org
- Rousilita Suhendah, A. M. K. C. (2020). Pengaruh Leverage, Firm Size, Firm Age Dan Sales Growth Terhadap Kinerja Keuangan. *Jurnal Paradigma Akuntansi*, 2(4), 1791. <https://doi.org/10.24912/jpa.v2i4.9375>
- Sekar Sari, P., Widiatmoko, J., & kunci, K. (2023). Pengaruh Environmental, Social, and Governance (ESG) Disclosure terhadap Kinerja Keuangan dengan Gender Diversity sebagai Variabel Moderasi. *Jurnal Ilmiah Akuntansi Dan Keuangan*, 5(9)(9), 3634–3642. <https://journal.ikopin.ac.id/index.php/fairvalue>
- Setiawan, M. B. (2024). *Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Pengungkapan Corporate Social Responsibility Sebagai Variabel Moderasi Kurnia Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya*.
- Shang, E. (2024). Corporate ESG and Financial Performance - A Study Based on the Mediating Effect of Financing Constraints. *Advances in Economics and Management Research*, 11(1), 432. <https://doi.org/10.56028/aemr.11.1.432.2024>
- Tanjaya, F., & Ratmono, D. (2024). Pengaruh Environmental, Social, Dan Governance (Esg) Terhadap Kinerja Perusahaan Dengan Variabel Moderasi Board Size. *Diponegoro Journal of Accounting*, 13(3), 1–13.
- Tarmuji, I., Maelah, R., & Tarmuji, N. H. (2016). The Impact of Environmental, Social and Governance Practices (ESG) on Economic Performance: Evidence from ESG Score. *International Journal of Trade, Economics and Finance*, 7(3), 67–74. <https://doi.org/10.18178/ijtef.2016.7.3.501>
- Utami, L. F., & Sebrina, N. (2024). Pengaruh Rating Risiko ESG dan Pengungkapan Keanekaragaman Hayati terhadap Kinerja Keuangan

Perusahaan. *Jurnal Eksplorasi Akuntansi*, 6(3), 1241-1256.
<https://doi.org/10.24036/jea.v6i3.1761>

Winarno, W. W. (2017). Analisis Ekonometrika dan Statistika Dengan EViews (Edisi 5). *Analisis Ekonometrika Dan Statistika Dengan EViews (Edisi 5)*, 102(1), 53-71. <https://www.belbuk.com/analisis-ekonometrika-dan-statistika-dengan-eviews-edisi-4-p-10178.html>

Zaneta, F., Nur, H., Ermaya, L., & Nugraheni, R. (2023). Hubungan Environmental, Social, and Governance Disclosure, Green Product Innovation, Environmental Management Accounting Terhadap Firm Value. *JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi)*, 9(1), 97-114.
<https://doi.org/10.34204/jiafe.v9i1.6134>