



Jurnal Nominal Barometer Riset Akuntansi dan Manajemen

URL: <https://journal.uny.ac.id/index.php/nominal>



The Impact of ESG Scores on Corporate Financial Performance: Moderating Role of Gender Diversity

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ARTICLE INFO

Article history

Received: 31 March 2023

Revised: 06 April 2023

Accepted: 10 April 2023

Keywords

ESG Scores
Financial Performance
Gender Diversity
Governance

Keywords

Skor ESG
Kinerja Keuangan
Keragaman Gender
Tata Kelola

ABSTRACT

This study aims to examine the impact of environmental, social and governance (ESG) scores on corporate financial performance and the moderating role of gender diversity in this relationship. This study uses 80 samples of companies listed on the Indonesian stock exchange. Samples were taken using a purposive sampling approach. The dependent variable in this study is corporate financial performance, the independent variable is the ESG scores, the moderating variable is gender diversity. In the context of this study, a high ESG score describes a company that has a high risk in ESG. The hypothesis was tested using multiple regression analysis. The results of this research show that there is a negative relationship between ESG risk scores and corporate financial performance. The empirical analysis provides evidence for a moderating effect of gender diversity on the relationship between ESG scores and corporate financial performance. Investors need to pay attention not only to financial aspects but also to environmental, social and governance aspects as non-financial factors in making investment decisions.

ABSTRAK

Penelitian ini bertujuan untuk menguji dampak skor *environmental, social* dan *governance* (ESG) terhadap kinerja keuangan perusahaan. Penelitian ini menggunakan 80 sampel perusahaan yang terdaftar di bursa efek Indonesia. Sampel diambil menggunakan pendekatan *purposive sampling*. Variabel dependen dalam penelitian ini adalah kinerja keuangan perusahaan, variabel independen adalah skor ESG, variabel pemoderasi adalah keragaman gender. Dalam konteks penelitian ini, skor ESG yang tinggi menggambarkan perusahaan yang mempunyai risiko ESG tinggi. Hipotesis penelitian diuji menggunakan analisis regresi berganda. Hasil penelitian menunjukkan adanya hubungan yang negatif antara skor risiko ESG dan kinerja keuangan perusahaan. Analisis empiris memberikan bukti adanya efek pemoderasi dari keragaman gender terhadap hubungan antara skor ESG dengan kinerja keuangan perusahaan. Investor tidak hanya perlu untuk memperhatikan aspek keuangan saja tetapi juga perlu memperhatikan aspek lingkungan, sosial dan tata kelola sebagai faktor non keuangan dalam pengambilan keputusan investasi.

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1. Introduction

Sustainable economic development requires practice with ESG principles: in the environmental, social and governance (Li, Wang, Sueyoshi, & Wang, 2021). The issue of ESG has become an increasingly prevalent issue lately. The United Nations Global Compact conducted a study on the sustainability of 1.230 CEOs in 113 countries and 21 industries which found that 62% of CEOs realized the importance of accelerating the transition to be a more sustainable business model (Accenture, 2021). ESG refers to how companies and investors integrate environmental, social and governance issues into their business model (Gillan, Koch, & Starks 2021; Fatemi, Glaum, & Kaiser 2018). In the last few decades, stakeholders have become increasingly aware of the importance of sustainability, especially after global warming, the economic crisis and market crashes.

Information about a company's ESG can generally be obtained through sustainability report, annual report, financial report, company website, external data provider agencies and other sources (Yawika & Handayani 2019; Manita, Bruna, Dang, & Houanti 2018). This report can reduce information asymmetry and ensure honest signals to different stakeholder (Bae, Masud, & Kim, 2018). Stakeholder theory explains that companies not only operate for their own interests, but must also provide benefits to other stakeholders (Freeman, 1984). Information related ESG is expected to encourage investors to make ESG-based investments. Investors need to pay attention not only to financial aspects but also to environmental, social and governance factors as non-financial factors in making investment decisions.

The Indonesian government has not yet required companies to prepare sustainability reports, so companies have voluntarily prepared these reports. Most companies prepare sustainability reports according to the Global Reporting Initiative (GRI) Guidelines. The number of companies compiling sustainability reports has recently increased from year to year (Setiani, 2020). This is a manifestation of corporate responsibility to stakeholders. Several companies have even used assurance services to provide an assessment of the sustainability report prepared by the company. ESG issues are increasingly important in line with the increasing attention of stakeholders on corporate sustainability. Long-term value creation is not only focused on maximizing shareholder value but also includes impact on stakeholders (Emeka-nwokeji & Osisioma, 2019).

The ESG scores have encouraged comparisons of companies concerning their sustainable practices. The Indonesia Stock Exchange fully supports ESG practice in companies by issuing IDX ESG Leaders, SRI-KEHATI, ESG Sector Leaders IDX KEHATI and ESG Quality IDX KEHATI, which are indexes that measure the performance of entities that have good ESG ratings and are not involved controversy significantly (IDX, 2021). The company carries out this ESG practice as a form of its responsibility to its stakeholders. This is in accordance with the triple bottom line (TBL) principle put forward by Elkington. According by Elkington (1997) companies have a responsibility for positive or negative impacts that arise on 3P aspects, namely people, planet and profit which underline the concept of corporate social responsibility (CSR). However, the results of research from Gillan et al. (2021) show that ESG is a more expansive terminology than CSR because ESG includes governance explicitly in its measurement.

The large number of stakeholders who care about ESG issues in business makes this contextual issue interesting to study. Previous research on the impact of ESG on firm performance has shown inconsistent results (Yawika & Handayani, 2019; Li et al., 2021). The research result of Duque-Grisales & Aguilera-Caracuel (2021) shows that the relationship between ESG scores and financial performance is statistically negative. Research by Saygili, Arslan, & Birkan (2022) also shows that environmental disclosure has a negative impact on corporate financial performance, but governance disclosure has a larger impact on corporate financial performance. Another study found that higher ESG ratings were associated with better financial performance (Sandberg et al., 2022; Ahmad, Mobarek, & Roni, 2021).

The existence of research findings inconsistent with previous studies is a driving force to test alternative factors affecting company performance, namely gender diversity. Research by Zahid et al. (2020) finds that female directors have an attractive role in improving corporate sustainability, as evidenced by significant positive associations with environmental, social and economic dimensions of the workplace and corporate sustainability. Corporate social responsibility reporting enhances corporate financial performance through the positive moderating role of gender diversity on the board

(Kahloul, Sbai, & Grira, 2022). Stakeholders should be aware of the potential implications of engaging the benefits of gender diversity.

This research will explain through testing the effect that moderating role of gender diversity weakens the relationship between ESG scores and corporate financial performance. Our findings contribute to the ongoing debate about the effect of gender diversity and ESG scores on corporate financial performance, focusing on the Indonesia situation. Research related to gender diversity and ESG scores has not been widely carried out in the context of companies in Indonesia. For this reason, researchers are interested in further research on this topic.

2. Literature Review

2.1. Stakeholder Theory

Stakeholder theory states that companies not only operate for their own interests, but must also provide benefits to other stakeholders. The pioneer of this theory is Freeman (1984), who argues that corporate responsibility is to all stakeholders, not only to shareholders. The sustainability of a company depends on the support of all stakeholders, so the company's activity is to seek this legitimacy. Stakeholders demand more sustainability disclosure of environmental, social and governance as non-financial information in the business decision-making (Hassan, Elamer, Lodh, Roberts, & Nandy, 2021). Incorporating ESG considerations into corporate decision-making can help companies to create long-term value for all stakeholders. By taking into account the needs and interests of all stakeholders, companies can improve their reputation, reduce risk and enhance their financial performance over the long term.

Research on the relationship between environmental social and governance (ESG) and corporate financial performance (CFP) has gained more prominence in recent years, particularly in the context of stakeholder theory (Chouaibi, Chouaibi, & Rossi, 2022; Huang, 2022). Stakeholder theory can provide a useful framework for understanding how ESG issues affect a company's relationship with various stakeholders. Company stakeholders are individuals or groups who can affect or be affected by the company's actions, decisions and performance (Mahmood, Kouser, Ali, Ahmad, & Salman, 2018). Companies are responsible not just to their shareholders, but also to other stakeholders such as employee, customers, suppliers, creditors and the wider community.

2.2. ESG Scores

Information about a company's ESG can be obtained through the annual report, sustainability report, financial report, company website, external data providers and other resources (Yawika & Handayani, 2019; Manita et al., 2018). ESG refers to how companies and investors integrate environmental, social and governance issues into their business models. ESG Rating agencies research a company's business and sustainability performance using their own indicators and research methods. The ESG Score is one of the main references for companies, financial markets and academics in assessing corporate sustainability (Gillan et al., 2021).

Kehati (2021) reveals indicators for assessing a company's ESG aspects, namely as follows: (1) Environment: sustainable products and innovation, natural resources, energy use, greenhouse gas emissions, and waste management; (2) Social: employee training and development, employment practices, occupational health and safety, product & client liability, and social environmental impacts; (3) Governance: protection of shareholder rights competence and role of the board of commissioners and directors, quality and information disclosure, business ethics and sustainability management practice. Several studies have used Global Reporting Initiative (GRI) Standards to measure ESG Disclosure or ESG Scores (Suttipun & Yordudom, 2022). Other agencies that provide ESG databases include Morgan Stanley Capital International (MSCI), Sustainalytics, Bloomberg, Thomson Reuters, ESG Intelligence (ESGI) and others.

The Indonesia Stock Exchange (IDX) is working with Morningstar Sustainalytics to carry out the ESG assessment (Bursa Efek Indonesia, 2022). IDX only displays assessments that have been carried out by the appraisal agency. ESG assessment is essential to assessing the implementation of ESG practices in companies. Therefore, IDX continues to encourage long-term sustainable investment and

improve ESG practices in the Indonesian capital market by collaborating with ESG assessment agencies and conducting ESG assessments of listed companies in the IDX.

Sustainalytics conducts an ESG risk assessment using the concept of risk decomposition, where companies face two dimensions of ESG issues: exposure and management. Exposure is a material ESG risk faced by a company and influences ESG risk assessment. Management is the company's commitment and concrete actions in dealing with ESG issues through various company policies and work programs. Based on the ESG score assessment, listed companies are grouped into one of 5 categories, as follows:

Table 1. ESG Score Category

ESG Risk Score	Category	Description
0-10	Negligible	Considered to have negligible ESG risk
10-20	Low	Considered to have low ESG risk
20-30	Medium	Considered to have moderate ESG risk
30-40	High	Considered to have a high ESG risk
>40	Severe	Considered to have a severe ESG risk

2.3. Corporate Financial Performance

Corporate financial performance (CFP) can be measured by analyzing and evaluating the company's financial statements. One of the most common approaches to assessing financial performance is using a financial ratio. CFP is important for business because it is a key indicator of a company's ability to meet its financial obligations and generate returns for its investors. These ratios can provide insights into a company's liquidity, solvency, profitability and efficiency. One measure of company performance is Return on Assets (ROA) which shows the company's ability to provide benefits from its assets (Jensen & Jones, 2019). The use of ROA to assess company performance has also been carried out by many previous studies (Wulandari & Handayani, 2022; Duque-Grisales & Aguilera-Caracuel, 2021).

CFP is an important measure of a company's financial health and performance, and it is essential for businesses to maintain strong financial performance in order to achieve long-term success and sustainability. Research has shown that there is a positive relationship between ESG performance and CFP. Sandberg, Alnoor, & Tiberius (2022) concluded that higher ESG ratings are associated with better financial performance, but need to reassess whether ESG ratings are able to measure actual ESG behavior. Companies that prioritize ESG tend to have better long-term financial performance than those that do not. This is because ESG factors can have a significant impact on company's operations, reputation and overall sustainability (Chouaibi et al., 2022).

2.4. Gender Diversity

Gender diversity boards have long been relegated to the wrong ethical issue of excluding individuals based on their gender, regardless of their abilities. Campbell & Mínguez-Vera (2008) find that gender diversity – as measured by the percentage of women on the board – may generate economic gains and many companies increasing their female board membership. Women on corporate boards are increasingly considered to be key value drivers for organizations and the nation of the “business case for diversity” was developed by Robinson & Dechant (1997).

Companies need to have a proportion of female directors to ensure gender equality and encourage more creativity, innovation and stimulate corporate performance (Manita, Bruna, Dang, & Houanti, 2018). Gender diversity in company boards is interesting issue in corporate governance, considering that companies are dominated by male directors. Research conducted by Shakil, Tasnia, & Mostafiz (2020) concluded that there is a positive relationship between board gender diversity and environment, social and governance performance of US banks. Gender diversity can increase stakeholder trust and can increase company value, and companies with higher representation of

women on their board can demonstrate significantly superior environmental, social and governance performance.

Romano, Cirillo, Favino, & Netti (2020) also conclude that greater gender diversity on the Board of Directors (BoD) has an overall positive influence on environmental, social and governance performance. The UN's Sustainable Development Goals (SDGs) have encouraged many companies to do so by adopting ethical and sustainable practices, ensuring the equal participation of women in company organizations to achieve gender equality and women empowerment. However, research from Manita et al. (2018) concluded that there is no significant relationship is found between board diversity and environment, social and governance disclosure.

2.5. Hypothesis Development

ESG scores are a performance assessment derived from environmental, social and governance aspects. The application of ESG in a company's business operations will generally require greater ESG funding. Thus, companies must allocate sufficient financial resources to strengthen and improve ESG practices (Duque-Grisales & Aguilera-Caracuel, 2021). Previous research regarding the effect of ESG on company performance showed inconsistent results (Yawika & Handayani, 2019; Li et al., 2021). The results of the research by Duque-Grisales & Aguilera-Caracuel (2021) show that the relationship between ESG scores and financial performance is statistically negative. Research from Saygili, Arslan, & Birkan (2022) also shows that environmental disclosure has a negative effect on corporate financial performance, but governance disclosure has a more substantial effect on corporate financial performance. Another research shows that higher ESG ratings are associated with better financial performance (Sandberg et al., 2022; Ahmad, Mobarek, & Roni, 2021).

The existence of inconsistent research results from previous research is a driving force for testing alternative factors that affect company performance, namely gender diversity. Research conducted by Zahid et al. (2020) found that female directors have an attractive role in improving corporate sustainability, as evidenced by significant positive associations with environmental, social and economic dimensions of the workplace and corporate sustainability. Corporate social responsibility reporting enhances corporate financial performance through the positive moderating role of gender diversity on the board (Kahloul et al., 2022). Stakeholders should be aware of the potential implications of engaging the benefits of mixed gender.

After reviewing the main theories that explain the inconclusive relationship between ESG scores and corporate financial performance, and based on the potential existence of intermediate variables that can explain this relationship, we develop the following hypothesis:

H1: ESG scores are negatively related to corporate financial performance

In response to the inability of previous studies to demonstrate a specific association between the two variable ESG scores and corporate financial performance, and for the purpose of contributing to the existing literature by ways to further elucidate the nature of this relationship and identify possible influencing factors. In the next model, the researcher incorporates gender diversity within boards as a moderating variable.

H2: Gender diversity strengthens the relationship between ESG scores and corporate financial performance

3. Research Methods

This study uses a quantitative approach by testing the hypothesis and then testing it using the data collected. The data used in this study are secondary data from financial reports and annual reports listed on the Indonesia Stock Exchange (IDX). The population in this study are companies listed on the IDX, and companies selected as samples are companies that match the criteria determined by the researcher (*purposive sampling*). First, companies listed on the IDX in 2022 have published financial reports. Second, companies have ESG Scores released by IDX in partnership with Morningstar Sustainability to conduct ESG assessments. There are 80 samples of companies that meet this criterion.

The dependent variable in this study is corporate financial performance, calculated as net income divided by total assets (ROA). The independent variable is the ESG scores sourced from Morningstar Sustainalytics. The moderating variable is gender diversity, calculated from the proportion of women on the board. The control variable in this study is firm size, leverage and growth rate of sales.

The data has been collected by the researcher will be analyzed using statistical tools. First, the researchers will conduct a descriptive analysis to find out the description regarding the mean, standard deviation, maximum, and minimum of the data. Next, the researcher conducted a classic assumption test consisting of normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. After fulfilling the BLUE (best linear unbiased estimator) requirements, then the multiple regression test technique is performed. The following is the hypothesis testing model in this study:

Hypothesis testing model 1:

$$CFP_{i,t} = a + \beta_1 ESG_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 LEV_{i,t} + \beta_4 GRW_{i,t} + \varepsilon \quad (1)$$

Hypothesis testing model 2:

$$CFP_{i,t} = a + \beta_1 ESG_{i,t} + \beta_2 GD_{i,t} + \beta_3 ESG_{i,t} * GD_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 LEV_{i,t} + \beta_6 GRW_{i,t} + \varepsilon \quad (2)$$

- CFP = Corporate financial performance (ROA) measured as net income divided by total assets
 ESG = Environmental, Social and Governance scores measured by Morningstar Sustainalytics
 GD = Gender Diversity measured by the proportion of female board
 SIZE = Firm size as the natural logarithm of total assets
 LEV = Leverage as total debt divided by equity
 GRW = Growth rate of sales

4. Results and Discussion

4.1. Results

Table 2 reports the descriptive statistics of the variables in this study. The mean value of the ESG score is 30,68 with a minimum score of 12,67 and a maximum score of 52,95. That score indicates that the ESG score is quite different between companies listed on IDX. Variables that are quite extreme regarding score differences are related to firm size and growth. Gender diversity is not too different between companies. Researchers found that boards in Indonesia are more dominated by men than women.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ESG Score	80	12,67	52,95	30,68	9,41
Return on Asset	80	-0,19	0,43	0,09	0,09
Gender Diversity	80	0,00	0,67	0,17	0,16
Firm Size	80	1148,42	1992545,69	139271,54	346973,78
Leverage	80	0,06	0,87	0,45	0,23
Growth	80	-0,33	43,96	4,68	7,98
Valid N (listwise)	80				

The classical assumption test was carried out on the three proposed research models, namely the first model, which is an equation without interaction and the second model, which is an interactive model with a moderating variable. First, the normality test is carried out by testing using the Kolmogorov Smirnov. Based on the normality test shown in table 3, the residuals in each model have a significance above 0,05. This indicates that the residuals in each proposed model are normally distributed and have met the normality assumption.

Table 3. Normality Test

	Unstandardized Residual	
	Model 1	Model 2
N	80	80
Asymp. Sig (2-tailed)	0,200	0,200

The result of the multicollinearity test is presented in table 4. Based on the multicollinearity test, it can be concluded that the regression model is free from the multicollinearity problem because the tolerance value exceeds 0,1 and the VIF value is less than 10 for each variable in each proposed model.

Table 4. Multicollinearity test

	Collinearity Statistics			
	Model 1		Model 2	
	Tolerance	VIF	Tolerance	VIF
ESG	0,942	1,061	0,602	1,991
SIZE	0,824	1,214	0,822	1,216
LEV	0,815	1,226	0,757	1,321
GRW	0,934	1,071	0,915	1,193
GD	-	-	0,812	1,256
ESG*GD	-	-	0,981	1,178

Heteroscedasticity testing in this study was carried out using the Glejser test. Table 5 shows that all independent variables do not significantly affect the residual absolute value of the dependent variable. It can be concluded that the two research models are free from heteroscedasticity problems.

Table 5. Heteroscedasticity test

	Collinearity Statistics			
	Model 1		Model 2	
	t	Sig.	t	Sig.
ESG	1,420	0,160	0,856	0,395
SIZE	-0,345	0,731	-0,201	0,842
LEV	1,062	0,292	0,855	0,379
GRW	1,463	0,148	1,388	0,167
GD	-	-	-1,518	0,133
ESG*GD	-	-	1,375	0,173

Hypothesis testing is done by testing the main effect in the regression equation model 1 and then proceed by testing the interaction equation in model 2. The results of hypothesis testing can be seen in table 6. The coefficient and significance value of the ESG Scores variable shows a positive and significant relationship to the company's financial performance with a significance level of 5%. This indicates that **hypothesis 1 is supported**. On the other hand, the control variables size, leverage and growth have no effect on the company's financial performance. Thus, it can be concluded that a company that has a high ESG score will have a high level of risk and can reduce the company's financial performance.

Table 6. Regression test

	Model 1		Model 2	
	β	Sig.	β	Sig.
Const	0,185	0,000	0,105	0,000
ESG	-0,011	0,000	-0,007	0,025
SIZE	2,935	0,664	2,697	0,686
LEV	-0,014	0,892	-0,071	0,500
GRW	0,020	0,532	0,020	0,450
GD	-	-	0,033	0,045
ESG*GD	-	-	0,022	0,035
Adj. R ²	0,150	-	0,221	-
F Value	6,354	0,000	5,073	0,000

The results of the analysis of testing hypothesis 2 illustrate the positive moderating effect of gender diversity between ESG scores and financial performance. This indicates that **hypothesis 2 is supported**. The control variable in the regression model hypothesis 1 shows the same results in the regression model regression 1.

4.2. Discussions

4.2.1. ESG Scores and Corporate Financial Performance

The first hypothesis states that ESG scores are negatively related to corporate financial performance. The results of the statistical test show that the first hypothesis is supported at a significance level of 5%. The results of this study are in line with research conducted by [Duque-Grisales & Aguilera-Caracuel \(2021\)](#), which examines whether ESG Scores are associated with financial performance in Latin American business, the results suggest that the relationship between the ESG score and Financial Performance is significantly statistically negative. Research from [Saygili, Arslan, & Birkan \(2022\)](#) also shows that environmental disclosure has a negative effect on corporate financial performance, but governance disclosure has a more substantial effect on corporate financial performance. Information related to ESG is expected to encourage investors to make ESG-based investments. Investors not only pay attention to financial aspects but also to environmental, social and governance factors as non-financial factors in making investment decisions.

In contrast, the results of this study are in contrast to research conducted by [Sandberg et al. \(2022\)](#) that investigates how ESG ratings impact financial performance in the European food industry, and results show that higher ESG ratings are associated with better financial performance. [Ahmad, Mobarek, & Roni \(2021\)](#) reexamined the impact of ESG on the financial performance of UK firms, the results confirm that high ESG firms show high financial performance as compared to low ESG firms.

In the context of this study, a high ESG score describes a company that has a high risk in environmental, social and governance. This study supports the stakeholder theory, which explains that ESG performance can help companies to create long-term value for all stakeholders. By taking into account the needs and interests of all stakeholders, companies can improve their reputation, reduce risk and enhance their financial performance over the long term. Investors with an ESG preference are among the stakeholders who are most concerned about the company's ESG performance ([Chen & Xie, 2022](#)). They consider the ESG score as one of the factors for determining investment decisions. Companies that are more active in disclosing ESG information can improve management efficiency and win the hopes of ESG investors.

The results of this study illustrate the important role of ESG scores on the company's financial performance. Stakeholders use this ESG score information to make business decisions. The investor will also increase their investment in companies that have low ESG risk scores that meet their expectations and thereby improve the company's financial performance. This is in line with the research conducted by [Friske, Hoelscher, & Nikolov \(2022\)](#), ESG performance is initially a costly signal, but ultimately increases company value as companies learn how to better perform sustainability performance to stakeholders and investors learn how to evaluate that sustainability performance.

4.2.2. ESG Scores, Gender Diversity and Corporate Financial Performance

Statistical testing shows that gender diversity fosters a positive relationship between ESG scores and corporate financial performance. The results of this study align with research conducted by [Kahloul et al. \(2022\)](#), corporate social responsibility enhances corporate financial performance through the positive moderating role of gender diversity on the board. [Zahid et al. \(2020\)](#) examined the impact of boardroom gender diversity in Malaysia, the finding showed a significant positive association between boardroom gender diversity with firms' financial performance. These results indicate that women directors have an imperative role in improving environmental, social and governance performance. However, the findings are inconsistent with research conducted by [Abdullah](#)

(2017) that gender diversity has a negative relation with corporate financial performance. Appointing women to boards can lead to excessive over-monitoring. This excessive board oversight slowed the board's decision-making speed, resulting in lower performance.

The results of this study are consistent with the assumptions of stakeholder theory that gender diversity increases satisfaction across multiple stakeholders by reducing agency conflict and improving firm performance. Freeman (1984) suggests that corporate responsibility is to all stakeholders, not only to shareholders. The growing interest in the global environmental issue has led to the widespread adoption of sustainability practices and gender diversity of board resources affect the implementation of sustainable performance in environmental, social and governance aspects (Girón, Kazemikhasragh, Cicchiello, & Monferrá, 2022). Therefore, gender equality plays a central role in achieving social development and improving corporate performance.

Shakil et al. (2020) finds significant positive impacts of board gender diversity on environmental, social and governance performance. Several studies have shown that significant feminization of the board of directors can increase transparency and ethical compliance of companies, which are approximated by ESG levels. This research suggests that companies pay more attention to greater gender diversity which can generate economic benefits. A woman must be prepared and ready to take on the role of director. Stakeholders and most importantly investors, come from different ethnic groups, so gender diversity should be encouraged.

5. Conclusion

The results of this study show results that are consistent with previous research, ESG scores have a negative and significant relationship to corporate financial performance. In the context of this study, a high ESG score describes a company that has a high risk in environmental, social and governance. ESG scores are able to show companies that manage environmental, social and governance risk aspects properly will be able to improve the company's financial performance. In addition, gender diversity can strengthen the relationship between ESG scores and corporate financial performance. This indicates that gender equality needs to be considered by the company as a good value in front of heterogeneous stakeholders. Furthermore, investors need to pay attention not only to financial aspects but also to environmental, social and governance aspects as non-financial factors in making investment decisions

This study uses the ESG scores variable, without dividing scores on each environmental, social and governance aspect. The use of ESG scores in each aspect needs to be considered for further research. The corporate financial performance variable is only measured using return on assets, so further research can add other measurements. In addition, this study only uses companies in Indonesia, so the findings cannot be generalized optimally. It is advisable for future researchers to consider increasing the scope of the research sample.

References

- Abdullah, S. N., & Ismail, K. N. I. K. (2013). Gender, ethnic and age diversity of the boards of large Malaysian firms and performance. *Jurnal Pengurusan*, 38(March 2017), 27–40. <https://doi.org/10.17576/pengurusan-2013-38-03>
- Accenture. (2021). CEO Climate Leadership & Sustainability Study. Retrieved November 9, 2022, from <https://www.accenture.com/us-en/insights/sustainability/ungc>
- Ahmad, N., Mobarek, A., & Roni, N. N. (2021). Revisiting the impact of ESG on financial performance of FTSE350 UK firms: Static and dynamic panel data analysis. *Cogent Business and Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1900500>
- Bae, S. M., Masud, M. A. K., & Kim, J. D. (2018). A cross-country investigation of corporate governance and corporate sustainability disclosure: A signaling theory perspective. *Sustainability (Switzerland)*, 10(8). <https://doi.org/10.3390/su10082611>

- Bursa Efek Indonesia. (2022). Nilai ESG. Retrieved March 1, 2023, from <https://www.idx.co.id/id/perusahaan-tercatat/nilai-esg>
- Campbell, K., & Mínguez-Vera, A. (2008). Gender Diversity in the Boardroom and Firm Financial Performance. *Journal of Business Ethics*, 83(1), 435–451.
- Chen, Z., & Xie, G. (2022). ESG disclosure and financial performance: Moderating role of ESG investors. *International Review of Financial Analysis*, 83(June), 102291. <https://doi.org/10.1016/j.irfa.2022.102291>
- Chouaibi, S., Chouaibi, J., & Rossi, M. (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. <https://doi.org/10.1108/EMJB-09-2020-0101>
- Duque-Grisales, E., & Aguilera-Caracuel, J. (2021). Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack. *Journal of Business Ethics*, 168(2), 315–334. <https://doi.org/10.1007/s10551-019-04177-w>
- Elkington, J. (1997). *Cannibals with forks: the triple bottom line of 21st century business*. 410. Retrieved from <https://www.wiley.com/en-in/Cannibals+with+Forks%3A+The+Triple+Bottom+Line+of+21st+Century+Business-p-9781841120843>
- Emeka-nwokeji, N., & Osisioma, B. C. (2019). Sustainability Disclosures and Market Value of Firms in Emerging Sustainability Disclosures and Market Value of Firms in Emerging Economy: Evidence From Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 3(7), 1–19.
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, 38, 45–64. <https://doi.org/10.1016/J.GFJ.2017.03.001>
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. New York: Cambridge University Press.
- Friske, W., Hoelscher, S. A., & Nikolov, A. N. (2022). The impact of voluntary sustainability reporting on firm value: Insights from signaling theory. *Journal of the Academy of Marketing Science*, 1–21. <https://doi.org/10.1007/S11747-022-00879-2/METRICS>
- Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, 66(June 2020), 101889. <https://doi.org/10.1016/j.jcorpfin.2021.101889>
- Girón, A., Kazemikhasragh, A., Cicchiello, A. F., & Monferrá, S. (2022). The Impact of Board Gender Diversity on Sustainability Reporting and External Assurance: Evidence from Lower-Middle-Income Countries in Asia and Africa. <https://doi.org/10.1080/00213624.2022.2020586>, 56(1), 209–224. <https://doi.org/10.1080/00213624.2022.2020586>
- Hassan, A., Elamer, A. A., Lodh, S., Roberts, L., & Nandy, M. (2021). The future of non-financial businesses reporting: Learning from the Covid-19 pandemic. *Corporate Social Responsibility and Environmental Management*, 28(4), 1231–1240. <https://doi.org/10.1002/csr.2145>
- Huang, D. Z. X. (2022). Environmental, social and governance factors and assessing firm value: valuation, signalling and stakeholder perspectives. *Accounting and Finance*, 62(S1), 1983–2010. <https://doi.org/10.1111/acfi.12849>
- IDX. (2021). PT Bursa Efek Indonesia. Retrieved November 9, 2022, from <https://www.idx.co.id/produk/indeks/>

- Jensen, G. R., & Jones, C. P. (2019). *Investments: Analysis and Management*, 14th Edition | Wiley. Retrieved November 10, 2022, from <https://www.wiley.com/en-us/Investments%3A+Analysis+and+Management%2C+14th+Edition-p-9781119578123>
- Kahloul, I., Sbai, H., & Grira, J. (2022). Does Corporate Social Responsibility reporting improve financial performance? The moderating role of board diversity and gender composition. *Quarterly Review of Economics and Finance*, 84(December), 305–314. <https://doi.org/10.1016/j.qref.2022.03.001>
- Kehati. (2021). Indeks ESG Quality 45 IDX Kehati. Retrieved November 10, 2022, from Kehati.or.Id website: <https://kehati.or.id/indeks-esgq-45-idx-kehati/>
- Li, T. T., Wang, K., Sueyoshi, T., & Wang, D. D. (2021). ESG: Research Progress and Future Prospects. *Sustainability 2021*, Vol. 13, Page 11663, 13(21), 11663. <https://doi.org/10.3390/SU132111663>
- Mahmood, Z., Kouser, R., Ali, W., Ahmad, Z., & Salman, T. (2018). Does Corporate Governance Affect Sustainability Disclosure? A Mixed Methods Study. *Sustainability 2018*, Vol. 10, Page 207, 10(1), 207. <https://doi.org/10.3390/SU10010207>
- Manita, R., Bruna, M. G., Dang, R., & Houanti, L. (2018). Board gender diversity and ESG disclosure: evidence from the USA. *Journal of Applied Accounting Research*, 19(2), 206–224. <https://doi.org/10.1108/JAAR-01-2017-0024>
- Robinson, G., & Dechant, K. (1997). Building a business case for diversity. *Academy of Management Executive*, 11(3), 21–31. <https://doi.org/10.5465/ame.1997.9709231661>
- Romano, M., Cirillo, A., Favino, C., & Netti, A. (2020). ESG (Environmental, social and governance) performance and board gender diversity: The moderating role of CEO duality. *Sustainability (Switzerland)*, 12(21), 1–16. <https://doi.org/10.3390/su12219298>
- Sandberg, H., Alnoor, A., & Tiberius, V. (2022). Environmental, social, and governance ratings and financial performance: Evidence from the European food industry. *Business Strategy and the Environment*, (April), 1–19. <https://doi.org/10.1002/bse.3259>
- Saygili, E., Arslan, S., & Birkan, A. O. (2022). ESG practices and corporate financial performance: Evidence from Borsa Istanbul. *Borsa Istanbul Review*, 22(3), 525–533. <https://doi.org/10.1016/j.bir.2021.07.001>
- Setiani, E. P. (2020). Pengungkapan Tanggung Jawab Sosial Perusahaan Pada Tipe Perusahaan Di Indonesia. *InFestasi*, 16(1), 1–12. <https://doi.org/10.21107/infestasi.v16i1.6008>
- Shakil, M. H., Tasnia, M., & Mostafiz, M. I. (2020). Board gender diversity and environmental, social and governance performance of US banks: moderating role of environmental, social and corporate governance controversies. *International Journal of Bank Marketing*, 39(4), 661–677. <https://doi.org/10.1108/IJBM-04-2020-0210>
- Suttipun, M., & Yordudom, T. (2022). Impact of environmental, social and governance disclosures on market reaction: an evidence of Top50 companies listed from Thailand. *Journal of Financial Reporting and Accounting*, 20(3–4), 753–767. <https://doi.org/10.1108/JFRA-12-2020-0377/FULL/XML>
- Wulandari, N., & Handayani, W. (2022). *Pengaruh Pengungkapan Lingkungan, Sosial dan Tata Kelola (LST) terhadap Kinerja Perusahaan High Profile di Asia dengan Kontroversi LST sebagai Variabel Pemoderasi*. Universitas Gadjah Mada.
- Yawika, M. K., & Handayani, S. (2019). The Effect of ESG Performance on Economic Performance in the High Profile Industry in Indonesia. *Journal of International Business and Economics*, 7(2), 112–121. <https://doi.org/10.15640/jibe.v7n2a12>

Zahid, M., Rahman, H. U., Ali, W., Khan, M., Alharthi, M., Imran Qureshi, M., & Jan, A. (2020). Boardroom gender diversity: Implications for corporate sustainability disclosures in Malaysia. *Journal of Cleaner Production*, 244, 118683. <https://doi.org/10.1016/j.jclepro.2019.118683>