How ESG and Gender Diversity Affect Firm Performance

by Johan Hadisurya, Joni Joni, Tan Kwang En, Sinta Setiana

Submission date: 12-Mar-2025 08:52AM (UTC+0700)

Submission ID: 2612225216

File name: How ESG and Gender Diversity Affect Firm Performance-2025.pdf (338.88K)

Word count: 10316 Character count: 55389





RESEARCH ARTICLE

How ESG and Gender Diversity Affect Firm Performance

Johan Hadisurya | Joni Joni 🕞 | Tan Kwang En | Sinta Setiana

Faculty of Business, Accounting Department, Universitas Kristen Maranatha, Kota Bandung, Jawa Barat, Indonesia

Correspondence: Joni Joni (joni@eco.maranatha.edu)

Received: 31 May 2024 | Revised: 29 December 2024 | Accepted: 2 January 2025

Funding: This research paper was supported by internal grant from Maranatha Christian University, which one of private universities in Indonesia.

Keywords: dual-board governance | emerging country | ESG | gender diversity | operating and market performances | the patriarchal society

ABSTRACT

This study investigates the impact of Environmental, Social, and Governance (ESG) disclosure and gender diversity on the board of commissioners on operating and market performance in Indonesia from 2018 to 2022. The sample for this study consisted of 218 listed companies in Indonesia with ESG disclosures. Ordinary least-squares regression was used to test this affiliation. The generalized moment method was also applied to address the endogeneity problem. This empirical research found that ESG disclosure and gender diversity on the board of commissioners have a positive and statistically significant effect on company performance in a patriarchal society where women experience negative stereotypes regarding their leadership and managerial skills. The results remained consistent after endogeneity testing. The findings of this study have practical implications for academics and policymakers interested in the role of ESG and gender diversity in improving company performance in developing countries, such as mobilizing resources to support ESG and increasing the percentage of women on corporate boards of commissioners. The findings of this study differs from previous research in that it was conducted in Indonesia, a developing country. Most previous studies have been conducted in developed countries, such as China and Europe. This study examines the associations in Indonesia, which has a distinct corporate governance mechanism called the dual-board system, and where the patriarchal system still influences corporate governance in Indonesia.

1 | Introduction

This study investigates the effects of Environmental, Social, and Governance (ESG) and gender diversity on the performance of companies listed on the Indonesia Stock Exchange from 2018 to 2022. ESG-related issues are important and of concern to practitioners and academics (Eccles, Lee, and Stroehle 2020). According to Becchetti et al. (2022), ESG is a standard used by companies to follow certain criteria so that economic activities carried out by companies can have a positive effect on the environment, social or community, and corporate governance. Efforts to integrate the economic, social, and environmental aspects are crucial for several reasons. First, prior research has found that companies that employ ESG principles and disclosures

in their business experience a lower cost of capital (e.g., Ramirez et al. 2022). Second, stakeholders believe that companies with extensive ESG disclosure experience improved firm value and reduced operational risks (e.g., Alsayegh, Rahman, and Homayoun 2020; Mulia and Joni 2019). Companies with better ESG implementation in various countries, including Indonesia, are positively perceived by stakeholders, including investors and creditors (e.g., Eccles, Lee, and Stroehle 2020; Hamdani, Joni, and Riyanto 2024; Sari, Joni, and Ginting 2024).

Additionally, empirical findings show that companies that focus on developing ESG outperform companies that do not in the global context. Alodat and Hao (2024) examine the relationship between ESG and corporate performance using

© 2025 ERP Environment and John Wiley & Sons Ltd.

 $Corporate Social \ Responsibility\ and\ Environmental\ Management,\ 2025;\ 0:1-12\ https://doi.org/10.1002/csr.3122$

1 of 12

European listing companies. They show that firms with better ESG scores improve their operating performance. Dong, Liang, and Wanyin (2022) indicated that increasing ESG activities in China can boost company performance. This is due to the fact that ESG activities are regarded as a competitive advantage for the company, with the potential to improve long-term performance, Pu (2022) also conducted a study of 232 Chinese companies and found a positive correlation between ESG activities and company's market performance proxied by Tobin's Q. Next, Gutiérrez-Ponce and Wibowo (2023), for example, examined the relationship between ESG and performance in a sample of Indonesian banking companies from 2010 to 2020. Their findings indicate a positive association between ESG disclosures and company performance.

This study differs from previous research in several respects. First, it was conducted in the context of a developing country, which places little emphasis on ESG issues. This is reflected in the low number of listed companies with ESG disclosure in Indonesia (Harymawan et al. 2021). Few studies (e.g., Gutiérrez-Ponce and Wibowo 2023; Rahmaniati and Ekawati 2024) that address listed companies in Indonesia have investigated the association between ESG and performance. Prior studies have focused on the banking industry and non-financial performance. This study uses all listed companies in Indonesia to examine the effect of ESG disclosures on operating and market performance. Second, this study investigates the impact of board characteristics on company performance, an important governance issue in Indonesia, namely, gender diversity on the company's board of commissioners. Based on the findings of empirical research, Chen, Leung, and Evans (2018) show that the amount of ESG investment and innovation increases if the proportion of women increases, causing boards to become more gender-balanced compared with the base case of boards comprising only men. In England, Brahma, Nwafor, and Boateng (2021) showed that when women are involved as board members, there is a positive and significant correlation between gender diversity and company performance. Using a cross-country sample, Zhang (2020) examines the relationship between gender diversity and company performance. The results depend on the institutional context, which differentiates between normative and regulatory environments. Gender diversity is positively associated with firm performance in normative environments but not in regulatory environments.

Third, the issue of gender diversity at the top management level in Indonesia is unique because of the characteristics of its businesses and society, which are significantly affected by Islamic culture (Rezaee et al. 2019). Consequently, the orientation of business governance in Indonesia is profoundly patriarchal, where women are marginalized in their leadership, capabilities, and assertiveness (Areneke et al. 2023). In the context of patriarchal culture, women are perceived differently than men in the workplace, including in job assignment, performance evaluation, and reward systems (Castro, Tascón, and Corral 2023). Our findings indicate that the presence of women on commissioner boards improves corporate performance. This is in line with the "queen bee syndrome" argument suggesting that female boards tend to pattern themselves in a masculine way or a patriarchal culture to achieve personal and organizational successes

as a sign of the adaptability process (Corwin, Loncarich, and Ridge 2022).

Fourth, many studies have been conducted to determine whether companies that disclose ESG can improve their performance (e.g., Dong, Liang, and Wanyin 2022). However, this study goes into greater detail to answer questions regarding current topics of discussion. In analyzing the empirical results, this study employs two main variables, ESG and gender diversity, which are then tested for their effect on company performance, as measured by return on assets (ROAs) and earnings per share (EPS). This study employs an ordinary least-squares (OLS) regression model analysis, aided by firm size, number of board members in the company, and leverage as control variables, as well as the year of study and industry type as fixed effects. This study uses 218 listed companies on the Indonesia Stock Exchange with ESG disclosures from 2018 to 2022, which can be accessed through Thomson Reuters DataStream.

This study finds that companies with high levels of ESG disclosure and gender diversity on their boards experience higher firm performance. In other words, the findings of the study suggest answers to whether gender diversity on boards of commissioners and ESG disclosures impact company performance. Compared to the findings of previous research, this study makes two contributions. First, it contributes to prior research that examines the effect of ESG disclosure on company performance in developing nations such as Indonesia, where ESG issues are still given little attention. Second, it investigates the effects of board characteristics, specifically gender diversity, on company performance in Indonesia, where the patriarchal system continues to influence governance. It has been argued that female boards improve firm performance because they may imitate the masculine culture in mendominated environments to achieve professional success. It is in line with the "queen bee syndrome" justification.

This study is divided into six sections. Section 1 of this paper is the introduction. Section 2 describes the institutional context, followed by a discussion of the theory and development of the hypotheses in Section 3. Section 4 discusses the study's research methodology. Section 5 discusses the findings of this study, and Section 6 concludes the paper with recommendations.

2 | Institutional Background

2.1 | ESG Development in Indonesia

ESG began to emerge and gain recognition in 2011 as a result of the establishment of the Sustainability Accounting Standards Board (SASB), an institution responsible for establishing ESG disclosure standards. This standard can be applied globally to businesses to foster a healthy economy. Trahan and Jantz (2023) explain the issues related to ESG with respect to definitional bias and how to score ESG, raising many questions regarding the economic ramifications of ESG ratings. The lack of agreement on ESG ratings (scoring) is a second issue related to ESG, which can be seen among

the ESG ratings themselves that lack strong correspondence (Berg, Kölbel, and Rigobon 2022). This issue is demonstrated by Carlsson Hauff and Nilsson (2023), who argue that, within accounting, the pool of funds invested in accordance with ESG-related principles is subject to numerous variations for a given ESG investment strategy. These issues are important because ESG investments are a highly influential topic in the business world. The PRI (2020) reports that 3038 investors representing assets worth more than \$100 trillion have signed an agreement to incorporate ESG disclosure information into investment decisions. Then, according to data compiled by Morningstar (2022), approximately \$2.47 trillion in global assets are now managed based on the ESG criteria of international funds.

ESG grew in popularity in Indonesia in the 2010s when it entered the mainstream financial industry. Initially, ESG implementation for the financial industry was regulated by the Financial Services Authority Regulation (POJK) Number 51/ POJK 03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. In accordance with POJK Article 1 paragraphs 8 and 9, sustainable finance is defined as the overall support of the financial service sector with the aim of achieving sustainable economic growth by balancing economic, social, and environmental interests. This is in line with Law No. 32 of 2009 on Protection and Management of the Environment. Article 33 of the 1945 constitution contains additional provisions pertaining to these regulations. Based on these regulations, ESG implementation is necessary for listed companies in the financial industry. However, this is voluntary for companies listed

2.2 | Corporate Governance System in Indonesia

Based on Law No. 40 of 2007 concerning Limited Liability Companies, the corporate governance system in Indonesia employs a dual-board system with a separation of functions between the board of directors, whose role is to perform management and operational functions, and the board of commissioners whose role is to perform supervisory functions. The board of commissioners plays a strategic role in this governance system, being responsible for monitoring the performance of the board of directors and balancing the various decisions made, including fulfilling the rights of shareholders and company stakeholders. Therefore, in a dual-board governance system, the board of commissioners holds a strategic position in the company (Joni, Ahmed, and Hamilton 2020b; Joni et al. 2021; Selin, Joni, and Ahmed 2023; Joni, Natalia, and Leliana 2023; Dharmawan, Joni, and Setvawan 2024). This is because the board of commissioners is responsible for overseeing all operational activities of the company, including those of its board of directors. This differs from governance in the United States, which uses a one-tier (unitary) system in which the duties and responsibilities of the Board of Directors and the Board of Commissioners are combined (Joni, Ahmed, and Hamilton 2020a). Jouber (2022) stated that the presence of women as board members could provide a different perspective from the superiority of their way of thinking when making a decision, thereby enhancing the precision of decision-making and oversight of the company. Studies suggest that board diversity has a positive effect on a company's operational performance (e.g., Sun and Zou 2021).

2.3 | Social and Corporate Structure in Indonesia

Indonesian society has been affected by a patriarchal system in which men are regarded as more powerful than women (Areneke et al. 2023). It is rooted in Islamic culture or religion (Rezaee et al. 2019). However, in terms of governance in Indonesia, the number of women as top managers is growing, making gender diversity an interesting issue. Essentially, the 1945 Constitution, particularly Article 27, Paragraph 1, states that gender equality in administration and law is essential. Next, Presidential Decree No. 9 of 2000 on Gender Mainstreaming aims to decrease the gap between women and men in accessing development benefits and to improve the participation of women in the development process. To address the issue of limited female representatives at the executive, judicial, bureaucratic, and political party levels in Indonesian politics, the Ministry of Women's Empowerment and Child Protection (KPPPA) developed a Draft Government Regulation (RPP) on Gender Equality in 2006. This increased women's participation in making strategic decisions.

The issue of gender diversity in a company's top management structure has received attention from a variety of groups, including the public, practitioners, and academics (e.g., Liu, Lei, and Buttner 2020; Brahma, Nwafor, and Boateng 2021). This is because women's participation in a company's structure is viewed as a value driver in the company's strategy. Following the Dutch corporate structure, Indonesia applies a two-tier board system that consists of a board of directors who are responsible for the company's operation and a supervisory board (also called the board of commissioner) who conducts monitoring and supervising functions (Joni, Ahmed, and Hamilton 2020a). It is important to explore the role of gender diversity in the Indonesian dual-board system, where the board of commissioners can make long-term decisions and is strategically involved. Moreover, the participation of women as board members is viewed positively by capital holders, including investors (e.g., Almarayeh 2023). Stakeholder support is needed to increase the number of women on a company's board (e.g., Hazaea et al. 2023). In addition, regulations in several nations mandate the presence of women on company boards. For example, the Norwegian government mandates that at least 40% of a company's board members be women (Garcia-Blandon, Maria, and Diego 2024). It is argued that there is a global movement toward greater gender diversity and that supply chain and investor considerations suggest that Indonesia will benefit from a trading perspective, from greater gender diversity on the boards of commissioners, because other countries will gain greater comfort.

3 | Theoretical Foundation and Hypothesis Development

Stakeholder and agency theories are two related arguments that explain how ESG and gender diversity influence corporate performance. According to stakeholder theory, companies not only focus on maximizing profits for company owners but also on parties with an interest in companies,

such as the government, society, and the social environment (Freeman 2023). This theory contends that the support provided by stakeholders can influence the existence of a company or organization. The greater the quality of ESG disclosures made by a company, the greater is the number of stakeholders who will provide full support to all companies with the aim of enhancing performance and achieving expected profit. Aydoğmuş, Gülay, and Ergun (2022) applied Stakeholder Theory to examine the effect of ESG disclosure on firm profitability. Their study reveals a strong positive relationship between ESG scores and business profitability. This also shows that the support and confidence of stakeholders have a positive effect on the value of the company.

The agency theory proposed by Jensen and Meckling (1979) explains that agency relations occur when there is a separation of interests between the company owner (principal) and the company manager (agent), in which one or more owners (principal) request that another party (agent) take action or have the authority to make a decision. In this case, a company's owners and managers are distinct entities with frequently divergent interests and objectives, resulting in agency conflicts. Company managers, as decision-making parties, are responsible for maximizing their utility while ignoring the interests of company owners. On the other hand, ESG is used by company owners (principals) to increase company transparency, which can reduce information asymmetry and thus reduce conflicts of interest between management and owners, which can reduce agency costs and improve company performance (Tang 2022).

Ullah, Fang, and Jebran (2020) applied agency theory to investigate the effect of gender diversity on corporate board performance. Their findings reveal that female board members can improve the monitoring process and increase managerial accountability. Next, in line with Adams and Ferreira (2009) and Adams, Gray, and Nowland (2011), Brahma, Nwafor, and Boateng (2021) suggested that women may provide an independent perspective. In circumstances in which a person of one gender is substantially underrepresented on a board, the incidence of higher independence seems sensible and unobjectionable. Ain et al. (2021) supported this expression by stating that gender diversity may reduce agency costs.

3.1 | ESG and Corporate Performance

ESG disclosure is expected to become an investment in a company's social environment to satisfy the interests of stakeholders, which will later contribute to improving company performance in both developed and developing countries. According to the findings of empirical research by Buallay (2019), disclosing nonfinancial reports such as ESG will generate demand and high growth rates for companies in European countries because ESG disclosures can attract the attention of company stakeholders. Albitar et al. (2020) find a positive and significant relationship between ESG disclosure scores and financial performance of companies in the United Kingdom. Chouaibi, Chouaibi, and Rossi (2022) explored the impact of ESG practices on firm performance in the UK and Germany. They found that firms with better ESG commitments have better firm value. Pulino

et al. (2022) explore the association between ESG and performance in a sample of Italian companies from 2011 to 2020. The results show a positive relationship between ESG disclosures and company performance. Recently, using the European market, Alodat and Hao (2024) found that ESG improves the operating performance.

Dong, Liang, and Wanyin (2022) find that investors value companies that engage in ESG disclosure in China. In this case, investors perceive the company's disclosure of ESG as a worthwhile investment. Zeng and Jiang (2023) suggested that ESG is associated with corporate performance, based on 156 listed agricultural and forestry companies in China. Naeem, Ullah, and Jan (2021) examined the performance of listed companies in India that disclose ESG. Their findings show a positive and significant relationship between ESG disclosures and company performance. Using an Indonesian sample, Gutiérrez-Ponce and Wibowo (2023) conducted a study that determined the effect of sustainability on financial performance in bankinglisted companies. Their findings indicate that sustainability activities have a positive impact on banking financial performance. Good environmental performance results in a high return on equity and an increase in the value of the company. This is further supported by Rahmaniati and Ekawati (2024), who examine the effect of ESG disclosure on non-financial performance in Indonesian listed companies. Their research indicates that ESG disclosures have a positive and significant impact on firm value.

Based on the results of empirical research conducted by previous researchers, the following hypotheses were tested.

H1. ESG disclosure has a positive effect on operating performance in Indonesia ceteris paribus.

Good ESG disclosure by a company can also improve its stock market performance, attracting investor attention as a reference for making investment decisions. According to empirical research, a study conducted in the China context by Zhou, Liu, and Luo (2022) shows that ESG disclosure practices positively and significantly influence market performance. In the UK context of the United Kingdom, Ahmad, Mobarek, and Roni (2021) show that ESG disclosure has a positive and significant effect on a company's market value and EPS.

Based on the findings of previous empirical research, this study tested the following hypotheses.

H2. ESG disclosure has a positive effect on a company's market performance in Indonesia ceteris paribus.

3.2 | Gender Diversity and Corporate Performance

Gender diversity is one of the several board characteristics that can influence company performance (Brahma, Nwafor, and Boateng 2021). In addition to ESG disclosures, the presence of a women's board can boost company performance. This is because female board members can improve the effectiveness of a company's internal governance (e.g., Srinidhi et al. 2020), increase public disclosure and share price informativeness (e.g.,

Eng, Fikru, and Vichitsarawong 2022; Marhfor et al. 2021; Ng and Rezaee 2020), and increase the trust of larger company shareholders and other stakeholders (e.g., Zhu and Wang 2024). For instance, Liu, Lei, and Buttner (2020) found that, within the context of the United States, a company's performance significantly increases when women are more involved, particularly when starting from a situation where no women are participating. Green and Homroy (2018) demonstrated that gender diversity is positively associated with performance in European companies. In addition, Ararat and Yurtoglu (2021) indicate that board diversity increases firm performance in Turkey. In the UK, specifically, Brahma, Nwafor, and Boateng (2021) asserted that board diversity enhances operating performance. Almarayeh (2023) reported a similar result in Jordan.

Research on the impact of gender diversity on firm performance in Indonesia, where the governance system is influenced by patriarchal culture, is unique and limited (Areneke et al. 2023). It can be justified that the presence of female boards can positively affect corporate performance in patriarchal culture by the "queen bee syndrome" argument (Brahma, Nwafor, and Boateng 2021). Women hold top management positions in male-dominated workplaces and distance themselves from other female colleagues (Corwin, Loncarich, and Ridge 2022). Consequently, female managers are prone to applying masculine cultural roles and imitating their male colleagues' attributes to achieve professional success as part of the adaptation process (Castro, Tascón, and Corral 2023). Several influential female leaders in Indonesia have strong leadership skills, which result in high performance. The salient examples have been shown by several female top leaders, including the Minister of Finance of Indonesia from 2019 to 2024 (Sri Muliani), the Minister for Foreign Affairs of Indonesia (Retno Marsudi) from 2019 to 2024, and the former president of Indonesia from 2001 to 2004 (Megawati Soekarno Putri).

Based on the results of empirical research conducted by previous researchers, the following hypotheses were tested.

H3. Gender diversity has a positive effect on operating performance in Indonesia ceteris paribus.

Women's presence on corporate boards can affect a company's stock market performance worldwide. Based on empirical research in Pakistan, Khan et al. (2016) discovered that gender diversity on boards has a positive and significant influence on the stock exchange performance of a company. In the European context, Qureshi et al. (2020) show that increasing the representation of women on company boards can increase stakeholder trust and positively and significantly influence company value in the capital market. Brahma, Nwafor, and Boateng (2021) found that gender diversity improves market performance in the UK. Using 111 Greek listed firms from 2008 to 2020, Arvanitis, Varouchas, and Agiomirgianakis (2022) show that gender diversity can lead to maximum market performance when the proportion of female boards reaches a certain level.

Based on the findings of previous empirical research, this study tested the following hypotheses.

H4. Gender diversity positively influences a company's market performance in Indonesia ceteris paribus.

4 | Research Design

4.1 | Selection of Samples and Data Sources

As a sample for this empirical study, 218 companies listed on the Indonesia Stock Exchange from 2018 to 2022 that have implemented ESG scoring activities in their annual reports were used. The period of this study was selected based on the initiation of sustainable finance in Indonesia through POJK Number 51/POJK 03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions. This allowed us to observe the effects of ESG implementation after the regulatory enactment.

This study relies on secondary data from Thomson Reuters DataStream or Refinitiv Eikon, including ESG data, gender diversity measures, ROA, EPS, company size, number of board members, leverage, years of study, and industry type. We applied two data collection steps. First, we collect financial data from the Thomson database. Second, non-financial data such as the number of board members were manually collected from the company's annual reports. After collecting and processing samples, 218 company data samples from all listed companies in Indonesia were obtained over 5 years from 2018 to 2022. This study had a limited sample size based on the availability of data from the Thomson database and published annual reports.

4.2 | Variable Measurement

4.2.1 | Independent Variables

This study employs two independent variables as a result of the reduction hypothesis. The first independent variable is ESG disclosure, which is an important factor that influences company performance (Becchetti et al. 2022). In this study, ESG was calculated using values obtained from the Thomson Reuters DataStream: (Revinitive Eikon) official website. Thomson Reuters is one of the most comprehensive databases in the world, covering over 7000 public companies worldwide. It calculates over 400 different ESG measurements, with over 178 subsets of comparable and relevant fields, to strengthen the overall company assessment process (Refinitiv 2022).

In the Thomson Reuters database, the ESG score consists of 10 categories, which are then processed proportionally with the calculated measures in each category to form a three-pillar score and the final ESG score, which is the result of a representation of the company's ESG performance, commitment, and effectiveness based on publicly reported information. The scores from each category were then aggregated into three-pillar scores: environmental, social, and corporate governance. Thomson Reuters uses Thomson Reuters Business Classification (TRBC) for industry classification as a benchmark to calculate environmental and social category scores, because it has issues that are relevant and similar to companies in the same industry. To calculate the score for the governance category, Thomson Reuters uses the country's head office as a benchmark, because it recognizes that each nation has distinct governance practices. Consequently, the governance score must be adapted to the conditions of the respective country. The final score for evaluating the ESG weight of each company will vary depending on the results of the calculations in the Thomson Reuters Database (Refinitiv 2022).

Next, we used gender diversity (GEN_DIV), a measure of the number of women on company boards (Refinitiv 2022). GEN_DIV was used as a metric to determine the percentage of women on the company's board of commissioners. Thomson Reuters provides the percentage of women on the company board of commissioners.

4.2.2 | Dependent Variables

Firm performance is the dependent variable in this study. This performance is measured using the ROA ratio as a benchmark for measuring the operating performance of the company and EPS to measure the market performance of the company. Similarly, many researchers have used ROA and EPS as proxies to measure companies' operating performance and market performance (Brahma, Nwafor, and Boateng 2021; Liu, Lei, and Buttner 2020; Khan et al. 2016). For example, Naeem, Ullah, and Jan (2021), Pu (2022), and Pulino et al. (2022) examine the effect of ESG disclosure on company performance using ROA as a yardstick to measure company operating performance. Ahmad, Mobarek, and Roni (2021) and Zhou, Liu, and Luo (2022) examine the effect of ESG disclosure on company market performance using EPS as a benchmark.

4.2.3 | Control Variables

Our study also includes several related control variables in the models, such as company size, leverage, board size, year, and industry effects. Company size (F_SIZE) is a metric that can be calculated by taking the natural logarithm of a company's total assets (Zhou, Liu, and Luo 2022). As firms become larger, their profitability increases (Albitar et al. 2020). This is due to the fact that the larger a company is, the greater its market power, which enables it to set high product prices in order to improve its financial performance. This finding is supported by Pulino et al. (2022), who indicate that company size has a positive effect

This study also includes leverage (LEV) and number of board members in the company (B_SIZE) as control variables. Leverage is a measure of how much of a company's financing comes from debt (Brahma, Nwafor, and Boateng 2021). The number of board members is also used as a proxy for board size (Charumathi and Rahman 2019). The study then determines the fixed effects, such as year effect (YR) and industry effect (IND), which are classified using the Global Industry Classification Standard (GICS).

4.3 | Analysis Models

This study employs descriptive statistics, the Pearson correlation test, and the multicollinearity test using the variance inflation factor (VIF) and OLS regression to examine the effects of ESG and gender diversity on firm performance. First, we investigate the association between ESG and corporate performance in H1 and H2. The empirical model used in this study is defined as follows:

$$ROA = \alpha_1 + \beta_1 ESG + \beta_2 F_SIZE + \beta_3 B_SIZE$$

$$+ \beta_4 LEV + \beta_5 YR + \beta_6 IND + \varepsilon$$
(Model 1)

$$\begin{split} \text{EPS} &= \alpha_1 + \beta_1 \text{GEN_DIV} + \beta_2 \text{F_SIZE} \\ &+ \beta_3 \text{B_SIZE} + \beta_4 \text{LEV} + \beta_5 \text{YR} + \beta_6 \text{IND} + \epsilon \end{split} \tag{Model 2}$$

Next, we explore whether gender diversity affects operating and market performance, as stated in H3 and H4: the models are as follows:

$$\begin{aligned} \text{ROA} &= \alpha_1 + \beta_1 \text{ESG} + \beta_2 \text{F_SIZE} + \beta_3 \text{B_SIZE} \\ &+ \beta_4 \text{LEV} + \beta_5 \text{YR} + \beta_6 \text{IND} + \varepsilon \end{aligned} \tag{Model 3}$$

$$\begin{split} \text{EPS} &= \alpha_1 + \beta_1 \text{Gen_Div} + \beta_2 \text{F_SIZE} + \beta_3 \text{B_SIZE} \\ &+ \beta_4 \text{LEV} + \beta_5 \text{YR} + \beta_6 \text{IND} + \varepsilon \end{split} \tag{Model 4}$$

The detailed definition is presented in Table 1.

4.4 | Additional Testing

In corporate governance literature, independent and dependent variables may influence each other, called simultaneity, which can cause bias in model estimation (Di Vito and Trottier 2022). As high-performance companies may apply ESG effectively, this study employs the generalized moment method (GMM) model to test endogeneity issues. The GMM incorporates lagged variables and individual-specific effects to result in unbiased model estimations (Khatib 2024). It effectively applies dynamic panel data to address unobservable heterogeneity (Li et al. 2021). In addition, this study used an additional variable in the form of a dummy to conduct further tests related to the COVID-19 pandemic that occurred for two periods, namely, 2020-2021 (COVID-19). A score of 1 was assigned to the study year when the pandemic occurred, 2020-2021, and a score of 0 was assigned to the study years before and after the COVID-19 pandemic, 2018-2019 and 2022, respectively. Finally, we use Tobin's Q as an additional proxy to measure market-based corporate performance. It is defined as the book value of total assets minus the book value of common equity, plus the market value of common equity (Brahma, Nwafor, and Boateng 2021). In our study, we utilize Tobin's Q as a metric for assessing market performance, as it quantifies the anticipated future growth of the company, thereby addressing the concerns of shareholders (e.g., Joni, Ahmed, and Hamilton 2020b).

5 | Results and Discussion

5.1 | Descriptive Statistics

Table 2 reports the results of descriptive statistics with a total sample of 218 companies in the period 2018–2022 to see and test the relationship between companies that disclose ESG and gender diversity on operating performance and company market performance as measured using ROA and EPS. Table 2 displays the number of observations, the average value, the standard deviation, the minimum and maximum, and percentile values for each variable used in this study. The average ESG is 44.24, and gender diversity (GEN_DIV) is 0.13 with a

TABLE 1 | Definitions.

Variable	Definition
Independent vari	ables
ESG	ESG is using score calculated by the Thomson Reuters score (Refinitiv 2022)
GEN_DIV	The proportion of female board members (Ahmad, Mobarek, and Roni 2021).
Dependent varial	oles
ROA	This study uses the return on assets measure to measure a company's operational performance. ROA is the net income divided by the total assets (Naeem, Ullah, and Jan 2021; Pu 2022; Pulino et al. 2022).
EPS	This study also uses the earning per share measure as an indicator of company stock market performance (Khan et al. 2016).
Control variables	-firm characteristics
F_SIZE	Natural logarithm of the company's total assets (Zhou, Liu, and Luo 2022).
B_SIZE	The total number of company board members reported at the end of the fiscal year (Brahma, Nwafor, and Boateng 2021).
LEV	Total long-term debt is divided by the company's total assets (Brahma, Nwafor, and Boateng 2021).
Control variables	-fixed effects
YR	Vector indicator variable for the period 2018–2022.
IND	Variable vector of industry variables classified based on Global Industry Classification Standard (GICS).

minimum (maximum) value of 12.59 (87.86) and 0 (0.67). The lower quartile (p25) of ESG is 33.59, and the upper quartile (p75) is 68.97. It is shown that the gap in ESG implementation in Indonesia is on average. However, the gap in gender diversity is large (the lower quartile is 0, and the upper quartile is 20). The results of these descriptive statistics were found to be consistent with those of previous studies, such as those conducted by Pulino et al. (2022) and Brahma, Nwafor, and Boateng (2021). The average values for ROA and leverage are 0.09 and 24.49, with minimum (maximum) values of 0.62 and 58.1, respectively. The average value of market performance as measured by EPS is 484.59, with a minimum (maximum) value of -125.40 (6213.32). Then, the average value of company size (F_SIZE) and the number of board members in the company (B_SIZE) are 21.82 and 6.38, with a minimum (maximum) value of 20.06 (28.24) and 3 (21) considered reasonable because it has a value consistent with previous studies,

respectively (Charumathi and Rahman 2019; Karim, Manab, and Ismail 2019).

A paired Pearson correlation test was conducted to investigate the relationship between the key variables in the industry effects model (IND) and the year issued. Table 3 shows that the highest correlation (r=0.26) exists between ESG and board size. Table 4 presents a multicollinearity test using VIF, and the results indicate that the model in this study is free of multicollinearity issues.

5.2 | Effect of ESG Disclosure and Gender Diversity on Company Performance

The results of the OLS regression analysis to explore how ESG and gender diversity affect operating performance as measured by ROA are reported in Table 4. According to the results of Model (1), the ESG coefficient of ROA was positive and significant at the 1% level (coefficient =0.00, t= 3.13). Leverage and company size have positive and significant effects on operating performance. However, the board size was not statistically significant. This shows that H1 is supported by evidence that the company's performance has improved as a result of its ESG disclosures. Model (2) indicates that the ESG coefficient of EPS was positive and statistically significant at the 1% level (coefficient =12.12, t= 2.70). Statistically, firm size, board size, and leverage are not significant. These results indicate that a company's market performance improves when ESG disclosures occur. This indicated that H2 was acceptable.

The results from Models (1) and (2) are consistent with Stakeholder Theory and agency theory, which explains why companies that disclose ESG information tend to achieve a high level of company performance in terms of operating performance and market performance. The stakeholder theory asserts that the support provided by stakeholders can affect a company's viability. The greater the quality of a company's ESG disclosure, the greater is the number of stakeholders that will provide full support for the company's aim to improve its operational and market performance. Further, ESG disclosure improves a company's monitoring function, which reduces agency conflict and increases corporate performance. The findings of this test are consistent with those of previous studies such as Naeem, Ullah, and Jan (2021), Pu (2022), and Pulino et al. (2022), who tested the effect of ESG disclosure on company operating performance. Ahmad, Mobarek, and Roni (2021) and Zhou, Liu, and Luo (2022) investigate the impact of ESG disclosure on company market performance.

The third model shows that the gender diversity coefficient on ROA is also positive and significant at the 1% level (coefficient=0.11 and t= 3.32). Leverage and company size have positive and significant effects on operating performance. However, the board size was not statistically significant. This shows that gender diversity in board membership improves a company's operating performance while also showing that H3 is accepted. Model (4) shows that the gender diversity coefficient on EPS is also positive and significant at the 1% level (coefficient=1388.98 and t=2.60). Firm size, board size, and leverage, on the other hand, are not statistically significant.

TABLE 2 | Descriptive statistics.

Variable	N	Mean	Std. dev.	Min	Max	p25	p75
ESG	218	44.24	22.82	12.59	87.86	33.59	68.97
GEN_DIV	218	0.13	0.17	0.00	0.67	0.00	20.00
ROA	218	0.09	0.09	0.00	0.62	0.03	0.11
EPS	218	484.59	1348.78	-125.40	6213.32	38.89	371.41
F_SIZE	218	21.82	1.92	20.06	28.24	23.86	25.40
B_SIZE	218	6.38	2.62	3.00	21.00	4.00	8.00
LEV	218	24.49	17.73	0.20	58.10	8.19	36.03

Note: Summary statistics for the key variables. The number of observations consists of 218 data samples for the period 2018–2022. The definitions for each variable can be seen in Table 1.

TABLE 3 | Correlation matrix.

							154
	ROA	EPS	ESG	GEN_DIV	F_SIZE	B_SIZE	LEV
ROA	1.00						
EPS	0.04	1.00					
ESG	0.17**	0.22***	1.00				
GEN_DIV	0.20***	0.16**	0.07	1.00			
F_SIZE	0.13*	-0.01	-0.14**	0.03	1.00		
B_SIZE	-0.12*	0.12*	0.26***	-0.09	-0.02	1.00	
LEV	0.20***	-0.06	0.12*	-0.06	-0.03	0.02	1.00

Note: The paired Pearson correlation matrix for a sample size of 218 company-year observations. The definitions of the variables used in table are listed in Table 1. The superscripts ***, ***, and * indicate the level of significance at 1%, 5%, and 10%, respectively.

TABLE 4 | ESG, gender diversity, and corporate performance—OLS regression.

	Model 1 (ROA)	Model 2 (EPS)	Model 3 (ROA)	Model 4 (EPS)
INTERCEPT	13.40 (1.25)	-139837.50 (-0.84)	-2.11 (-0.21)	-344791.20** (2.21)
ESG	0.00*** (3.13)	12.12*** (2.70)		
GEN_DIV			0.11*** (3.32)	1388.98*** (2.60)
F_SIZE	0.01*** (2.60)	8.41 (0.18)	0.01**(2.08)	-13.44 (-0.29)
B_SIZE	-0.01*** (-2.87)	37.34 (1.04)	-0.00*(-1.68)	76.14** (-2.21)
LEV	0.00** (2.54)	-5.79 (-1.12)	0.00***(3.37)	-2.43 (-0.47)
YR	Included	Included	Included	Included
IND	Included	Included	Included	Included
Average VIF	1.12	1.12	1.02	1.02
Adj. R ²	0.12	0.05	0.13	0.04
F	6.19	2.79	6.43	2.70
Prob > F	0.00***	0.01**	0.00***	0.02**
N	218	218	218	218

Note: The results of the OLS coefficient estimation. Indicator variables are included in the regression to control for fixed effects of year and type of industry. The definitions of the variables used in table are listed in Table 1. The superscripts ***, **, and * indicate two-way significance levels at 1%, 5%, and 10%, respectively.

Thus, H4 is supported by showing that gender diversity on company boards improves market performance. The results of testing Models (3) and (4) are consistent with agency theory,

which states that agency problems occur when the owner (principal) requests that another party (agent) take action or has the authority to make decisions. In the context of gender

8 of 12

Corporate Social Responsibility and Environmental Management, 2025

TABLE 5 | ESG, gender diversity, corporate performance—the GMM model.

	Model 1 (ROA)	Model 2 (EPS)	Model 3 (ROA)	Model 4 (EPS)
INTERCEPT	13.39 (0.94)	-1398.50*** (-24.25)	-2.11 (-0.16)	-344791.20*** (-149.92)
ESG	0.00*** (2.49)	12.12** (2.40)		
GEN_DIV			0.11** (2.30)	1388.98** (2.12)
F_SIZE	0.01** (2.47)	8.41 (0.13)	0.01** (2.23)	-13.44 (-0.22)
B_SIZE	-0.01** (-2.40)	37.34 (1.32)	-0.00*(-1.68)	76.14** (2.18)
LEV	0.00*** (2.83)	-5.79 (-1.08)	0.00*** (3.62)	-2.43 (-0.47)
YR	Included	Included	Included	Included
IND	Included	Included	Included	Included
N	218	218	218	218

Note: The results of the common moment method (GMM). The definitions of the variables are described in Table 1. The superscripts ***, **, and * indicate two-way significance levels at 1%, 5%, and 10%, respectively.

TABLE 6 | ESG, gender diversity, COVID-19, corporate performance.

	Model 1 (ROA)	Model 2 (EPS)	Model 3 (ROA)	Model 4 (EPS)
INTERCEPT	6.29 (0.38)	-1099048***(-4.55)	-8.49 (-0.55)	-1265325*** (-5.51)
ESG	0.00*** (3.05)	9.86**(2.32)		
GEN_DIV			0.11***(3.24)	1105.92** (2.18)
COVID-19	-0.01 (-5.07)	-1436.38***(-5.24)	-0.01 (-0.53)	-1436.73*** (-5.23)
F_SIZE	0.01**(2.51)	-17.49 (0.39)	0.01**(2.02)	-35.21 (-0.80)
B_SIZE	-0.01***(-2.90)	26.30 (0.77)	-0.00 (-1.72)	57.72 (1.77)
LEV	0.00**(2.49)	-7.70 (-1.57)	0.00***(3.29)	-4.98 (-1.03)
YR	Included	Included	Included	Included
IND	Included	Included	Included	Included
Average VIF	1.57	1.57	1.47	1.47
Adj. \mathbb{R}^2	0.12	0.15	0.13	0.15
F	5.34	6.61	5.53	6.51
Prob > F	0.00***	0.00***	0.00***	0.00***
N	218	218	218	218

Note: The results of additional testing related to the COVID-19 pandemic that occurred during the study year for two periods (2020–2021). The definitions of the variables used in table are listed in Table 1. The superscripts ***, **, and * indicate two-way significance levels at 1%, 5%, and 10%, respectively.

diversity in corporate board membership, this theory posits that greater participation by independent female boards of commissioners from the base of no women can enhance the monitoring function of the company. In light of this opinion, the presence of gender diversity on a company's board of independent commissioners can improve its operational performance and market performance. The results of this test are consistent with those of previous studies by Brahma, Nwafor, and Boateng (2021) and Liu, Lei, and Buttner (2020), who analyzed the effect of gender diversity among board members on the operating performance of a company. Khan et al. (2016), Qureshi et al. (2020), and Brahma, Nwafor, and Boateng (2021) examined the effect of gender diversity on the market and operational performance of company board members.

5.3 | Additional Testing

This study employed the GMM to increase the dependability of the results. This study strengthens the evidence that companies with ESG disclosures and women on their boards of board of commissioners have a positive effect on company performance. Table 5 displays the results of an alternative analysis employing the GMM model to investigate endogeneity issues when examining the relationship between the ESG disclosure of gender diversity and firm performance. After conducting the GMM test, the overall results of data testing were the same.

Next, we investigated corporate performance during the COVID-19 pandemic. This additional test aims to determine

TABLE 7 | ESG, gender diversity, market-based performance (Tobin's Q).

	Model 1 (Tobin's Q)	Model 3 (Tobin's Q)
INTERCEPT	, ,	
INTERCEPT	-0.43* (-1.57)	-0.55**(-1.99)
ESG	0.00*** (2.50)	
GEN_DIV		0.00*(1.67)
F_SIZE	0.02***(2.41)	0.03*** (3.26)
B_SIZE	-0.00 (-0.73)	0.00 (0.09)
LEV	0.00 (0.41)	-0.00 (-0.32)
YR	Included	Included
IND	Included	Included
Average VIF	1.78	1.62
$Adj. R^2$	0.42	0.46
F	10.01	9.65
Prob > F	0.00***	0.00***
N	218	218

Note: The results of additional testing related to Tobin's Q as a proxy of market performance. The definitions of the variables are listed in Table 1. The superscripts ***, ***, and * indicate two-way significance levels at 1%, 5%, and 10%, respectively.

the impact of the COVID-19 pandemic on the sample study data for five periods, namely, 2018–2022. The results of this test indicate that the COVID-19 pandemic has affected market performance but has no significant effect on operating performance. However, these results did not affect the overall model (Table 6).

In addition, our study tests the effect of ESG and gender diversity on different market-based performances, namely, Tobin's Q, to confirm the consistency of the main results, particularly Models (1) and (3) in Table 4 (see Table 7). Overall, the results in Table 7 are consistent with those in Table 4.

6 | Conclusions

The results of this study have implications for policymakers, practitioners, and academics because they can answer questions regarding whether companies with ESG disclosures and the presence of gender diversity among company board members affect the enhancement of company performance in the context of a patriarchal society. These findings indicate that companies in developing countries that disclose ESG information and have gender diversity on their boards of commissioners exhibit superior performance. Also, corporate social responsibility and sustainability efforts are increasingly being integrated into business operations and play an important role in influencing a company's performance. We recommend that public policymakers in Indonesia and countries with similar characteristics implement ESG practices and pursue compulsory disclosure. The findings provide evidence for company managers and policymakers to mobilize resources to support ESG and increase the percentage of women on the company's board of commissioners. In a

dual-board governance system, the board of commissioners plays a strategic role because it is responsible for supervising all operational activities of the company, including overseeing the performance of the board of directors. The findings of this study can also help investors decide whether to invest in companies that have implemented ESG in developing countries. This study also investigates and addresses endogeneity when testing the relationship between gender diversity in ESG disclosure and firm performance. Endogeneity tests yielded consistent results across boards.

However, the results of this study require further interpretation, owing to their limitations. First, it is limited to companies that use ESG and report their data in the Thomson Reuters Database. Companies that do not report their data may embrace the concept of ESG. Second, the measure of gender diversity of the board of commissioners in this study is only seen from a gender perspective, ignoring other types of diversity such as age, educational background, nationality, and culture. Therefore, future studies should include other dimensions of diversity to capture the essence of diversity on a company's board of commissioners better.

Acknowledgments

The authors would like to express their gratitude to Maranatha Christian University for providing funding to conduct this research. The content of this article is entirely the responsibility of the authors.

References

Adams, R. B., and D. Ferreira. 2009. "Women in the Boardroom and Their Impact on Governance and Performance." *Journal of Financial Economics* 94, no. 2: 291–309.

Adams, R. B., S. Gray, and J. Nowland. 2011. "Does Gender Matter in the Boardroom? Evidence From the Market Reaction to Mandatory New Director Announcements." Evidence From the Market Reaction to Mandatory New Director Announcements (November 2, 2011).

Ahmad, N., A. Mobarek, and N. N. Roni. 2021. "Revisiting the Impact of ESG on Financial Performance of FTSE350 UK Firms: Static and Dynamic Panel Data Analysis." Cogent Business & Management 8, no. 1: 190500. https://doi.org/10.1080/23311975.2021.1900500.

Ain, Q. U., X. Yuan, H. M. Javaid, M. Usman, and M. Haris. 2021. "Female Directors and Agency Costs: Evidence From Chinese Listed Firms." *International Journal of Emerging Markets* 16, no. 8: 1604–1633.

Albitar, K., K. Hussainey, N. Kolade, and A. M. Gerged. 2020. "ESG Disclosure and Firm Performance Before and After IR." International Journal of Accounting and Information Management 28, no. 3: 429–444. https://doi.org/10.1108/JJAIM-09-2019-0108.

Almarayeh, T. 2023. "Board Gender Diversity, Board Compensation, and Firm Performance. Evidence From Jordan." *Journal of Financial Reporting and Accounting* 21, no. 3: 673–694.

Alodat, A. Y., and Y. Hao. 2024. "Environmental, Social and Governance (ESG) Disclosure and Firm Performance: The Moderating Role of Board Gender Diversity and Sustainability Committee." Sustainable Development

Alsayegh, M. F., R. A. Rahman, and S. Homayoun. 2020. "Corporate Economic, Environmental, and Social Sustainability Performance Transformation Through ESG Disclosure." Sustainability (Switzerland) 12, no. 9: 3910. https://doi.org/10.3390/su12093910.

Ararat, M., and B. B. Yurtoglu. 2021. "Female Directors, Board Committees, and Firm Performance: Time-Series Evidence From Turkey." *Emerging Markets Review* 48: 100768.

Areneke, G., E. Adegbite, A. Tunyi, and T. Hussain. 2023. "Female Directorship and Ethical Corporate Governance Disclosure Practices in Highly Patriarchal Contexts." *Journal of Business Research* 164: 114028.

Arvanitis, S. E., E. G. Varouchas, and G. M. Agiomirgianakis. 2022. "Does Board Gender Diversity Really Improve Firm Performance? Evidence From Greek Listed Firms." *Journal of Risk and Financial Management* 15, no. 7: 306.

Aydoğmuş, M., G. Gülay, and K. Ergun. 2022. "Impact of ESG Performance on Firm Value and Profitability." *Borsa Istanbul Review* 22: S119–S127. https://doi.org/10.1016/j.bir.2022.11.006.

Becchetti, L., E. Bobbio, F. Prizia, and L. Semplici. 2022. "Going Deeper Into the S of ESG: A Relational Approach to the Definition of Social Responsibility." *Sustainability* 14, no. 15: 9668.

Berg, F., J. F. Kölbel, and R. Rigobon. 2022. "Aggregate Confusion: The Divergence of ESG Ratings." Review of Finance 26, no. 6: 1315–1344.

Brahma, S., C. Nwafor, and A. Boateng. 2021. "Board Gender Diversity and Firm Performance: The UK Evidence." *International Journal of Finance and Economics* 26, no. 4: 5704–5719.

Buallay, A. 2019. "Is Sustainability Reporting (ESG) Associated With Performance? Evidence From the European Banking Sector." Management of Environmental Quality: An International Journal 30, no. 1: 98–115. https://doi.org/10.1108/MEO-12-2017-0149.

Carlsson Hauff, J., and J. Nilsson. 2023. "Is ESG Mutual Fund Quality in the Eye of the Beholder? An Experimental Study of Investor Responses to ESG Fund Strategies." *Business Strategy and the Environment* 32, no. 4: 1189–1202. https://doi.org/10.1002/bse.3181.

Castro, P., M. T. Tascón, and S. Corral. 2023. "Can Patriarchal Attitudes Moderate the Relation Between Women on Boards and Firm Economic Performance?" European Research on Management and Business Economics 29, no. 3: 100222.

Charumathi, B., and H. Rahman. 2019. "Do Women on Boards Influence Climate Change Disclosures to CDP? – Evidence From Large Indian Companies." Australasian Accounting, Business and Finance Journal 13, no. 2: 5–31. https://doi.org/10.14453/aabfij.v13i.2.2.

Chen, J., W. S. Leung, and K. P. Evans. 2018. "Female Board Representation, Corporate Innovation, and Firm Performance." *Journal of Empirical Finance* 48: 236–254. https://doi.org/10.1016/j.jempfin. 2018.07.003.

Chouaibi, S., J. Chouaibi, and M. 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, no. 1: 46–71.

Corwin, E. S., H. Loncarich, and J. W. Ridge. 2022. "What's It Like Inside the Hive? Managerial Discretion Drives TMT Gender Diversity of Women-Led Firms." *Journal of Management* 48, no. 4: 1003–1034.

Dharmawan, L. V., J. Joni, and S. Setyawan. 2024. "Politically Connected Independent Supervisory Boards and Corporate Performance During COVID-19: Evidence From Indonesia." *Journal of Public Affairs* 24, no. 2: e2921.

Di Vito, J., and K. Trottier. 2022. "A Literature Review on Corporate Governance Mechanisms: Past, Present, and Future." *Accounting Perspectives* 21, no. 2: 207–235.

Dong, Y., C. Liang, and Z. Wanyin. 2022. "Board Diversity and Firm Performance: Impact of ESG Activities in China." Economic Research-Ekonomska Istrazivanja 36: 1592–1609. https://doi.org/10.1080/13316 77X.2022.2090406.

Eccles, G. R., L.-E. Lee, and J. C. Stroehle. 2020. "The Social Origins of ESG: An Analysis of Innovest and KLD." *Organization & Environment* 33, no. 4: 575–596. https://doi.org/10.1177/1086026619888994.

Eng, L. L., M. Fikru, and T. Vichitsarawong. 2022. "Comparing the Informativeness of Sustainability Disclosures Versus ESG Disclosure

Ratings." Sustainability Accounting, Management and Policy Journal 13, no. 2: 494-518.

Freeman, R. E. 2023. "The Politics of Stakeholder Theory: Some Future Directions." In *R. Edward Freeman's Selected Works on Stakeholder Theory and Business Ethics*, edited by S. D. Dmytriyev and R. E. Freeman, 119–132. Cham: Springer International Publishing.

Garcia-Blandon, J., A. B. J. Maria, and R. Diego. 2024. "Female Directors and the Firm's Cost of Debt: Evidence From a Quasi-Natural Experiment." European Management Journal 42, no. 2: 224–232.

Green, C. P., and S. Homroy. 2018. "Female Directors, Board Committees, and Firm Performance." European Economic Review 102: 19–38. https://doi.org/10.1016/j.euroecorey.2017.12.003.

Gutiérrez-Ponce, H., and S. A. Wibowo. 2023. "Do Sustainability Activities Affect the Financial Performance of Banks? The Case of Indonesian Banks." Sustainability 15, no. 8: 6892.

Hamdani, J., J. Joni, and N. F. Riyanto. 2024. "Do Gender Diversity and Foreign Investor Affect Sustainability Disclosure." *Business Strategy and Development* 7: e70024. https://doi.org/10.1002/bsd2.70024.

Harymawan, I., F. K. G. Putra, B. A. Fianto, and W. A. Wan Ismail. 2021. "Financially Distressed Firms: Environmental, Social, and Governance Reporting in Indonesia." Sustainability (Switzerland) 13, no. 18: 10156. https://doi.org/10.3390/su131810156.

Hazaea, S. A., E. M. Al-Matari, N. H. Farhan, and J. Zhu. 2023. "The Impact of Board Gender Diversity on Financial Performance: A Systematic Review and Agenda for Future Research." Corporate Governance: The International Journal of Business in Society 23, no. 7: 1716–1747.

Jensen, M. C., and W. H. Meckling. 1979. Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. Dordrecht: Springer.

Joni, J., K. Ahmed, and J. Hamilton. 2020a. "Politically Connected Boards, Family and Business Group Affiliations, and Cost of Capital: Evidence From Indonesia." *British Accounting Review* 52, no. 3: 100878.

Joni, J., K. Ahmed, and J. Hamilton. 2020b. "Politically Connected Boards, Family Business Groups, and Firm Performance: Evidence From Indonesia." Journal of Accounting and Organizational Change 16, no. 1: 93–121.

Joni, J., M. Natalia, and L. Leliana. 2023. "The Investment Behavior of Politically Connected Firms in Indonesia." *Asian Journal of Accounting Research* 8, no. 4: 348–355.

Joni, J., J. H. Widjaja, M. Natalia, and I. J. Salim. 2021. "The Value of Political Independent Supervisory Boards: Evidence From Indonesian Dual Board Setting," ACRN Journal of Finance and Risk Perspectives 10, no. 1: 128–138.

Jouber, H. 2022. "Women Leaders and Corporate Social Performance: Do Critical Mass, CEO Managerial Ability, and Corporate Governance Matter?" *Management Decision* 60, no. 5: 1185–1217.

Karim, S., N. A. Manab, and R. B. Ismail. 2019. "The Dynamic Impact of Board Composition on CSR Practices and Their Mutual Effect on Organizational Returns." *Journal of Asia Business Studies* 14, no. 4: 463–479. https://doi.org/10.1108/JABS-07-2019-0214.

Khan, Y., M. Amjad, D. S. Batool, and O. U. Bashir. 2016. "Corporate Governance Factors Drive Firms' Earning per Share: Evidence From Pakistan Stock Exchange Listed Companies." *Journal of Business & Tourism* 2, no. 2: 123–132.

Khatib, S. F. A. 2024. "An Assessment of Methods to Deal With Endogeneity in Corporate Governance and Reporting Research." Corporate Governance. https://doi.org/10.1108/CG-12-2023-0507.

Li, J., H. Ding, Y. Hu, and G. Wan. 2021. "Dealing With Dynamic Endogeneity in International Business Research." *Journal of International Business Studies* 52: 339–362.

Liu, Y., L. Lei, and E. H. Buttner. 2020. "Establishing the Boundary Conditions for Female Board Directors' Influence on Firm Performance Through CSR." Journal of Business Research 121: 112–120. https://doi. org/10.1016/j.jbusres.2020.08.026.

Marhfor, A., K. Bouslah, B. M'Zali, and R. Ghilal. 2021. "Corporate Social Responsibility and Stock Price Informativeness: The Public Interest Perspective." Canadian Journal of Administrative Sciences, Revue Canadienne Des Sciences de l'Administration 38, no. 1: 29–41.

Morningstar. 2022. "Global Sustainable Fund Flows: Q2 2022 in Review." Flows and Assets Fall Further but Hold Up Better Than the Broad Market.

Mulia, R. A., and J. Joni. 2019. "Corporate Social Responsibility (CSR) and Risk Taking: Evidence From Indonesia." ACRN Journal of Finance and Risk Perspectives 8, no. 1: 152–162.

Naeem, M., H. Ullah, and S. Jan. 2021. "The Impact of ESG Practices on Firm Performance: Evidence From Emerging Countries." *Indian Journal of Economics and Business* 20, no. 1: 731–750.

Ng, A. C., and Z. Rezaee. 2020. "Business Sustainability Factors and Stock Price Informativeness." *Journal of Corporate Finance* 64: 101688.

PRI. 2020. "Principles for Responsible Investment Annual Report." https://www.unpri.org/annual-report-2020/.

Pu, G. 2022. "A Non-Linear Assessment of ESG and Firm Performance Relationship: Evidence From China." *Economic Research-Ekonomska Istrazivanja* 36, no. 1. https://doi.org/10.1080/1331677X.2022. 2113336.

Pulino, S. C., M. Ciaburri, B. S. Magnanelli, and L. Nasta. 2022. "Does ESG Disclosure Influence Firm Performance?" *Sustainability* (Switzerland) 14, no. 13: 7595. https://doi.org/10.3390/su14137595.

Qureshi, M. A., S. Kirkerud, K. Theresa, and T. Ahsan. 2020. "The Impact of Sustainability (Environmental, Social, and Governance) Disclosure and Board Diversity on Firm Value: The Moderating Role of Industry Sensitivity." Business Strategy and the Environment 29, no. 3: 1199–1214. https://doi.org/10.1002/bse.2427.

Rahmaniati, N. P. G., and E. Ekawati. 2024. "The Role of Indonesian Regulators on the Effectiveness of ESG Implementation in Improving Firms' Non-financial Performance." Cogent Business & Management 11, no. 1: 2293302.

Ramirez, A. G., J. Monsalve, J. D. González-Ruiz, P. Almonacid, and A. Peña. 2022. "Relationship Between the Cost of Capital and Environmental, Social, and Governance Scores: Evidence From Latin America." Sustainability (Switzerland) 14, no. 9: 5012. https://doi.org/10.3390/su14095012.

Refinitiv. 2022. "Environmental, Social, and Governance Scores, Brochure on Refinitiv Website." https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/refinitiv-esg-scores-methodology.pdf.

Rezaee, Z., J. Tsui, P. Cheng, and G. Zhou. 2019. Business Sustainability in Asia: Compliance, Performance, and Integrated Reporting and Assurance. Hoboken, NJ: John Wiley & Sons.

Sari, M., J. Joni, and E. K. S.B. Ginting. 2024. "How Does Family Business Affect the Association Between Corporate Social Responsibility Disclosure and Cost of Debt in Indonesia." *Business Strategy and Development* 7: e395. https://doi.org/10.1002/bsd2.395.

Selin, M., J. Joni, and K. Ahmed. 2023. "Political Affiliation Types and Corporate Social Responsibility (CSR) Commitment: Evidence From Indonesia." *Journal of Accounting and Organizational Change* 19, no. 1: 24–39. https://doi.org/10.1108/JAOC-08-2021-0109.

Srinidhi, B., Y. Sun, H. Zhang, and S. Chen. 2020. "How Do Female Directors Improve Board Governance? A Mechanism Based on Norm Changes." *Journal of Contemporary Accounting and Economics* 16, no. 1:100181.

Sun, R., and G. Zou. 2021. "Political Connection, CEO Gender, and Firm Performance." *Journal of Corporate Finance* 71: 101918. https://doi.org/10.1016/j.jcorpfin.2021.101918.

Tang, H. 2022. "The Effect of ESG Performance on Corporate Innovation in China: The Mediating Role of Financial Constraints and Agency Cost." Sustainability 14, no. 7: 3769.

Trahan, R. T., and B. Jantz. 2023. "What Is ESG? Rethinking the "E" Pillar." Business Strategy and the Environment 32: 4382–4391. https://doi.org/10.1002/bse.3371.

Ullah, I., H. Fang, and K. Jebran. 2020. "Do Gender Diversity and CEO Gender Enhance a Firm's Value? Evidence From an Emerging Economy." Corporate Governance: The International Journal of Business in Society 20, no. 1: 44–66.

Zeng, L., and X. Jiang. 2023. "ESG and Corporate Performance: Evidence From Agriculture and Forestry Listed Companies." Sustainability 15, no. 8: 6723.

Zhang, L. 2020. "An Institutional Approach to Gender Diversity and Firm Performance." Organization Science 31, no. 2:439–457. https://doi.org/10.1287/orsc.2019.1297.

Zhou, G., L. Liu, and S. Luo. 2022. "Sustainable Development, ESG Performance, and Company Market Value: Mediating Effect of Financial Performance." *Business Strategy and the Environment* 31, no. 7: 3371–3387.

Zhu, B., and Y. Wang. 2024. "Does Social Trust Affect Firms' ESG Performance?" International Review of Financial Analysis 93: 103153.

How ESG and Gender Diversity Affect Firm Performance

ORIGINALI	TY REPORT			
	4% TY INDEX	18% INTERNET SOURCES	20% PUBLICATIONS	7% STUDENT PAPERS
PRIMARY S	OURCES			
	www.md Internet Source	•		<1%
	WWW.COU Internet Source	irsehero.com		<19
	research Internet Source	online.gcu.ac.u	k	<19
4	WWW.eco			<19
5	research Internet Source			<19
О	Submitte Berlin Student Paper	d to Fachhoch	schule fuer Wi	rtschaft <1 9
/	investor.	wika.co.id		<19
\sim	www.aba	academies.org		<19
9	www.btp Internet Source	nsyariah.com		<19
	islamicm Internet Source	arkets.com		<19
	eprints.w Internet Source	hiterose.ac.uk		<19
12	Financial Apparel I	Tasneem. "The Performance on ndustry Firms" y (Qatar), 2024	of Global Texti , Hamad Bin K	le and

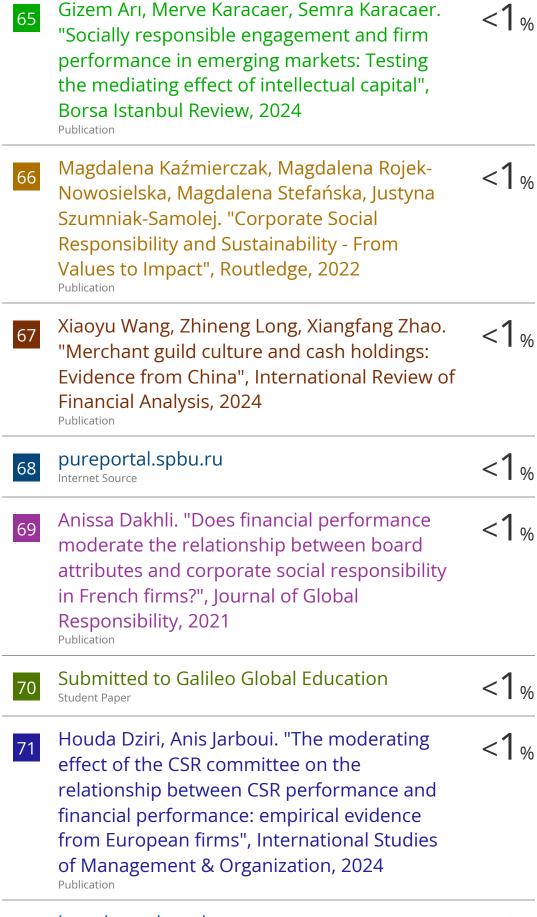
13	biopen.bi.no Internet Source	<1%
14	www.efmaefm.org Internet Source	<1%
15	www.irabf.org Internet Source	<1%
16	www.mbagroup.id Internet Source	<1%
17	psasir.upm.edu.my Internet Source	<1%
18	Submitted to RMIT University Student Paper	<1%
19	Viviana Patricia Narváez-Castillo, María Antonia García-Benau, Laura Sierra-García, Nicolás Gambetta. "Are material ESG issues making their way into key audit matters? An analysis of Colombian innovative companies", Journal of Innovation & Knowledge, 2024 Publication	<1%
20	socialspacejournal.eu Internet Source	<1%
21	virtusinterpress.org Internet Source	<1%
22	Submitted to British University in Egypt Student Paper	<1%
23	Sumru Altuğ, Alpay Filiztekin. "The Turkish Economy - The real economy, corporate governance and reform", Routledge, 2006 Publication	<1%
24	Kiymet Caliyurt. "Women and Sustainability in Business - A Global Perspective", Routledge, 2019 Publication	<1%

25	Salma Loulou-Baklouti. "Does board gender diversity affect intellectual capital voluntary disclosure? Evidence from Tunisia", International Journal of Disclosure and Governance, 2023 Publication	<1%
26	Hong, Ee Rea, Jennifer B. Ganz, Rose Mason, Kristi Morin, John L. Davis, Jennifer Ninci, Leslie C. Neely, Margot B. Boles, and Whitney D. Gilliland. "The effects of video modeling in teaching functional living skills to persons with ASD: A meta-analysis of single-case studies", Research in Developmental Disabilities, 2016.	<1%
27	I Wayan Budiasa. "Green financing for supporting sustainable agriculture in Indonesia", IOP Conference Series: Earth and Environmental Science, 2020	<1%
28	cmuir.cmu.ac.th Internet Source	<1%
29	upcommons.upc.edu Internet Source	<1%
30	www.frontiersin.org Internet Source	<1%
31	Submitted to Heriot-Watt University Student Paper	<1%
32	Suham Cahyono, Ardianto Ardianto. "Intellectual Capital, Political Connection, and Firm Performance: Exploring from Indonesia", Risks, 2024 Publication	<1%
33	ibimapublishing.com Internet Source	<1%

34	koreascience.or.kr Internet Source	<1%
35	Malek Hamed Alshirah, Faraj Salman Alfawareh, Ahmad Farhan Alshira'h, Ghaith Al- Eitan, Tareq Bani-Khalid, Moh'd Alsqour. "Do Corporate Governance and Gender Diversity Matter in Firm Performance (ROE)? Empirical Evidence from Jordan", Economies, 2022 Publication	<1%
36	Yu, Su. "Relationship Between Internationalization and Corporate Social Responsibility Performance: Evidence from Chinese Listed Companies", University of Malaya (Malaysia), 2023 Publication	<1%
37	ideas.repec.org Internet Source	<1%
38	vpr.hkma.gov.hk Internet Source	<1%
39	Ahmad Yuosef Alodat, Zalailah Salleh, Haitham Nobanee, Hafiza Aishah Hashim. "Board gender diversity and firm performance: The mediating role of sustainability disclosure", Corporate Social Responsibility and Environmental Management, 2023 Publication	<1%
40	Submitted to Asia Pacific University College of Technology and Innovation (UCTI) Student Paper	<1%
41	Meylani, Martdian Ratna Sari. "Exploring the Impact of ESG Practices on Financial Performance: The Moderating Effect of Green Innovation in the Indonesian Energy Sector", Jurnal Riset Akuntansi Dan Bisnis Airlangga, 2025	<1%

42	www.shirkah.or.id Internet Source	<1%
43	Ashokkumar Manoharan, Juan M. Madera, Manisha Singal. "The Routledge Handbook of Diversity, Equity, and Inclusion Management in the Hospitality Industry", Routledge, 2023 Publication	<1%
44	Cuartas, Jesus Bill. "Double-Edged Discourse: The Paradoxical Impact of ESG Terminology on Corporate Governance and Risk Scores", Drexel University, 2024 Publication	<1%
45	Ford Lumban Gaol, Seifedine Kadry, Marie Taylor, Pak Shen Li. "Recent Trends in Social and Behaviour Sciences - Proceedings of the International Congress on Interdisciplinary Behaviour and Social Sciences 2013", CRC Press, 2019 Publication	<1%
46	Submitted to International Hellenic University Student Paper	<1%
47	escholarship.org Internet Source	<1%
48	hanoman.allobank.com Internet Source	<1%
49	Maria Aluchna, Güler Aras. "Women on Corporate Boards - An International Perspective", Routledge, 2018 Publication	<1%
50	Submitted to Queen's University of Belfast Student Paper	<1%
51	Submitted to Tilburg University	<1%
<u> </u>	Student Paper	

52	Internet Source	<1%
53	Submitted to Bocconi University Student Paper	<1%
54	Submitted to Christian University of Maranatha Student Paper	<1%
55	Submitted to Higher Education Commission Pakistan Student Paper	<1%
56	Submitted to Hong Kong Baptist University Student Paper	<1%
57	Submitted to Universitas Diponegoro Student Paper	<1%
58	Submitted to University College London Student Paper	<1%
59	Submitted to University of Leeds Student Paper	<1%
60	Wajahat Azmi, M. Kabir Hassan, Reza Houston, Mohammad Sydul Karim. "ESG activities and banking performance: International evidence from emerging economies", Journal of International Financial Markets, Institutions and Money, 2021 Publication	<1%
61	mitsloan.mit.edu Internet Source	<1%
62	www.businessperspectives.org	<1%
63	www.pupuk-indonesia.com Internet Source	<1%
64	Submitted to Anglia Ruskin University Student Paper	<1%



73	conferinte.stiu.md Internet Source	<1%
74	ebin.pub Internet Source	<1%
75	ir.knust.edu.gh Internet Source	<1%
76	journal.ubm.ac.id Internet Source	<1%
77	link.springer.com Internet Source	<1%
78	www.ajrsp.com Internet Source	<1%
79	www.buscompress.com Internet Source	<1%
80	WWW.eco-ena.ca Internet Source	<1%
81	www.emerald.com Internet Source	<1%
82	www.ideapublishers.org Internet Source	<1%
83	www.scielo.org.mx Internet Source	<1%
84	"Climate Change Adaptation, Governance and New Issues of Value", Springer Science and Business Media LLC, 2022 Publication	<1%
85	Aladdin Dwekat, Abdulmalik Taweel, Ali Salameh. "Boardroom diversity and financial performance in Palestinian banks and insurers", Discover Sustainability, 2025 Publication	<1%
86	Carolina Bona-Sánchez, Gema C. Fleitas- Castillo, Jerónimo Pérez-Alemán, Domingo J.	<1%

Santana-Martín. "Gender diversity and audit
fees: Insights from a principal-principal
agency conflict setting", International Review
of Financial Analysis, 2024

Publication

- Daniel Balsalobre-Lorente, Tugba Nur, Emre E. Topaloglu. "Chapter 2 Environmental, Social, and Governance Sustainability Management and Financial Outcomes: Evidence from US Tech Companies", Springer Science and Business Media LLC, 2025
- Desi Adhariani, Elda du Toit. "Readability of sustainability reports: evidence from Indonesia", Journal of Accounting in Emerging Economies, 2020

Publication

Juan David Gonzalez-Ruiz, Nini Johana Marín-Rodríguez, Alejandro Peña. "Board gender diversity and cost of debt financing: Evidence from Latin American and the Caribbean firms", Journal of Corporate Accounting & Finance, 2023

Publication

- Qurat Ul Ain, Xianghui Yuan, Hafiz Mustansar Javaid. "The impact of board gender diversity and foreign institutional investors on firm innovation: evidence from China", European Journal of Innovation Management, 2021
- Ryan Thomas Trahan, Brad Jantz. "What is ESG? Rethinking the "E" pillar", Business Strategy and the Environment, 2023

Shijie Li, En Xie. "The effect of economic growth target constraints on ESG", Applied Economics Letters, 2023

<1%

<1%

<1%

<1%

<1%

<1%

93	Submitted to Universitas Pamulang Student Paper	<1%
94	downloads.waifc.finance Internet Source	<1%
95	onlinelibrary.wiley.com Internet Source	<1%
96	taxpolicy.crawford.anu.edu.au Internet Source	<1%
97	www.ba.aegean.gr Internet Source	<1%
98	www.dyandramedia.com Internet Source	<1%
99	www.grafiati.com Internet Source	<1%
100	www.journals.uchicago.edu Internet Source	<1%
101	www.shs-conferences.org	<1%
102	www.ssbfnet.com Internet Source	<1%
103	Aneta Kuźniarska, Karolina Mania, Monika Jedynak. "Organizing Sustainable Development", Routledge, 2023 Publication	<1%
104	Anh Thi Xuan Tran, Tuan Minh Le. "Fintech development influences on corporate ESG performance: evidences from Southeast Asia", Journal of Management and Governance, 2024 Publication	<1%
105	Antonius Arya Hadiputra, Windijarto. "Political Connection, Financial Distress and Cost of	<1%

Debt: Empirical Evidence from Emerging Country", Jurnal Manajemen Teori dan Terapan | Journal of Theory and Applied Management, 2023

Publication

Publication

Publication

Dunahoo, Gary Don. "The Stories and Developmental Stages of Men Who Have Become Allies with Women in Senior Leadership within the Foursquare Church", Fielding Graduate University, 2023

<1%

Isam Saleh, Malik AbuAfifa, Abdallah Alkhawaja. "Environmental, social, and governance () disclosure, earnings management and cash holdings: Evidence from a European context ", Business Ethics, the Environment & Responsibility, 2023

<1%

Lei Ruan, Jianing Li, Siqi Huang. "News or noise? ESG disclosure and stock price synchronicity", International Review of Financial Analysis, 2024

<1%

Mochamad Roland Perdana, Achmad Sudiro, Kusuma Ratnawati, Rofiaty Rofiaty. "Does Sustainable Finance Work on Banking Sector in ASEAN?: The Effect of Sustainable Finance and Capital on Firm Value with Institutional Ownership as a Moderating Variable", Journal of Risk and Financial Management, 2023

<1%

Mouna Moalla, Saida Dammak. "Do media coverage and audit quality of US companies affect their Environmental, Social and Governance transparency?", Journal of Financial Reporting and Accounting, 2023

<1%

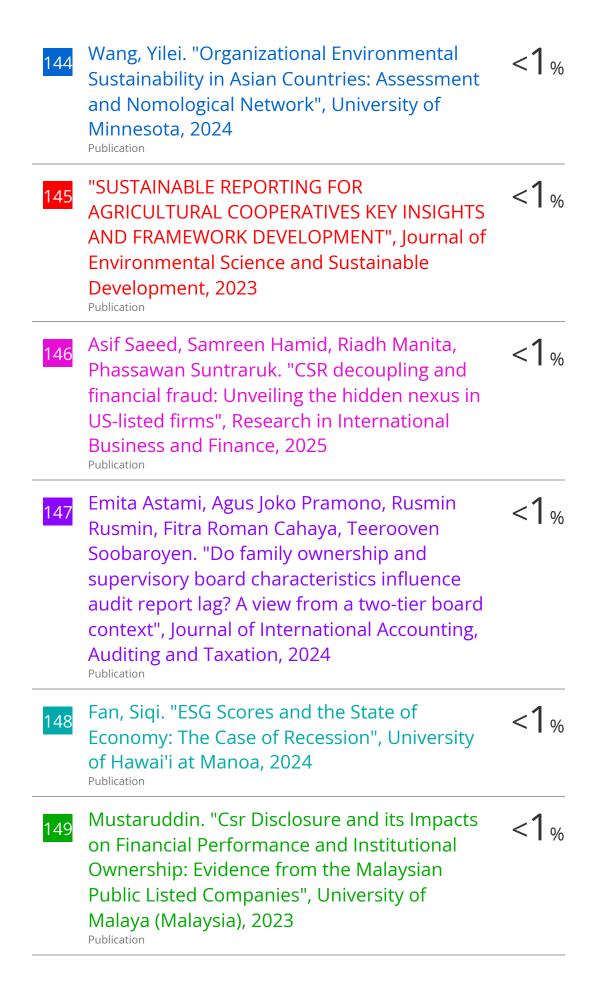
111	Neji Al-Eid Omri, Abdulhameed Mohanna Alfaleh. "The effects of boardroom gender diversity on corporate performance: empirical evidence from a sample of European listed companies", Business Economics, 2024 Publication	<1%
112	Sarip Sarip, Hanif Nurcholish Adiantika, Abdul Muaz. "Political Law of Sidawangi Society towards Customary Rights Over Oro-Oro Land", FIAT JUSTISIA, 2019 Publication	<1%
113	Submitted to University of Sheffield Student Paper	<1%
114	Vidia Gati, Iman Harymawan, Mohammad Nasih. "Indonesia Shariah Stock Index (ISSI) firms and environmental, social, and governance (ESG) disclosure in Indonesia", Journal of Islamic Accounting and Business Research, 2024 Publication	<1%
115	agasr.org Internet Source	<1%
116	archive.aessweb.com Internet Source	<1%
117	coek.info Internet Source	<1%
118	d-nb.info Internet Source	<1%
119	dokumen.pub Internet Source	<1%
120	gupea.ub.gu.se Internet Source	<1%
121	hrcak.srce.hr Internet Source	<1%

jurnalakuntansi.petra.ac.id Internet Source	<1%
123 lutpub.lut.fi Internet Source	<1%
m.growingscience.com Internet Source	<1%
news.johncabot.edu Internet Source	<1%
126 pepri.edu.pk Internet Source	<1%
127 pure.port.ac.uk Internet Source	<1%
repositorio.iscte-iul.pt Internet Source	<1%
repository.fe.unj.ac.id Internet Source	<1%
repository.ipmi.ac.id Internet Source	<1%
studenttheses.uu.nl Internet Source	<1%
www-emerald-com-443.webvpn.sxu.edu.cn Internet Source	<1%
133 www.aimspress.com Internet Source	<1%
134 www.antam.com Internet Source	<1%
135 www.hec.edu Internet Source	<1%
www.pjlss.edu.pk Internet Source	<1%
137 www.scirp.org Internet Source	<1%

sensitivity", Business Strategy and the

Environment, 2019

Publication





Exclude quotes Off

On

Exclude bibliography

Exclude matches

Off

How ESG and Gender Diversity Affect Firm Performance

GRADEMARK REPORT	
FINAL GRADE	GENERAL COMMENTS
/0	
PAGE 1	
PAGE 2	
PAGE 3	
PAGE 4	
PAGE 5	
PAGE 6	
PAGE 7	
PAGE 8	
PAGE 9	
PAGE 10	
PAGE 11	
PAGE 12	