CORPORATE SUSTAINABILITY PERFORMANCE AND FINANCIAL PERFORMANCE: MODERATING EFFECT OF BOARD COMPOSITION

Ferina Nurlaily1, Ahadiyah Adinia Rahmi2
Fakultas Ilmu Administrasi Universitas Brawijaya, Malang1,2
1Corresponding author: ferinanurlaily@ub.ac.id

ABSTRACT
This study analyzes the moderating effect of the composition of female directors and the composition of independent directors on CSP and ROA. The purpose of this study is to analyze the effect of the disclosure of Corporate Sustainability Performance (CSP) on the Return on Assets (ROA) as a proxy for the company's financial performance. The population of this study is companies listed on the SRI-KEHATI index during the period November 2016–October 2019. The research hypotheses were tested using linear regression analysis and moderated regression analysis. The study results found that CSP has a significant effect on the company's ROA. The better and more complete the CSP disclosure, the higher the ROA. Furthermore, the composition of female and independent directors does not significantly affect CSP on corporate financial performance. This study implies that female directors and the composition of the independent board are more for compliance with regulatory requirements.

Keywords: corporate sustainability performance, return on asset, female director, independent director
1. Introduction

Stakeholder theory reveals that a business is created from connections between groups with interests and then initiating a business (Parmar et al., 2010). In the business world, sustainable development is represented in the triple bottom line concept known as the 3Ps: profit, people, and planet. Slaper and Hall (2011) define the Triple Bottom Line as a framework combining three performance dimensions: social, environmental, and financial. The triple bottom line requires companies to pay attention to the impact and considerations given to society and the environment instead of only focusing on financial advantages and disadvantages (Lee, 2007).

The corporate sustainability concept describes the three pillars of sustainability: economic, social, and environmental, as a “nested system” that is interconnected. The economic pillar appears as a dimension of value in the company by increasing the community's products and services' effectivity (Montiel, 2008). The next stage is proper disclosure in a sustainability report, which will refer to measuring corporate sustainability performance. World Business Council for Sustainable Development (WBCSD) in sustainable development reporting (2002) explains sustainability report as a public report of a company intended for internal and external stakeholders by presenting an overview of the company's position and its activities in the economic, environmental, and social fields. Guidelines for reporting on corporate sustainability performance were first issued by the Global Reporting Initiative (GRI), which serves as a framework that can be used generally for reporting on the organization’s performance in economic, environmental, and social fields. Many agencies later adopted this set of guidelines in assessing the company's sustainability. CSRHub, for instance, is a website-based media that provides access to information on employee performance ratings, environment, society, and corporate governance in most large companies in North America, Europe, and Asia (csrhub.com).

In Indonesia, appreciation, and assessment of corporate sustainability performance from the Indonesia Stock Exchange (IDX) is manifested in its collaboration with the KEHATI (Indonesian Biodiversity) foundation by establishing the SRI-KEHATI Index. The SRI-KEHATI index measures the stock price performance of 25 listed companies that encourage sustainable businesses and are aware of the environment, social, and good management system, called Sustainable and Responsible Investment (SRI) (kehati.or.id). SRI-KEHATI is the first green index listed on the IDX. It has become the first reference for investment principles that focus on environmental, social, and governance (ESG) issues in the Indonesian capital market. However, the Indonesian Business Council for Sustainable Development (IBCSD) president stated that despite the increased appreciation of sustainability, the company's awareness of sustainable development is still low compared to other Asian countries. As much as 27% of companies are ready to integrate SDGs into their supply chains (Septian, 2020). If the company's sustainability can be implemented properly, this will affect the increase in the company's profitability performance (Anggarwal, 2013).

The profitability performance of a company can be identified from financial report analysis by calculating the profitability ratio. Return on Assets (ROA) is used to calculate the profitability ratio, which can assess the ability of the company to profit based on its
assets. In the growth of a business, the diversity of the boards brings a larger pool of board talent in terms of their expertise, experience, and connections, which leads to better governance and firm performance (Davies, 2012). The diversity of the board of directors can be seen from race, ethnicity, age, gender, or educational background. The effect of the diversity of the board of directors on financial performance can be appraised by evaluating the composition of female directors and independent directors in a company. As gender diversity in the board of directors positively affects company performance, the higher composition of female directors correlates to improving company value, profitability, and productivity (Yasser, 2012). Women in Business 2020, released by Grant Thornton International, reported that women place 37% of senior management positions in Indonesia, ranked fourth globally (Setiawan, 2017). The presence of an independent director in a company leads to an improved earnings quality by reducing managerial interests and controlling the state of financial statements, as they tend to carry out greater monitoring and demand better earnings quality from the company (Alves, 2014).

Studies related to the effect of CSP on company performance have been conducted but revealed different results, especially in developing countries such as Indonesia. Garg (2015) explains that the company's sustainability report on the company's performance has a significant influence on the company's ROA. In contrast, Aggarwal (2013) states that corporate sustainability performance does not significantly impact the company's ROA. In addition, the company's financial performance, especially the ROA of companies listed in the SRI-KEHATI index, turned out to be unstable. Based on this background, the purpose of this study is to analyze the effect of corporate sustainability performance on the ROA of companies listed in the SRI-KEHATI Index.

Furthermore, this research has several contributions. First, this study will expand the previous literature by providing empirical evidence on the effect of the composition of the board of directors in the implementation of corporate sustainability performance and its effect on the ROA of companies in Indonesia. Second, this research will enrich knowledge for companies to maximize the role of the board of directors in improving sustainability performance. Finally, this research can provide insight to the government regarding policy development for companies to pay attention to sustainability aspects.

2. Literature Review and Hypothesis Development

Company stakeholders are groups that support the running of the company. This group includes customers, employees, suppliers, political parties, environmental communities, local communities, media, financial institutions, and government agencies. The company is described as an ecosystem of related groups, all of which need to be considered and satisfied to keep the company healthy and successful in the long term (Freeman in smartsheet.com). Stakeholder theory describes that if a company treats employees badly, the company will eventually fail. Stakeholder theory provides a solution to answer the three problems above by making relationships between companies, community groups, and individuals that can influence and be affected. When viewed from stakeholders' perspective, a business is formed from a set of relationships between groups that have interests that then do a business (Parmar et al., 2010:5). In realizing the company's sustainability performance, stakeholders are an important concern. This is
because the concept of sustainability will involve all major stakeholders such as investors, the environment, and the wider community.

Corporate Sustainability Performance (CSP) emerged from the Triple Bottom Line concept popularized by Elkington (1997:20). Elkington (1997:20) mentions that the Triple Bottom Line concept has three forms of sustainability, namely economic prosperity, environmental quality, and social justice. Slaper and Hall (2011:4) also explain that the Triple Bottom Line is a framework that combines three dimensions of performance: social, environmental, and financial. This concept differs from the traditional framework, as it includes environmental and social impacts that are difficult to find an exact measurement.

Sustainability is the principle of ensuring that our current actions do not reduce the economic, social, and environmental resources open to future generations (Elkington, 1997:20). In the business world, this form of sustainability is known as corporate sustainability, which is a leadership and management approach adopted by a company so that it can grow profitably and at the same time provide social, environmental, and economic results (Kantabutra and Ketprapakom, 2020: 3). To measure sustainable corporate performance, a company must report on its social, environmental, and economic results. The implementation of this sustainability concept can be done by focusing the strategy on the needs of stakeholders and the benefits provided to them. Measurement of corporate sustainability performance is based on the company's sustainability report. Sustainability reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for the company's performance towards sustainable development goals.

The company's ability to generate profits in its operational activities focuses on evaluating its performance. Effectiveness is assessed by linking net income, defined in various ratios to assets or the profitability ratio (Hermuningsih, 2013: 128). Apart from the company's ability to earn profits, currently, stakeholders are also considering the company's sustainability performance. In other words, companies are required to provide benefits to their surroundings by implementing sustainability strategies in their operations. The results of previous research from Garg (2015) state that Corporate Sustainability Performance (CSP) has a significant positive influence on the company's financial performance. Montwani and Pandya (2016), in their research, explain that overall, CSP has a significant positive effect on company profitability. In contrast, Aggarwal (2013) states that corporate sustainability performance does not significantly impact the company's ROA. Therefore, in line with the prior literature, our first hypothesis is stated as follows: 

H1: Corporate Sustainability Performance has a significant effect on Return on Assets

Nowadays, being a profitable company is not enough. Stakeholders expect the company to be sustainable. In realizing a sustainable company, stakeholders expect the company to be environmentally friendly, have good governance, and be socially responsible. Especially in large-scale companies because they have enormous resources (Motwani and Pandya, 2016:15). The board of directors has a major role in realizing a sustainable company. Therefore, the composition of the board of directors is one of the important things to consider in assessing the sustainability of a company. The existence of female directors in the company's board of directors is a manifestation that the company has implemented a diversity system in the election of the board, where diversity is one of
the points considered in the company's sustainability assessment. The results of previous research from Yasser (2012), who researched the effect of board diversity on the performance of companies in Pakistan, found that board diversity had no significant negative effect on company performance. The study results stated that the presence of female directors was only used as a symbol in the implementation of good corporate governance. This is because female directors on the board could not improve the company's performance. In addition, Pasaribu (2017), who researched the influence of female directors on company performance, found that the presence of female directors had no significant but positive effect on company performance. Therefore, in line with the prior literature, our second hypothesis is stated as follows:

H2: Corporate Sustainability Performance has a significant effect on Return on Assets with female director composition as the moderating variable.

The quality of corporate governance is one of the internal factors that impact the company's performance. Good corporate governance can affect company performance because the board structure is at the root of corporate decision-making. One indicator of a company having good governance is having a proportionate board composition, such as having an independent director on the staff list. This is because the board's structure in corporate governance will relate to shareholders and their responsibilities to divisions and employees within the company. The results of previous research from Rashid (2018) showed that the independent board of directors had an insignificant negative effect on the company's performance. According to Rashid (2018), directors from internal companies are the most influential directors because they will understand the company more thoroughly than independent directors who have external experiences. Therefore, in line with the prior literature, our third hypothesis is stated as follows:

H3: Corporate Sustainability Performance significantly affects Return on Assets with independent director composition as the moderating variable.

Figure 1. Conceptual Framework Model 1

Figure 2. Conceptual Framework Model 2
3. Research Method

Explanatory research with a quantitative approach was implemented in this study. The population in this study included all 30 companies listed on the SRI-KEHATI index from November 2016 to October 2019. The sampling technique implemented purposive sampling by categorizing the companies based on particular criteria obtaining 44 units of analysis from 11 companies throughout the four years of the research period. Data were collected from www.IDX.co.id and company websites in the form of an annual report and sustainability report from 2016 to 2020 published by Indonesia Stock Exchange (IDX) and sample companies listed in the Sustainable and Responsible Investment (SRI) KEHATI index.

The independent variable in this study is Corporate Sustainability Performance (CSP), with the moderating variable to be the composition of female and independent directors. In contrast, the dependent variable is the company’s Return on Assets (ROA) as a proxy of financial performance. CSP is calculated using a dummy variable by giving a score of 1 if there’s a disclosure of each sustainability and 0 if there’s none. The following table demonstrates the equation for measuring the variables used in this study.

<table>
<thead>
<tr>
<th>Variable Measurement</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CSP</strong> = Amount of Disclosures by Company</td>
<td>Number of disclosure indicators</td>
</tr>
<tr>
<td><strong>ROA</strong> = Earning After Tax</td>
<td>Total Assets</td>
</tr>
<tr>
<td><strong>FEDI</strong> = Number of Female Director</td>
<td>Number of Overall Director</td>
</tr>
<tr>
<td><strong>INDI</strong> = Number of Independent Director</td>
<td>Number of Overall Director</td>
</tr>
</tbody>
</table>

The data analysis method in this study was carried out by descriptive statistical tests followed by classical assumption tests as a condition for performing simple linear regression analysis and moderated regression analysis (MRA). At the same time, hypothesis testing is done with the coefficient of determination, F test, and t-test. The regression equation in this study can be denoted as follows:

Table 2. Regression Equation

<table>
<thead>
<tr>
<th>Model</th>
<th>Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>( \text{ROA} = a + b_1 \cdot \text{CSP} + b_2 \cdot \text{FEDI} + b_3 \cdot \text{INDI} + e )</td>
</tr>
<tr>
<td>Model 2</td>
<td>( \text{ROA} = a + b_1 \cdot \text{CSP} + b_2 \cdot \text{FEDI} + b_3 \cdot \text{INDI} + b_4 \cdot \text{CSP} \cdot \text{FEDI} + b_5 \cdot \text{CSP} \cdot \text{INDI} + e )</td>
</tr>
</tbody>
</table>
4. Result and Discussion

The independent descriptive analysis provides an overview or description of the research variables. The calculations used in this study are the maximum, minimum, average, and standard deviation values of company data in 2016 – 2019.

Table 3. Descriptive Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP</td>
<td>44</td>
<td>0.28</td>
<td>0.77</td>
<td>0.5677</td>
<td>0.09516</td>
</tr>
<tr>
<td>FEDI</td>
<td>44</td>
<td>0.00</td>
<td>0.50</td>
<td>0.0818</td>
<td>0.13855</td>
</tr>
<tr>
<td>INDI</td>
<td>44</td>
<td>0.00</td>
<td>0.17</td>
<td>0.0475</td>
<td>0.06871</td>
</tr>
<tr>
<td>ROA</td>
<td>44</td>
<td>0.01</td>
<td>0.47</td>
<td>0.0811</td>
<td>0.10258</td>
</tr>
</tbody>
</table>

Table 3 shows the results from independent descriptive analysis based on the processed data from each research variable, including N (number of the sample), maximum value, minimum value, mean, and deviation standard. Variable of Corporate Sustainability Performance (CSP) shows a mean value of 0.5677 or 56.67% and a deviation standard of 0.09516. The deviation standard is lower than the mean value, indicating low CSP variability. The maximum value of CSP is 0.77, which shows the company's high level of sustainability performance disclosure, while the minimum value is 0.28 signifying a low disclosure of the company’s sustainability performance. FEDI, or the variable for female directors, shows a value of 0.0818 or 8.18% and a deviation standard of 0.13855. This means a high level of FED variability. FED's maximum value is 0.50, indicating companies' high delegation of female directors, while the minimum value is 0.00, which shows otherwise.

The average value of the independent director variable (INDI) is 0.0475 or 4.75%, with a standard deviation of 0.06871, greater than the average value. This shows that data diversity or INDI variability is quite high. The maximum value of INDI is 0.17, which indicates the company’s high delegation of independent directors, while the minimum value of INDI is 0.00 indicating the low delegation of independent directors. The average value of the Return on Assets (ROA) variable is 0.0811 with a standard deviation of 0.10258. The standard deviation value is smaller than the average, so data diversity or ROA variability is low. The maximum value of ROA is 0.47, which implies the high effectiveness of using the company’s assets. Contrarily, the minimum ROA value, which is 0.01, shows the low effectiveness of using assets owned by the company.

Classic assumption test is implemented to fulfill a proper and unbiased regression analysis. This test includes normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. Results show that the research data are distributed normally and are declared free from multicollinearity, autocorrelation, and heteroscedasticity symptoms. In this study, hypothesis testing uses two types of regression analysis. Hypothesis 1 uses simple regression analysis, while hypotheses 2 and 3 use moderated regression analysis (MRA). The results of the multiple regression analysis are presented in Table 4 below:
Table 4. Summarized Results of Model 1 Regression Equation

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>t Statistic</th>
<th>Significance of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.022</td>
<td>-0.860</td>
<td>0.396</td>
</tr>
<tr>
<td>CSP</td>
<td>0.129</td>
<td>2.748</td>
<td>0.009***</td>
</tr>
<tr>
<td>FEDI</td>
<td>-0.156</td>
<td>-3.586</td>
<td>0.001***</td>
</tr>
<tr>
<td>INDI</td>
<td>0.177</td>
<td>3.201</td>
<td>0.003***</td>
</tr>
</tbody>
</table>

Adjusted R² 0.417
F Statistic 10.295
Sig. (F-Stat) 0.000

Note: *:significance level 10%; **:significance level 5%; ***:1% significance level

Hypothesis 1 of this study states a significant effect of Corporate Sustainability Performance on the company's Return on Assets (ROA). Based on the regression analysis results in table 4, it is found that corporate sustainability performance has a significant positive effect on Return on Assets. It can be seen that the significance value is smaller than the significance level (α) = 5% or 0.05 or 0.009 <0.05, thus H1 is accepted. These results are in line with research conducted by Garg (2015), which states that CSP has a significant positive effect on the company's ROA; also, Motwani dan Pandya (2016) states that CSP has a significant positive effect on the firm profitability. Companies need to gain social legitimacy to keep operating their business. The sustainability performance can be a tool to legitimate the company and show that it can be accepted by the community and its environment (Salihin, 2020). This situation will require the company to improve its sustainability performance since it is implicitly essential in increasing its profitability performance, such as the value of ROA.

Hypothesis 2 and hypothesis 3 are moderate regression equations that use moderated regression analysis (MRA). This study will examine the influence of CSP on the company's ROA with the composition of female directors and the composition of independent directors as moderating variables. The results of the calculation of the moderated regression analysis (MRA) are presented in Table 5, and the following regression equation is obtained:

Table 5. Summarized Results of Model 2 Regression Equation

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>t</th>
<th>Significance of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.006</td>
<td>-0.183</td>
<td>0.856</td>
</tr>
<tr>
<td>CSP</td>
<td>0.097</td>
<td>1.669</td>
<td>0.104</td>
</tr>
<tr>
<td>FEDI</td>
<td>-0.138</td>
<td>-0.347</td>
<td>0.731</td>
</tr>
<tr>
<td>INDI</td>
<td>-0.382</td>
<td>-0.778</td>
<td>0.442</td>
</tr>
<tr>
<td>CSP*FEDI</td>
<td>-0.005</td>
<td>-0.008</td>
<td>0.994</td>
</tr>
<tr>
<td>CSP*INDI</td>
<td>0.979</td>
<td>1.157</td>
<td>0.255</td>
</tr>
</tbody>
</table>

Adjusted R² 0.000
F Statistic 6.361
Sig. (F-Stat) 0.000

Note: *:significance level 10%; **:significance level 5%; ***:1% significance level
Based on Table 5 above, female directors' composition in the company does not serve as moderating variable in the effect of CSP on ROA. As it can be seen, the result of interactions between Return on Asset and female director composition variable (CSP*FEDI) show an insignificant negative value (0.994>0.05). As of that hypotheses testing have resulted, Hypothesis 2 is rejected. The results of this study are in line with research from Yasser (2012), which states that board diversity has an insignificant negative effect on company performance. Meanwhile, this study is slightly contradictory to the research results from Pasaribu (2017), which explains more specifically regarding the research results that female directors do not have a significant but positive effect on company performance.

There has not been any regulation related to gender equality awareness in board composition in Indonesia. On the contrary, in the UK, the market regulation has explicitly suggested putting lots of consideration into board composition and sparing as much as 25% of the portion for female directors. The lack of regulations and recommendations has caused the implications of gender diversity in the board of directors to get less attention from companies, making it an unnoticeable factor in intensifying the effect of CSP on a company’s ROA. Almost all sample companies in this study are classified into STEM (Science, Technology, Engineering, and Mathematics) industries. In Indonesia, however, there’s still a gatekeeping practice to suit specific gender in a particular sector; for instance, STEM industries are still considered male-centric, as it is difficult for women to participate in this industry. This situation has been described by Pasaribu (2017) which claims that there’s a probability of a company referring to other companies in the same field about their board composition. As for the company with a gender-balanced type of consumer will tend to benefit from having a female director in the board directors. This gender-centric stereotype is better to be eliminated because female directors enable the company to be more dynamic and innovative.

Furthermore, based on Table 5, the moderating effect of the independent director composition on the effect of Corporate Sustainability Performance on the company's Return on Assets (ROA) shows a positive insignificance value than the significance level (α)=10% or 0.10 or 0.255>0.10; thus, Hypothesis 3 is rejected. Results depicted in Table 5 indicate that the presence of an independent director on the board of directors could not increase the effect of CSP on ROA in the company. The study results are slightly contradictory from the research conducted by Rashid (2018), which shows that the independent board of directors has an insignificant negative effect on company performance. Based on the data from www.idx.com, as much as 55% of overall companies in this study do IPO (Initial public offering) or in the 1990s was called go-public. If the company has conducted IPO for a long time, the transparency level towards stakeholders and stockholders is considered high. The higher transparency level reduces the need for monitoring and having an independent director and vice versa. Since the presence of an independent director is meant to increase profit for the company (Alves, 2014), when a company manages to be highly transparent, the shareholders and stakeholders will become more loyal so that the responsibility of an independent director will be diminished.

An obligation of independent directors’ presence on the board of directors in Indonesia is regulated by Indonesia Stock Exchange (IDX) and is approved by Financial
Services Authority (OJK). It says that any company willing to conduct IPO must have a director and independent director on its board of directors. Nevertheless, this regulation was amended in 2018, thus removing the obligation of having a director and independent director for companies intending to do IPO. This is because companies in Indonesia adhere to a two-tier board system; independent commissioners have carried independent supervisory duties, so the presence of independent directors is no longer effective (Laoli, 2018). On its implementation, from 2016 to 2017, when the independent director had not been removed from the currently applicable law, only 50% of companies in this study that have independent directors throughout the period. It can imply that the presence of an independent director was only meant for regulatory compliance.

5. Conclusion, Implication, and Limitations

Research findings reveal that Corporate Sustainability Performance (CSP) has a significant positive effect on a company's Return on Assets (ROA). If a company manages to disclose the overall sustainability component properly and completely, the company’s ROA will also increase. Furthermore, the female and independent directors portion does not either strengthen or weaken the effect of CSP on the company’s ROA. This study implies that the female directors and the composition of independent directors on corporate governance structure are more due to complying with regulatory requirements. Aside from the contribution made, this study has several limitations. Firstly, this study focuses only on the companies in the SRI-KEHATI index. Secondly, this study only analyzes the effect of the CSP components entirely. Therefore, further studies require increasing the number of research samples in different industries or country locations. Other than that, future research can also examine the effect of each CSP component on the financial performance of different companies by using different moderating variables or intervening variables.

References


