The Effect of Board Gender Diversity on Corporate Sustainability Performance with Enterprise Risk Management as a Moderating Variable

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ABSTRACT

Corporate Sustainability Performance is an approach taken by companies to create long-term profits by developing business strategies that prioritize profits and pay attention to social, cultural, economic, and environmental factors. Gender diversity plays an important role in achieving sustainable performance because the gender diversity of board members can improve company performance. This study aims to examine the effect of board gender diversity on corporate sustainability performance by using ERM as a moderation variable. The study in this study took samples of energy and mining companies on the IDX. This includes mining companies that have published integrated reports (IRs). The type of data used is secondary data using random sampling to determine the number of sampling trials. This study used qualitative descriptive approach and causality method. Data analysis in this study used SPSS to examine the effect of the independent variable on the dependent variable. The results of this study provide an in-depth understanding of the relationship between independent and dependent variables, with implications that can increase awareness of the importance of gender diversity in the context of sustainable company performance.

1. INTRODUCTION

Corporate responsibility is significant in an organization/company where every manager must be sensitive to new issues to create sustainability (Linnenluecke & Griffiths, 2013; Shevchenko et al., 2016). Responsibility shows that the business of any organization or company that ignores sustainability will not last long. A good strategy in the company's sustainability process and the involvement of key stakeholders in determining business continuity, whether the company will grow or vice versa, namely will fail
Corporate Sustainability Performance, abbreviated as CSP (Corporate Sustainability Performance), takes work. However, if achieved, it can provide good results to be more competitive with other companies in the short term. One of the efforts to implement corporate responsibility is the implementation of CSR in the capital market sector, namely the use of an index that contains classes of company shares that practice social responsibility (Panait et al., 2014; Simionescu & Dumitrescu, 2018). Corporate sustainability is an approach companies take to create long-term benefits for consumers and employees and develop a green strategy, namely a business strategy that prioritizes profits and how the company works in a social, cultural, and economic context. The company’s sustainable development is a balance between economic, ecological, and social interests. Financial risk management has an average score above 80 that reflect it has implemented well in Islamic social enterprises but for corporate culture still need improvement implementation (Ifada et al., 2019; Saiedi et al., 2019).

Previous research explained in their research that internal resource factors are the driving force behind the growth and sustainability of companies (Betts et al., 2015; Vilchez et al., 2017). Of course, accountability is supported by the role of the board in decision-making, because the board plays an influential role (Keay, 2017; Rao & Tilt, 2016). So, managers must understand all the company’s needs, especially in implementing sustainable development. The Board of Directors, in accordance with their authority and responsibility, ensures that the company under their auspices can run the business without jeopardizing the continuity of the company.

Gender diversity in this case is considered very important in the composition of board members. With regard to sustainability performance for modern companies, gender diversity of board members has been, and will continue to be, a focus in addressing other governance issues in the future (Kassinis et al., 2016; Rao & Tilt, 2016). For example, State Street Global Advisors (SSGA) opposes 581 companies in the world whose board members do not include women. Decision making by women is considered very important in policy making. As in Norway, the 2006 quota law stated that 40% of the board membership in government-owned companies is women. In contrast to the results of research (Abdullah, 2014) stating that company performance is negatively correlated with gender diversification on the board, even though the role of women is more significant in the family business (Nekhili & Gafouai, 2013; Wellalage & Locke, 2013). Likewise in Indonesia, as of October 2022, gender diversity in the board of directors, including women, is considered to be more thorough in making decisions (results of interviews with directors of Tbk companies). Likewise, the mining company that is the sample of this study has a female board of directors. Firms with women on the board help counter the natural tendency of male members to take high risks for the company (Abdullah, 2014; Darmadi, 2013; Wiley & Monllor-Tormos, 2018).

Board member enterprise risk management (ERM) can implicitly impact a company’s sustainability performance. Previous research explained that risk management is a significant concern in the era of a dynamic global environment (Braumann, 2018; Lundqvist, 2014). Their findings show that the implementation of ERM has an impact on CSP business performance, because it is based on the ERM Framework of the Council of Sponsoring Organizations (COSO), clearly states that the board is responsible for the effective use of ERM. Moreover, according to similar research, operations and finance are the two keys to a company’s success in implementing ERM (Babich & Kouvelis, 2018; Wang et al., 2021). The board can implicitly influence sustainability performance through a series of strategies and decisions to achieve the company’s sustainability performance and gender diversity roles which should be the focus of the board. This research aims to gather empirical evidence on how gender diversity in boards affects sustainability performance. In addition, this study aims to determine whether the effect of gender diversity on performance sustainability is influenced by corporate risk management business. In addition, the implementation of enterprise risk management mitigates the impact of diversity on gender committees on sustainable performance. Sustainability performance requires ongoing investor relations and proper risk management while promoting gender diversity, enhancing investor relations, and enhancing monitoring or strategic risk (Chen et al., 2016; Rezaee, 2016). Therefore, it remains interesting to examine the interaction between gender diversity on the board of directors and the company’s sustainability performance.

There are several reasons why the gender board, in this case, women who hold positions as directors, has a positive impact on the sustainability of company performance, the reason is that female directors will increase investor confidence by increasing transparency, openness, and moral obligations in the meeting room (Rajput & Jhunjhunwala, 2019; Sanan, 2019; Tahir et al., 2020). Previous research proved that women excel in leadership competencies. A global leader requires high cultural and emotional intelligence, but awareness of a value, purpose, and vulnerability to a situation is preferred (Azevedo & Shane, 2019; Le et al., 2021). Women have better abilities in this Leadership style. The proportion of women
on the board of directors has a significant but negatively correlated effect on company performance in Indonesia (Ahmad et al., 2020; Rifandy et al., 2021).

There are several reasons why boards that are gender responsive, in this case, female directors, have a positive impact on the sustainability of company performance because female directors will increase investor confidence through transparency, openness, and ethical obligations in the Trust boardroom (Rajput & Jhunjhunwala, 2019; Sanan, 2019; Tahir et al., 2020). Previous research stated that global leaders need high cultural and emotional intelligence but prioritize values, goals, and vulnerabilities (Dasborough et al., 2022; McCleskey, 2014). Women are more prepared for this leadership style formula. Similar research notes that the proportion of female boards significantly but negatively affects company performance in Indonesia (Darmadi, 2013; Wiley & Monllor-Tormos, 2018). The measurement of the sex plate refers to previous research using the following sizes: Gender of Directors = proportion of total female directors compared to the entire board of directors (Arora, 2022; Fernández-Temprano & Tejerina-Gaite, 2020).

Previous research stated that ERM is defined as risk management and prevention by organizational leaders to keep business entities alive and manage risks that already exist in the business (Bromiley et al., 2015; Prewett & Terry, 2018). Unlike the COSO (Committee of Origination), ERM is defined as a process that is influenced by the board, management, and others. It is implemented through developing a company-wide strategy to identify potential events that could affect its business, which might impact an entity. Specifically, ERM is defined as a risk management process aimed at providing reasonable assurance regarding a company’s physical and business objectives. According to COSO, ERM consists of eight interrelated components. It comes from the integration of management of how to do business and management of processes. The eight components are: Internal environment, target setting, event identification, risk assessment, risk response, activity control, information and communication, and monitoring. ERM is evaluated according to an index consisting of 108 evaluation items in 8 components, with a score of 1 if the company implements it and 0 if it does not, divided into 108 items. ERM measures in this study are: (a) ERM = a number of ERM items implemented compared to all ERM items; (b) Strategy = Sales/Average of industry sales/standard deviation of sales; (c) Operations = Sales/total assets; (d) Reporting= Income before extraordinary item-operating cash flow: Total assets; (e) Compliance= Penalty or lawsuit costs: total assets

Academics offer a number of reasons why CSPs should benefit from having women on their boards. First, it has been suggested that female directors will increase board transparency, openness, and ethical obligations, thereby increasing investor confidence. In his findings it was concluded that gender on the board has an impact on company performance. Other research has found that women often hold one of the two most influential board positions, such as CEO, with implications for business and beyond. As in the previous research stated that the number of female directors significantly affects company performance (Darmadi, 2013; Wiley & Monllor-Tormos, 2018). Gender diversity on company boards improves company performance in China. However, it is different from who concluded that board gender diversity does not affect the company’s sustainable performance.

The use of ERM has been shown to increase the sustainability of CSP business performance. The diversity of risk committee members in terms of financial expertise and gender complements the ERM function which has an impact on company performance (Bhuiyan et al., 2021; Malik et al., 2020). This implies that ERM can increase the influence of board gender on sustainable corporate performance. In addition, influence the role of ERM as a mediator of the relationship between gender diversity on boards and corporate sustainability performance (E-Vahdati et al., 2018; Fakir & Jusoh, 2020). Furthermore conclude that risk management has no significant effect on the sustainability of businesses.

The results of this study hypothesize that gender diversity in boards directly impacts ERM use and, therefore, sustainability performance. The conclusion of the research shows that the risk management and control systems identified by the company have a positive impact on performance and increase corresponding value creation. The results of this study indicate that the role of the risk management committee has been considerably strengthened. The motivation for this research is the phenomenon of declining sustainability performance in mining companies and the role of gender in influencing sustainability performance. In this context, diversity is considered very important in the composition of the board of directors. With regard to the sustainable development performance of modern enterprises, the diversity of board members has always been. It will be at the center of other management issues in the future. Based on previous research studies, it can be seen that the factors that influence the sustainability performance of mining companies are board diversity, gender, and company risk management.

2. METHODS

This study uses a quantitative approach, namely causal (causal studies), which is a type of research that examines the effect of independent variables on the dependent variable. Using explanatory research
aims to identify the causes and effects of the influence between variables in the study. The research data is in the form of quantitative data collected by the “Bursa Efek Indonesia” in the form of an annual report. The sample selection method uses purposive sampling, namely sampling with special considerations and objectives with observations of mining companies in Indonesia consisting of 49. The criteria for selecting the sample are companies that are consistently registered in the mining company group and issue CSR from 2019 to 2021, a total of 32 companies.

3. RESULTS AND DISCUSSIONS

Results

Results are the main part of scientific articles, containing: final results without data analysis process, hypothesis testing results. Results can be presented with tables or graphs, to clarify the results verbally.

Table 1. Coefficient Of Determination Test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.259</td>
<td>0.067</td>
<td>0.060</td>
<td>0.191</td>
</tr>
</tbody>
</table>

Based on the Table 1, it can be seen that the R Square value is 0.067. This can be interpreted that the independent variable gender of directors can explain the dependent variable Sustainable Performance (Y) of 6.7%, while the rest is explained by other factors not examined.

Table 2. R2 Test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.304</td>
<td>0.092</td>
<td>0.079</td>
<td>0.18951</td>
</tr>
</tbody>
</table>

Based on the Table 2, it can be seen that the R Square value is 0.148. This can be interpreted as the independent variable ERM strengthens (moderates) the influence of the Gender of Directors on Sustainability Performance.

Table 3. F Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.357</td>
<td>1</td>
<td>0.357</td>
<td>9.750</td>
<td>0.002</td>
</tr>
<tr>
<td>Residual</td>
<td>4.984</td>
<td>136</td>
<td>0.037</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5.341</td>
<td>137</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the F test in Table 3 showed a sig value of 0.002 with a significant number (P value) where the value was <0.05. So, the f-test above has a high level of model feasibility, namely the variables used can explain the phenomenon being analyzed so that it can be continued for the t-test.

Table 4. F Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.493</td>
<td>2</td>
<td>0.246</td>
<td>6.861</td>
<td>0.001</td>
</tr>
<tr>
<td>Residual</td>
<td>4.849</td>
<td>135</td>
<td>0.036</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5.341</td>
<td>137</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The F model 2 test results in Table 4 showed a sig value of 0.021 with a significant number (P value) where the value was <0.05. So, it can be concluded that the f-test above has a high level of model feasibility, namely the variables used (Board Gender and ERM) can explain the phenomena being analyzed so that it can be continued for the t-test.

Table 5. T test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.438</td>
<td>0.020</td>
<td>22.238</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>-0.311</td>
<td>0.100</td>
<td>-3.122</td>
</tr>
</tbody>
</table>
Based on the t-test Table 5, it can be seen whether the hypothesis is accepted or rejected so that it can be concluded whether the independent variables significantly influence the dependent variable or not. The t-test with a significance level of 5% (α=0.05) shows the results of the Gender variable of 0.002 (<0.05) affecting Sustainability Performance.

Table 6. MRA Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.436</td>
<td>0.020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>-0.408</td>
<td>0.111</td>
<td>-3.692</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender_ERM</td>
<td>1.580E-14</td>
<td>0.000</td>
<td>1.943</td>
<td>0.054</td>
</tr>
</tbody>
</table>

The results of the MRA tests which explain the effect of moderation in the Table 6 show a significance value of 0.054 (> 0.05). This means that the ERM variable moderates the effect of the Gender of Directors on Sustainability Performance.

Discussion

The Effect of Board Gender Diversity on Corporate Sustainability Performance

Based on the results of the T-test, they have concluded that the Board Gender positively affects Sustainability Performance. That the number of women on their board has an essential role in increasing business sustainability, this is in accordance with the results of data processing that increasing the number of women on the board will increase the sustainability of the company’s performance; female directors can increase crowds, closure, and ethical obligations thereby increasing investor confidence. Gender on the board has an impact on company performance, in line with previous findings which conclude that companies without board diversity experience a significant decline (Chapple & Humphrey, 2014; Reguera-Alvarado et al., 2017). In Malaysia, the company’s performance decreased by 29.0%, and in India, the performance decreased by 33%. This study supports the results of similar research proving that women who place one of the most crucial board positions such as CEO, have the opportunity to hold corporate business (Ellwood & Garcia-Lacalle, 2015; Smith & Parrotta, 2018). This research supports another study which proves that the number of female directors significantly affects company performance (Darmadi, 2013; Wiley & Monllor-Tormos, 2018). Put, gender diversity leads to better performance. Furthermore, gender diversity on the boards of companies in China improves company performance (Gulzar et al., 2019; McGuinness et al., 2017). However, this does not support other research which concludes that gender diversity does not affect a company’s sustainable performance (E-Vahdati et al., 2018; Fakir & Jusoh, 2020).

Moderating ERM affects the Board Gender Diversity on CSP

The results of the T-test in this study concluded that enterprise risk management (ERM) as a tool that provides substantial assurance to organizational management and the board of directors in managing risks and opportunities strengthens the influence of board gender on sustainability performance. The use of ERM has been shown to increase the sustainability of CSP business performance (Braam & Peeters, 2018; Fakir & Jusoh, 2020). Effective ERM implementation to achieve corporate and shareholder goals requires clear guidelines on the structure and composition of the risk committee. In addition, influence the role of ERM as a mediator of the relationship between gender diversity on boards and corporate sustainability performance (E-Vahdati et al., 2018; Fakir & Jusoh, 2020). The diversity of risk committee members in terms of financial expertise and gender complements the ERM function which has an impact on company performance (Bhuiyan et al., 2021; Malik et al., 2020). This implies that ERM can increase the influence of board gender on sustainable corporate performance.

This study supports the similar findings in Malaysia which concluded that ERM mediates the relationship between business strategy and performance (Rehman, A. U. & Anwar, 2019; Yang et al., 2018). Likewise, research other findings in South Africa where ERM acts as an intermediary for the influence of gender diversity in boards on sustainability performance (Ambulkar et al., 2015; Parker & Ameen, 2018). While study Nugroho & Utami, W conclude that ERM did not support to enhance sustainability performance. The results of this study indicate that the role of risk management has strengthened the influence of gender diversity in boards on sustainability performance.

These findings make a significant contribution to the advancement of knowledge in the domain of gender diversity on boards and corporate sustainability achievements. The impact involves a deeper understanding of the correlation between gender diversity and corporate performance, as well as the relevance of enterprise risk management (ERM) in strengthening those positive effects. Although providing
valuable insights, this research is limited, for example in geographic coverage and specific industry sectors. As a suggestion, the research supports the need for research across industries and broader regions to broaden the applicability of the findings. Additionally, further exploration is needed regarding moderating factors that may influence the relationship between board gender diversity and sustainable performance, such as cultural context and heterogeneous management practices.

4. CONCLUSION

Based on the results of data testing and discussion to answer the hypothesis can, it is concluded that Board Gender influences the Company’s Sustainability. Female directors can increase transparency, openness, and ethical obligations thereby increasing investor confidence. ERM is proven to strengthen the influence of the Board Gender on Company Sustainability. Enterprise risk management (ERM) is a tool that provides substantial assurance to organizational management and the board of directors in managing risk, with the gender of the board more transparency, openness, and ethical obligations can improve.

5. REFERENCES


Yang, S., Ishtiaq, M., & Anwar, M. (2018). Enterprise risk management practices and firm performance, the
Tahir, H., Masri, R., & Rahman, M. M. (2020). Impact of board attributes on the firm dividend payout policy: