WHAT IS THE ROLE OF WOMEN ON BOARDS IN INDONESIA?

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Abstract
The achieving of gender equality is a target of the SDGs. As part of the effort toward gender parity, we have ensured that women hold executive roles in both private and public sectors. Using SPSS version 25, this study analyzed data from real estate and property companies that were listed on the Indonesia Stock Exchange between 2016 and 2021. While having women on the board of commissioners did not influence the company's performance, having women on the board of directors had a detrimental effect. On the other hand, a positive and statistically significant effect was shown when a board of directors and a board of commissioners were tested simultaneously.

Keywords: Gender Diversity; Gender Equality; Sustainable Development Goals and Firm Performance.

INTRODUCTION
The Sustainable Development Goals (SDGs) program is an action initiated by world leaders in 2015 and ends in 2030. The SDG's originators hope to reduce inequality and poverty and preserve the environment. The SDGs themselves have 17 goals and 169 targets, one of which discusses gender equality (goal five), which aims to ensure that all women can participate fully and have equal opportunities to lead at every level of decision-making in economic, political, and public life. Indonesia is a country that is actively involved in the SDG program. Apart from that, if we look at the human resource factor, Indonesia is a country that has relatively large resources. The Directorate General of Population and Civil Registry reports that 190,827,224 individuals, or 69.30 percent of Indonesia's population, fall into the productive age group (15–64 years old). Furthermore, according to the Central Statistics Agency (BPS), women made up 54.03 percent of the working-age population in 2021, according to the Labor Force Participation Rate (TPAK). According to the International Labor Organization (ILO), in 2020, the proportion of female CEOs in Indonesia was 15 percent.

Data on gender equality in 2021 on the Indonesia Stock Exchange (BEI) shows that of the 2,200 companies listed on the BEI, 20 percent of women are in the management ranks, 5.5 percent are on the board of directors, and 3.5 percent are CEOs. Clearly, this issue highlights the ongoing need for increased representation of women in senior executive roles. This statement is according to the results of previous research conducted by Fathonah (2018), Raharjanti (2019), Khairani and Harahap (2017), Raharjanti et al. (2023) and Thoomaszen and Hidayat (2020).
There needs to be consistency in the previous study on the impact of women on company performance. Fathonah (2018) and Pasaribu et al. (2019) prove that the composition of women on the board of directors and commissioners has a positive influence on performance. On the contrary, it found that there was a negative influence of the presence of women on the board of directors and commissioners on company performance (Khairani & Harahap, 2017; Thoomaszen & Hidayat, 2020; Raharjanti et al., 2023). Consequently, questions concerning the representation of women on boards remain intriguing topics for future studies.

LITERATURE REVIEW AND HYPOTHESES

Gender Diversity
In corporate boards, various types of diversity can represent top management, including age, gender, ethnicity, culture, religion, constitutional representation, educational background, knowledge, technical skills and expertise, industry and trade experience, and life and career experience (Fan, 2004). In this article, Pasaribu (2017) suggests two main hypotheses regarding gender diversity in top management positions. According to the first hypothesis, the primary factors related to the company's operations must be adequately considered when determining the board's gender composition. So, beyond the firm environment, there is a lot of push to get women on the board of commissioners or directors. In light of the first theory's conclusions, the second hypothesis posits that gender diversity on boards of directors or commissioners does not improve firm performance and effectiveness. A diverse board of directors includes members from a range of genders. The social, cultural, and psychological construction of gender. Hasan and Marimuthu (2015) in Fathonah (2018) define gender as the perception of differences between men and women. In gender diversity theory, the presence of women in top management results from pressure from substances outside the company environment, such as government regulations. Furthermore, gender diversity in top management positions regarding company effectiveness and performance is not optimal (Pasaribu, 2017).

Company Performance
Company performance is the financial condition of a company, which aims to assist management in making decisions. Apart from that, company performance concerns the effectiveness of capital utilization and the efficiency of firm activities (Kristianti, 2018). Noval et al. (2020) added that firm performance reflects operational activities, company finances, and the level of the company's financial health during the accounting period. Generally, stakeholders, especially investors, will be more careful in paying attention to company performance. This is because investors generally aim to invest in business to gain increased welfare. So, related to measuring financial performance, companies must be able to provide indicators of changes in the level of investor welfare based on investment results at a specific time (Kristanti, 2018). The formula for return on assets (ROA), namely net profit divided by total assets.

Hypotheses
Below is the hypothesis that this research is based on.
H1: The performance of a firm can be affected by the number of women on its board of directors.
H2: The performance of a firm can be affected by the number of women on its board of commissioners.
H3: Representation of women on both the board of directors and the board of commissioners affects the performance of a corporation.

RESEARCH METHOD
Population and Sample
The population is the broad object of study, consisting of individuals, animals, items, growing, events, symptoms, and test values as a source of data with unique features to the research that is being done. The organizations that took part in this research are companies operating in the real estate and property subsector that are listed on the Indonesian Stock Exchange. Here are the sample criteria to consider when using purposive sampling:
1. Companies from the real estate and property subsector are listed on the IDX from 2016 to 2022.
2. Companies that release yearly reports.
3. Companies offering data relevant to research goals.

Data Collecting Technique
Techniques of documentation and literature reviews were utilized in the data collection process. Documentation is done by gathering documentary data sources, such as annual reports from research samples. The literature review is data gathered from many sources of the subject being examined.

Hypotheses Test
We employed descriptive statistics, tests of classical assumptions, and tests of model feasibility to examine the data. The proportion of female directors and commissioners serves as a proxy for the presence of women on these boards, which is considered an independent variable in this study. The return on assets (ROA) is a measure of a company's performance that takes net profit and divides it by total assets.

RESULT AND DISCUSSION
Result
Statistic Descriptive
A descriptive statistical test was administered to provide a general description of the study object following the sample selection process. Table 1 displays the results of descriptive statistical tests.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOM_DIR</td>
<td>0,000</td>
<td>1</td>
<td>0,202</td>
</tr>
<tr>
<td>WOM_KOM</td>
<td>0,000</td>
<td>0,75</td>
<td>0,198</td>
</tr>
<tr>
<td>FIRM_PER</td>
<td>0,67</td>
<td>19,96</td>
<td>0,475</td>
</tr>
<tr>
<td>Total of Sample</td>
<td>248</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the data in Table 1, the variable WOM_DIR, which measures the percentage of female directors in Indonesian real estate and property businesses,
ranges from 0% to 100%, with an average of 20.2%. On average, women make up 20.2% of the board of directors of Indonesian enterprises operating in the real estate and property subsector. The range of values for the WOM_KOM variable, which measures the percentage of female commissioners, is 0% to 75%, with 19.8% being the average. This indicates that women make up 19.8% of the board of commissioners in Indonesian enterprises operating in the property and real estate subsector on average. The corporate performance variable can take on values between -0.67% and 19.96%, with an average of 47.5%. Companies in the real estate and property subsector had an average performance rating of 47.5%, according to these statistics.

Classic Assumption Test

Following a quality assessment of the data and before a feasibility evaluation of the model, one may undertake the classical assumption test. Finding out how closely the regression model under investigation complies with the classical assumption principles is the main goal of the test, which helps to minimize any possible problems related to these assumptions. Doing a normal test is not essential because there are more than 100 study data.

Multicollinearity Test

It is the purpose of the multicollinearity test to determine whether the independent variables in the regression model are significantly related to one another. According to Ghozali (2018), an ideal regression model should not exhibit a correlation with its independent variables. Two values—the tolerance and the variance inflation factor—are examined to determine the presence or absence of multicollinearity. Ghozali (2018) states that to assess the absence of multicollinearity in a regression model, one can evaluate the tolerance value, which should be less than 0.1, or the variance inflation factor (VIF), which should be greater than 10. Table 2 displays the examination results for each variable.

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistic</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>WOM_DIR</td>
<td>0.967</td>
<td>1.034</td>
</tr>
<tr>
<td>WOM_KOM</td>
<td>0.967</td>
<td>1.034</td>
</tr>
</tbody>
</table>

The computation of tolerance values shows that none of the independent variables have a value less than 0.10. This finding is further corroborated by the variance inflation factor (VIF) calculations, which showed that not a single independent variable had a VIF over 10. Results from the analysis show that the independent variables used in the regression model do not exhibit any signs of multicollinearity.

Heteroscedasticity Test

This study tested the heteroscedasticity assumption using the White test. Table 3 displays the findings of the White test that were achieved.

<table>
<thead>
<tr>
<th>R² White Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
</tr>
</tbody>
</table>
Following the information provided in Table 3, the White test can be computed using the formula $C^2 = n \times R^2$. If the calculated value of $C^2$ is less than the critical value of $C^2$ from the table, it indicates that the alternative hypothesis of heteroscedasticity in the model should be rejected (Ghozali, 2018). Next, the previously described computation is performed, resulting in the value of $C^2$ being equal to the product of 248 and 0.029. Based on the aforementioned calculations, a numerical value of 7.192 is derived. Subsequently, the computed value of $C^2$ is juxtaposed with the critical value of $C^2$ obtained from the table, revealing that the computed $C^2$ value (7.192) is less than the table $C^2$ value (233.99). Based on the obtained data, it may be inferred that there is an absence of heteroscedasticity within the research model.

**Autocorrelation Test**

In a linear regression model, the autocorrelation test determines if the confounding errors in period $t$ and period $t-1$ are correlated. If correlation occurs, it is called an autocorrelation problem which causes the model used to be unsuitable for use (Ghozali, 2018). The Lagrange Multiplier test is utilized for the autocorrelation test in this research. Results are displayed in Table 4.

**Table 4**

<table>
<thead>
<tr>
<th>Autocorrelation Test with Lagrange Multiplier Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>R square</td>
</tr>
</tbody>
</table>

By comparing the computed chi-square value, which is the R squared value multiplied by the number of samples, with the chi-square table, the presence of autocorrelation can be detected in the Lagrange Multiplier test. The absence of autocorrelation is indicated by a chi-square value that is smaller than the one found in the table. Findings from Table 4 indicate that the R-squared value is 1.24 ($n \times 248 \times 0.005$). There is a 233.99 value in the chi-square table. Since the computed chi-square (1.24<233.99) is less than the chi-square table value, it can be inferred that the study does not exhibit autocorrelation.

**Goodness of Fit**

This study's regression model was tested using the model feasibility test to determine its practicability. Model feasibility tests in this study include the F-test, t-test, and coefficient of determination test. The three different kinds of examinations are broken down below.

**Determination Coefficient Test**

$R^2$ is a measure of how much of the dependent variable can be explained by the independent variables when all of them are considered together. The range of values for the coefficient of determination is from zero to one. An $R^2$ number closer to one indicates that the independent variable provides a stronger explanation for the dependent variable, whereas an $R^2$ value closer to zero indicates that the independent variable provides a weaker explanation.

**Table 5 Determination Coefficient Test Result**

| R square Value | 0.029 |
A hypothesis test generated an $R^2$ value of 0.029, which means that the independent variable explains 2.9% of the dependent variable and that other factors, other than the regression equation model, account for the remaining 97.1% (100%-2.9%). The significance level is less important than the R-squared value when trying to establish a connection between variables; so, a low R-squared value is sufficient.

**F Test**

To find out how much the independent factors impact the dependent variable all at once, the F test is utilized. The results of the F test showed that the independent variable had a simultaneous effect on the dependent variable; this was confirmed by a value of 3.597 at the 0.029 significance level.

**t Test**

To determine whether the independent variable's regression coefficient is partially significant, one uses the t-test (Ghozali, 2018). Here is a table 6 displaying the results of computing individual t-statistical parameters.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>Significant</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constanta</td>
<td>1.060</td>
<td>1.934</td>
<td>0.054</td>
<td></td>
</tr>
<tr>
<td>WOM_DIR</td>
<td>-4.443</td>
<td>-2.647</td>
<td>0.009</td>
<td>Significant</td>
</tr>
<tr>
<td>WOM_KOM</td>
<td>1.565</td>
<td>0.905</td>
<td>0.367</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

Here is the multiple linear regression equation used in this study, as shown by the computations.

Company Performance = 1,060 – 4,443 WOM_DIR + 1,565 WOM_KOM + $\varepsilon$ ........

(i)

As an independent variable, the number of female board members significantly and negatively impacts business outcomes, according to the results of a multiple linear regression analysis. The reason is that a p-value is less than 0.05, which is the significance level. A significance value greater than 0.05 indicated that having women on the board of commissioners had no bearing on the success of the company.

**Discussion**

**First Result with Hypothesis Testing**

The premise of this study is that boardroom diversity, namely the representation of women, affects financial results. The hypothesis test found that having female directors had a negative effect on company performance (t statistical value -2.647). At the 0.009 level of significance, the statistical t-value is 2.647 > 1.653, which means that the null hypothesis is rejected.

This study's findings are consistent with those of Fathonah (2018), Khairani and Harahap (2019), Thoomaszen and Hidayat (2020), and Raharjanti et al. (2023). These results are intriguing since they point in a negative but statistically significant direction. The reason is, that women make up a disproportionately small percentage of the research sample in the real estate and property subsector, where the majority of companies do not have female board members. Furthermore, according to Khairani and Harahap (2019), most Indonesia Stock Exchange-listed companies choose women for their boards of directors due to familial ties rather than merit. According to Noorkhaista and Sari (2017), as cited in Andrianov and Santosa
(2023), this unfavorable impact could be attributable to women’s inclination to shun confrontation and be risk averse, the sway that women hold in board positions, or the fact that the company does not truly require women in top management roles.

**Second Result with Hypothesis Testing**

The second hypothesis tested here is that having female commissioners has an effect on business results. The computed t-value is 0.905 at the 0.367 level of significance, according to the statistical test results. If we reject the second hypothesis, we can conclude that the computed t-value of 0.905 is less than the t-table value of 1.653, so we can reject the null hypothesis.

Findings from studies by Thoomaszen and Hidayat (2020) and Ariska et al. (2021) corroborate the second idea. Companies and government bodies are now beginning to think about the potential contributions of women to their boards of directors or commissioners. The fact remains, nevertheless, that not all businesses have completely trusted women with senior managerial roles. As evidence, consider the small number of real estate and property subsector corporations whose boards of commissioners are predominately comprised of women. Additionally, the government’s involvement was exposed by Thoomaszen and Hidayat (2020), who have not yet decided on the percentage of women to serve in high managerial positions.

**Third Result with Hypothesis Testing**

Thirdly, this study tests the notion that gender parity on boards of directors and commissioners affects company performance. At the 0.029 level of significance, the statistical test yields an F value of 3.597. As a result, we adopt the third hypothesis. In agreement with this study are studies by Eliya and Suprapto (2022) and Teg (2016). Women are seen as effective information facilitators, according to Earley and Mosakowski (2000) cited in Fathonah (2018). Aside from that, women are resilient when confronted with environmental obstacles.

**CONCLUSION, LIMITATION AND SUGGESTION**

This study found that having women on the board of directors lowers company performance, having women on the board of commissioners has no impact, and having women on both the board of directors and the board of commissioners at the same time boosts performance significantly. For example, instead of focusing on the real estate and property subsector, future studies should look at the financial sector as a whole. For the next research, it could be added by comparing ASEAN countries like Indonesia and Philippines.

**Note of Gratitude**

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**REFERENCES**


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