CSR Disclosure in Indonesian SOEs: Does It Influenced by Company Characteristics and Corporate Governance?

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Abstract

As sustainable development is echoed, environmental and social matters and Corporate Social Responsibility (CSR) are increasingly being considered. Some companies are increasingly aggressive in disclosing their CSR, but some still need to be more optimal. This study aims to determine what factors can influence the disclosure of CSR in Indonesian SOEs. This study used multiple linear regression analysis with 51 samples observed. The results obtained in this study show that the size of the company, the type of sector, and the size of the board of directors positively affect CSR disclosure. In contrast, the involvement of female board members and green accounting have no influence. This research is expected to add insight and increase further references for future researchers and investors to discover the factors that affect CSR disclosure and can help decision-making.

Keywords: CSR Disclosure, SOEs, Sectors Type, Directors

1. Introduction

Since the agreement of Sustainability Development Goals (SDGs), which aims to maintain the improvement of the community's economy, the sustainability of the community's social life to the quality of the environment, issues about the social environment have again been highlighted by the public, including Corporate Social Responsibility (CSR). CSR is developing now, starting from public protests against the actions of companies that disturb or do not care about the surrounding community. In Indonesia itself, there are quite a lot of cases related to CSR, such as the case of illegal gold mining that occurred in West Pasamanan early in 2023, which is still unresolved (Zikri, 2023), environmental pollution cases committed by PT KSA in West Cikarang in mid-2022 (Newsroom Diskominfosantik, 2022), disputes over mining companies PT DPM in North Sumatra since 2019 (Sengketa Perusahaan Tambang Di Indonesia: China Didesak Tingkatkan Standar Perlindungan Lingkungan, 2022), and so on. In general, CSR is developed as a form of corporate responsibility to the social environment of the
surrounding community. This form of responsibility can be in the form of empowering the community, making donations to the surrounding community, providing scholarships, and efforts to protect the environment.

The reason CSR is important to implement is to prevent companies from committing arbitrary acts that can harm society and the environment. It is also based on the fact that the company operates side by side with society and the environment. To ensure that the company can continue to operate, the company must maintain its relationship with these two things. Many people argue that companies that implement CSR will benefit more than companies that do not implement it. These benefits such as getting a positive view or image from the community, the product being preferred by the community, increasing company value, and the potential to establish profitable cooperation with various parties. Research conducted by Saraswati et al. (2021) shows that the implementation of CSR can increase company access to funding and reduce company risk. Extensive and quality CSR reporting will be more beneficial for investors, fund providers, and the surrounding community. However, this is not the only motive that drives companies to implement CSR.

The practice of CSR itself in Indonesia has been regulated in Law No. 40 of 2007 concerning Limited Liability Companies (LLC). Article 74 states that companies are obliged to carry out CSR and will be penalized if companies do not implement it. It is also mentioned that companies are required to budget this CSR practice as a cost and be implemented with due regard to compliance and fairness. However, the implementation of CSR in Indonesia is still not comprehensive or has not been implemented properly. This is what disturbs a handful of researchers to find out the basis of factors that underlie companies implementing CSR.

Many variables were used by previous researchers in research on CSR disclosure. The variables that are commonly tested are company size, profitability, and leverage. Some researchers examine the influence of CEO attributes, as well as the influence of board characteristics, such as board size, the proportion of female members on the board, and the number of royal directors. Most researchers found that company size had a significant or positive effect on CSR disclosure with data samples in different countries (Gaol & Harjanto, 2019; Masoud & Vij, 2021; Matuszak et al., 2019; Solikhah, 2016; Wardhani et al., 2019; Winarto & Rachmawati, 2020). In the same study, Masoud & Vij (2021) and Solikhah (2016) found that sector type also affects CSR disclosure.

As for the size of the board of directors and the proportion of female members on the board of directors, the results vary. Tapver (2019) with global banking companies data and Rouf & Hossan (2021) with banking companies data in Bangladesh found that the size of the board of directors did not affect CSR disclosure. While in other studies the opposite results were found, in which the size of the board of directors had a positive effect on CSR disclosure, this study was conducted with banking data but in different countries (Jahid et al., 2020; Matuszak et al., 2019). Then, in most studies, female board member variables were found to have a positive effect on CSR disclosure (Jahid et al., 2020; Matuszak et al., 2019; Rouf & Hossan, 2021; Tapver, 2019), while in another study female board members were found to negatively affect CSR disclosure, the study was conducted using banking companies’ data in Arabian Gulf Countries (Issa et al., 2022).

The last variable that will be tested by the researcher is green accounting. This variable is still rarely tested against CSR disclosures and the results are quite varied. In research on mining companies, green accounting has a positive effect on CSR disclosure (Laksni & Hanin DE, 2022; Rohayati & Mulyati, 2022). Conversely, in banking companies, green accounting does not have a significant effect on CSR disclosure (Azahra et al., 2021).

The existence of research gaps in the form of different research results and the lack of research on CSR disclosure in the field of Indonesian SOEs encourages the researcher to review the influence of
company size, type of sector, board of directors size, involvement of female board members, and green accounting on CSR disclosure in the Indonesian SOEs. CSR disclosure in the Indonesian SOEs is important to know because SOEs are business entities owned and managed by the state, so SOEs indirectly become a role model for private companies in carrying out policies and regulations made by the state. This research is also based on the aim of finding out whether the results of previous research can also be applied to the Indonesian SOE sector, especially research conducted by Masoud & Vij (2021), which examines factors that influence CSR disclosure in Libyan SOEs. The results of this study are expected to contribute to the education sector and increase further references to researchers regarding factors that affect CSR disclosure in the field of SOEs.

2. Literature Review

2.1 Theory of Legitimacy and Application of CSR in Indonesia

Legitimacy theory is generally used to explain corporate behavior related to society. According to Dowling & Prefer, this theory explains that while operating in the external environment, companies try to create harmony between the environment and the norms of behavior that apply in the community environment with the activities carried out by the company (Putri et al., 2022). This shows the awareness of companies that operate side by side with the community. According to this theory, a company can only continue to operate if the surrounding community recognizes its existence and the way it operates following societal norms. Brown & Deegan state that after the community recognizes the company, it will ensure the continuity or sustainability of the company (Solikhah, 2016).

In line with the theory of legitimacy, CSR is applied by companies to maintain their survival. Gray et al. in Solikhah (2016), showed the application of CSR to maintain the sustainability and operation of the company in the community. Therefore, in operating the company is not only responsible to stakeholders, but also to the surrounding community. CSR, in Wibisono's opinion, is a form of responsibility owned by companies to behave ethically, in order to maximize positive impacts in the economic, social, and environmental fields (Putri et al., 2022). However, in practice, the implementation of CSR in Indonesia is still not comprehensive and maximal.

In research conducted by Nayenggita et al. (2019), it was found that the implementation of CSR in Indonesia is still in the stage of profit sharing which is used for wants rather than the real needs of the community. There are still many companies that do not understand the proper implementation of CSR. Companies tend to make inappropriate contributions to educate or create a society which then creates community dependence on companies (Nayenggita et al., 2019). In another study, it was also found that CSR practices carried out by companies are generally limited to providing assistance to the community in the form of health, social and educational assistance, as well as distributing funds to amil zakat institutions (Gandi & Mutaqi, 2022; Setiyowati & Azqiya, 2022; Sulistyowati et al., 2022), and labor management (Ardani & Mahyuni, 2020; Yudhistira & Darma, 2020). Another CSR program is employing local residents and efforts to protect nature so that the company's existence can benefit the surrounding community (Ardani & Mahyuni, 2020). However, such CSR practices are still rare to be founded.

The implementation of CSR that has not been maximized is caused by companies that consider the costs that must be incurred and the impact in the short term compared to the main concept of implementing CSR itself related to sustainable development (Putri et al., 2022). The company can be said to think more about the benefits to be obtained when applying this concept. In another study, it was found that there are two motives underlying the implementation of CSR carried out by companies, namely economic motives and social motives (Hadi & Baihaqi, 2020). The social motive in implementing CSR is to reduce the negative impact of the company's operating activities and problems related to society, while the economic motive is to build corporate image, promotion, and corporate legitimacy (Hadi & Baihaqi, 2020). However, based on the results of Hadi & Baihaqi's
research (2020), this social motive is increasingly displaced by economic motives, which are caused by deviations from stakeholders who are less interested in helping solve social problems. The use of funds that are more dominant for internal parties than external parties also shows this disinterest (Hadi & Baihaqi, 2020). As shown in research conducted by Mustofa & Trisnaningsih (2022), companies implement CSR only as a strategy to outperform their competitors. The application of CSR in this research is driven by several urgency or motives—economic—namely increasing company commitment, corporate image, and company performance (Mustofa & Trisnaningsih, 2022).

2.2 Stakeholder theory

Stakeholder theory is a theory that explains the relationship between companies and stakeholders. This theory assumes that stakeholders can determine the existence of the company and the stronger the position of stakeholders, the more likely the company will be to adjust to the wishes of stakeholders (Endiana, 2019). In addition, Khalif et al. and Gray et al. argue that this theory also seeks to explain how companies identify strong stakeholder groups and how companies try to respond to their expectations to win the support of stakeholders who can guarantee the company can continue to operate (Masoud & Vij, 2021). This is based on the fact that stakeholders play an important role in controlling the resources needed by the company. Thus, without the support of stakeholders, the company cannot or is difficult to maintain its sustainability. As a party that also sparked stakeholder theory, Freeman et al. define stakeholders as groups or individuals who can influence or be influenced by the process of achieving company goals (Rouf & Hossan, 2021).

Regarding this study, stakeholder theory is used to explain the relationship between power and/or stakeholder interest and information disclosure in the company's annual report, in this case regarding CSR disclosure. Van der Laan Smith once mentioned that companies will tend to increase CSR disclosure when stakeholders pay high attention to environmental and social issues (Permatasari & Setyastrini, 2019). This is intended to get support from stakeholders as previously stated. In addition, according to Adebayo, stakeholders can claim their right to influence the activities carried out by the company and show certain expectations regarding CSR practices (Matuszak et al., 2019). So, in addition to companies trying to attract stakeholder support by implementing CSR programs, stakeholders themselves can also directly influence companies to implement CSR programs through decision-making processes.

2.3 Company size

Company size is a scale to find out how big or small a company is. Based on its size, companies can be categorized into micro, small, medium, and large enterprises, depending on the number of assets owned, the number of workers, or sales made. Company size is pretty much used as a variable tested against CSR disclosures. This is based on a concept that explains that companies will tend to express CSR if the size gets bigger (Permatasari & Setyastrini, 2019). Cowen, Ferreri & Parker argue that the larger the size of the company, the company will tend to carry out activities that have an impact on the community so that it can remain legitimized by the community (Permatasari & Setyastrini, 2019). Another concept shows an opposite relationship, where companies that are getting bigger in size will tend to use their assets in business development rather than in the application of CSR (Rohayati & Mulyati, 2022).

The results of previous research show that company size affects CSR disclosure (Gaol & Harjanto, 2019; Masoud & Vij, 2021; Matuszak et al., 2019; Rohayati & Mulyati, 2022; Solikhah, 2016; Wardhani et al., 2019; Winarto & Rachmawati, 2020). However, the direction or nature of the relationship is still branching out with the majority of results being positive relationships (Masoud & Vij, 2021; Matuszak et al., 2019; Solikhah, 2016; Wardhani et al., 2019; Winarto & Rachmawati, 2020). Even if it is not much, the results that show the size of the company negatively affects CSR
disclosure remain (Rohayati & Mulyati, 2022). So, based on these previous studies, a hypothesis can be drawn, as follows:

H1: The size of the company is positively influencing CSR disclosure.

2.4 Type of sector

Sector type is one of the categories of grouping companies. In general, the business sector consists of agriculture, mining, manufacturing, banking, retail, tourism, telecommunications, health, food and beverages, insurance, infrastructure, logistics, and so on. In previous research, sector type corresponds to industry sensitivity. Industry sensitivity refers to the level of sensitivity of the industry to economic, political, and social changes. Testing this variable on CSR disclosure is based on several studies that show different results in CSR disclosure due to different samples of industry sectors used. Based on legitimacy theory, companies engaged in sectors that are sensitive to environmental issues or social issues will tend to disclose the application of CSR compared to companies that are less sensitive to these issues (Permatasari & Setyastrini, 2019).

According to research conducted by Deegan & Jeffry and Deegan, companies operating in the same sector as companies revealing CSR will tend to disclose their CSR implementation to look the same as other companies (Masoud & Vij, 2021). Referring to this theory, previous research has shown that the type of company sector positively affects CSR disclosure (Masoud & Vij, 2021; Solikhah, 2016). Thus, a hypothesis can be drawn based on previous research, as follows:

H2: The type of sector is positively influencing CSR disclosure.

2.5 Board of Directors

In the corporate structure, in addition to the CEO, there is a board of directors which is a group of people elected by shareholders. The board of directors as a whole is authorized and responsible for the management of the company represents the company and consists of internal and external parties. Many parts of the board of directors can be tested for their effect on CSR disclosure, two of them: being the size of the board of directors and female board members.

2.5.1 Size of the Board of Directors

The size of the board of directors basically varies between less than 10 people to more than 30 people depending on the needs of the company. A small board of directors is considered to be more effective than a large one in terms of decision-making. However, concerning CSR disclosure, the larger size of the board of directors will increase the company's CSR disclosure (Jahid et al., 2020). The larger the size of the board of directors, it can be said the board directors will be richer by different knowledge and opinions. This is supported by several previous researchers who found that the size of the board of directors has a significant or positive effect on CSR disclosure (Jahid et al., 2020; Matuszak et al., 2019). On the other hand, Tapver (2019) and Rouf & Hossan (2021) found no effect of company size on CSR disclosure. At the beginning of his presentation using a sample of banking companies in the Global scope, Tapver (2019) found that the larger company size will reduce the tendency of CSR disclosure by banks. However, after being controlled or tested per country, the size of the board of directors was found to have no effect or irrelevance on CSR disclosure (Tapver, 2019). Based on the results of previous studies, a hypothesis can be drawn, as follows:

H3: The size of the board of directors is positively influencing CSR disclosure.

2.5.2 Involvement of female board members

In the previous point, it was mentioned about diversity on the board of directors. One form of diversity is gender diversity on the board of directors, which also leads to the diversity of opinion considering the mindset of women relative to men. Most studies confirm that female board members positively influence CSR disclosure (Jahid et al., 2020; Matuszak et al., 2019; Rouf & Hossan, 2021; Tapver, 2019). This means that the more female board members, the more CSR disclosures will
increase. In Khan et al.’s research, it is known that women are relatively more interested in social activities than men (Jahid et al., 2020). Meanwhile, in a study conducted by (Issa et al., 2022) using a sample of banking companies in Arabian Gulf countries, female board members were found to negatively affect CSR disclosure. This could be due to the lack of knowledge and experience possessed by women who are members of the board of directors of banking companies in Gulf Arab countries (Issa et al., 2022). Based on these results, a hypothesis can be drawn, as follows:

H4: The involvement of female board members is positively influencing CSR disclosure.

2.6 Green Accounting

Environmental issues such as global warming and ozone depletion encourage various parties to design new concepts that are more friendly to the environment, especially those related to business or economic activities, such as green accounting. Green accounting is a relatively new concept in the field of accounting that also pays attention to the environment such as CSR. Green accounting involves incorporating environmental considerations into financial reporting and decision-making processes. In Syekha’s opinion, green accounting is a concept of using costs or expenses that seek to protect the environment (Rohayati & Mulyati, 2022). Green accounting is very interesting to be tested against CSR disclosure because the concept is similar to the concept of CSR, so it can be known whether the implementation of CSR also affects the environment or is only limited to providing assistance to the community.

Previous research results have shown that green accounting tends to have a positive effect on CSR disclosure (Laksmi & Hanin DE, 2022; Rohayati & Mulyati, 2022). This is because green accounting is interrelated with CSR where companies implement CSR as a form of their responsibility to the environment in which they are located (Rohayati & Mulyati, 2022) or it can also be said that green accounting is part of the implementation of CSR itself. Conversely, a study conducted by Azzahra et al. (2021) did not get the influence of green accounting on CSR disclosure. The reason is the company's reluctance to disclose the costs of environmental activities it carries out as CSR implementation (Azzahra et al., 2021). Based on the results of previous research, a hypothesis can be drawn, as follows:

H5: Green accounting positively affects CSR disclosure.

Based on the presentation of the literature review and the formulation of the hypothesis above, the following is presented as an illustration of the research model carried out along with the relationship between dependent and independent variables used by the researcher.

\[ \text{Figure 1. Research Model} \]

\[ \text{Company Size} \quad H_1 (+) \]
\[ \text{Type of Sector} \quad H_2 (+) \]
\[ \text{Board of Director Size} \quad H_3 (+) \]
\[ \text{Female Board Member} \quad H_4 (+) \]
\[ \text{Green Accounting} \quad H_5 (+) \]

\[ \text{Source: Researcher, 2023} \]
3. **Research Method**

### 3.1 Sample and data

This study aims to examine factors that can influence CSR disclosure in Indonesian SOEs. Of the total population, namely all Indonesian state-owned companies as many as 13 companies, 11 companies were sampled with a research period of 5 years from 2017 to 2021, so the total samples used were 55 samples. The sample selection technique applied is the purposive sampling technique. According to Sugiyono, purposive sampling is a method to ensure the picture of research with some considerations aimed at making the samples obtained more representative later (Lenaini, 2021). Simply put, purposive sampling techniques use a few considerations or criteria in selecting samples from the entire population. Purposive sampling is applied to ensure that the specific type of sample or case that can be included is part of the final sample in the study (Campbell et al., 2020). Effective purposive sampling must have clear criteria and reasonable reasons for the sample used (Mweshi & Sakyi, 2020). The sample selection criteria in this study are Indonesian SOEs listed on the IDX for 5 consecutive years from 2017 to 2021 that use the Rupiah currency in their annual reports to obtain the latest data on the condition of Indonesian SOEs and comparisons of financial conditions on the same scale.

#### Table 1. Sample Selection Criteria

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesian SOEs listed on the IDX from 2017 to 2021</td>
<td>13 samples</td>
</tr>
<tr>
<td>Indonesian SOEs that use currencies other than the Rupiah</td>
<td>2 companies</td>
</tr>
<tr>
<td>SOEs that meet the criteria</td>
<td>11 companies</td>
</tr>
<tr>
<td><strong>Samples that meet the criteria (11 companies x 5 years)</strong></td>
<td><strong>55</strong></td>
</tr>
<tr>
<td>Sample outlier</td>
<td>(4)</td>
</tr>
<tr>
<td><strong>Samples observed</strong></td>
<td><strong>51</strong></td>
</tr>
</tbody>
</table>

*Source: IDX, 2023*

This study used content analysis methods with quantitative methods of multiple regression analysis to conduct testing. Content analysis is used in the scoring process against qualitative data in annual reports and corporate sustainability reports so that the data becomes numerical and can be tested for influence. According to Weber, content analysis is a method to codify narrative texts into various groups or categories according to desired criteria (Masoud & Vij, 2021). The use of content analysis is aimed at extracting CSR information and information related to green accounting from annual reports and corporate sustainability reports.

Then, quantitative research seeks to parse the breadth of study results and generalize them as truth or empirical facts in general (Firmansyah et al., 2021). This method tries to find facts or truth, so it focuses on facts rather than the situation that should be, and one of the goals is to reveal the relationship between variables (Yue & Xu, 2019). In quantitative research, there is a principle that states that there is no valid research method if there is no reliable data (Yue & Xu, 2019). Therefore, in this study, SPSS version 29 was used to test the validity of the data and regression model, as well as other tests to find out what factors can affect CSR disclosure in Indonesian SOEs.

### 3.2 Regression model and variable measurements

#### 3.2.1 Dependent variable

The dependent variable in this study is CSR disclosure which will identify the presence of elements or components in CSR disclosure in the company's annual report and sustainability report. This variable will then be elaborated into 91 components, under the GRI G4 guidelines and measured by the dummy method in accordance with research conducted by Masoud & Vij (2021), where the number 0 will be given if the component is not found in the annual report or sustainability report and the...
number 1 is given if the component is contained in the annual report or sustainability report of the company concerned. In addition, this study applies an unweighted approach to scoring. This approach is applied with the assumption that all components are equally valued (Masoud & Vij, 2021). Based on this approach, the scoring for CSR disclosure variables is outlined as follows.

\[
CSRDIS_i = \frac{1}{nd_i} \sum_{m=1}^{nd_i} DISC_{im}
\]

(1)

where CSRDIS leads to CSR disclosure for company \(i\) and \(DISC_i\) will be 0 if there is no disclosure of any information about CSR in the company and is calculated based on the number of components of CSR disclosure in company \(i\) in year \(m\). Then, \(nd_i\) refers to the number of components of CSR disclosure in company \(i\).

3.2.2 Independent variables

The independent variables consist of company size, type of sector, board size, involvement of female board members, and green accounting. Based on previous studies, the size of the company is measured by the natural logarithm of the company’s total assets assuming the company operates based on assets, so that the more assets, the larger the company (Wardhani et al., 2019). Then, the type of sector will be measured by a dummy method where the number 1 will be given for the category of companies that are sensitive to the environment and the number 0 if vice versa. The categories include manufacturing, oil and gas, transportation, construction, tourism, and food and beverage companies (Masoud & Vij, 2021). The size of the board of directors is measured based on the number of members of the board of directors and the involvement of female board members refers to the percentage of female board members assuming that the greater the percentage, the greater the influence in CSR disclosure decision-making. Finally, green accounting will be measured based on accounting reporting on the costs of environmental maintenance and environmental improvement, such as recycling, and environmental research, etc. in the annual report (Azzahra et al., 2021). These variables also include green banking disclosures and PROPER awards to companies (Endiana et al., 2020). Scoring for this variable is carried out on a nominal scale, where the number 0 is given if there is no component, number 1 if there is disclosure about PROPER and/or green banking, and number 2 if there is a disclosure of environmental or related costs in the company’s financial statements.

3.2.3 Control variables

Control variables are variables that are used to help independent variables affect the dependent variable. The control variables used in this study were the company’s age, return on assets (ROA), and return on equity (ROE). The company’s age is measured by subtracting the observation year from the established year. Then, the ROA is measured by dividing the net profit by total assets, while the ROE is measured by dividing the net profit by total equity.

3.2.4 Regression model

The analysis process is carried out with multiple regression models to analyze the relationship between factors affecting CSR disclosure. This is based on previous research which also used multiple regression models (Masoud & Vij, 2021). The regression model is formulated as follows in accordance with the hypothesis development.

\[
CSRDIS_i = \alpha + \beta_1 COMPS_i + \beta_2 TOS_i + \beta_3 BDS_i + \beta_4 FBM_i + \beta_5 GRA_i + \beta_6 COAG_i + \beta_7 ROEA_i + \\
\beta_8 ROEOE_i + \varepsilon_i
\]

(2)

where CSRDIS leads to the dependent variable (CSR disclosure) and the independent variable consists of COMPS: company size, TOS: sector type, BDS: board size, FBM: female board members,
and GRA: green accounting, and control variables consisting of COAG: company age, REOA: return on assets, REOE: return on equity. $\alpha$ is a constant, while $\beta_1$ up to $\beta_8$ is the coefficient of any calculation of the independent variable and $\varepsilon_i$ leads to an error.

4. Results and discussion
4.1 Descriptive Statistic

Table 2 shows descriptive statistic results from dependent and independent variable data. In the table, it can be known the number of CSR disclosures made by companies based on the GRI G4 indicator. Based on the data that has been collected, CSR disclosure contains at least 4 components and at most 56 components. Then, the mean column shows the majority of CSR disclosure in the observed companies, which is 24 components out of 91 components or 26.37%. This value is slightly higher than the average CSR disclosure obtained from previous research, which is 23.26% (Salsabilla et al., 2022). That study used 95 samples of state-owned companies listed on the IDX during 2016-2020. Because the period or duration of observation is not much different, the mean results are also not much different. Higher mean results show the enhancement made by SOEs in disclosing their CSR practices.

Furthermore, on the independent variables, the size of the company in this study ranged from 16.71 to 25.91 with an average company size of 20.66. The type of business sector ranges between 0 and 1, as well as green accounting whose minimum value is 0 and the maximum value is 2. The size of the board of directors in this study ranged from 6 to 12, with an average board size of 8.25. Finally, the involvement of female board members is at least 0% (there are no female board members) and at most 50%, with an average of 27.13%. This shows that in most of the companies observed, male board members still dominate. Then, the standard deviation value as a whole is smaller than the mean value, so it can be concluded that the data obtained are quite diverse widely distributed, or spread.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Size</td>
<td>51</td>
<td>16.71</td>
<td>25.91</td>
<td>20.6571</td>
<td>2.34274</td>
</tr>
<tr>
<td>Type of Sector</td>
<td>51</td>
<td>0.00</td>
<td>1.00</td>
<td>0.5098</td>
<td>0.50488</td>
</tr>
<tr>
<td>Board Size</td>
<td>51</td>
<td>6.00</td>
<td>12.00</td>
<td>8.2549</td>
<td>2.34813</td>
</tr>
<tr>
<td>Female on Board</td>
<td>51</td>
<td>0.00</td>
<td>50.00</td>
<td>27.1296</td>
<td>12.13605</td>
</tr>
<tr>
<td>Green Accounting</td>
<td>51</td>
<td>0.00</td>
<td>2.00</td>
<td>0.5882</td>
<td>0.60585</td>
</tr>
<tr>
<td>Age</td>
<td>51</td>
<td>18.00</td>
<td>123.00</td>
<td>60.4510</td>
<td>26.63780</td>
</tr>
<tr>
<td>ROA</td>
<td>51</td>
<td>0.10</td>
<td>16.50</td>
<td>3.4465</td>
<td>3.57434</td>
</tr>
<tr>
<td>ROE</td>
<td>51</td>
<td>0.50</td>
<td>29.20</td>
<td>12.0194</td>
<td>6.94661</td>
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<tr>
<td>CSR Disclosure</td>
<td>51</td>
<td>4.00</td>
<td>56.00</td>
<td>23.7451</td>
<td>12.45928</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed

4.2 Classical Assumption Test

Classical assumption tests are carried out to ensure that the regression model formulated has accuracy in estimation, is not biased and the results are consistent (Mardiatmoko, 2020). There are 4 classic assumption tests in this study, namely the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The normality test in this study was carried out using the Kolmogorov-Smirnov one-sample test assuming the data was normally distributed if
Table 3. Multicollinearity test

<table>
<thead>
<tr>
<th>ROE</th>
<th>ROA</th>
<th>Age</th>
<th>Green Accounting</th>
<th>Female Board Member</th>
<th>Board Size</th>
<th>Type of Sector</th>
<th>Company Size</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td>0.244</td>
<td>4.100</td>
<td>0.078</td>
<td>0.147</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>0.009</td>
<td>1.000</td>
</tr>
<tr>
<td>ROA</td>
<td>1.000</td>
<td>-0.262</td>
<td>-0.166</td>
<td>-0.091</td>
<td>0.364</td>
<td>-0.803</td>
<td>0.078</td>
<td>-0.169</td>
<td>0.009</td>
</tr>
<tr>
<td>Age</td>
<td>-0.093</td>
<td>0.009</td>
<td>-0.169</td>
<td>0.372</td>
<td>0.364</td>
<td>-0.133</td>
<td>0.009</td>
<td>0.004</td>
<td>0.009</td>
</tr>
<tr>
<td>Green Accounting</td>
<td>-0.147</td>
<td>0.004</td>
<td>-0.133</td>
<td>0.372</td>
<td>0.364</td>
<td>-0.169</td>
<td>-0.241</td>
<td>0.026</td>
<td>0.009</td>
</tr>
<tr>
<td>Female Board Member</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>0.364</td>
<td>0.364</td>
<td>-0.133</td>
<td>0.264</td>
<td>0.056</td>
<td>0.009</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.169</td>
<td>-0.169</td>
<td>-0.169</td>
<td>0.372</td>
<td>0.372</td>
<td>-0.170</td>
<td>0.056</td>
<td>0.013</td>
<td>0.009</td>
</tr>
<tr>
<td>Type of Sector</td>
<td>0.372</td>
<td>0.372</td>
<td>0.372</td>
<td>0.372</td>
<td>0.372</td>
<td>-0.170</td>
<td>0.136</td>
<td>0.013</td>
<td>0.009</td>
</tr>
<tr>
<td>Company Size</td>
<td>0.009</td>
<td>0.009</td>
<td>0.009</td>
<td>0.009</td>
<td>0.009</td>
<td>0.009</td>
<td>0.009</td>
<td>0.009</td>
<td>0.009</td>
</tr>
<tr>
<td>Tolerance</td>
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<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
</tr>
<tr>
<td>VIF</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Data processed
The value was more than 0.05. The test results carried out on the data in this study were 0.200 and the value had exceeded 0.05, so it can be concluded that the data in this study has been distributed normally.

The next test is the multicollinearity test, which is carried out based on Ghozali’s opinion, which is to prove there is no correlation among independent variables in the model or regression equation formed (Winarto & Rachmawati, 2020). The multicollinearity test is shown in Table 4 using the pairwise correlation method and the tolerance value and VIF value. The condition for no multicollinearity is that the pairwise correlation value is not greater than 0.9 (<0.9), the tolerance value is more than 0.1 (>0.1), and the VIF value is less than 10 (<10). The test results in this study (Table 3) show values that follow these requirements, so that the regression equation in this study does not experience multicollinearity.

Then, a glejser test is performed to perform a heteroscedasticity test. According to Setiawan and Kusrimi, this test aims to determine whether there is heteroscedasticity in the regression equation which causes regression testing to be invalid (Sari et al., 2017). Table 4 shows the results of the glejser test that have met the homogeneity requirement, namely a significance value of more than 0.05.

Table 4. Glejser 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>(Constant)</td>
<td>-0.001</td>
<td>0.045</td>
<td>-0.016</td>
<td>0.987</td>
</tr>
<tr>
<td>Company Size</td>
<td>2.278E-05</td>
<td>0.000</td>
<td>0.209</td>
<td>0.433</td>
</tr>
<tr>
<td>Type of Sector</td>
<td>3.556</td>
<td>3.724</td>
<td>0.442</td>
<td>0.955</td>
</tr>
<tr>
<td>Board Size</td>
<td>0.221</td>
<td>0.805</td>
<td>0.114</td>
<td>0.274</td>
</tr>
<tr>
<td>Female on Board</td>
<td>-0.020</td>
<td>0.078</td>
<td>-0.045</td>
<td>-0.251</td>
</tr>
<tr>
<td>Green Accounting</td>
<td>-1.009</td>
<td>1.261</td>
<td>-0.131</td>
<td>-0.800</td>
</tr>
<tr>
<td>Age</td>
<td>-0.001</td>
<td>0.030</td>
<td>-0.007</td>
<td>-0.041</td>
</tr>
<tr>
<td>ROA</td>
<td>0.394</td>
<td>0.337</td>
<td>0.404</td>
<td>1.169</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.175</td>
<td>0.193</td>
<td>-0.324</td>
<td>-0.909</td>
</tr>
</tbody>
</table>

Source: Data processed

The fourth classical assumption test, namely the autocorrelation test, is carried out by comparing the Durbin-Watson value with the du value in the Durbin-Watson table. The condition for no autocorrelation is the value of $d < 4 - du$. The Durbin-Watson value obtained in this study was 2.047 (see Table 5) with the number of variables (k) as many as 8 variables and the number of data (n) as many as 50 pieces. The compared du values of 1.9297 and $4 - du$ are equal to 2.0703. So the values of $1.9297 < 2.047 < 2.0703$ meet the requirements and it is concluded that there is no autocorrelation in the regression model tested.

Based on the results of the tests that have been done, the regression equation in this study can be said to have been valid, unbiased, and consistent. Therefore, this research can be continued.

4.3 Multiple regression analysis and hypothesis testing
Multiple regression analysis is aimed at determining how much influence the independent variable has on the dependent variable. Table 5 displays the results of regression testing based on the equations that have been formed.
Table 5. Results of multiple linear regression analysis and 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>(Constant)</td>
<td>-125.119</td>
<td>23.372</td>
<td>-5.353</td>
<td>0.000</td>
</tr>
<tr>
<td>Company Size</td>
<td>5.348</td>
<td>0.871</td>
<td>1.006</td>
<td>6.143</td>
</tr>
<tr>
<td>Type of Sector</td>
<td>18.828</td>
<td>5.685</td>
<td>0.763</td>
<td>3.312</td>
</tr>
<tr>
<td>Board Size</td>
<td>2.387</td>
<td>1.032</td>
<td>0.450</td>
<td>2.313</td>
</tr>
<tr>
<td>Female on Board</td>
<td>0.214</td>
<td>0.130</td>
<td>0.209</td>
<td>1.651</td>
</tr>
<tr>
<td>Green Accounting</td>
<td>-1.057</td>
<td>2.137</td>
<td>-0.051</td>
<td>-0.494</td>
</tr>
<tr>
<td>Age</td>
<td>0.032</td>
<td>0.045</td>
<td>0.068</td>
<td>0.704</td>
</tr>
<tr>
<td>ROA</td>
<td>3.313</td>
<td>0.668</td>
<td>0.950</td>
<td>4.960</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.786</td>
<td>0.308</td>
<td>-0.438</td>
<td>-2.551</td>
</tr>
</tbody>
</table>

*sig. at 0.05
**sig. at 0.01
F = 12.121  sig. = <0.001
R² = 0.698
Adjusted R² = 0.640

Source: Data processed

a. The beta coefficient value on the company size to CSR disclosure was 5.348. Because the value is positive, there is a unidirectional relationship between the two variables. So, if other variables are constant and the company size increases by 1 unit, the value of CSR disclosure will also increase by 5.348.

b. The beta coefficient value in the type of sector to CSR disclosure is 18.828. There is a unidirectional relationship between the two variables since it’s positive. So, if other variables are constant and the type of sector increases by 1 unit, the value of CSR disclosure will increase by 18.828.

c. The beta coefficient value on the board of directors to CSR disclosure was 2.387. Since it’s positive, there is a unidirectional relationship between the two variables. So, if other variables are constant and the board of directors size increases by 1 unit, the value of CSR disclosure will increase by 2.387.

d. The beta coefficient value on female board members' involvement in CSR disclosure was 0.214. There is a unidirectional relationship between the two variables since it’s positive. So, if other variables are constant and the involvement of female board members increases by 1 unit, the value of CSR disclosure will increase by 0.214.

e. The beta coefficient value in green accounting for CSR disclosure is -1.057. Because the value is negative, there is an idirectional relationship between the two variables. So, if other variables are constant and green accounting increases by 1 unit, the value of CSR disclosure will decrease by 1.057; And vice versa.

f. The value of the beta coefficient at the company’s age to CSR disclosure is 0.032. Because it’s positive, there is a unidirectional relationship between the two variables. So, if other variables are constant and the company's age increases by 1 unit, the value of CSR disclosure will increase by 0.032.

g. The beta coefficient value of ROA to CSR disclosure is 3.313. Because the value is positive, there is a unidirectional relationship between the two variables. So, if other variables are constant and the ROA increases by 1 unit, the value of CSR disclosure will increase by 3.313.
h. The beta coefficient of ROE to CSR disclosure is -0.786. Because the value is negative, there is a counter-directional relationship between the two variables. So, if other variables are constant and ROE increases by 1 unit, the value of CSR disclosure will decrease by 0.786; And vice versa.

Based on the above interpretation, a multiple linear regression equation can be constructed as follows.

\[
CSRDIS_i = -125.119 + 5.348COMPS_i + 18.828TOS_i + 2.387BDS_i + 0.214FBM_i - 1.057GRA_i \\
+ 0.032COAG_i + 3.313REOA_i - 0.786REOE_i + \epsilon_i
\]

Hypothesis testing is carried out to find out whether a hypothesis that has been formulated previously can be accepted or rejected. This test is performed using the F-test and t-test. First, based on the results of the F test, the calculated F value is 12.121 (see Table 5) and the F table value is 2.06 so overall, the independent variable affects the dependent variable, namely CSR disclosure. It is also reaffirmed that the significance value of the F test that is less than 0.001 meets the requirements of the F test, namely: the calculated F value is greater than the F table and the significance value is less than 0.05.

Then, the t-test displays the influence of each independent variable on the dependent variable. The t-test produces a t-count value and a significance value between each independent variable and the dependent variable. The t-count value for the company size variable is 6.143 with a significance value of 0.000. The significance value is less than 0.05 and the t-count value is positive. Thus, the size of the company positively affects CSR disclosure. So, if the size of the company increases, there will also be an increase in CSR disclosure. These results suggest that H1: "Company size is positively influencing CSR disclosure" is acceptable. This is in line with the results of several previous studies conducted by Wardhani et al. (2019), Gaol & Harjanto (2019), Masoud & Vij (2021), Solikhah (2016), and other researchers.

The type of business sector also positively affects CSR disclosure, with a t-count value of 3.312 and a significance value of 0.002. This conclusion is obtained because the t-count value is positive, and the significance value is less than 0.05. So H2: "Type of sector is positively influencing CSR disclosure" in this study is acceptable. Previous researchers, such as Masoud & Vij (2021) and Solikhah (2016) also got the same results. Business sectors that are directly related to society and the environment tend to be more active in CSR disclosure to gain support and legitimacy from the community to maintain their survival.

The last variable that influences CSR disclosure in this study is the size of the board of directors. The t-count value in this variable is 3.313 and the significance value is 0.026. A positive t-count value and a significance value of less than 0.05 support H3: "The board size is positively influencing CSR disclosure". So, the larger the size of the board of directors or the more members of the board of directors, the more or more complete the CSR disclosure. The results of this study are also supported by previous research conducted by Matuszak et al. (2019) and Jahid et al. (2020), as well as other researchers.

The involvement of female board members was shown to not affect CSR disclosure in this study, so H4: "The involvement of female board members is positively influencing CSR disclosure" was rejected. This is based on a significance value of 0.106 which is greater than 0.05. Issa et al. (2022) also found that the involvement of female board members or the gender of the board of directors did not affect CSR disclosure. When viewed from Table 2, the proportion of female board members still does not dominate or is not more than 50%. This can lead to less hearing from female board members, or they tend to follow the votes of a male-dominated majority.
Green accounting variables in this study were also proven to not affect CSR disclosure, so $H_5$: "Green accounting is positively influencing CSR disclosure" was also rejected. Its significance value of 0.624 far exceeds the normal limit of variables that can be said to affect the dependent variable. Another researcher who also got results like this is Azzahra et al. (2021) who conducted research in the Indonesian banking sector. The difficulties experienced by her in finding green accounting components are also experienced by the researcher. Although the company disclosed the CSR program and the nominal costs incurred, the financial party still did not elaborate in more detail about non-operating expenses or other expenses incurred. The small number of companies reporting costs related to the environment in financial statements, along with the small number of companies that received PROPER awards in the sample studied is one of the factors that causes green accounting to be found to not affect CSR disclosure.

In testing the control variable against CSR disclosure, the significance value for ROA and ROE was less than 0.05 which indicates that these two variables influence CSR disclosure. However, there is a difference in the direction of the relationship between the two variables. ROA positively affects CSR disclosure because the t-count value is positive at 4.960. Meanwhile, ROE negatively affects CSR disclosure because the t-count value is negative (-2.551). In addition, another control variable, namely the company’s age, didn’t affect CSR disclosure, with a significance value greater than 0.05. Although these three control variables are not the main objectives of this study, this gives more understanding that in addition to the five independent variables, other variables can affect CSR disclosure in Indonesian SOEs.

Then, the test results of the coefficient of determination shown by the adjusted value of $R^2$ in this study amounted to 0.640 or 64%. This indicates that the independent variables used in this study can explain the dependent variable by 64%, and the remaining 36% is explained by other independent variables that are not used in this study. The adjusted $R^2$ number is quite high indicating the number of independent variables in this study that affect the dependent variable. These results also show that the independent variables in this study have the ability to provide the information needed to predict the dependent variable (Ghozali, 2016).

Based on the explanation above, it can be concluded that only three of the five independent variables in this study affect CSR disclosure as dependent variables. The three variables are company size, type of business sector, and size of the board of directors. Meanwhile, the involvement of female board members and green accounting does not affect CSR disclosure. So $H_1$, $H_2$, and $H_3$ are accepted, while $H_4$ and $H_5$ are rejected.

5. **Concussion**

This research is based on the concept of legitimacy theory and stakeholder theory which explains that the company will do anything to gain legitimacy from the community as one of the stakeholders and to get support from other stakeholders. At a time when society is increasingly focusing on matters related to environmental care and social life, disclosure of corporate social responsibility is also something that is considered by its stakeholders. However, the disclosure made by the company is still not optimal. The main purpose of this study is to find out what factors can influence or improve corporate social responsibility disclosure carried out by SOEs as the subject of this study.

There were five independent variables and three control variables used to test corporate social responsibility disclosure. These variables are company size, type of sector, size of the board of directors, involvement of female board members, and green accounting. While the control variables consist of the age of the company, ROA, and ROE. Based on the results of the discussion, it was found that the size of the company, the type of sector, and the size of the board of directors positively affect the disclosure of CSR. Profitability as a control variable also influences CSR disclosure and has
a positive relation with CSR disclosure when it is measured by ROA but has a negative relation when it is measured by ROE. Meanwhile, the involvement of female board members and green accounting does not affect corporate social responsibility disclosure, as well as the company’s age.

The results obtained today are also the impact of the limitations that the researcher has. The first limitation is in the amount of data owned. The small amount of data obtained is due to business mergers or conciliations carried out by SOEs to reduce the number of existing SOEs. This results in research data becoming less varied, with more data will result in better data variation. Another limitation is the difficulty of defining green accounting. In general, it can be said that the application of corporate social responsibility to the environment can be said to be in line with the application of green accounting. However, the lack of reporting of environment-related costs in the company's financial statements is quite difficult for researchers. Therefore, according to researchers, it is necessary to reassess the definition of the concept of green accounting in the future.

Based on these limitations, the researcher suggested that the data used in future studies could be even wider in scope. The data used should not only be limited to companies directly owned by the government but also subsidiaries of SOEs that are not observed by current researchers. Then, for the application of green accounting, the definition can be expanded again. In addition, green accounting variables can also be changed to green concepts, which consist of green offices, green buildings, green banking, and so on to get more varied data.

6. References


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