Determinants of Occupational Health and Safety Disclosure: An Empirical Study of Property, Real Estate, and Building Construction Companies on IDX

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ABSTRACT: Occupational Health and Safety Disclosure (OHSD) is essential to provide the public and stakeholders with more information about a company. In particular, OHSD still needs further research because the work accidents in Indonesia are currently excessive, but not all companies disclose it. OHSD is also crucial for corporate sustainability. The primary objective of this study is to conduct an empirical study of the impact of Profitability, Leverage, and The Size of the Board of Commissioners on OHSD. The research method used in this study is quantitative and secondary data obtained from the annual reports and sustainability reports of the property, real estate, and building construction companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2021. The sampling technique used is purposive sampling, with 81 samples. Data analysis used panel data regression with a Random Effect Model (REM). The study concluded that Profitability and Leverage (DER) significantly and positively affect OHSD. However, the size of the Board of Commissioners has a negative and significant effect on OHSD. The research results imply the Occupational Health and Safety Disclosure as material for preparing company policies. For academics, this research is expected to expand the financial accounting literature on OHSD from the stakeholder theory perspective.

Keywords: Stakeholder Theory, Occupational Health and Safety Disclosure, Profitability, Leverage, The Size of the Board of Commissioners.

INTRODUCTION

Corporate Social Responsibility (CSR) has been officially regulated in Indonesia through several regulations. Indonesian law (Undang-Undang) confirms the obligation of Perseroan Terbatas (PT) companies to carry out CSR programs. Undang-Undang Nomor 13 Tahun 2003 Tentang Ketenagakerjaan emphasizes that workers' rights are related to protection for the health and safety of workers in Indonesia. According to the Global Reporting Initiative (GRI), workers’
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occupational health and safety can reflect a good or bad CSR level. Reports prepared according to GRI standards can provide a comprehensive (inclusive) overview of an organization's material topics, their related impacts, and how they are managed (Global Reporting Initiative, 2018).

Occupational Health and Safety Disclosure (OHSD) is integral to the financial report (Bataineh et al., 2018; Brown & Butcher, 2004; Cahaya et al., 2015; Cahaya et al., 2017). Occupational Health and Safety Disclosure is a form of company transparency. Company transparency positively impacts the companies’ and stakeholders’ relationship (Schnackenberg & Tomlinson, 2016). Corporate Social Responsibility Disclosure (CSRD) helps maintain transparency to improve organizational performance (Font et al., 2012). It means stakeholders’ pressure to disclose Occupational Health and Safety (OHS) practices is also helpful in improving company performance. Primarily, reporting CSR focuses on the whole work continuum, human rights, society, product responsibility, and environmental information (Belal & Owen, 2007; Islam & Deegan, 2010).

Companies endeavor to minimize high rates of workplace accidents that have the potential to harm their reputation and lead to fines or regulatory actions (Nikolaou, 2016). The significant risk associated with work accidents raises high operational costs (Tsalis et al., 2018). A company's efforts to protect employee welfare (Dixon et al., 2019; Freeman, 1984) can increase productivity, corporate image, and build public trust, and is expected to have an impact on improving brand image and competitiveness (Aguilera et al., 2007; Che Abdul Rahman et al., 2018; Neumann et al., 2014). This research is expected to broaden the scope of research on Occupational Health and Safety Disclosure (OHSD); the GRI standard on OHSD in Indonesia is identified using the GRI 403 standard: Occupational Health and Safety 2018 (Global Reporting Initiative, 2018).

The figure above indicates that OHSD in that sector still needs to be fully disclosed by the applicable GRI 403 Standard. An increase in OHSD of 44.44% occurred in 2020, but this percentage decreased by 5.8% to 38.46% in 2021. It shows that OHSD in this sector in the last

Source: data processed by the author, 2022
three years still needs to be improved. One of the OHSD indicators by the GRI 403 Standard is the 403-9 Disclosure Index about work accidents (Global Reporting Initiative, 2018).

_Badan Penyelenggara Jaminan Sosial (BPJS) Ketenagakerjaan_ revealed that the reported cases of work accidents in 2021 increased by 5.65% compared to the previous year (2020), with a total of 234,270 cases. This data indicates a concerning trend and highlights the need for continued efforts toward improving workplace safety. As a result of work accident cases in Indonesia, _BPJS Ketenagakerjaan_ paid claims in 2021 for IDR 1,790,006,000,000. This amount increased by 14.97% compared to the previous year, with a nominal IDR 1,556,943,000,000 (BPJS Ketenagakerjaan, 2021).

Cases of work accidents occur in many corporate sectors in Indonesia. The following diagram shows the percentage related to workplace accident cases in Indonesia based on the company sectors.

Source: konstruksimedia.com

The diagram above shows the percentage of work accidents in Indonesia that mainly occur in the construction sector, which is 32%. It indicates that the construction industry is the leading contributor to the overall incidence of work accidents in the country. The manufacturing sector is the next most significant contributor, responsible for 31.6% of work accidents in Indonesia. Many other corporate industries, including transportation (5.3%), forestry (3.8%), mining (2.6%), and other sectors (24.7%), also contribute to the occurrence of work accidents in the country (Hasanuddin, 2022).

Differences in CSR disclosure (CSRD) in a country are caused by political, social, cultural, environmental, and macroeconomic factors (Mayorova, 2019). Previous research on CSR disclosure examines various factors and parameters of company characteristics in implementing CSR. Elements characteristic of the company include Managerial ownership, Leverage, Liquidity, Profitability, Solvency, Company Size, the size of the Board of Commissioners, and Company Age (Suprasto & Haryanti, 2019). The company’s characteristics, which are the independent variables in this research, are Profitability, Leverage, and The Size of the Board of Commissioners.
Stakeholder Theory

A literature review, which Nigel de Bussy did in 2008, demonstrated that the stakeholder concept had long emerged in the 1930s when management academics considered communication strategy to stakeholders as a crucial driver to achieve a corporate reputation. From this point, the concept of stakeholders became the realm of public relations.

Stakeholder theory provides theoretical knowledge to public relations practitioners to understand external individuals, groups, and organizations influencing the organization’s activities. The scope of stakeholders is broader than the public because it explains the process of building relationships carried out by the organization with surrounding actors related to its daily operations (Kriyantono, 2017, p. 57).

Edward Freeman developed the stakeholder theory in 1984 to offer a pragmatic approach to encourage organizations to understand their stakeholders to achieve the best conditions (superior performance). Freeman argues that corporate social responsibility (CSR) is related to stakeholders. The organization can gain profit by carrying out its social responsibility (Kriyantono, 2017, pp. 57-58).

Occupational Health and Safety Disclosure (OHSD)

Occupational Health and Safety (OHS) is a series of efforts to create a safe work atmosphere, including physical, mental, and emotional, so that it is free from the risk of accidents and protects the workforce in terms of health, safety, humane treatment, maintenance of work ethics, and religious morality (Widodo, 2021, p. 5). Therefore, a company needs to make disclosures related to OHS. Based on GRI indicator 403, there are 10 OHSD items, so the OHSD index is calculated using the following formula.

\[
OHSD_{(j)} = \frac{\sum x_{ij}}{n_j}
\]

(Source: Singal and Putra, 2019)

\( OHSD_{(j)} \) = Indicators of OHSD

\( \sum x_{ij} \) = Total GRI 403 items disclosed

\( n_j \) = Total of all GRI 403 disclosure items, \( n_j \leq 10 \)

Profitability

The ratio that can evaluate a company's capability to earn profits is called the profitability ratio (Kasmir, 2019, p. 198). ROA (Return on Assets) can describe the company's ability to generate profits sourced from available assets (Sirait, 2019, p. 142) so that it can be formulated:

Return on Assets = \[
\frac{\text{Net Profit After Tax}}{\text{Total Assets}}
\]
When interpreted in stakeholder theory, a company’s high profitability level will increase CSR disclosures (CSRD). High profitability can also ensure that company activities are carried out by social values that apply in society and evidence of corporate accountability to stakeholders (Irmayanti & Mimba, 2018). High profitability reflects the increasing availability of funds to fulfill its social responsibilities, especially in disclosing OHS in the company's annual and sustainability reports.

Previous researchers revealed a positive influence on Profitability variables CSR Disclosure (Hamdani et al., 2017; Hermawan & Gunardi, 2019; Oktavianawati & Wahyuningrum, 2019; Zulhaimi & Nuraprianti, 2019). However, Profitability does not affect CSRD, as Suprasto & Haryanti (2019) stated. Based on the description above, the hypothesis is formulated as follows:

**H1: Profitability has a positive effect on OHSD**

**Leverage**

The effectiveness of the utilization of resources, such as receivables, capital, or company assets, can be measured by leverage ratio (Sujarweni, 2019, p. 61). One of many leverage ratios is the Debt to Equity Ratio (DER), which confirms a company's debt security level against available capital. The subsequent equation is used for measuring DER.

\[
\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Equity}}
\]

When linked to the stakeholder theory, a high level of Leverage will make the company obliged to convey more extensive information (Dewi & Sari, 2019). Widespread disclosure means that investors will obtain more information to convince and guarantee investors’ rights as lenders (creditors). Thus, the company can minimize the doubts of creditors and make it easier for companies related to their business capital (Irmayanti & Mimba, 2018).

Research that can prove the positive effect of Leverage on CSRD was carried out by Dewi & Budiasih (2021) and Irmayanti & Mimba (2018). Other research informs that Leverage has a negative and significant influence on CSRD (Yusra & Hadya, 2021; Utamie et al., 2020; Hermawan & Gunardi, 2019). However, research by Dewi & Sari (2019) suggests that Leverage does not affect CSRD. Based on the preceding description, the following hypothesis is formulated:

**H2: Leverage has a positive effect on OHSD**

**Size of the Board of Commissioners**

The board of commissioners, comprised of principal and independent commissioners, is tasked with controlling, supervising, and advising the board of directors. The formulation of the size of the Board of Commissioners is as follows (Zulhaimi & Nuraprianti, 2019).

\[
\text{The size of the board of commissioners} = \text{number of board of commissioners' members}
\]
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As the shareholders' representative, the board of commissioners of a Perseroan Terbatas (PT) company has the authority to supervise the directors. The board of commissioners has enough power to pressure management to make various disclosures required by the company. If the composition of the board of commissioners is prominent, the company will inclusively convey information to stakeholders, including information related to CSR activities (Suprasto & Haryanti, 2019). The enormous number of the board of commissioners will distribute a lot of advice and contributions in determining a more comprehensive company CSRD policy, including OHSD practices.

The research results of previous researchers can prove the positive influence of the size of the Board of Commissioners variable on CSRD (Hermawan & Gunardi, 2019; Oktavianawati & Wahyuningrum, 2019). The size of the Board of Commissioners has a negative impact on CSRD, as proven by Zulhaimi & Nuraprianti (2019) in their research, but it does not affect CSRD (Santo, 2022). The following hypothesis is derived from the preceding description.

**H3: The size of the board of commissioners has a positive effect on OHSD**

**METHOD**

This study used a quantitative approach with quantitative data for property, real estate, and building construction companies listed on the Indonesia Stock Exchange (IDX) in 2019–2021. A total of 102 companies are used as the study population. The sample was selected using the purposive sampling method, with 27 companies over the three years, so 81 observation samples were obtained.

Data collection from secondary data is obtained through documentation techniques in the form of annual reports, sustainability reports, and financial reports downloaded through the official IDX website and each company's web page. This research adopted the panel data linear regression analysis technique. It was assisted by a data processing program, namely EViews 12, with the panel data regression equation model formulated as follows.

\[
Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e_{it}
\]

**Description:**

\(Y_{it}\) = OHSD (for entity \(i\) at time \(t\))

\(\alpha\) = Constant

\(\beta_1 - \beta_2\) = Slope or Regression Coefficient of Independent Variable

\(i\) = Entities

\(t\) = Time

\(X_{1it}\) = Profitability (ROA)
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\[ X_{2it} \] = Leverage (DER)
\[ X_{3it} \] = Size of the Board of Commissioners (SBC)
\[ e \] = Standard Error

RESULT AND DISCUSSION

The combination of data characteristics that are historical or time series with cross section is called panel data (Ghozali, 2018, p. 95). The following is a statistical test for estimating the parameters of the panel data model.

<table>
<thead>
<tr>
<th>Table 1. Chow Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects Test</td>
</tr>
<tr>
<td>Cross-section F</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
</tr>
</tbody>
</table>

**Source:** EViews 12, 2022

Panel data estimation with the Chow Test in Table 1. obtains the value of Prob as 0.0000, less than 0.05, so the **Fixed Effect Model** is more correctly used than the **Common Effect Model**.

<table>
<thead>
<tr>
<th>Table 2. Hausman Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Summary</td>
</tr>
<tr>
<td>Cross-section random</td>
</tr>
</tbody>
</table>

**Source:** EViews 12, 2022

The Hausman test is a statistical test to determine the model’s accuracy. Table 2. displays the values of Prob as 0.1118, which means > 0.05, so the **Random Effect Model** was selected as a more accurate model than the **Fixed Effect Model**.
Table 3. Lagrange Multiplier (LM) Test Results

<table>
<thead>
<tr>
<th>Test Hypothesis</th>
<th>Cross-section</th>
<th>Time</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>38.70620</td>
<td>0.087166</td>
<td>38.79336</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.7678)</td>
<td>(0.0000)</td>
<td></td>
</tr>
</tbody>
</table>

(Source: EViews 12, 2022)

Finally, the researcher conducted the LM test (Lagrange Multiplier) to select the proper panel data model. Table 3. above displays the values of the Cross Section on Breusch-Pagan of 0.0000, which is <0.05. Hence, the Random Effect Model is more appropriate than the Common Effect Model.

Panel Data Regression Model Analysis

The results of the estimation testing technique for the panel data regression model in the three tables above aim to confirm the conclusions related to the model to be used. Based on those results, the most appropriate model chosen to project panel data regression is the Random Effect Model (REM).

Table 4. Panel Data Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.365218</td>
<td>0.092512</td>
<td>3.947786</td>
<td>0.0002</td>
</tr>
<tr>
<td>ROA</td>
<td>0.166763</td>
<td>0.059716</td>
<td>2.796016</td>
<td>0.0048</td>
</tr>
<tr>
<td>DER</td>
<td>0.125062</td>
<td>0.032612</td>
<td>3.834876</td>
<td>0.0002</td>
</tr>
<tr>
<td>SBC</td>
<td>-0.221948</td>
<td>0.015945</td>
<td>-13.91959</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effects Specification</th>
<th>S.D.</th>
<th>Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>0.215774</td>
<td>0.7443</td>
</tr>
<tr>
<td>Idiosyncratic random</td>
<td>0.126475</td>
<td>0.2557</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weighted Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Root MSE</td>
<td>0.125750</td>
</tr>
<tr>
<td>Mean dependent var</td>
<td>0.121889</td>
</tr>
<tr>
<td>S.D. dependent var</td>
<td>0.127270</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>1.280852</td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.972576</td>
</tr>
<tr>
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</tbody>
</table>

(Source: EViews 12, 2022)
The result of the panel data regression model equation is:

\[ \text{OHSD} = 0.365218 + 0.166763 \text{ROA} + 0.125062 \text{DER} - 0.221948 \text{SBC} + e \]

A constant value of 0.365218 indicates that if the independent variable is zero, the OHSD value remains at 0.365218. The Profitability Coefficient (ROA) has a positive value of 0.166763; if the profitability value increases by one rupiah (1 IDR), then the OHSD value increases by 0.014927, and vice versa. Leverage Coefficient (DER) of 0.125062 means that for every increase of one DER unit, OHSD will also increase by 0.125062 under the assumption of other factors remaining constant. The Size of the Board of Commissioners Variable (SBC) has a negative coefficient of -0.221948, which means that if the SBC value increases by one, the OHSD value decreases by 0.221948.

**The Effect of Profitability on OHSD**

The results of the partial test Table 4. shows the coefficient value of the Profitability variable (ROA), which is 0.166763 with a significance level of 0.0048 (<0.05), so the first hypothesis (H1) is supported. The conclusion is that Profitability has a positive and significant effect on OHSD. The findings of this study provide empirical evidence for the stakeholder theory, which posits a positive relationship between a company's profitability and the potential for shareholders to gain higher profits. Profitability is one of the factors that can motivate management to carry out broader CSR programs and communicate them to shareholders.

Companies with high profits have a more comprehensive range of stakeholders, so they are responsible for CSR disclosures, including more extensive OHSD. The disclosure of corporate social activities in high-profit corporations might convince investors that the corporation not only considers profit as a short-term goal but also considers the company's sustainability as a long-term goal.

The results of this partial test research are in line with Oktavianawati & Wahyuningrum (2019), Yusra & Hadya (2021), Utamie et al. (2020), and Hermawan & Gunardi (2019). However, contrary to Suprasto & Haryanti (2019), who could not find an effect between Profitability and CSR disclosure (CSRD).

**The Effect of Leverage on OHSD**

Significance values in Table 4. for the Leverage variable (DER) is 0.0002 (<0.05), and the regression coefficient is 0.125062. The results support the second hypothesis (H2): Leverage significant positive and significant effects on OHSD.

Aligned with the stakeholder theory, the high leverage ratio makes the information disclosed by the company more extensive because the company's responsibility to creditors and investors as the company's stakeholders will be more significant. Additional information in the form of OHSD can also minimize doubts by bondholders about their rights as creditors. It helps increase trust and makes it easier for companies to maintain their capital continuity.
The results of this partial test research are coherent with Dewi & Budiasih (2021) and Zulhaimi & Nuraprianti (2019), who suggest that Leverage positively affects CSRD. The results contradict Utamie et al. (2020), arguing that Leverage has no significant negative impact on CSRD.

The Effect of the Size of the Board of Commissioners on OHSD

Table 4. shows the negative regression coefficient on the SBC variable, which has a value of -0.221948 with a significance level of 0.0000, so this does not support the H3 hypothesis. Those results of partial testing contradict the stakeholder theory. This research can prove that there is a negative effect of the size of the Board of Commissioners on OHSD.

The results of this study cannot prove the stakeholder theory, which explains that the larger the composition (size) of the Board of Commissioners can increase the objectivity of the actions of the Board of Commissioners to protect all stakeholders. The Board of Commissioners for companies has a supervisory role, including determining CSR programs to be implemented. However, it is the director's authority to make all operational decisions within the company.

Supervision by the Board of Commissioners is not solely measured based on the size of the Board of Commissioners. Still, it is more concerned with the values and trust earned by the company, along with the competence and integrity of the board of commissioners.

The results of this partial test research are coherent with research by Zulhaimi & Nuraprianti (2019) and Sunarsih & Nurhikmah (2017), which proves that the size of the Board of Commissioners has a negative effect on CSRD. However, contrary to Hermawan & Gunardi (2019) and Oktavianawati & Wahyuningrum (2019), they can prove that there is a positive effect on the size of the Board of Commissioners on CSRD.

CONCLUSION

This study aims to empirically examine the effect of Profitability, Leverage, and the size of the Board of Commissioners on the Occupational Health and Safety Disclosure. Empirical testing uses stakeholder theory.

Profitability has a positive and significant effect on OHSD. The higher the company’s profitability ratio, the more comprehensive the OHSD is because it has more funds to fulfill its social responsibilities and disclose occupational health and safety information. The findings of this study are consistent with the stakeholder theory; the more significant the company's profits, the greater the stakeholder returns. Profitability is one of the factors that can motivate management to carry out broader CSR programs and communicate them to their stakeholders.

Leverage has a positive and significant effect on OHSD. In line with the stakeholder theory, the high leverage ratio makes the information disclosed by the company more extensive because the company's responsibility to creditors and investors as company stakeholders will be greater. Additional information in the form of OHSD can also minimize doubts by bondholders about their rights as creditors. It helps increase trust and facilitate the company in terms of capital.
The results of this study cannot prove the stakeholder theory, which explains that the greater the composition (size) of the Board of Commissioners can increase the objectivity of the actions of the Board of Commissioners to protect all stakeholders. The Board of Commissioners for companies has a supervisory role, including determining CSR programs to be implemented by the company. However, it is essential to note that the director has sole jurisdiction over all operational determinations.

Further researchers are suggested to choose different types of companies because they can obtain different research results. Other factors regarding company characteristics, such as company age, company size, liquidity, managerial ownership, and institutional ownership, can enrich the following research variables.

REFERENCES


