The Effect of Biological Asset Intensity, Ownership Concentration, Public Ownership, and Audit Committee Meeting on Biological Asset Disclosure

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Abstract
The existence of biological assets is fully regulated in PSAK 69 which is the adoption of IAS 41. This study aims to provide empirical evidence related to the influence of biological asset intensity, ownership concentration, public ownership, and audit committee meetings on biological asset disclosure. The population used in this study is an agricultural company listed on the Indonesia Stock Exchange (IDX) for the period of 2018 to 2021. The sample selection method used in this study was purposive sampling. Based on the predetermined criteria, a total sample of 15 companies was obtained with a total of 60 firm observations. Data were analyzed using multiple regression analysis methods. Results show that biological assets intensity has a positive influence on the biological assets disclosure of agricultural companies listed on the Indonesia Stock Exchange (IDX) in 2018-2021. However, ownership concentration, public ownership, and audit committee meetings have no effect on the biological assets disclosure of agricultural companies listed on the Indonesia Stock Exchange.

Keywords: Biological assets, intensity, ownership concentration, public ownership, audit committee meeting.

1. INTRODUCTION
The agricultural sector is one of the important drivers of economic growth for Indonesia because of the tropical climate and large area of land that supports the agricultural sector. Referring to data from the Central Statistics Agency (BPS), the contribution of the agricultural sector to the Gross Domestic Product (GDP) in 2021 is 12.62%. This is the 6th contributor to
the 2021 GDP growth structure. The performance of the agricultural sector is strongly influenced by the biological assets owned by agricultural companies.

PSAK 69 describes 40 items to measure the level of disclosure of biological assets of agricultural companies. Every agricultural company in Indonesia is required to disclose the ownership of its biological assets as of January 1, 2018. Despite the disclosure of biological assets requirement effectively implemented in 2018, several agricultural sector companies in Indonesia still have not disclosed biological assets in their annual financial statements. Until the second quarter of 2022, five companies still do not disclose their biological assets. The five companies are Bumi Teknokultura Unggul Tbk (BTEK), Wahana Pronatural Tbk (WAPO), Golden Plantation Tbk (GOLL), Mahkota Group Tbk (MGRO), and Dharma Samudera Fishing Industry (DSFI).

The purpose of this research is to examine factors that influence the disclosure of biological assets. Until now there has not been much research on the disclosure of biological assets. Several studies on the disclosure of biological assets including Bagis et al. (2022), Azzahra et al. (2020), Scarvino et al. (2021), and Owen and Radianto (2022) reported mixed results. Bagus et al. (2022) and Azzahra et al. (2020) found that the intensity of biological assets is positively associated with biological assets disclosure. However, Owen and Radianto (2022) found that the intensity of biological assets is negatively associated with biological assets disclosure. Scarvino et al. (2021) found no evidence of the association between biological assets intensity and biological assets disclosure.

In addition, Bagis et al. (2022) and Riski et al. (2019) found that ownership concentration is positively associated with the disclosure of biological assets, while Zufriya et al. (2020) found the opposite result. Azzahra et al. (2020) found that public ownership is positively associated with biological asset disclosure. Meanwhile, Aruan et al. (2021) and Rivandi (2021) reported that the proportion of public ownership does not affect the company's disclosure level. While Azzahra et al. (2020) found that audit committee meeting is positively associated with the disclosure of biological assets, Astuti and Yopie (2020); Nasution and Prasetyo (2022) found no evidence of the association between audit committee meeting and biological asset disclosure. Due to the conflicting results of previous studies, this study re-examines the determinants of biological assets disclosure. Specifically, this study re-examines the effect of biological asset intensity, ownership concentration, public ownership, and audit committee meetings on biological asset disclosure.

2. LITERATURE REVIEW AND HYPOTHESES FORMULATION

Stakeholder Theory

According to Deegan (2004), stakeholder theory explains that all stakeholders have the right to know any information from organizational activities that can affect their position. Stakeholders are groups or individuals who can be affected or influence the process of achieving organizational goals. According to Chariri and Ghozali (2007), stakeholder theory states that companies should operate by providing benefits to stakeholders. The Stakeholder Theory point of view says that company managers will strive to get the company's added value, which will then be redistributed to all stakeholders.

Stakeholder Theory helps company managers understand their environment and conduct more effective company management (Agustia et al., 2021). In the context of explaining the
relationship between the disclosure of biological assets and stakeholder theory, this theory supports the idea that biological assets are the main assets in agricultural companies. As the main asset, the proportion of the company's investment in its biological assets must also be revealed in the company's annual report (Sakinatunnisak and Budiwinarto, 2020). This research uses stakeholder theory as one of the theoretical foundations with the hope that managers will be able to manage the use of biological assets wisely. The managers will also be able to handle the disclosure of biological assets in detail and consider stakeholders' interests to improve company performance.

**Signaling Theory**

Signaling theory was first proposed by Spence (1973). According to Spence (1973), Signaling Theory states that in signaling signals, the sender (owner of the information) tries to provide relevant information that the receiving party can utilize. The receiving party will then adjust its behavior according to its understanding of the signal. The signal in question is information on the condition, direction, or prospects of the company disclosed in the annual report and has the potential to be positive to convince the user of the report.

According to the statement of Ningsih and Gunawan (2016) in Azzahra et al. (2020), signaling theory is one of the theories behind the problem of information asymmetry. The existence of positive signals given based on considerations by management regarding the company's private information will provide investors with further insights about the company. This theory also helps management make detailed disclosures to avoid giving negative signals to investors.

The relationship between signaling theory and disclosure is that the wider the disclosure, the better it will signal to stakeholders and shareholders. From the perspective of disclosure of company reports, signaling theory can be used to explain how managers should provide adequate information about the more information that companies face.

**Biological Assets Disclosure**

Disclosures aim to protect companies to be more open with company information, so it can improve disclosure and achieve financial reporting goals (Bagis et al., 2022). PSAK 69 regulates the disclosure of biological assets for agricultural companies to be carried out using quantitative descriptive methods. Disclosures of biological assets are conveyed in detail in the annual reports of agricultural companies. Referring to PSAK 69, there are 40 items of mandatory disclosure and voluntary disclosure items of biological assets.

PSAK 69 defines biological assets as living animals or plants that undergo biological transformations, including growth, decay, production, and reproduction over time. Biological assets will be divided into two categories, the first category is consumption assets and productive assets, and the second category is biological assets producing and immature. Under IAS 41, biological assets in financial statements can be recognized as current assets and fixed assets, depending on their useful life. In managing biological assets, agricultural activity is needed (Scarpino et al., 2021). Agricultural activity is a combination of biological transformation and harvesting of biological assets by entities for sale or conversion into agricultural products or additional biological assets.
Biological Assets Intensity

IAS 41 defines biological assets as living animals and plants that are under the control or controlled by a company as a result of past events. The intensity of biological assets indicates the magnitude of the investment value of the company's biological assets. The higher the intensity of biological assets owned by a company, the higher the tendency for companies to disclose the intensity of biological assets in the notes to financial statements.

Signaling theory describes that companies with good prospects should disclose more information to build investor confidence in the company's future performance. This theory is the basis for the relationship between the intensity of biological assets and the disclosure of biological assets. According to Owen and Radianto (2022), high biological assets indicate company confidence in obtaining economic benefits from these biological assets. Companies will be more transparent in disclosing their biological assets to attract investors.

Biological assets are the operational needs of agricultural companies, and the value of biological assets will certainly be the investment focus. The higher level of investment made in biological assets, the wider the level of information disclosure. Thus, the intensity of biological assets is positively associated with biological assets disclosure (Azzahra et al., 2020; Bagis et al., 2022; Halim, 2021; Sakinatunnisak and Budiwinarto, 2020; Siregar and Priantinah, 2017).

From the previous discussion, the relationship between the intensity of biological assets and the disclosure of biological assets is formulated in the following hypothesis:

**H₁**: Biological asset intensity is positively associated with biological asset disclosure.

Ownership Concentration

Ownership concentration is the proportion of shareholdings owned by groups or individuals that can actively influence management in any decision-making for the company. Bagis et al. (2022) state that a company concentrated in an institution or individual will influence the disclosures presented in the financial statements. Companies with concentrated ownership receive monitoring that encourages companies to run sound business practices that can have a positive effect on company performance (Alfiani and Rahmawati, 2019).

Concentrated ownership is a signal to stakeholders that the company is in good condition because strict supervision by shareholders encourages managers to prioritize them in managing the company. Managers are responsible for providing comprehensive information about the company's operations to reduce asymmetry information as suggested by the signaling theory. Companies with promising prospects will disclose information widely to attract investors to invest in the company. Riski et al. (2019) and Bagus et al. (2022) found that ownership concentration is positively related to the disclosure of biological assets.

From the previous discussion, the relationship between the ownership concentration and the disclosure of biological assets is formulated in the following hypothesis:

**H₂**: Ownership concentration is positively associated with biological assets disclosure.

Public Ownership

Public ownership here is defined as shares owned by the public. Choi and Gary (2010) stated that the more significant the proportion of shares owned by the public, the higher the disclosure of information by managers. Since stakeholders need adequate information to assist
them in assessing company performance, the more shares owned by the public, the companies are more motivated to disclose more information voluntarily.

Stakeholder theory states that the community as a stakeholder has the right to know about the company's business and operational activities that can affect their well-being. The trust that is instilled by the public is reflected in the percentage of share ownership by the public. Companies must maintain this trust by maximizing disclosure regarding the company's business and operations. Azzahra et al. (2020) provide evidence that public ownership is positively related to the disclosure of the biological assets of agricultural companies. The more significant the proportion of shares held by the public, the more the company's biological assets will be disclosed.

From the previous discussion, the relationship between public ownership and the disclosure of biological assets is formulated in the following hypothesis:

**H₁: Public ownership is positively associated with biological assets disclosure.**

**Audit Committee Meeting**

Audit Committee is a committee established by and responsible to the Board of Commissioners in assisting in carrying out the duties and functions of the Board of Commissioners (Otoritas Jasa Keuangan, 2015). The audit committee is obliged to hold meetings as a form of its role in overseeing financial reporting. Reliable financial reports reflect the effectiveness of the audit committee in overseeing the financial reporting process. The more often the company's audit committee holds meetings to discuss matters related to financial reporting, the higher the company's adherence to sound financial reporting practices.

Audit committee meetings discuss and provide solutions to problems arising from the lack of disclosure. Lack of disclosure can have a detrimental effect on a company's success because it impacts stakeholder trust. Stakeholder theory is the theoretical basis for formulating hypotheses about the effect of audit committee meetings on the disclosure of biological assets. Azzahra et al. (2020) found that audit committee meetings are positively associated with biological asset disclosure.

From the previous discussion, the relationship between audit committee meetings and the disclosure of biological assets is formulated in the following hypothesis:

**H₄: Audit committee meeting is positively associated with biological assets disclosure.**

3. **RESEARCH METHODS**

**Sample**

The sample was selected from companies listed on the Indonesia Stock Exchange (IDX) for 2018-2021 by using a purposive sampling method. As many as 15 agricultural companies are available for further analysis. Thus, the number of observations is 60 as shown in Table 1.

<table>
<thead>
<tr>
<th>Sample Criteria</th>
<th>Total Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural companies for the period 2018 – 2021</td>
<td>26</td>
</tr>
<tr>
<td>Annual reports are not available from data sources.</td>
<td>(6)</td>
</tr>
<tr>
<td>Biological assets are not reported in the annual report.</td>
<td>(5)</td>
</tr>
<tr>
<td>Firms available for further analysis</td>
<td>15</td>
</tr>
<tr>
<td>Number of observations (15 companies x 4 years)</td>
<td>60</td>
</tr>
</tbody>
</table>
Variable Measurement

The dependent variable is biological asset disclosure. Measurement of biological assets is carried out using Wallace's disclosure index formula as stated below:

\[
\text{Wallace disclosure index} = \frac{n}{k} \times 100\%
\]

\(n\) = the number of items disclosed by the company; \(k\) = number of items required under PSAK 69 which is 40 items; The first independent variable in the study is biological asset intensity (\(X_1\)). Referring to the research of Azzahra et al. (2020) and Bagis et al. (2022), the intensity value of biological assets can be measured using the following formula:

\[
\text{Biological Assets Intensity} = \frac{\text{Biological Assets}}{\text{Total Assets}} \times 100\%
\]

Biological Assets = the number of biological assets owned by the company; Total Assets = the number of total assets owned by the company; The second independent variable in the study is ownership concentration (\(X_2\)). Referring to the research of Bagis et al. (2022), ownership concentration can be measured using the following formula:

\[
\text{Ownership Concentration} = \frac{\text{The Largest Number of Shares}}{\text{Total Outstanding Shares}} \times 100\%
\]

The Largest Number of Shares = the number of largest shares from outstanding shares; Total Outstanding Shares = the number of total outstanding shares owned by the company; The third independent variable in the study is public ownership (\(X_3\)). Referring to the research of Azzahra et al. (2020), public ownership can be measured using the following formula:

\[
\text{Public Ownership} = \frac{\text{Total Shares Own by Public}}{\text{Total Outstanding Shares}} \times 100\%
\]

Where The Shares Own by Public = number of shares owned by public/general in the outstanding shares; Total Outstanding Shares = number of total outstanding shares owned by the company; The fourth independent variable in the study is the audit committee meeting (\(X_4\)). Referring to the research of Azzahra et al. (2020), an indicator used to measure audit committee meetings is the number of audit committee meetings conducted in one period. The number of audit committee meetings presented in the company's Annual Report in the audit committee sub-discussion.

Research Model

Secondary data in this study were obtained through the documentation method. This method of documentation is carried out by collecting the necessary annual reports and financial statements based on the previous explanation. The data that has been collected will be analyzed by conducting descriptive statistical analysis and multiple linear regression analysis. Descriptive statistical analysis is carried out to determine the dispersion and distribution of data. Classical assumption test analysis is used to determine and understand the influence of independent variables to be studied. This analysis becomes a condition for conducting a linear regression test. Multiple linear regression test analysis was employed to determine the relationship between independent variables: biological assets intensity, ownership...
concentration, public ownership, audit committee meeting, on the dependent variables, and biological assets disclosure. The form of multiple linear regression analysis equations used in this study is as follows:

$$BAD = \beta_0 + \beta_1BAI + \beta_2OC + \beta_3PO + \beta_4ACM + \epsilon$$

BAD  = Biological Assets Disclosure  
BAI  = Biological Assets Intensity  
OC  = Ownership Concentration  
PO  = Public Ownership  
ACM  = Audit Committee Meeting  

Data analysis and processing are carried out with the help of the SPSS version 26 to regress the model that has been formulated.

4. RESULTS AND DISCUSSION

Descriptive Statistics

As many as 15 agriculture companies met the criteria for 2018 – 2021. The number of observation data in this study is 60 observation data. Descriptive statistics are presented in Table 2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAD</td>
<td>60</td>
<td>0.525</td>
<td>0.825</td>
<td>0.663</td>
<td>0.066</td>
</tr>
<tr>
<td>BAI</td>
<td>60</td>
<td>0.000</td>
<td>0.041</td>
<td>0.015</td>
<td>0.009</td>
</tr>
<tr>
<td>OC</td>
<td>60</td>
<td>0.030</td>
<td>1.163</td>
<td>0.473</td>
<td>0.284</td>
</tr>
<tr>
<td>PO</td>
<td>60</td>
<td>0.056</td>
<td>1.644</td>
<td>0.293</td>
<td>0.232</td>
</tr>
<tr>
<td>ACM</td>
<td>60</td>
<td>4.000</td>
<td>13.000</td>
<td>6.583</td>
<td>2.907</td>
</tr>
</tbody>
</table>

The minimum and maximum values of biological asset disclosure are 0.525 and 0.825 respectively with a mean value of 0.666. Thus, the agricultural companies in Indonesia only disclose 66% of biological assets out of 40 biological asset disclosure items. Although it is above 50%, this figure is still relatively low for the disclosure of biological assets, which agricultural companies are obliged to disclose in their financial statements and annual reports. The minimum and the maximum values of biological assets are 0.000 and 0.041 respectively with a mean of 0.015. It suggests that biological assets intensity is relatively small, which is only 1.50%. The minimum and maximum values of ownership concentration are 0.030 and 1.163 respectively. A mean of 0.473 suggests that ownership concentration is 47.3% of total outstanding shares. The minimum and maximum values of public ownership are 0.056 and 1.644. A mean of 0.293 suggests that public ownership in agricultural companies is only 29.3% of total outstanding shares. For audit committee meetings, the minimum and the maximum values of audit committee meetings are 4,000 and 13,000 respectively. A mean of 6,583 suggests that the audit committee meeting was held 6-7 times a year.
Test of Classical Assumption

The normality test was performed using the Kolmogorov-Smirnov Test. Table 4 shows the Asymp Sig value. (2 failed) is 0.200, which is greater than the significance level of 0.05. It means that the assumption of normality is met.

Table 3. Classical Assumption Test Result

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tolerance</th>
<th>VIF</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAI</td>
<td>0.846</td>
<td>1.183</td>
<td>0.712</td>
</tr>
<tr>
<td>OC</td>
<td>0.827</td>
<td>1.210</td>
<td>0.557</td>
</tr>
<tr>
<td>PO</td>
<td>0.953</td>
<td>1.050</td>
<td>0.929</td>
</tr>
<tr>
<td>ACM</td>
<td>0.898</td>
<td>1.114</td>
<td>0.190</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.947</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The multicollinearity was indicated by VIF. Table 3 shows that the VIF value is less than 10 which means that no correlation among independent variables is identified. The table also indicates that the value of Durbin-Watson is 1.947. No high autocorrelation symptom is identified. In addition, heteroskedasticity is not present.

Results

Four hypotheses are tested and the results are presented in Table 4. Hypothesis one predicts that biological asset intensity is positively associated with biological asset disclosure. The result confirms the prediction. It can be seen from the table that the p-value for biological asset intensity is less than 1% with a positive direction. Thus, hypothesis one is statistically supported.

Hypothesis two predicts that ownership concentration is positively associated with biological asset disclosure. The result rejects the prediction. It can be seen from the table that the p-value for ownership concentration is larger than 5%. Thus, hypothesis two is not statistically supported.

Hypothesis three predicts that public ownership is positively associated with biological asset disclosure. The result rejects the prediction. It can be seen from the table that the p-value for ownership concentration is larger than 5%. Thus, hypothesis three is not statistically supported.

Table 4. Regression Result

<table>
<thead>
<tr>
<th>Variables</th>
<th>Expected Signs</th>
<th>Coefficients</th>
<th>t-stat</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAI</td>
<td>+/-</td>
<td>2.665</td>
<td>2.806</td>
<td>0.007</td>
</tr>
<tr>
<td>OC</td>
<td>+/-</td>
<td>0.007</td>
<td>0.219</td>
<td>0.828</td>
</tr>
<tr>
<td>PO</td>
<td>+/-</td>
<td>0.002</td>
<td>0.070</td>
<td>0.945</td>
</tr>
<tr>
<td>ACM</td>
<td>+/-</td>
<td>0.004</td>
<td>1.198</td>
<td>0.236</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>0.033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj R²</td>
<td></td>
<td>0.110</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis four predicts that an audit committee meeting is positively associated with biological asset disclosure. The result rejects the prediction. It can be seen from the table that the p-value for ownership concentration is larger than 5%. Thus, hypothesis four is not statistically supported.

**Discussion**

As described before, the test of hypothesis one shows that the biological assets intensity is positively associated with biological assets disclosure. This means that the greater the intensity value of biological assets, the higher the level of disclosure of biological assets. The results of this study support the signaling theory in which shareholders and investors will receive a good signal in the form of investment in biological assets to the company if the company discloses its assets openly. This research is consistent with the research courtesy Bagis et al. (2022); Azzahra et al. (2020); Halim (2021); Sakinatunnisak and Budiwinarto (2020); Siregar and Priantinah (2017) which proves that the intensity of biological assets positively affects the disclosure of biological assets.

The test of hypothesis two suggests that the ownership concentration is not associated with biological assets disclosure. The concentrated shareholding does not cause a change in the high or low level of biological assets disclosure carried out by agricultural companies. The result also proves that the role of majority shareholders towards the actions of managers within the company is less significant than expected. The result is consistent with Zufriya et al. (2020) who found that the ownership concentration does not affect the disclosure of biological assets. According to Zufriya et al. (2020), companies with a high concentration of ownership do not pay much attention to disclosing biological assets in financial and annual statements because they are not considered necessary. The results of this study are also consistent with Yurniawati (2018) and Duwu (2018).

The test of hypothesis three suggests that public ownership is not associated with biological assets disclosure. The insignificant relationship between the two variables suggests that public ownership needs to be increased in order to encourage agricultural companies to disclose biological assets. Descriptive statistics show that the average public share ownership in agricultural companies is still low, namely only 0.293 or equivalent to 29%. The results of this study are consistent with Sidik (2022) who found that public ownership is not related to the level of voluntary disclosure. This study is also consistent with Aruan et al. (2021) and Rivandi (2021) who found that the proportion of public ownership has no significant relationship with the level of disclosure.

The test of hypothesis four suggests that the audit committee meeting is not related to biological assets disclosure. This finding indicates that the frequency of audit committee meetings has no effect on the disclosure of biological assets. The audit committee has not functioned optimally in encouraging the disclosure of biological assets. This may be due to the tendency of agricultural companies to hold a number of audit committee meetings as a form of compliance with OJK regulations without serious efforts to encourage disclosure of biological assets. The results of this study are consistent with Astuti and Yopie (2020); Nasution and Prasetyo (2022).
5. CONCLUSIONS AND SUGGESTIONS

Based on the results of research that have been carried out related to the influence of variables biological assets intensity, ownership concentration, public ownership, and audit committee meetings on biological assets disclosure, it can conclude that biological assets intensity affects biological assets disclosure and the ownership concentration, public ownership, audit committee meetings do not affect biological assets disclosure in agricultural companies listed on the Indonesia Stock Exchange (IDX) in 2018-2021. This study has several limitations, namely determining the score of biological asset disclosure items based on subjectivity, not all agricultural companies publish complete annual reports, and the results of testing the coefficient determination show that independent variables can only explain the dependent variables of biological asset disclosure by 11% where other variables can still influence the remaining 89%.

Based on the conclusions and limitations that have been outlined, the researcher provides suggestions as consideration for further research, namely, the next research is expected to combine biological asset disclosure items in IAS 41 that are not listed in PSAK 69, such as scope exclusions on land assets, the next study is expected to test other variables that may affect the disclosure of biological assets, such as the level of internationalization and audit finance expertise to expand the scope of research into the disclosure of biological assets. This research is expected to provide additional knowledge related to the unique treatment of the main assets of agricultural companies. Management, as the manager of the company, is expected to be able to disclose factors that affect biological assets, such as the presence or absence of government grants related to biological assets.

REFERENCE


