Biological Asset Disclosure, Profitability, and Green Accounting: The Impact on Company Value

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ABSTRACT

This research aimed to determine the impact of biological assets disclosure measured by using index Wallace, profitability measured by return on assets (ROA), and green accounting expressed by PROPER, on firm value, measured by using Tobin’s Q. The data used in this study were analyzed by using multiple liiner regression. The population for this research comprised agricultural companies listed on the ISE between 2016 and 2022. The research sample was selected using a purposive sampling method, resulting in a total of 7 companies. The results of this research partially showed that the biological assets disclosure and profitability had a positive effect on the firm value. Meanwhile, green accounting had no effect on firm value. Simultaneously, biological assets disclosure, profitability, and green accounting had an impact on firm value. The novelty of this research lies in its comprehensive analysis of the interplay between biological asset disclosure, profitability, and green accounting practices on firm value within the agricultural sector, emphasizing the importance of adhering to PSAK 69 for biological assets disclosure. Companies should focus on improving biological assets disclosure and profitability by increasing revenue and reducing costs to enhance firm value.

Keywords: Biological Assets Disclosure, Firm Value, Green Accounting, Profitability

INTRODUCTION

Companies always strive to maximize performance to enhance corporate value. This applies universally, including in the agricultural sector. Corporate value serves as a goal in sustaining business operations. It holds significance as it influences investor perspectives, market trust, and owner welfare. Agricultural companies play a crucial role in national food security by supplying essential food items to the populace. Additionally, their contribution to the Gross Domestic Product (GDP) is noteworthy. Based on Bank Indonesia’s data, the contribution of the agricultural, forestry, and fisheries sectors to GDP has steadily increased from 2016 to 2022 compared to other sectors, as shown in Figure 1:

Figure 1 GDP by Field of Activity Based on Constant Prices of 2010 (in Billion IDR).
Source: Processed, 2023
One of the efforts companies can make to attract investors to invest their capital is by disclosing comprehensive information about their business activities. In agricultural companies, this can take the form of disclosing their biological assets. Disclosure of biological assets is based on PSAK 69 and then measured using the Wallace index. Many agricultural companies have not yet disclosed their biological assets, or their disclosures tend to be incomplete. This occurs because companies only disclose information based on certain interests. Companies need to implement unbiased disclosure based on stakeholder theory.

Efforts to maximize corporate value can also be made by considering the company's profitability. Profitability is a measure of a company's performance in managing its resources to generate profits for investors (Ayu and Suarjaya, 2017). Improving business capacity to generate profits, as demonstrated in the profit and loss statement, may send a positive message and attract investors. Therefore, profitability is something companies need to consider in their efforts to increase corporate value. This research determines profitability using the Return on Assets ratio. This ratio is used because it indicates the company's ability to utilize resources and generate returns in the form of profits that meet shareholders' expectations. Meanwhile, Tobin's Q is used in calculating corporate value.

As companies in the agricultural sector primarily rely on natural resources, their continuous activities can cause environmental damage. Based on this, agricultural companies need to strive for accountability and conservation of the surrounding environment through the implementation of green accounting. The implementation of green accounting provides a favorable view in the eyes of the public and investors, enabling companies to maintain their legitimacy in society. This is because green accounting means that the company is not only focused on profit achievement but also plays a role in environmental preservation.

LITERATURE STUDY

Stakeholder Theory

Stakeholder theory was proposed by R. Edward Freeman (Puspitaninngrum and Indriani, 2021), which emphasizes that the success of a company depends on its ability to meet various stakeholder needs. Stakeholders can be individuals or institutions with interests in the company, capable of influencing or being influenced by the company's operational activities. Stakeholders may include suppliers, customers, government, shareholders, and the community. Therefore, stakeholders need to be considered by companies in disclosing information. Stakeholders have the right to receive information about the company's activities fairly, without favoring or benefiting any one of them. Based on this, companies are expected to disclose information that is useful to all stakeholders.

Signaling Theory

Signaling theory, proposed by Michael Spence as explained in Rasyid and Darsono (2022), suggests that companies, as information holders, can provide signals in the form of data about the company's condition that can benefit prospective investors. This theory addresses the emergence of information asymmetry between management and stakeholders, where information is only held by one party, either management or stakeholders in need of the information. Information asymmetry occurs when management possesses information but does not use it effectively in line with the company's interests. This signaling theory indicates that efficient companies will provide relevant and high-quality information to investors (Sartawi and Reyad, 2018).

Legitimacy Theory

John Dowling and Jefferey Pfeffer discussed the legitimacy theory in Puspitaninngrum and Indriani (2021), focusing on company management's interactions within the community. Companies can enhance environmental performance to gain recognition from the community. This is necessary because, besides considering investors, companies also need to consider public rights. If a company fails to meet the expectations of the surrounding community, it may face suspension (Linawati, et al, 2022). Based on this, legitimacy theory can be used to analyze and ensure that a
company's operational activities are accepted in society.

The Partial Influence of Biological Asset Disclosure on Company Value

Agricultural companies are pivotal to Indonesia's economic development (Hayati and Serly, 2020). Economic progress, such as the establishment of the ASEAN Economic Community, has led to the internationalization of agricultural company activities. Therefore, these companies need to fully disclose their information due to the increasing interests of their stakeholders. This aligns with stakeholder theory, wherein stakeholders need to be considered by companies when disclosing information about biological assets needed for investment decision-making processes. This theory is supported by previous research (Khodijah and Utami, 2020; Suhardjanto and Nugaheni, 2012; Rahmawati and Apandi, 2023) which found that disclosing biological assets positively affects company value. Increased disclosure of biological assets leads to higher company value. This aligns with the hypothesis proposed as follows:

H1: Partial disclosure of biological assets influences company value.

The Partial Influence of Profitability on Company Value

High profitability indicates a company's ability to generate profits for shareholders. Large profits can increase the company's ability to pay dividends, thus increasing its value. The higher the ROA value, the greater the return on investment and the better the company's performance, resulting in an increase in company value. Signaling theory explains that high profitability can provide positive signals and encourage prospective investors in the investment decision-making process. This is also supported by previous research (Yanti and Damayanti, 2019; Itsnaini and Subardjo, 2017; Dewi and Ekadjaja, 2020; Muwirdha and Winarto, 2013) which found that profitability positively influences company value. This leads to the hypothesis proposed as follows:

H2: Partial profitability influences company value.

The Partial Influence of Green Accounting on Company Value

The increasing environmental issues necessitate every company's involvement in environmental preservation by implementing green accounting (Dewi and Narayana, 2020). Agricultural companies also need to adopt it to contribute to the environment and enhance the company's environmental performance. This performance can improve the company's image in the eyes of stakeholders, leading to recognition from the community and an increase in company value, as per legitimacy theory. This is also supported by previous research (Dewi and Narayana, 2020; Nugroho, 2023; Erlangga et al, 2021), which found that the implementation of green accounting positively influences organizational value. This leads to the following hypothesis:

H3: Partial implementation of green accounting influences company value.

The Simultaneous Influence of Biological Asset Disclosure, Profitability, and Green Accounting on Company Value

Generating profit through resource management is a short-term goal for companies, with the long-term goal being a high company value (Erlangga et al, 2021). To achieve this, companies need to strive for prosperity and stakeholder interests. According to stakeholder theory, companies need to fully and impartially disclose biological assets in financial reports. This disclosure can be beneficial for stakeholders, especially investors, to assess company performance and make investment decisions. In pursuing short-term goals, companies must consider profitability, as high profitability ratios can also provide positive signals to stakeholders in their investment decision-making. Additionally, to attract investor attention, companies can implement efforts in line with legitimacy theory, where companies need to operate within established boundaries and norms. This can be done by focusing on environmental preservation through the implementation of green accounting, which can reduce environmental damage costs and give the company a competitive edge in the market (Erlangga et al, 2021). This leads to the following hypothesis:

H4: Simultaneous disclosure of biological assets, profitability, and green accounting influences company value.
METHOD

The approach used in this study is quantitative explanatory research, which explains the influence of one or more variables on other variables. Data were collected through documentation in the form of financial reports from agricultural companies listed on the IDX from 2016 to 2022 as secondary data. PROPER (Program for Rating Companies' Environmental Performance) documents from the period 2016-2022 were also used as primary data, along with other references related to this research.

The population consists of all agricultural companies listed on the IDX during the period 2016-2022, totaling 49 companies. The sample determination technique used purposive sampling method, resulting in 6 sampled companies. Data were analyzed using descriptive statistical analysis and multiple linear regression analysis, with the linear equation as follows:

\[ Y = a + b1X1 + b2X2 + b3X3 \]

Where:
- \( Y \) = Company value
- \( a \) = Constant
- \( b1-3 \) = Regression coefficients
- \( X1 \) = Biological asset disclosure
- \( X2 \) = Profitability
- \( X3 \) = Green Accounting

Tobin's Q was used in calculating company value in this research because the information it provides is superior to other ratios, showing the current market stock price compared to the equity book value. Biological asset disclosure is known based on PSAK 69. There are 40 points of biological asset disclosure based on PSAK 69. Full disclosure is measured using the index of disclosure methodology, namely the Wallace index.

In this study, profitability is determined using Return on Assets (ROA). This ratio indicates the company's ability to generate profits from managing assets or company assets. A higher ROA value indicates that the company is more efficient in utilizing its assets to generate net income. The implementation of green accounting can be indicated through environmental performance assessment expressed by PROPER. PROPER awards are given to companies with performance assessments that include activities to prevent environmental damage or pollution, mitigate environmental damage or pollution, and restore the effects of environmental damage or pollution. The assessment of green accounting through PROPER is done using colors. Gold represents the excellent category, green is in the good category, blue is in the fair category, red is in the poor category, while black falls into the very poor category.

RESULTS AND DISCUSSION

The results of descriptive statistical analysis presented in Table 1 indicate that this study utilized 42 research data. For the variable of biological asset disclosure based on the items in PSAK 69 and measured with the Wallace Index, the lowest value is 0.15 and the highest value is 0.60. The average biological asset disclosure is 0.3256, with a standard deviation of 0.1452. ROA produced the lowest value of 0.00 and the highest value of 0.17. The average ROA is 0.0694, with a standard deviation of 0.0374.

| Table 1. Descriptive Analysis Results |
|----------------|----------------|----------------|----------------|----------------|
|                | N      | Minimum | Maximum | Mean      | Std. Deviation |
| Indeks Wallace | 42     | .150000 | .600000 | .32559524 | .145196261    |
| ROA             | 42     | .001020 | .165260 | .06935424 | .037430685    |
| PROPER          | 42     | 3.000000 | 4.000000 | 3.11904762 | .327770068    |
| Tobin's Q       | 42     | .676779 | 4.604395 | 1.54955441 | .893991723    |
| Valid N (listwise) | 42 |                  |              |              |              |

Source: Data processed, 2023.
PROPER has a minimum value of 3 and a maximum value of 4, with an average score of 3 obtained. The standard deviation or difference in rankings between companies is 0.3278. Tobin’s Q ratio has a minimum value of 0.68 and a maximum value of 4.60. The average company value is 1.5496, with a standard deviation of 0.8940.

The multiple linear regression analysis of biological asset disclosure, profitability, and green accounting on company value is expressed as follows:

\[ Y = 0.401 + 2.549X1 + 9.840X2 - 0.117X3 \]

Based on the test results, the coefficient a of 0.401 means that if all independent variables have a value of zero, then the dependent variable will be 0.401. Biological asset disclosure with a regression coefficient of (+) 2.549 means that biological asset disclosure positively influences company value. Profitability has a regression coefficient of (+) 9.840, indicating that profitability positively influences company value. Meanwhile, the green accounting variable has a regression coefficient of (-) 0.117, indicating that green accounting has a negative influence on company value.

The coefficient of determination test results in Table 2 show the value of adjusted R² to be 0.437. This means that the contribution of biological asset disclosure, profitability, and green accounting to company value is 43.7%, with the remaining 56.3% being the contribution of other factors outside of the variables examined.

### Table 2. Coefficient of Determination Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.691a</td>
<td>.478</td>
<td>.437</td>
<td>.671021952</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023.

The results of partial testing between biological asset disclosure, profitability, and green accounting on company value are presented in Table 3. This study involved a total of 42 observations.

### Table 3. Statistical Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.401</td>
<td>1.119</td>
<td></td>
<td>.359</td>
</tr>
<tr>
<td>Indeks Wallace</td>
<td>2.549</td>
<td>.779</td>
<td>.414</td>
<td>3.273</td>
</tr>
<tr>
<td>PROPER</td>
<td>-.117</td>
<td>.328</td>
<td>-.043</td>
<td>-.356</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023.

Table 4 presents the results of the ANOVA (Analysis of Variance) test used to determine the overall significance of the regression model. The regression model in this context aims to assess the impact of three predictors—PROPER (green accounting), Wallace Index (biological asset disclosure), and ROA (profitability) on the dependent variable, Tobin's Q (firm value).

### Table 4. Statistical Test Results F

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>15.658</td>
<td>3</td>
<td>5.219</td>
<td>11.591</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>17.110</td>
<td>38</td>
<td>.450</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>32.768</td>
<td>41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

The F-statistic of 11.591 with a significance level of .000 indicates that the model is statistically significant. This means that the predictors—PROPER, Wallace Index, and ROA collectively have a significant effect on the firm value as measured by Tobin's Q.
Discussion

The Influence of Biological Asset Disclosure on Company Value.

Based on hypothesis testing, the partial effect of the biological asset disclosure variable, interpreted with the Wallace Index, shows a t-test statistic value of 3.273 and a significance level of 0.002. The calculated t-value is greater than the tabulated t-value of 2.024 (3.273 > 2.024). Furthermore, the resulting significance value is lower than the \( \alpha \) value (0.002 < 0.05). In the regression equation, the biological asset disclosure variable positively influences company value (Tobin’s Q).

This positive influence means that an increase in biological asset disclosure (Wallace Index) can enhance the company's value. A more comprehensive disclosure of biological assets based on PSAK 69 indicates that the company can fulfill various stakeholders' information needs, thereby aiding stakeholders in investment decision-making in line with stakeholder theory. Additionally, stakeholders feel confident about the company's capabilities because it can fully disclose its biological assets. Through the information disclosed by the company, stakeholders can assess investment risks and the company's prospects, leading to increased demand for company shares. Consequently, biological asset disclosure can drive up the company's stock price. Conversely, if the Wallace Index decreases, the company has not fully disclosed its biological assets, leading potential investors to hesitate to invest. This is because the company has not provided various information and met the needs of various stakeholders. Previous research consistent with this study, such as Rahmawati (2023), found that biological asset disclosure positively influences company value. Khodijah and Utami’s research (2021) also states that full biological asset disclosure positively influences company value by providing a positive signal to investors. However, contrary to this, research of Alfarisi et al (2022) found that biological asset disclosure negatively affects company value.

The Influence of Profitability on Company Value.

Based on hypothesis testing, the partial effect of profitability on company value with a t-test statistic value of 3.253 and a significance level of 0.002. This means that the calculated t-value is greater than the tabulated t-value of 2.024 (3.253 > 2.024). Furthermore, the resulting significance value is lower than the \( \alpha \) value (0.002 < 0.05). In the regression equation, the profitability variable positively influences company value.

This positive influence means that every increase in profitability can result in an increase in company value. A higher profitability (ROA) value indicates that the company earns more profit. A large profitability signals to potential investors that the company is in a favorable condition. In line with the assumption of signaling theory, where high profits can be a signal to indicate the company's prospects and good performance, making potential investors interested in buying company shares. Conversely, a decrease in the ROA value indicates a decrease in company value. This is because poor company performance in generating profits for investors or owners. Previous research consistent with this study, such as [10], where profitability calculated with ROA positively influences company value (PBV). Additionally, Itsnaini and Subardjo’s research (2017) and Dewi and Ekadjaja’s (2020) also provide consistent results, where profitability (ROA) positively influences company value (Tobin’s Q). Muwida and Winarno’s research (2013) yields similar results, where profitability (ROA) positively influences company value. In contrast, Mercyana et al (2022) found that profitability (ROA) does not influence company value.

The Influence of Green Accounting on Company Value.

Based on hypothesis testing, the partial effect of the green accounting variable (PROPER) on company value, the calculated t-value is -0.356 with a significance level of 0.724. This indicates that the calculated t-value is lower than the tabulated t-value of 2.024 (-0.356 < 2.024). Furthermore, the resulting significance value is higher than the \( \alpha \) value (0.724 > 0.05). This means that the green accounting variable (PROPER) does not influence company value (Tobin’s Q).
These results indicate that environmental management activities through participation in the PROPER program have not attracted public attention or increased demand for shares, thus not affecting company value. This is inconsistent with legitimacy theory because a company's participation in the PROPER program alone does not convince the public about the company's contribution to environmental preservation. Therefore, it should be accompanied by disclosure of social and environmental activities and environmental costs in the company's financial reports. Strong trust in the company can arise when the company implements green accounting effectively and comprehensively.

Based on this research, the sample used, which consists of agricultural companies from the period 2016-2022, showed a good ranking in the PROPER program. However, the efforts of these companies have not instilled confidence in investors and the public. This aligns with research conducted by Melawati and Rahmawati (2022), which found that green accounting has no effect on company value. Research by Salsabila and Widiatmoko (2022) also yielded similar results, indicating that green accounting has no effect on company value. However, research by Nugroho (2023) found a different result, stating that green accounting positively influences company value.

The Influence of Disclosure of Biological Assets, Profitability, and Green Accounting on Company Value.

In the simultaneous testing results, the effect of disclosure of biological assets measured using the Wallace index, profitability (ROA), and green accounting (PROPER) on company value showed an F-test statistic value of 11.591 and a significance level of 0.000. This result means that the calculated F value is greater than the tabulated F value of 2.85 (11.591 > 2.85). Furthermore, the significance value obtained is lower than the α value (0.000 < 0.05). This indicates that simultaneously, the Wallace index, ROA, and PROPER affect company value.

The disclosure of biological assets carried out by agricultural companies can meet the needs of all company stakeholders, thus can be utilized when making investment decisions. This is consistent with stakeholder theory, where comprehensive disclosure of information not tailored to any specific party can increase demand for company shares. In this study, agricultural companies have also paid attention to their profitability, thus providing positive signals to stakeholders in their investment decisions. Moreover, the company's participation in the PROPER program contributes to environmental preservation and maintains its legitimacy in society. The results of this study indicate that if agricultural companies pay attention to the simultaneous disclosure of biological assets, profitability, and green accounting, it can increase the company's value.

CONCLUSION

Company value is important to consider as it serves as a management consideration in ensuring business sustainability in the future. Disclosure of biological assets and profitability are factors that can increase company value. Therefore, companies need to strive for high profitability by increasing revenue and reducing costs. Additionally, the disclosure of biological assets is important and can be done by providing comprehensive information in accordance with PSAK 69. Although the implementation of green accounting has less impact on company value, companies should still strive to improve it by disclosing information about the company's environmental activities and environmental costs. In further research, the variables to be used are expected to be replaced or added. Profitability can use measurements such as return on equity (ROE), gross profit margin, operating profit margin, or net profit margin. Company value variables can be calculated using other ratios such as price book value (PBV) or price earnings ratio (PER). In the green accounting variable, the focus can be on disclosing information about the company's environmental activities and environmental costs. Additionally, additional research samples can be added with other groups of companies or by extending the research period.
References


