



Impact of Fair Value Measurement and Disclosure of Biological Assets Based on PSAK 69 on Agricultural Firm Value (2018-2022)

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Abstract. *The agricultural sector plays an important role in Indonesia's capital markets, making a significant contribution to the economy despite facing the challenges of the COVID-19 pandemic. The consistent growth of this sector, marked by an increase in contribution to GDP by 2.20% in 2020 and 12.4% in 2022, has attracted investor interest. To support better investment decisions, agricultural companies need to improve the quality of the financial information they present. The implementation of PSAK 69, which requires disclosure of the fair value of biological assets, is an important step in increasing corporate transparency and accountability. This research aims to empirically test the influence of the fair value of biological assets and disclosure of biological assets on firm value in the Indonesian agricultural sector for the 2018-2022 period. The research was conducted using multiple linear regression analysis. The research results show that disclosure of biological assets has a positive effect on increasing firm value, while the fair value of biological assets does not have a significant effect.*

Keywords *fair value, biological assets, biological assets disclosure, PSAK 69, firm value*

INTRODUCTION

The agricultural sector plays a crucial role in the Indonesian economy, especially when facing challenges such as the COVID-19 pandemic. Based on Badan Pusat Statistik (2020), Fadliyansyah (2020) and *databoks.katadata.id* (2022) despite the general economic slowdown, the agricultural sector continues to show relatively stable performance and even experiences positive growth. The contribution of the agricultural sector to Indonesia's Gross Domestic Product (GDP) consistently places it as one of the main sectors, even when the global economy is experiencing uncertainty (Rahmawati & Apandi, 2023). The positive performance of the agricultural sector is expected to attract investor interest and have the potential to increase investment in companies in this sector.

Pernyataan Standar Akuntansi Keuangan No. 69 (PSAK 69) regarding agricultural businesses that adopt IAS 41 is evidence of IFRS convergence in Indonesia. PSAK 69 became effective on January 1 2018, providing a new atmosphere for agricultural companies because biological assets are unique assets that require special treatment in recognition, measurement and disclosure. The use of fair value assumptions on biological assets supports broader disclosure and reflects the firm's ability to manage its biological assets.

Research by Argilés et al. (2010) and Domo et al. (2022) show that the fair value of biological assets can accurately reflect the asset value and provide good predictions of future cash flows. The application of fair value measurements also improves the qualitative characteristics of information in financial reports, thereby increasing the value of agricultural companies. However, the trend of using fair value accounting is still controversial because some academics argue that fair value can be manipulated and result in less efficient investment decisions. Despite this, the agricultural sector continues to show positive performance with significant growth, as can be seen from the increase in shares of plantation companies.

Huffman (2018) found that fair value information is less useful in decision making on biological assets. Based on an IASB survey, analysts do not find reporting fair market value for bearer biological assets useful because it can distort financial statements. In Indonesia, since the enactment of PSAK 69, there are still 87.5% of agricultural sub-sector companies that have not adopted this standard, indicating challenges in its implementation (Hidayat, 2018). However, the agricultural sector remains the 3rd largest contributor to GDP in 2022, reflecting positive perceptions from investors.

In addition to measuring biological assets at fair value, disclosure of biological assets also affects firm value. Good financial report disclosure describes the firm's performance and financial position accurately, helping in making investment decisions. Financial reports of agricultural companies must include information about biological assets because these assets are unique and undergo dynamic biological transformation (Alfiani & Rahmawati, 2019). This phenomenon is important because the agricultural sector continues to show positive performance despite facing economic challenges.

The importance of disclosing biological asset information is supported by research showing that high-quality financial reports can attract investors' attention and assist in the decision-making process. Thus, agricultural companies need to improve the quality of information presented in financial reports to accurately reflect firm value and support better investment decisions (Rahmawati & Apandi, 2023). This is in line with the significant contribution of the agricultural sector to the Indonesian economy, which continues to grow positively even in recession conditions.

LITERATURE REVIEW

Signaling Theory

Signaling theory, according to Spence (1973), explains how management manages and conveys financial information to stakeholders. Signaling theory predicts that companies will disclose more information than requested, as well as determining the type, manner and time of information delivery (Godfrey et al., 2010). This theory also helps understand how outside parties assess the company (Alfarisyi et al., 2022). According to Astuti (2015) in Hayati & Serly, (2020), the signals given by the company can help management realize the owner's wishes and become a consideration for investors. The information disclosed can be a positive or negative signal, influencing the assessment of investors and creditors (Rahmawati & Apandi, 2023). The implementation of PSAK 69 increases the proportion of main assets in a company through measuring the fair value of biological assets, which shows the ability of assets to generate cash flows and profits (Alfarisyi et al., 2022).

Firm Value

According to Natsir et al. (2023), firm value reflects the firm's ability to manage assets, which is important for stakeholders. Good firm value attracts potential investors because it reflects achievements in capital and asset management (Hapsoro & Falih in Natsir et al., 2023). Increasing firm value increases shareholder welfare and the company's image in the eyes of investors (Rahmawati & Apandi, 2023). Firm value also provides an overview of past performance as a reference for investors (Natsir et al., 2023). Luckyardi et al. (2021) state that company value can be seen through investment spending which predicts future growth and increases in share prices. Measurements of firm value include Tobin's Q, Price Earning Ratio (PER), and Price to Book Value (PBV). High firm value attracts investor interest and increases shareholder welfare (Rahmawati & Apandi, 2023). Fluctuations in firm value are influenced by capabilities in presenting biological assets and financial report communication skills (Rahmawati & Apandi, 2023).

PSAK 69 and Biological Assets

Based on IAI (2020), PSAK 69 concerning Agriculture is a statement of financial accounting standards that regulates the recognition, measurement and disclosure of agricultural activities. PSAK 69, which is an adaptation of IAS 41: Agriculture, has been approved by DSAK-IAI with an exposure draft since 16 December 2015 and began to be implemented on 1 January 2018 (Wardhani, 2021). “*Biological assets, defined as living animals or plants, require special treatment because they are affected by biological changes*” (Rahmawati & Apandi,

2023). Alfiani & Rahmawati (2019) explain that biological assets arise from past events and can be classified as long-term or short-term assets depending on the period of biological change. Biological assets with a transformation period of less than one year are classified as current assets, while those more than one year are classified as other assets (Rahmawati & Apandi, 2023). This accounting standard does not regulate biological assets in the form of productive plants (bearer plants), which are defined as “*plants that are cultivated to produce agricultural products and are rarely sold as agricultural products (Hidayat, 2018).*” Companies only recognize biological assets if they control the asset as a result of past events, future economic benefits are likely to flow to the entity, and the fair value or cost of the asset can be measured reliably (Hidayat, 2018).

Fair value of biological assets

Based on PSAK 69, biological assets must be measured at initial recognition and at the end of each reporting period at fair value less costs to sell, unless the fair value cannot be measured reliably (paragraph 30). Agricultural products harvested from biological assets are valued based on their fair value minus sales costs at harvest, which are considered costs at that date if applying PSAK 14: Inventories or other applicable statements (Rachmawati et al., 2019). This is in accordance with IFRS (2021) which explains that the fair value of biological assets can be measured by subtracting the selling costs from the market price. Sales costs include levies, import duties and transfer taxes. Based on the site *dpjb.kemenkeu.go.id*, the fair value of biological assets can be determined from prices in active markets that trade similar types of assets under normal conditions. In determining the fair value of biological assets, it is necessary to group items based on significant attributes such as age or quality. If there is an active market that reflects the current conditions and location for a biological asset or agricultural product, the price in that market is considered fair value. Yields from agricultural assets are also measured at fair value less costs to sell at the point of harvest (Domo et al., 2022). In the financial statements, the fair value measurement of biological assets is presented in the notes section of the financial statements.

Biological Asset Disclosure

Based on PSAK 69, companies are required to provide a quantitative description of each group of biological assets to differentiate between productive biological assets and consumable biological assets, as well as between mature and immature biological assets (Rachmawati et al., 2019). Disclosure is a method for communicating company economic information, both financial and non-financial, which reflects company performance (Owusu-

Ansah, 1998). In the disclosure, an entity must describe all biological assets held, both narratively and quantitatively. Hidayat (2018) explains that if biological assets are not disclosed in published information, the entity must describe the nature of activities involving each group of biological assets as well as non-financial measures or estimates of the physical quantity of each group of biological assets at the end of the period and the output of agricultural products during the period.

Hypothesis Development

Signaling theory Spence (1973) indicates that companies use financial information, such as the fair value of biological assets, as a positive signal to attract investors. Godfrey et al. (2010) explain, companies will tend to provide more information than requested with management as a key element in managing information about company performance. Based on signaling theory, companies employ various means to communicate their performance and future prospects to investors. One increasingly relevant signal is the fair value measurement of biological assets. In other words, company management attempts to communicate company information that is a significant consideration for investors, and then becomes a positive signal that can influence the company's assessment. Previous research by Putri Mas et al., (2023); Danbolt & Rees (2008); Herrmann et al. (2006); Marra (2016); Alfarisyi et al. (2022); Domo et al. (2022); and Rahmawati & Apandi (2023) supports the hypothesis that the fair value of biological assets has a positive impact on firm value. This finding has important implications for companies, especially in the agricultural sector, because it shows that the application of fair value can increase the company's attractiveness in the eyes of investors. In addition, for investors, information regarding the fair value of biological assets can be a reference in making more informative investment decisions. Based on the theoretical basis and previous research findings, the hypothesis proposed for this study is:

H1: The fair value of biological assets has a positive effect on firm value.

PSAK 69, by requiring detailed disclosure of biological assets, has improved the quality of information available to investors. This more transparent and relevant information allows investors to make more accurate judgments about a company's performance and prospects. PSAK 69 requires companies to disclose information regarding biological assets, which is considered a positive signal for investors (Abdullah & Tursoy, 2019; Orens et al., 2009). This disclosure is not just economic communication, but also reflects the company's commitment to transparency and accountability (Owusu-Ansah, 1998). Previous research by Khodijah & Utami (2021) and Rahmawati & Apandi (2023) supports the hypothesis that disclosure of

biological assets contributes to increasing firm value, in line with signaling theory that stated by van Biljon & Scott, (2019) on previous research. Although there is research that does not support these findings by Alfarisyi et al. (2022) and Domo et al. (2022) the general agreement suggests that more complete disclosure in accordance with PSAK 69 will have a positive impact on firm valuation. Based on the theoretical basis and previous research findings, the hypothesis proposed is:

H2: Disclosure of biological assets has a positive effect on firm value.

METHODS

This research examines the influence of the variables fair value of biological assets and disclosure of biological assets on the value of agricultural companies with 3 control variables, namely profitability, *leverage*, and *firm size*. Research conducted with using a quantitative approach with secondary data obtained from the financial reports of agricultural sector companies listed on the Indonesia Stock Exchange (BEI) for the 2018-2022 period. The research sample was selected purposively, with the following criteria.

Table 1 Purposive Sampling Selection Criteria

No.	Criteria	Amount
1.	Companies operating in the agricultural sector that have been listed on the IDX until 2022.	41
2.	Companies operating in the agricultural sector that publish their annual reports or audited financial reports for the 2018-2022 period on an ongoing basis.	(19)
3.	Companies that measure and disclose biological assets in accordance with PSAK 69 in their annual reports for the 2018-2022 period.	(5)
	Number of Samples	17
	Number of Years of Observation	5
	Total Sample	85

Of the total companies used, companies that were not used as samples were companies that did not disclose biological assets in their financial reports, namely companies with company codes BTEK, IIKP, MGRO, and WAPO, and companies that measured their biological assets still used their historical costs, namely BISI so that the information needed for the research is not available in the financial reports of these companies.

The research was carried out using IBM SPSS Statistics 26 software to carry out data analysis including descriptive statistical analysis, classic assumption tests consisting of normality tests, multicollinearity tests, heteroscedasticity tests and autocorrelation tests, as well as to carry out multiple linear regression analysis and hypothesis testing.

To measure company value, researchers use the Tobin's Q (1970) measurement ratio with the following formula.

$$\text{Tobin's } Q (1970) = \frac{\text{MVE}_{it} + \text{TA}_{it} - \text{BVE}_{it}}{\text{TA}_{it}}$$

This research measures the fair value of biological assets using a biological asset intensity proxy, namely the ratio between the fair value of biological assets and total assets (Alexeyeva & Mejia-Likosova, 2016; Alfariysi et al., 2022); Putri Mas et al., 2023). This proxy was chosen because it reflects the extent to which the company invests resources in biological assets that are valued fairly and have the potential to increase firm value (Yurniwati et al., 2018) and Martanti et al., 2019). Biological asset disclosure in this study was measured using the Wallace index, which is an adaptation of the disclosure index developed by Clarkson et al. (2013). This index calculates the proportion of biological asset disclosure items required by PSAK 69 that are disclosed by companies in their annual financial reports by comparing the total disclosure items disclosed by the company with the total disclosure items as a whole. For the control variable, profitability is measured using the return on assets ratio, a control variable *leverage* measured using the DAR ratio by comparing total liabilities with total assets, and the firm size variable is measured using the natural logarithm value of the company's total assets.

This research uses multiple linear regression analysis to examine the influence of the fair value of biological assets and the level of disclosure of biological assets on firm value. This regression model assumes a linear relationship between these variables and aims to identify the significant contribution of each independent variable to variations in company value. The model used to test the hypothesis in this research is:

$$\text{TOBINSQ}_{it} = \beta_0 + \beta_1 \text{FVBA}_{it} + \beta_2 \text{BAD}_{it} + \beta_3 \text{ROA}_{it} + \beta_4 \text{DAR}_{it} + \beta_5 \text{FS}_{it} + \varepsilon_{it}$$

In the equation above:

1. TOBINSQ_{it} is the dependent variable which is the value of firm i in year t,
2. FVBA_{it} and BAD_{it} is the main independent variable, which shows the application of the fair value of biological assets and biological disclosures of firm i at time t.
3. ROA_{it} , DAR_{it} , and FS_{it} is the control variable in this study for company i at time t.
4. β_0 is a constant.
5. β_1 , β_2 , β_3 , β_4 , and β_5 are regression coefficients that indicate the extent to which the independent variables and control variables influence the dependent variable.
6. ε_{it} is the standard error (error).

RESULTS

Descriptive Statistical Analysis

Descriptive statistical analysis summarizes the key characteristics of a dataset, including the average value, standard deviation, minimum, and maximum values.

Table 2 Statistic Descriptives Result

<i>Descriptive Statistics</i>					
	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Y	85	0,471	2,382	1,060	0,382
X1	85	0,001	0,209	,028	0,040
X2	85	0,250	0,472	,367	0,055
K1	85	-0,583	0,343	,010	0,129
K2	85	0,119	2,312	,644	0,375
K3	85	13,004	17,567	15,700	1,240
Valid N (listwise)	85				

Keterangan: TOBINSQ_Y (nilai perusahaan) FVBA_X1 (nilai wajar aset biologis); BAD_X2 (pengungkapan aset biologis); ROA_K1 (profitabilitas); DAR_K2 (leverage); FS_K3 (firm size)

Source: Processed Data (2024)

Based on the table above, the firm value (Tobin's Q) has an average of 1.060 with relatively small variations with a standard deviation of 0.382, but has a fairly wide range of values, from 0.471 (STAA in 2021) to 2.382 (UNSP in 2022). From the two minimum and maximum value data, it can be seen that the sample companies, when viewed from the criteria in TOBIN'S Q, experienced *undervalued* and *overvalued* because the value is far from the good TOBIN'S Q value, namely 1.

First independent variable namely Fair Value of Biological Assets (FVBA) has the average proportion of fair value of biological assets to total assets is 2.8%. The variation in this proportion is quite large, with the ANDI having the highest proportion at 20.9% and BEEF having the lowest proportion at 0.1%. Biological Asset Disclosure (BAD): The average level of biological asset disclosure is 36.7%, which indicates that companies only disclose a small portion of the disclosure items required by PSAK 69.

The control variable, Profitability (ROA): An average ROA of 0.010 indicates that in general the company is able to generate profits. However, there is considerable variation, with some companies experiencing losses (UNSP 2019). The control variable Leverage (DAR) average Debt-to-Asset Ratio (DAR) of 0.644 indicates that companies on average have moderate levels of debt. However, there are several companies with high debt levels (UNSP 2022), which indicates greater financial risk. Descriptive analysis revealed that the third control variable, firm size sample varied between 13,004 and 17,567, with a mean of 15,700. The variation in firm size was relatively small, as indicated by a standard deviation of 1,240.

Classical Assumption Test

Table 3 Normality Test

Runs Test	
	<i>Unstandardized Residual</i>
<i>Test Value^a</i>	-0,040
<i>Cases < Test Value</i>	42
<i>Cases >= Test Value</i>	42
<i>Total Cases</i>	84
<i>Number of Runs</i>	45
<i>Z</i>	0,439
<i>Asymp. Sig. (2-tailed)</i>	0,661

Source: Processed Data (2024)

Normality test is carried out using a run test. Based on the table above the normality test results are shown in section *Asymp. Sig. (2-tailed)* of 0.661. The significance value is more than 0.05, which in this case means that the data used in this research is normally distributed so that the data can be used for tests in research.

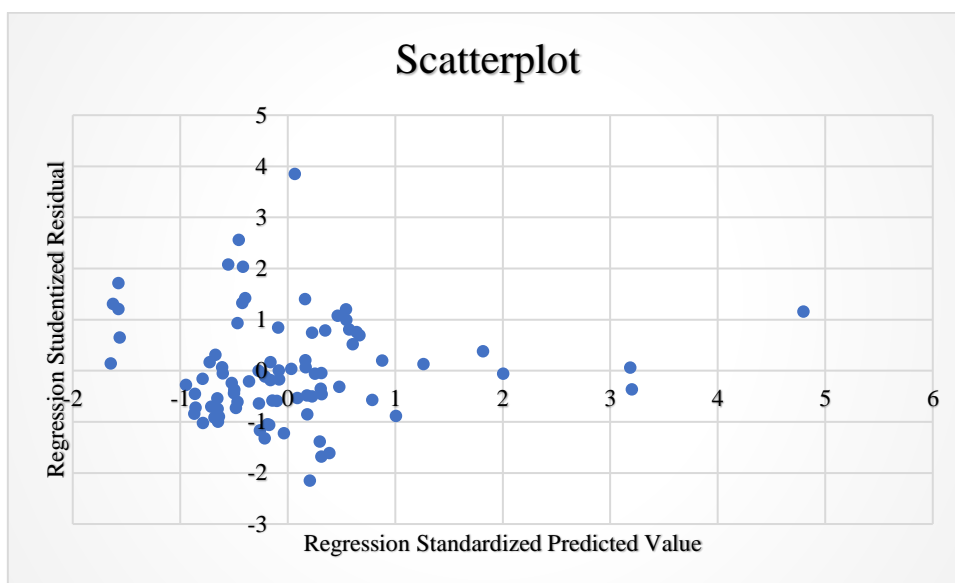
Table 4 Multicollinearity Test Result

Coefficients^a			
<i>Model</i>		Collinearity Statistics	
		Tolerance	VIF
1	<i>X1</i>	0,932	1,073
	<i>X2</i>	0,920	1,087
	<i>K1</i>	0,823	1,215
	<i>K2</i>	0,869	1,151
	<i>K3</i>	0,939	1,065
a. Dependent Variable: Y			
<i>Keterangan: Y (nilai perusahaan); X1 (nilai wajar aset biologis); X2 (pengungkapan aset biologis); K1 (profitabilitas); K2 (leverage); K3 (firm size)</i>			

Source: Processed Data (2024)

Multicollinearity Test, *output* in the multicollinearity test shows that the variables fair value of biological assets, disclosure of biological assets, profitability, *leverage*, and the size of the company in 5 years has value *tolerance* more than 0.1 and a VIF value of less than 10. When the value *tolerance* greater than 0.1 and indigo *Variance Inflation Factor (VIF)* is not greater than 10, so there is no multicollinearity in the independent variables used in the research. Thus, it can be concluded that there are no symptoms of multicollinearity in the data in this study.

Table 5 Heteroscedasticity Test Result



Source: Processed Data (2024)

Heteroscedasticity Test on the graph *scatterplot* above explain that the points are distributed randomly along the Y axis, both above and below zero, the points on the graph are also distributed evenly, and do not show any special patterns that indicate symptoms of heteroscedasticity, so it can be concluded that there is no heteroscedasticity problem in the fair value variable of biological assets and disclosure of biological assets on the firm value variable in this research with the control variable used.

Table 6 Autocorrelation -Test Result

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,660 ^a	0,435	0,399	0,296	2,307
<i>a. Predictors: (Constant), K3, X2, K2, X1, K1</i>					
<i>b. Dependent Variable: Y</i>					
<i>Keterangan: Y (nilai perusahaan); X1 (nilai wajar aset biologis); X2 (pengungkapan aset biologis); K1 (profitabilitas); K2 (leverage); K3 (firm size)</i>					

Source: Processed Data (2024)

Autocorrelation Test Based on the results of the autocorrelation test in table 4.7, the dW value is 2.307. This value shows a result of $1.774 < 2.307 > 2.226$, in which case the value does not meet the requirements for passing autocorrelation, namely $dU < dW < 4-dU$. To overcome the signs of autocorrelation, researchers use methods *cochrane-orcutt*. The following are the results of the autocorrelation test after implementing a solution to overcome autocorrelation using the method *Cochrane-Orcutt*.

Table 7 Autocorrelation Test Result (After Cochran-Orcutt)

Model Summary^b					
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
1	,668 ^a	,446	,410	,293504	2,039
<i>a. Predictors: (Constant), K3, X2, K2, X1, K1</i>					
<i>b. Dependent Variable: Y</i>					
<i>Keterangan: Y (nilai perusahaan); X1 (nilai wajar aset biologis); X2 (pengungkapan aset biologis); K1 (profitabilitas); K2 (leverage); K3 (firm size)</i>					

Source: Processed Data (2024)

Based on these data, value *Durbin-Watson* shows a value of 2,039. Based on table *Durbin-Watson* with an N value of 84 and a significance level of 0.05, the dU value was 1.773 and the dL value was 1.522. With the condition that the autocorrelation $dU < dW < 4-dU$, the results of the autocorrelation test show a value of $1.773 < 2.039 < 2.227$ so it can be concluded that after data transformation, the results show that there are no symptoms of autocorrelation in the research variables.

Hypothesis Testing

Coefficient of Determination

Table 8 Coefficient of Determination

Model Summary^b				
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	0,668 ^a	0,446	0,410	0,294
<i>a. Predictors: (Constant), K3, X2, K2, X1, K1</i>				
<i>b. Dependent Variable: Y</i>				
<i>Keterangan: Y (nilai perusahaan); X1 (nilai wajar aset biologis); X2 (pengungkapan aset biologis); K1 (profitabilitas); K2 (leverage); K3 (firm size)</i>				

Source: Processed Data (2024)

The results of the coefficient of determination test show that the independent variables studied are only able to explain around 44.6% of the total variation in firm value, indicating that there are other factors that significantly influence firm value.

Regression Model Feasibility Test (F Test)

Table 9 F-Test Result

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,409	5	1,082	12,559	,000 ^b
	Residual	6,719	78	,086		
	Total	12,129	83			
a. Dependent Variable: Y						
b. Predictors: (Constant), K3, X2, K2, X1, K1						
Keterangan: Y (nilai perusahaan); X1 (nilai wajar aset biologis); X2 (pengungkapan aset biologis); K1 (profitabilitas); K2 (leverage); K3 (firm size)						

Source: Processed Data (2024)

Based on table 9, it can be seen that the significance value in the F test table is 0.000, smaller than 0.05 and the calculated F value is 12.559, indicating a greater value than the F table value of 2.332, which in this case shows that the data in the research meets the requirements. and fulfill a research model that is worthy of further testing.

Multiple Linear Regression Analysis

Table 10 Multiple Linear Regression Result

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,055	0,553		1,908	0,060
	X1	0,952	0,889	0,093	1,071	0,288
	X2	1,277	0,566	0,198	2,255	0,027
	K1	0,361	0,267	0,126	1,355	0,179
	K2	0,653	0,094	0,628	6,942	0,000
	K3	-0,049	0,027	-0,157	-1,806	0,075
a. Dependent Variable: Y						
Keterangan: Y (nilai perusahaan); X1 (nilai wajar aset biologis); X2 (pengungkapan aset biologis); K1 (profitabilitas); K2 (leverage); K3 (firm size)						

Source: Processed Data (2024)

Based on the results of the regression test, the multiple linear regression equation can be formulated as follows.

The results of multiple linear regression analysis show that in general, there is a positive relationship between the fair value of biological assets, disclosure of biological assets, profitability and leverage with firm value. A 1% increase in the fair value of biological assets with a coefficient of 0.952 and disclosure of biological assets with a coefficient of 1.277

significantly increases firm value. Likewise, a 1% increase in profitability with a coefficient of 0.361 and leverage with a coefficient of 0.653 also contributes positively to increasing firm value. This indicates that companies with high fair value of biological assets, good disclosure quality, high profitability, and high levels of leverage tend to have higher firm value. However, the analysis results also show that there is a negative relationship between firm size and firm value. A 1% increase in firm size (coefficient -0.049) actually reduces firm value. These findings indicate that smaller companies tend to have higher firm value than larger companies. However, it should be remembered that the coefficient for firm size is relatively small compared to other variables, so its influence on firm value may not be as big as the influence of other variables.

Statistical T-Test

Based on the t-test results from table 10 above, it can be explained that, the significance value of the fair value of biological assets is $0.288 > 0.05$ and the t table value is $1.989 > 1.071$ t calculated. Based on these values, it can be concluded that H1 is rejected and is variable fair value of biological assets (*FVBA*) has no effects on the firm value variable. The significance value of biological asset disclosure is $0.027 > 0.05$ and the t table value is $1.989 < 2.225$ t calculated. Based on this significance value, it can be concluded that H2 is accepted and the biological asset disclosure variable has a significant positive effect on the firm value variable.

The three control variables show the following results, the significance value of the profitability variable (ROA) is $0.179 > 0.05$ with t table $1.989 > t$ count 1.355, so it can be concluded that the profitability variable (ROA) does not have a significant effect on the variable *TOBINSQ*, variable significance value *leverage* (DAR) is $0.000 < 0.05$ with t table $1.989 < t$ count 6.942, so it can be concluded that the variable *leverage* (DAR) has a positive and significant effect on the firm value variable, the significance value of the firm size is $0.075 > 0.05$ with t table $1.989 > t$ -1.806, so it can be concluded that the firm size has no significant effect on the firm value variable.

DISCUSSION

The hypothesis that the fair value of biological assets has a positive impact on firm value is not supported by the results of this research, which in this case is indicated by the results of the hypothesis test in the research which shows a significance value of 0.288 which is greater than the value of 0.05. Regression analysis shows that the fair value of biological assets does not have a significant influence on the value of agricultural sector companies in Indonesia. This finding is not in line with several previous studies by Alfarisyi et al. (2022),

Domo et al. (2022), dan Rahmawati & Apandi (2023) which shows a positive relationship between the two. One possible reason is that the fair value proportion of biological assets is relatively small in the sample companies, so the impact on firm value is not significant. In addition, external factors such as weather conditions, harvest success, and disease risks that are difficult to predict can also influence investors' assessment of a firm's value.

This research also found that investors tend to focus more on information that is easy to measure and understand, such as disclosure that a biological asset has been measured based on PSAK 69, rather than on the fair value proportion of the biological asset itself. Information regarding changes in the fair value of biological assets and their impact on firm profits or losses is also considered more relevant by investors in making investment decisions. This shows that although fair value is a more accurate measurement for biological assets, other factors such as the quality of disclosure and other relevant financial information have a more dominant role in influencing investors' assessments of firm value.

The second hypothesis which tests the effect of biological asset disclosure on firm value in this study shows supported results, which in this case are shown by the results of regression analysis which shows a significant positive relationship between the two ($0.027 < 0.05$). This finding is in line with signaling theory which states that transparent information disclosure can increase investor confidence and ultimately increase firm value (van Biljon & Scott, 2019). In other words, when a firm openly and honestly reports information regarding its biological assets in accordance with PSAK 69, investors tend to view the company as more credible and are willing to provide a higher valuation. The content analysis results also support these findings. Most of the sample companies have fulfilled the mandatory disclosure requirements for biological assets in accordance with PSAK 69. This shows that companies in the agricultural sector in Indonesia have realized the importance of transparency in disclosing biological assets. This finding is consistent with previous research by Khodijah & Utami (2021) and Rahmawati & Apandi (2023) which concluded that comprehensive disclosure of biological assets can attract investor interest and increase firm value. Thus, it can be concluded that disclosure of biological assets is good practice and contributes positively to increasing firm value.

CONCLUSION

This research aims to analyze the influence of the fair value of biological assets and disclosure of biological assets on the value of companies in the agricultural sector listed on the IDX. The research results show that:

1. The fair value of biological assets does not have a significant effect on firm value. Investors are more focused on other factors such as the implementation of PSAK 69 and changes in fair value which directly affect company profits.
2. Disclosure of biological assets based on PSAK 69 has a positive influence on firm value. Transparent disclosure increases investor confidence and attracts investment interest.

LIMITATION

Several limitations in this research include:

1. The number of samples is limited because there are quite a lot of companies that do not report both financial reports and annual reports completely, which causes a reduction in samples that can be used in research, in this case there are several companies that have not included the fair value of biological assets in the early years of implementing PSAK. 69 and there are still companies that use historical costs in measuring their biological assets.
2. The measurement of the fair value of biological assets used in research is still subjective, because in the financial statements, the fair value of biological assets is presented in several accounts that may be used, such as the fair value of biological assets, changes in biological assets, and the increase (decrease) in the fair value of assets. biological, which allows showing different influences on firm value.

REFERENCES

- Alexeyeva, I., & Mejia-Likosova, M. (2016). The Impact of Fair Value Measurement on Audit Fees: Evidence from Financial Institutions in 24 European Countries. *International Journal of Auditing*, 20(3), 255–266. <https://doi.org/10.1111/ijau.12075>
- Alfarisyi, N., Diantimala, Y., Yahya, R., & Saleh, M. (2022). Biological Assets and Firm Value: Do Fair Value Measurement and Disclosure Matter? *Jurnal Dinamika Akuntansi Dan Bisnis*, 9(2), 205–222. <https://doi.org/10.24815/jdab.v9i2.24694>
- Alfiani, L. K., & Rahmawati, E. (2019a). Pengaruh Biological Asset Intensity, Ukuran Perusahaan, Pertumbuhan Perusahaan, Konsentrasi Kepemilikan Manajerial, dan Jenis KAP Terhadap Pengungkapan Aset Biologis(Pada Perusahaan Agrikultur yang Terdaftar di Bursa Efek Indonesia Periode 2014-2017). *Reviu Akuntansi Dan Bisnis Indonesia*, 3(2), 163–178.
- Argilés, J. M., Garcia-Balndon, J., & Monllau, T. (2010). Fair Value Versus Historical Cost-Based Valuation for Biological Assets: Predictability of Financial Information. *Revista de Contabilidad-Spanish Accounting Review*, 14(2), 87–113.
- Badan Pusat Statistik. (2020). *Indikator Pertanian (Agricultural Indicators) 2020* (H. dan P. Direktorat Statistik Tanaman Pangan, Ed.). Badan Pusat Statistik.

- Clarkson, P. M., Fang, X., Li, Y., & Richardson, G. (2013). The relevance of environmental disclosures: Are such disclosures incrementally informative? *Journal of Accounting and Public Policy*, 32(5), 410–431. <https://doi.org/10.1016/j.jaccpubpol.2013.06.008>
- Danbolt, J., & Rees, W. (2008). An experiment in fair value accounting: UK investment vehicles. *European Accounting Review*, 17(2), 271–303. <https://doi.org/10.1080/09638180701819865>
- djpb.kemenkeu.go.id/kppn/ketapang/id/data-publikasi/artikel/3081-perlakuanakuntansi-aset-biologis-menurut-sap-dan-sak.html
- Domo, A., Resky, V., & Utami, W. (2022). The Effect of the Quality of Disclosure and the Fair Value of Biological Assets on Company Value. *DIJMS (Dinasti International Journal Od Management Science)*, 4(2), 279–285. <https://doi.org/10.31933/dijms.v4i2>
- Fadliyansyah, M. E. (2020, September 2). *Tertolong Saham-saham Pertanian. IHSG Ditutup di Zona Hijau Naik 0,02%*. Katadata.Co.Id.
- Godfrey, J., Hodgson, A., Tarca, A., & etc. (2010). *Accounting Theory (7th Edition)*.
- Hadiyanto, A., Puspitasari, E., & Ghani, E. K. (2018). The effect of accounting methods on financial reporting quality. *International Journal of Law and Management*, 60(6), 1401–1411. <https://doi.org/10.1108/IJLMA-03-2017-0022>
- Hayati, K., & Serly, V. (2020). Pengaruh Biological Asset Intensity, Growth, Leverage, Dan Tingkat Internasional Terhadap Pengungkapan Aset Biologis (Studi pada Perusahaan Agrikultur yang Terdaftar di BEI Tahun 2015-2018). *Jurnal Eksplorasi Akuntansi*, 2(2), 2656–3649. <http://jea.ppj.unp.ac.id/index.php/jea/issue/view/22>
- Herrmann, D., Saudagaran, S. M., & Thomas, W. B. (2006). The quality of fair value measures for property, plant, and equipment. *Accounting Forum*, 30(1), 43–59. <https://doi.org/10.1016/j.accfor.2005.09.001>
- Hidayat, M. (2018). *Analysis Of Accounting Treatment Of Agricultural Activities In The Idx Targeted Plants Sector Companies Approaching The Im-Plementation Of PSAK 69. Measurement*, 12(1), 36–44.
- Huffman, A. (2018). Asset use and the relevance of fair value measurement: evidence from IAS 41. *Review of Accounting Studies*, 23(4), 1274–1314. <https://doi.org/10.1007/s11142-018-9456-0>
- Ikatan Akuntan Indonesia. (2020). *Agrikultur (PSAK No. 69)*. Jakarta: Penulis.
- Khodijah, A. S., & Utami, E. R. (2021). The Role Of Biological Assets Disclosure In Agricultural Companies: A Study In Indonesia. *Advances in Economics, Business, and Management Research*, 176.
- Luckyardi, S., Agustini, K., & Sari, M. (2021). *The Impact Of Dividend Policy And Capital Structure On Firm Value In Agricultural Sector*. In *Jurnal Ilmu Keuangan dan Perbankan (JIKA)* (Vol. 11, Issue 1). www.idx.co.id
- Marra, A. (2016). The pros and cons of Fair Value Accounting in a globalized economy: A never ending debate. *Journal of Accounting, Auditing and Finance*, 31(4), 582–591. <https://doi.org/10.1177/0148558X16667316>
- Martanti, R., Lestari, E., Zarkasyi, W., Soepardi, E. M., & Farida, I. (2019). Accounting for Biological Assets: Data from Indonesia and Malaysia. *International Journal of Innovation, Creativity and Change*. www.Ijicc.Net, 6(9). www.ijicc.net

- Natsir, K., Bangun, N., & Ishlah, R. N. (2023). Firm Value Of The Agricultural Sector In Indonesia And Several Influencing Factors. *Jurnal Manajemen*, 27(2), 297–321. <https://doi.org/10.24912/jm.v27i2.1113>
- Orens, R., Aerts, W., & Lybaert, N. (2009). Intellectual capital disclosure, cost of finance and firm value. *Management Decision*, 47(10), 1536–1554. <https://doi.org/10.1108/00251740911004673>
- Owusu-Ansah, S. (1998). The Impact of Corporate Attributes on the Extent of Mandatory Disclosure and Reporting by Listed Companies in Zimbabwe. In *The International Journal of Accounting* (Vol. 33, Issue 5).
- Putri Mas, N. P. A., Putri, I. G. A. M. A. D., Sari, M. M. R., & Wirajaya, I. G. A. (2023). Does firm growth moderate the effect of biological assets intensity on firm value? *World Journal of Advanced Research and Reviews*, 19(2), 700–709. <https://doi.org/10.30574/wjarr.2023.19.2.1632>
- Rachmawati, Y., Oktriyani, A., & Ermina. (2019). Implementasi Perlakuan Akuntansi Aset Biologis Berbasis PSAK 69 yang Berlaku Efektif 1 Januari 2018 pada Perusahaan Perkebunan (Studi Kasus PT.PP London Sumatera Indonesia,Tbk). *Akuntansi Dan Manajemen*, 14(2), 130–145.
- Rahmawati, D., & Apandi, R. N. N. (2023). Do Biological Assets And Disclosures Under Psak 69 Affect Company Value? *Nur Klabat Accounting Review* |, 4(1).
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355–374. <http://qje.oxfordjournals.org/>
- van Biljon, M., & Scott, D. (2019). The importance of biological asset disclosures to the relevant user groups. *Agrekon*, 58(2), 244–252. <https://doi.org/10.1080/03031853.2019.1570285>
- Wardhani, P. M. (2021). *Analisis Perlakuan Akuntansi Aset Biologis pada Industri Perkebunan Berdasarkan PSAK 69 Agrikultur* (Vol. 1).
- Yurniwati, Y., Djunid, A., & Amelia, F. (2018). Effect of Biological Asset Intensity, Company Size, Ownership Concentration, and Type Firm against Biological Assets. *The Indonesian Journal of Accounting Research*, 21(1). <https://doi.org/10.33312/ijar.338>