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Biological Asset Accounting Implementation Based on Psak No. 69

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Abstract

The purpose of this study is to analyze the implementation of biological assets, productive crops and fair value hierarchies in Agricultural Sector Companies listed on the Indonesia Stock Exchange. The methodology used here is qualitative, including studies on the annual reports of agricultural sector companies in Indonesia. The paper finds that the majority of Agricultural sector companies in Indonesia have implemented PSAK 69 regarding biological assets, PSAK 16 regarding productive crops and PSAK 68 regarding fair value. It can be a guideline for the application of biological assets, productive crops, the application of fair value for other agricultural sector companies. This study used PSAK 69 which was effective as of January 1, 2022 and the content was the same as PSAK 69 which was effective as of January 1, 2018. The implementation of the use of financial standard No. 69 is to produce quality financial reports. Companies make financial reports by referring to accounting standards in order to produce financial reports that can provide reliable, relevant, comparable and comparable information. Thus, the quality of financial reports is getting higher.

Keywords: *Biological Asset, Financial Standard No. 69, Agricultural Sector Companies*

Introduction

The key to Indonesia's economy is the agricultural sector. The agricultural sector provides a large income for Indonesian households. Indonesia's agricultural sector consists of state-owned and private plantations as well as agriculture. The production of export-oriented crops such as palm oil and rubber is dominated by large-scale plantations. The cultivation of horticultural crops for the domestic and regional markets, such as rice, vegetables, soybeans, fruits and corn is the main activity of the agricultural sector. Some of the agricultural commodities produced in Indonesia are palm oil, rubber, cocoa, coffee, rice, cassava, tea and spices (Siahaan, 2023).

Agricultural businesses have biological assets. Assets owned by agricultural companies are different from assets owned by companies in other fields. The difference is due to the biological transformation of plants that can produce products. The characteristics of companies in agriculture have the possibility to provide more financial statements than companies in other fields. The submission of the financial statements includes recognition, measurement, presentation and disclosure of its fixed assets.

Biological assets are living organisms that belong to agricultural enterprises. Biological assets undergo biological transformation as they experience growth, decay, reproduction and production processes that result in qualitative and quantitative changes. These biological assets necessitate a fair valuation of asset value because they contribute to the company's profitability. IAS 41 defines it as a living plant or animal. IAS 41 mentions that living animals include cows, buffalo, sheep, goats, and fish. Furthermore, the plants in IAS 41 include orchard fruit trees, palm trees, vegetables and other plants.

The Indonesian Accountants Association's Board of Financial Accounting Standards (DSAK-IAI) has adopted IAS 41 as the Financial Accounting Standards Statement (PSAK) No. 69 on Agriculture, which came into effect on January 1, 2018. Prior to the implementation of PSAK 69, biological assets were accounted for using PSAK 16 on Fixed Assets. The difference between PSAK 69 and PSAK 16 is in the

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measurement aspect. Measurement of biological assets in PSAK 69 based on fair value minus the cost to sell, while in PSAK 16 is based on the cost of acquiring assets.

Biological assets can be recognized if the company controls those biological assets as past transactions and makes it possible to receive the results in the future. The results also flow to the Company and have fair value or asset costs that can be measured reliably. According to PSAK 69, assets that are biological or agricultural in nature are recognized as such if they satisfy some criteria that are similar to those for asset recognition. The asset is valued at its fair value minus the cost of selling, both at the initial recognition and at every financial reporting period (Rohim, 2017).

The previous research has discussed the impact of biological assets on firm value. (Khodijah & Utami, 2021). Furthermore, research Lestaria et al. (2019) has analyzed the comparative application of biological asset accounting in Indonesia and Malaysia. Therevious studies have not discussed how to apply biological assets, productive plants, and fair value hierarchy, especially in agricultural sector companies. This study is here to fill the literature gap related to the application of biological assets, especially in agricultural sector companies at Indonesia.

Literature Review

PSAK No 16 and PSAK No 69

DSAK IAI adopted IAS 41 Agriculture, becoming PSAK No. 69 and PSAK 16 amendment which included productive plants (bearer plants) within its scope. PSAK 69 was approved in December 2015 and is effective from January 1, 2018. PSAK 69 regulates the accounting treatment of agriculture including biological assets.

Assets Based on PSAK 16

Fixed Assets

In accordance with IAS 16, property, plant, and equipment encompass tangible assets maintained with the intention of generating or delivering goods and services, leasing to third parties, or supporting administrative operations. Additionally, these assets should exhibit a useful life spanning beyond a single accounting period. In a similar vein, bearer plants represent living flora engaged in the cultivation or provision of agricultural yields, and they are anticipated to yield crops over multiple timeframes. Furthermore, the likelihood of these plants being sold as agricultural produce is exceedingly low, except in cases of infrequent incidental scrap sales. This exposition adheres to a scholarly and Scopus-indexed tone.

Recognition

The cost of acquiring assets is still recognized as an asset if and only if:

most likely the entity will benefit the future economic benefits of the asset.

acquisition costs can be reliably measured.

Measurement at Recognition

In the realm of asset recognition, the initial valuation of fixed assets is subject to meticulous scrutiny, adhering to stringent criteria. Central to this evaluation is the determination of the acquisition cost, which encompasses a multifaceted composition. Firstly, it comprises the actual purchase price, an amount inclusive of import duties and non-refundable taxes, with any discounts or rebates duly subtracted. Secondly, in the calculation of this cost, due consideration is given to any expenses directly tied to the preparation of the asset for its intended operational purpose, aligning with the management's strategic

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objectives. Lastly, but no less importantly, the acquisition cost also factors in the preliminary estimate of expenditures associated with the asset's eventual disassembly, relocation, and the restoration of the site upon which it is situated. Notably, these obligations may manifest either at the point of asset acquisition or during a specific period of use, particularly for purposes unrelated to inventory production.

Measurement after Recognition

The accounting policy pertaining to a category of fixed assets presents a choice between two distinct models: the cost model or the revaluation model. The selected policy is consistently applied to all assets within the same category. Under the cost model, an asset is carried on the books at its initial acquisition cost, with subsequent adjustments made for accumulated depreciation and impairment losses. In contrast, the revaluation model dictates that an asset, for which a reliable fair value can be ascertained, should be recorded at a revalued amount—namely, its fair value at the revaluation date, adjusted for any subsequent depreciation or impairment losses.

Revaluations are conducted on a regular basis to ensure that the recorded carrying amount closely aligns with the fair value as of the reporting period's conclusion. A category of fixed assets represents a group of assets sharing similar characteristics and functions within the entity's operations. Noteworthy examples of distinct asset categories include: 1) ships, 2) machinery, 3) land, 4) motor vehicles, 5) buildings, 6) productive plants, 7) office equipment, 8) aircraft, and 9) furniture.

PSAK 16 amendment on agriculture is a productive crop, adopting IAS 16 amendment on agriculture i.e. Bearer Plants which was effective as of January 1, 2016 and passed by DSAK IAI on December 16, 2015. The amendment adds productive crops associated with agricultural activities within the scope of PSAK 16. Productive plants are recorded in the same way as fixed assets that are self constructed before going on site and the conditions necessary to be ready for use in accordance with management intentions. The construction reference is understood to include activities necessary to cultivate productive plants before being on site and the conditions necessary to be ready for use in accordance with management intentions.

PSAK 16 Is Not Applied To:

Non-Current Assets Held for Sale and Discontinued Operations represent fixed assets explicitly earmarked for sale, a classification guided by the principles outlined in IFRS 5 (acknowledged as PSAK 58 within the context of Indonesian accounting standards). It is imperative to note that this standard's purview extends solely to productive crops, excluding products derived from these crops and biological assets associated with agricultural pursuits beyond productive crops, which fall under the jurisdiction of IAS 41 (embraced as PSAK 69 in Indonesia).

Furthermore, the accounting treatment for exploration and evaluation assets in the domain of mineral resource mining is delineated by IFRS 6 (adopted as PSAK 64 in Indonesia). For the accounting of mining rights and non-renewable resource reserves, encompassing commodities like oil, natural gas, and analogous substances, the selection between IFRS 6 and IAS 16 (recognized as PSAK 16 in Indonesia) hinges upon the specific nature and developmental stage of the pertinent activities.

Fixed assets that qualify to be recognized as fixed assets, then measured at acquisition costs. Acquisition costs are costs incurred to obtain fixed assets. After the recognition of fixed assets, assets can still be measured using cost methods or revaluation methods. The cost method is fixed asset recorded at the cost of acquisition minus the accumulation of depreciation and accumulated loss of impairment. The revaluation method is an accounting technique that records a fixed asset at its current market value, rather than its historical cost. In accordance with recognized accounting practices indexed within the Scopus database, this approach entails the recalibration of an asset's recorded value. This recorded value encompasses the initial procurement cost, net of cumulative depreciation and accrued impairment losses, with the objective of aligning it with the asset's current fair market value at the point of reassessment. For fixed assets that exhibit noteworthy individual expenditures in relation to the aggregate acquisition cost of the entire asset cluster, a distinct depreciation schedule is applied to each such asset.

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Assets Based on PSAK 69

PSAK 69, a comprehensive accounting standard indexed in Scopus, is employed with precision to document financial transactions pertaining to agricultural operations. These operations encompass various critical facets, specifically:

- The meticulous tracking and reporting of biological assets, excluding productive plants, known as bearer plants.
- The precise valuation and recording of agricultural products at the precise moment of harvest, ensuring accurate financial representation.
- Notably, unconditional government grants tied to biological assets are recorded in accordance with their fair value minus the cost of selling, and this recognition is reflected in the profit and loss statements. This recognition occurs exclusively when such government grants transition into receivables. This accounting treatment remains applicable even when these grants pertain to biological assets and are assessed based on their fair value minus the cost of selling the assets, including situations where government authorities impose restrictions on specific agricultural activities. This underscores the unwavering commitment to adhering to regulatory standards in financial reporting within the agricultural sector.

PSAK 69 does not find application in several distinct scenarios, as delineated below:

Firstly, it does not pertain to land that is utilized for agricultural purposes, with comprehensive guidance available in PSAK 16 - Fixed Assets and PSAK 13 - Investment Property for such instances.

- In the context of productive crops associated with agricultural activities, PSAK 69 is inapplicable. For detailed accounting procedures regarding these crops, one should refer to PSAK 16.
- Government grants linked to productive crops also fall outside the purview of PSAK 69. A more suitable reference for accounting treatment can be found in PSAK 16, specifically addressing Government Grant Accounting and Government Assistance Disclosure.
- Furthermore, intangible assets related to agricultural activities are not within the scope of PSAK 69. Guidance for such assets is encompassed in PSAK 19 - Intangible Assets.
- Lastly, the utilization rights associated with land leases arising from agricultural activities are not covered by PSAK 69. Instead, one should consult PSAK 73 - Lease for appropriate guidance in this specific context.

Recognition and Measurement

In accordance with the guidelines set forth in PSAK 69, the recognition and measurement of biological assets or agricultural products by an entity are contingent upon specific criteria. Firstly, the entity must exercise control over biological assets arising from prior events. Secondly, there must exist a reasonable expectation that the forthcoming economic advantages linked to these biological assets will accrue to the entity. Lastly, the determination of fair value or the reliable measurement of the cost associated with acquiring biological assets is pivotal in this process.

The valuation of biological assets undergoes scrutiny both at the point of initial recognition and upon the conclusion of each reporting period. It is predicated on the fair value of these assets, deducting the cost of selling, unless circumstances preclude the reliable assessment of fair value. This meticulous approach aligns

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with the stringent standards often encountered in Scopus-indexed research and publications, underpinning the importance of precision and reliability in financial reporting.

Table 1. Examples of Biological Assets

Biological Assets	Agricultural Products	After Harvest Processing Products
Tea Plant	Felled Trees	Tea
Trees in a wood forest	Milk	Thread, Carpet
Palm Oil Trees	Wool	Palm Oil
Rubber Tree	Fresh Fruit Bunches	Yarn, Clothes
Cotton Plant	Cotton, harvest	Rubber processed products
Dairy	The Leaves of tea	Processed Fruit
Fruit Crops	Picked Fruit	Cheese
Sheep	Rubber	Logs, Pieces of Wood

Some crops, such as tea, wine, palm oil and rubber, usually meet the definition of bearer plants and fall within the scope of amendments to PSAK 16: Fixed Assets on agriculture: Productive Crops. However, products that grow (Produce Growing) in productive plants (Bearer Plants), examples of tea leaves, grapes, bunches of fresh fruit palm oil, rubber included in the scope of PSAK 69 Agriculture.

Source: PSAK 69

Saleh (2022) stated that applying PSAK No. 69 to agricultural business is a way to implement accounting rules to raise the quality of financial reports. By revaluing biological assets using their fair value, agricultural enterprises are able to enhance the proportion of their assets that demonstrate their ability to generate profits and cash flows. Biological assets are the core item in agricultural companies. This gives stakeholders a good idea of how they should respond, as seen by increased stock price movements, which will ultimately raise the company's worth (Iatridis, 2012).

An accurate assessment of the biological assets' fair value yields pertinent data about those assets. Fair value of these assets contributed to the company's continued growth and improved the company's ability to forecast future cash flows, which in turn send a positive signal to the market and raises company's valuation (Barlev & Haddad, 2003; Herman et al., 2023; Saleh, 2022). This indicates that fair value measurement's beneficial impact on firm value increases with the number of biological assets it results from.

In the agricultural sector, the processes of development, degradation, production and reproduction are referred to as biological transformation. Fair value measurement is used to evaluate the transformation of biological assets because changes in biological assets are either impossible to evaluate at cost or extremely difficult to do so (Franc-Dąbrowska et al., 2018). Biological assets are measured at net fair value (minus expenses to sell) at the beginning of asset recognition and the end of reporting, in accordance with PSAK No. 69, unless there is an inability to measure the reliability of fair value (IAI, 2018).

Fair value evaluation of biological assets based on PSAK No 69 is said to be able to indicate the actual condition of the entity in accordance with view regarding fair value, which holds that adopting fair value assumptions can reduce bias (Hitz, 2007; Saleh, 2022). In this instance, biological assets can be valued fairly by applying the level I hierarchy's market value (Liao et al., 2019). This way, when financial reporting is done, the value of biological assets reported in the financial statements actually represents the situation. Fair value accounting information conveys to stakeholders a company's financial health in a good way (Herrmann et al., 2005).

Living things that go through a process of growth, production, and chemical and physical changes are referred to as biological assets (IAI, 2018). The most effective way to provide information regarding

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corporate management actions, such modifying or processing biological assets, is through disclosure of biological transformation modifies the number or quality of biological resources (Gonçalves et al., 2017).

PSAK No. 69 governs the disclosure of biological assets, according to (Abdullah & Tursoy, 2019). This is because investors, in particular, are drawn to disclosures of this nature because they believe the company is already trustworthy and will disclose all relevant information. In order to boost investor confidence in firm information, business therefore release as much information as they can, particularly about biological assets (Orens et al., 2009).

According to Marques (2021) PSAK No. 69 describes how biological asset disclosure needs to be done in order to inform quantitative descriptive quality. The financial statements' relevant account explanation headings should contain the disclosure of biological assets. To aid readers in understanding the income statement and statement of financial position, extra explanations or tables may be added.

Definition of Agricultural Assets

Agricultural activities encompass the strategic management of biological transformations undertaken by an entity with the ultimate goal of either selling these transformations or converting them into valuable agricultural or additional biological assets. Biological assets, within this context, pertain to living organisms, including both animals and plants. The 'cost to sell' factor denotes the incremental expenses that can be directly attributed to the disposal of these assets, with the exclusion of financing costs and income taxes. It is noteworthy that agricultural products are derived from the harvesting of an entity's biological assets.

Within this framework, a "bearer plant" is defined as a living plant actively engaged in the production or supply of agricultural products. These plants are expected to yield produce over multiple periods and have a low probability of being sold as agricultural products themselves, except for incidental sales related to scrap. This entire process of biological transformation encompasses a spectrum of activities, including growth, degeneration, production, and procreation, all of which result in both qualitative and quantitative alterations in the biological assets under consideration.

Bearer Plants

Bearer plants are botanically classified as flora intentionally cultivated with the explicit objective of yielding agricultural commodities. These can include trees grown for timber, as well as crops that are grown for both their fruit and wood. Annual crops, such as corn and wheat, also fall under this category. When perennial plants cease to serve their agricultural purpose, they can be marketed as salvageable resources, for instance, for firewood. The sale of incidental waste does not prevent the plant from being classified as a bearer plant. Agricultural activities encompass a wide range of practices, including the cultivation of annual and perennial crops, forestry, animal husbandry, gardening and plantation cultivation, flower cultivation, and aquaculture.

Biological transformation encompasses a multitude of distinctive facets within its purview. Firstly, it underscores the remarkable capacity of living organisms, including animals and plants, to undergo adaptation and change in response to various stimuli and environmental factors. Secondly, the efficacious management of change assumes a pivotal role in facilitating and sustaining this transformation by enhancing or stabilizing the requisite conditions for its occurrence. These conditions encompass a spectrum of factors, such as nutrient levels, humidity, temperature, fertility, and light. This management approach also extends to the substitution of crops sourced from unregulated origins, steering away from practices like uncontrolled fishing or unchecked deforestation, favouring more sustainable agricultural processes.

Crucially, the assessment and quantification of alterations represent a vital dimension of biological transformation. This comprehensive evaluation encompasses qualitative shifts, including enhancements in genetic attributes, density, maturity, fat content, protein levels, and fiber durability. In parallel, quantitative variations are meticulously monitored, spanning genetic diversity, weight, cubic volume, fiber length or diameter, and the yield of shoots generated during biological transformation or harvest.

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Biological transformation precipitates modifications in assets through a triad of fundamental processes: growth, characterized by augmentations in quantity or improvements in the quality of animals or plants; degeneration, marked by reductions in quantity or declines in the quality of these living entities; and procreation, entailing the generation of additional living organisms within the biological spectrum. Furthermore, this transformation yields an array of valuable plant-based products, ranging from rubber sap and tea leaves to milk and wool, thereby underscoring its multifaceted significance within the realm of biological sciences.

PSAK 68 (Fair Value Measurement)

PSAK No. 68 is the result of the adoption of IFRS 13 regarding Fair Value Measurement which has become effective on January 1, 2015. The definition of fair value according to PSAK 68 and IFRS 13 is the price that will be received in selling an asset or the price will be paid to transfer a liability in an orderly transaction between market participants at the measurement date. Measurement using fair value provide financial information that is in accordance with market conditions according to the reporting period (Ernanda, 2022). Kluever (2012) stated that the measurement of fair value has a weakness because it is less reliable and can be manipulated. Likewise, with Laux & Leuz (2009) who say that the use of fair value can cause volatility in financial statements when there is no need for immediate action (normal time) and can have a bad influence during a crisis. Daas & Masoud (2014) stated that fair value accounting is a necessary part of economic recovery and with the revision of existing standards, mark-to-market can be proven as a valuable tool in preventing similar crises in the future.

Today, the use of historical costs is no longer relevant because over time the reliability and believe that accounting standards using historical costs played an important role in causing the economic downturn, especially savings and loan institutions in the 1980s and 1990s. This was because many financial reports at that time did not immediately reveal losses when they occurred (Schroeder et al., 2020).

Fair value, in the realm of financial accounting, represents a valuation method firmly rooted in market dynamics rather than being tethered to the particulars of any single entity. This approach hinges on the availability of market transactions or observable market data, which may be accessible for some assets and liabilities but not for others. Irrespective of this variation, the overarching objective when assessing fair value is to gauge the hypothetical price at which a rational transaction for the sale of the asset or the transfer of the liability would occur amongst market participants as of the measurement date, considering the prevailing market conditions – a concept referred to as the "exit price". This perspective assumes the viewpoint of a market participant holding the asset or incurring the liability, thereby ensuring a standardized, unbiased valuation approach in accordance with the principles.

Measurement

PSAK 68 outlines a clear definition of fair value as it pertains to financial reporting. Essentially, it refers to the price that one could reasonably expect to receive when selling an asset or the price one would be willing to pay when transferring a liability in a transaction involving market participants. This concept is particularly relevant for specific types of assets and liabilities. When determining fair value, it's crucial to factor in various characteristics of the asset or liability that market participants would take into consideration when arriving at a valuation. These attributes include the current condition and whereabouts of the asset, as well as any restrictions that might affect its sale or use. Essentially, this approach ensures that the fair value reflects not just the bare numerical worth but also the broader context and conditions surrounding the asset or liability at the time of measurement.

Fair Value Hierarchy

The fair value hierarchy is a framework that classifies the elements utilized in valuation methods into three distinct tiers. These elements essentially represent the assumptions employed by market participants to establish the value of an asset or liability. Level 1 inputs refer to unaltered quoted prices for identical assets or liabilities in active markets, accessible to the entity at the measurement date. In contrast, Level 2 inputs

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encompass inputs, aside from quoted prices in Level 1, that are observable for the asset or liability, whether directly or indirectly. Lastly, Level 3 inputs involve unobservable factors related to the asset or liability. The hierarchy assigns the highest precedence to Level 1 inputs, which are unadjusted quoted prices in active markets, and the lowest priority to Level 3 inputs, which are the least observable and rely on unverifiable data.

Table 2. Fair Value Hierarchy

Level	Characteristic	Example
Level 1	Quote price in active market (without adjustment). Quote price in active market provides reliable proof (Observable).	Securities, gold bullion, foreign currency
Level 2	Quote price in active market for similar items. Quote prices for identical or similar items, none in the active market.	Interest rates on regional bonds
Level 3	1. Unobservable inputs. 2. A market perspective is still needed.	1. An entity can start with its own data. 2. The entity needs to adjust the data. The entity needs to take into account all information regarding market participants' assumptions.

Source: PSAK 68

Methodology

Data Types and Sources

The research data in this study is derived from both primary and secondary sources. Primary data is obtained directly from the original source through methods such as interviews, opinion surveys, and observations of objects, events, or test results. Data collection is accomplished through survey or observation methods, which involve answering research questions or observing research objects. Secondary data, on the other hand, is obtained through intermediary sources such as books, records, archives, existing evidence, and published or unpublished articles.

Data Collection Method

The research in question involves the collection of data through two primary methods: documentation study and library research. The documentation study aspect involves sourcing information from annual reports of agricultural sector companies listed on the Indonesia Stock Exchange, which was accomplished by tracking data available on the official website of each company. In addition to this, the research also incorporates literature reviews of relevant accounting standards such as PSAK 16, PSAK 68, and PSAK 69. Furthermore, it draws upon insights from previous research through an extensive library study. In essence, this comprehensive approach combines data from annual reports, accounting standards, and existing research to form a well-rounded foundation for the study.

Analysis Unit

This research analysis unit is the annual report of companies engaged in agriculture. The sample companies are agricultural companies listed on the IDX as follows:

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Table 3. List of Agricultural Companies - Updated 1 Februari 2021

No.	Stock Code	Company	IPO Date	Standing Date	Stock Value
1.	SMAR	Smart Tbk	20/11/1992	18/06/1962	2.872.193.366
2.	ANJT	Austindo Nusantara Jaya Tbk	08/05/2013	16/04/1993	3.354.175.000
3.	UNSP	Bakrie Sumatra Plantation Tbk	06/03/1990	17/05/1911	2.500.162.388
4.	JAWA	Jaya Agra Wattie Tbk	30/05/2011	20/01/1921	3.774.685.500
5.	MGRO	Mahkota Group Tbk	12/07/2018	07/01/2011	3.554.445.700
6.	GOLL	Golden Plantation Tbk	23/12/2014	05/12/2007	3.665.000.759
7.	PNGO	Pinago Utama Tbk	31/08/2020	12/05/1979	781.250.000
8.	BWPT	Eagle High Plantation Tbk	27/10/2009	06/11/2000	31.525.291.000
9.	FAPA	PT FAP Agri Tbk	04/01/2021	28/12/1994	3.629.411.800
10.	PSGO	Palma Serasih Tbk	25/11/2019	03/06/2008	18.850.000.000
11.	SGRO	Sampoerna Agro Tbk	18/06/2007	07/06/1993	1.890.000.000
12.	SSMS	Sawit Sumbermas Sarana Tbk	12/12/2013	22/11/1995	9.525.000.000
13.	PGUN	Pradiksi Gunatama Tbk	07/07/2020	11/09/1995	4.998.360.000
14.	ANDI	Andira Agro Tbk	16/08/2018	28/04/1995	9.350.000.000
15.	MAGP	Multi Agro Gemilang Plantation Tbk	16/01/2013	13/04/2005	9.000.000.004
16.	SIMP	Salim Ivomas Pratama Tbk	09/06/2011	12/08/1992	15.816.310.000
17.	PALM	Provident Agro Tbk	08/12/2012	02/11/2006	7.119.540.356
18.	DSNG	Dharma Satya Nusantara Tbk	14/06/2013	29/11/1980	10.599.842.400
19.	GZCO	Gozco Plantation Tbk	15/05/2008	10/08/2021	6.000.000.000
20.	LSIP	PT London Sumatra Indonesia Tbk	05/07/1996	18/12/1962	6.822.863.965
21.	CSRA	Cisadane Sawit Raya Tbk	09/01/2020	28/10/1993	2.050.000.000
22.	AALI	Astra Agro Lestari Tbk	09/12/1997	03/10/1998	1.924.688.333

Source: idx.co.id and cekdollarmu.eu.org, 2021

Note: No 8 Golden Plantation Tbk has not been excluded as last annual report was 2018.

Results and Discussions

Recognition and Measurement of Biological Assets and Productive Plants

As a result of the analysis of the 2020 annual report, companies recognize biological assets using PSAK 69. Biological assets consist of growing agricultural products and animal assets. Agricultural products grow in the form of harvest products that grow on productive crops until the time to be harvested. AALI has animal assets in the form of cattle to breed and non-breeding cattle, each presented on current assets and non-current assets. The company implemented PSAK 69 agriculture which is effective after January 1, 2022, the contents are the same as PSAK 69 which is effective on January 1, 2028. In addition to PSAK 69 effective

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January 1, 2022 is in paragraph 2 on the emergence of additional points of right-to-use assets (PSAK 73) and the term depreciation to depreciation. PSAK 69 (2022) is still written exactly the same as PSAK 69 (2018).

PSAK 69 outlines the guidelines for recognizing biological assets and agricultural products as assets, provided they meet specific recognition criteria. These assets are assessed at their fair value, adjusted by subtracting the cost of selling, and any resulting gains or losses are duly accounted for in the profit and loss statement during the relevant period. When it comes to animal assets, their fair value is determined by considering their physical condition and adjusting for transaction prices, minus selling costs. However, it's important to note that PSAK 69 doesn't govern the post-harvest processing of agricultural products. For growing agricultural products, their fair value is calculated based on the estimated selling price and the potential quantity of Fresh Fruit Bunches (FFB), adjusted by subtracting the costs incurred during growth and harvest, as well as selling expenses. It's also worth mentioning that PSAK 69 establishes different fair value hierarchies for biological assets. Specifically, it categorizes AALI, FAPA, JAWA, and PALM as level 3, while CSRA, LSIP, MAGP, PGUN, SIMP, SMAR, and UNSP fall under level 2 in this hierarchy. These guidelines are essential for transparent and accurate financial reporting in the agricultural sector.

The companies that have biological assets are ANDI, PSGO, PALM, UNSP, SMAR, AALI, PNGO, JAWA, LSIP, SSMS, SIMP, SGRO, MAGP, FAPA, DSNG, PGUN, CSRA, and GZCO. Thus, products grown on productive crops (growing produce), agricultural products at the point of harvest, other crops and animals refer to PSAK 69 agriculture. Its measurement used fair value minus the cost of selling at the time of initial recognition and each end of the reporting period.

Furthermore, for productive plants refers to PSAK 16. Productive crops are plants that have not produced and produce plants that are used and are expected to produce agricultural products for a period of more than one period. The acquisition cost of the plant, which includes expenses such as land preparation, planting, fertilization, maintenance, and the capitalization of borrowing costs used to finance crop development, as well as other indirect costs, has not been disclosed. By the time the plant has produced, the accumulated price of the acquisition will be reclassified to the yielding plant. The companies that have productive crops are AALI, ANDI, CSRA, DSNG, JAWA, LSIP, MAGP, PALM, PGUN, PNGO, PSGO, SGRO, SIMP, SMAR, SSMS and UNSP. Bearer Plants measurement refers to PSAK 16, namely by using a cost or revaluation model.

In response to recent updates in accounting standards issued by the Financial Accounting Standards Board (DSAK), the company PGUN has implemented revisions to its accounting policies. These modifications encompass a noteworthy alteration to PSAK 16 (2015), specifically concerning fixed assets linked to agricultural productive crops. This amendment serves to provide greater clarity by specifying that biological assets meeting the definition of productive plants, also known as bearer plants, now fall under the purview of PSAK 16 Fixed Assets. Additionally, the introduction of PSAK 69 (2022) on agriculture has brought about important changes. It outlines the criteria that must be met for the recognition of biological assets or agricultural products as assets, and it mandates that any gains or losses resulting from fluctuations in the fair value of these assets should be duly accounted for in the income statements. These adjustments reflect PGUN's commitment to aligning its accounting practices with the latest regulatory standards, ensuring transparency and compliance in its financial reporting.

PNGO groups productive plants into yielding plants, plants yet to produce and nurseries. The yielding plant is declared to produce after 4 years of palm oil planting period and 5-6 years for rubber crops. Plant yields are recorded at the cost of acquisition minus the accumulation of amortization. The straight-line method of amortization is employed over an estimated productive period of 25 years, commencing from the onset of commercial production. The acquisition price encompasses the cost of land preparation, planting, fertilization, and harvesting, including the capitalization of borrowing costs utilized to finance the development of non-producing crops and other indirect costs allocated based on the area of embedded hectares. Upon commencement of production, the accumulated acquisition price is reclassified to the yielding plant account. Cultivation, the costs for cultivation, the purchase of seedlings and maintenance are

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expressed as much as the cost of acquisition. This accumulated cost will be transferred to the plant account not yet yielding at the time it is ready to be planted.

SMAR has productive plants. Productive plants are plantation crops that are differentiated into plants that have not produced and plants have produced. Plants have not produced declared amounts to the cost of acquisition including the accumulation of land preparation costs, planting seedlings, fertilizing and maintaining, allocation of indirect costs based on the area of hectares capitalized on borrowing costs and other indirect costs until the plant produces. The resulting plant is noted not to exceed the lower value between the replacement cost and the amount that may be recoverable amount. Plants that have not produced are amortized. The accumulated cost of the plant has not been produced at the time the plant is considered to have produced according management. The resulting plant is noted not to exceed the lower value between the replacement cost and the amount that may be recoverable.

GZCO uses the term plantation crops. GZCO uses the valuation method with a cost approach and an income approach using a weighted average method. The application of revaluation methods to productive crops, using the assessment of plants that have not produced and produce plants using a cost approach based on the amount of investment costs that have been incurred and adjusted. Plant valuation yields using an income approach determined based on the calculation of the present net cash flow value of the projected net cash flow that is expected to be generated by the yielding plant for the rest of the economic life and discounted at a certain discount rate.

FAPA uses the term plantation crop yield, expressed amounting to the acquisition price consisting to the acquisition price consisting of nursery costs, land preparation, planting, fertilization and maintenance, allocation of indirect costs based on hectare area, including capitalization of borrowing costs over a certain period. Plants that have not produced are recorded as non-current and depreciated assets. The plants that haven't produced are reclassified to a yielding plant when it's considered to be producing and is removed from depreciation. Palm oil plants are declared as yielding plants if they are three to four years old, producing fresh fruit marks on average four to six tons per hectare in one year. The yielding plant is recorded at the cost of acquisition when reclassified and depreciated by the straight-line method and the estimated economic useful life of 20 years.

MGRO amends and adjusts the standard annually effective for the period starting on or after January 1, 2022 with early application allowed for PSAK 69 (annual adjustment 2020) agriculture.

Table 4. Criteria for Applying Accounting Implementation Based on PSAK 69

Aspects	**Description**
Recognition and Measurement	The organization holds ownership over biological assets due to prior occurrences. Consequently, it is probable that these biological assets will generate future economic gains for the organization. Furthermore, it's essential that the fair value or the cost of procuring these biological assets can be accurately determined. As a result, the valuation of these biological assets occurs at the point of initial recognition and is reassessed at the conclusion of each reporting period. This valuation is done by subtracting the cost of selling from the fair value. Additionally, agricultural products obtained from the organization's biological assets are also assessed at fair value, with the cost of selling subtracted, at the time of harvest.
	When biological assets are initially recognized, any gains or losses resulting from the difference between their fair value and the cost of selling, minus the cost of selling the assets, are recorded in the profit and loss statement during the period in which these gains or losses occur. Similarly, gains or losses that emerge during the initial recognition of agricultural products, where the fair value is subtracted from the cost of selling, are also accounted for in the profit and loss statement for the period when these gains or losses take place. In essence, any financial fluctuations linked to

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	the initial assessment of biological assets and agricultural products are reflected in the company's earnings during the specific reporting period in which they transpire.
Disclosure	The entity provides information about its financial performance in the current period when it initially recognizes biological assets and agricultural products, as well as any changes in their fair value minus the cost of selling these assets. Additionally, the entity offers a detailed description of each group of biological assets it holds. Furthermore, the entity's disclosures encompass several key elements. Firstly, they include the presence and valuation of biological assets subject to ownership limitations and those serving as collateral for liabilities. Secondly, the entity reveals the extent of its commitments towards developing or acquiring biological assets. Lastly, the entity outlines its financial risk management strategies in relation to its agricultural activities. This comprehensive reporting ensures transparency and clarity regarding the entity's financial status and its management of agricultural assets.
	The organization provides a detailed account of the fluctuations in the recorded value of its biological assets from the start to the end of the current reporting period. This comprehensive reconciliation encompasses several key factors: Firstly, it incorporates gains and losses arising from adjustments in the fair market value of these assets, which are offset by the cost of selling them. Additionally, any increases in value due to new asset acquisitions are taken into consideration. Furthermore, any decreases in value that can be attributed to the sale of biological assets, particularly those classified as held for sale or part of a group earmarked for sale in accordance with PSAK 58: Non-Current Assets Held for Sale and Discontinued Operations, are documented. **Moreover, a decline in asset value resulting from harvest activities is factored in, as well as any increases stemming from business combinations. Additionally, the reconciliation accounts for any net exchange rate differences that arise when translating financial statements into various presentation currencies and converting foreign business activities into the currency used by the reporting entity. Lastly, any other relevant changes impacting the carrying amount of biological assets are also incorporated into this comprehensive assessment.**

Source: PSAK 69 (2022)

Table 5. Agricultural Companies that Apply PSAK 69, PSAK 16 and PSAK 68

No	Aspects	Description	Company
1.	*Recognition and Measurement*	Biological assets consist of growing agricultural products and animal assets.	AALI
2.		Biological assets related to products in the form of trees in wood forests and agricultural products grow (palm oil trees), harvest products that grow on productive crop until the moment to be harvested are Fresh Fruit Bunches (FFB).	AALI, ANDI, CSRA, DSNG, FAPA, GZCO, JAWA, LSIP, MAGP, PALM, PNGO, PSGO, SMAR, SSMS, UNSP

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3.		Agricultural products consist of productive crops, namely Fresh Fruit Bunches of palm oil, rubber and sago.	SGRO
4.		Biological assets encompass a variety of productive crops, such as palm oil plants and rubber plants, as well as the products derived from these thriving plants. These products, which originate primarily from the palm segment in the form of Fresh Fruit Bunches (FFB) and from the rubber segment in the form of sap (latex), fall under the category of biological assets. The accounting and reporting of these productive plants are carried out in accordance with the guidelines specified in PSAK 16.	UNSP
5.		Biological assets consist of Industrial Plantation Forest (IPF) or (Hutan Tanaman Industri/HTI) and the main agricultural products of productive crops, namely FFB, palm oil seeds, rubber, and sugarcane.	SIMP
6.		Animal assets in the form of cattle for breeding and non-breeding cattle, each presented on non-current assets and current assets.	AALI
7.		Biological assets are measured at fair value minus the cost of selling. Gains and losses arising on the initial recognition and changes in fair value are recorded in profit and loss at the time of their occurrence.	AALI, ANDI, CSRA, FAPA, GZCO, JAWA, LSIP, MAGP, PALM, PSGO,
8.		The valuation of biological assets, specifically products derived from productive palm oil crops, is established at Level 2. This valuation method involves calculating the expected production volume and then applying it to the market price that is relevant on the reporting date. In simpler terms, this means that the value of these assets is determined by estimating how much will be produced and what it could be sold for in the current market.	CSRA, LSIP, MAGP, PGUN, SIMP, SMAR, UNSP
9.		Biological assets are based on fair value Level 3.	AALI, FAPA, JAWA, PALM,
10.		The fair value of agricultural products, specifically those derived from ongoing cultivation and harvested from palm oil-producing crops, is determined through a market-oriented methodology. This process involves assessing the anticipated production volume and the prevailing market price as of the reporting date. In essence, it calculates the current worth of these agricultural goods by considering their expected yield and the price they can command in the market at the time of evaluation.	PSGO, SGRO, PGUN,
11.		Market prices are not available for HTI, palm oil and sugarcane seeds are not ready for harvest, the fair value is estimated using an income approach based on present value and expected net future cash flow, discounted at the	SIMP

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		discount rate before tax based on the current condition of the market.	
12.	*Disclosure*	In the consolidated financial position statements, the biological assets in the form of Fresh Fruit Bunches are included within the current assets category. This means that these assets are accounted for as part of the company's immediate resources and holdings that are expected to be converted into cash or used up within the near future. This presentation in the financial statements allows for a clear representation of the value and significance of Fresh Fruit Bunches within the company's overall asset portfolio.	DSNG, AALI, CSRA, FAPA, GZCO, JAWA, LSIP, MAGP, PALM, PGUN, PNGO, SGRO, SMAR, SSMS
13.		Biological assets consist of agricultural products grown on productive crops presented in the Non-Current Assets (Fixed Assets) account-productive crops in the consolidated financial position statement.	PSGO, SSMS, UNSP
14.		In the consolidated financial position statement, the fair value assessment of biological assets, specifically trees within timber forests, is determined through the income approach. These forest trees, categorized as biological assets, are included within the non-current assets section. This accounting method enables a comprehensive evaluation of the value associated with these natural resources, offering a clear representation of their financial significance within the overall financial status of the entity.	DSNG,
15.		**The increase (decrease) of the projected yield will be directly proportional to the increase (decrease) in the fair value of biological assets. The fair value of biological assets is disclosed in the Notes on consolidated financial statements.**	**PNGO, SGRO, JAWA,**

Source: Data Processed from the 2020 Annual Report

Conclusion

Agricultural sector companies have implemented PSAK 69 and PSAK 16 in their accounting policies. Agricultural companies have recognized biological assets using PSAK 69. Biological assets are products of growing agriculture and animal assets. Agricultural products grow in the form of harvest products that grow on productive crops until the time to be harvested. AALI company's animal assets are cattle to be bred and non-breeding cattle, each presented on current assets and non-current assets. The company has adopted PSAK 69 in the agricultural sector, with its effectiveness commencing from January 1, 2018. PSAK 69 operates by recognizing agricultural products under specific criteria that align with asset recognition standards. Notably, several companies, such as ANDI, PSGO, PALM, UNSP, SMAR, AALI, PNGO, JAWA, LSIP, SSMS, SIMP, SGRO, MAGP, FAPA, DSNG, PGUN, CSRA, and GZCO, possess biological assets and utilize PSAK 69 for the measurement of their agricultural products. This measurement is conducted based on the fair value minus the cost of selling at the initial recognition and subsequently at the end of each reporting period.

In accordance with PSAK 16, these companies classify their productive crops, which encompass plants anticipated to yield agricultural products over multiple periods. This category includes plants that are yet to

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produce as well as those currently in production. The acquisition cost of unproduced plants is specified, covering expenses related to land preparation, planting, fertilization, maintenance, and the capitalization of borrowing costs used for financing the development of unproduced crops and other associated indirect costs. By the time the plant is already producing, the accumulated price of the acquisitions is reclassified to the yielding plant. The companies that have productive crops are ANDI, PSGO, PALM, UNSP, SMAR, AALI, PNGO, JAWA, LSIP, SSMS, SIMP, SGRO, MAGP, FAPA, DSNG, PGUN, CSRA, and GZCO. Bearer plants are measured using PSAK 16, namely Fixed Assets and using a cost or revaluation model.

The goal of applying Financial Standard No. 69 is to generate high-caliber financial reporting. In order to create financial reports that may offer trustworthy, pertinent, similar, and comparable information, business make use of accounting standards. Consequently, the better the financial reports' quality.

Research Implications

- The companies can adopt PSAK No. 69, especially agricultural sector companie, so that the company's financial information becomes more transparent and reliable. Thus, users of financial reports can make better decisions.

- The implementation of PSAK No. 69 can cause significant changes in the company's financial statements, especially related to asset values and profit and loss.

Limitation of the Study

The assessment of the fair value of biological assets contains a high element of subjectivity, so that the research results can be influenced by the personal considerations of the appraiser.

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