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Responsiveness of Biological Assets to Board size, Firm size, and Firms' age of Agricultural Firms in Nigeria

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ABSTRACT: *This study examined the responsiveness of biological assets to board size, firm size and firm age of quoted Agricultural firms in Nigeria. The specific objectives were to examine the effect of board size, firm size, and firm age on the biological assets of quoted Agricultural firms in Nigeria. An ex-post facto research design was used which made use of secondary panel data drawn from annual reports and accounts of the sampled firms for a period of ten (10) years, 2011-2020. Panel least squares were applied in the test of hypotheses. The result of the analysis showed that board size, firm size and firm age have an insignificant effect on biological assets. The implication is that none of the three variables can predict the increase or decrease in biological assets of agricultural firms in Nigeria. The study recommends that agricultural firms should maintain a robust board size so that they can continue to reap the benefits of the two good heads theory. Efforts should be made to ensure continuous firm growth because of the positive link it has with biological assets. Firms are encouraged to continuously effect changes in both assets and other activities that may be affected by the age of the firm. Management should maintain current innovations in the industry to attract new investors, boost productivity and enhance shareholders' funds.*

KEYWORDS: biological assets, firm size, board size, firm age, nigeria agricultural sector, leverage, profitability, liquidity.

INTRODUCTION

Background of the study

Agriculture turns animals and plants into human and environmental sustenance. Nnajieze (2021). Agriculture feeds the world's population through crops and animals (Haris & Fuller, 2014). Agriculture promotes rural economic activities, employment, living conditions, and population density. IAS 41 agriculture is a little standard with a significant impact. It applies to most profitable biotech businesses. Standard recognises asset value gains as they happen, not simply upon harvest or sale. Agricultural operations are differentiated by management's facilitation and management of biological assets (live animals and plants) into agricultural produce.

Agricultural accounting is distinguished by "biological assets" (Ore, 2010). Biological assets are animals or plants a company grows to sell or as assets (Supreme Council of Republic of Latvia, 1992a). Accounting for biological assets depends on plant and animal harvests (Kalnia, 2006). Agricultural circumstances and a company's distance from sales marketplaces make assessing biological assets problematic. This is especially relevant in shifting market conditions when valuing long-term biological assets. Zone-specific value of perennial plants and food-producing animals. Risk and manufacturing costs rise. Initial plant and animal values differ from younger, more productive biological assets throughout time (Jesemika, 2010b).

Nigeria is the third-most poor after China and India. 70 million Nigerians live on less than $1 a day on a per capita income of US$350. Nigeria's high poverty rate is linked to its over-reliance on oil production and lack of interest in a significant industry that may assist the country achieve food sufficiency (Agriculture). Agriculture's contribution to GDP is quite low; future fuel will be produced from agriculture (biological assets), thus it's vital to concentrate and intentionally expand its operations to generate large income. Any business owner may manage biological assets. Due to their nature, they are crucial to farmers and others whose main source of income is cultivating, selling, and transporting things. The asset is vital to agribusiness. The biological transformation of these assets makes these agricultural firms successful.

Inadequate management and accounting of these assets has hampered Nigeria's agricultural firms. Due to the agricultural sector's low relevance in Nigeria's economy, accounting in this field got little attention until IAS 41. Financial managers' incapacity to plan and manage their organisations' biological assets has caused many corporate bankruptcies. Some Nigerian agricultural firms with high-return investments failed due to insufficient use of their biological assets. It made it imperative to advocate for improved financial reporting quality and stronger management control of the firms' biological assets. Examining the factors affecting Nigerian agricultural enterprises' biological assets is necessary. Many factors affect organisations' biological assets, but the study focused on board size, firm size, and firm age. The study aims to determine the response of Nigerian agricultural enterprises' biological assets to board size, firm size, and age.

REVIEW OF RELATED LITERATURE

Conceptual Review

Biological Assets

Biological assets include plantations and bred animals that vary over time (Sanja, Ivana, & Mateja, 2016). IAS 41 Agriculture lets agricultural enterprises extend revenue recognition across time, per Ernst (2017). IAS 41 controls agricultural accounting, financial statements, and disclosures. Agricultural activity is the management and harvest of biological assets (living animals or plants) for sale or conversion into agricultural produce or more biological assets. IAS 41 prescribes the accounting approach for biological assets throughout growth,

degeneration, production, and propagation, and for agricultural output upon harvest. Post-harvest processing isn't covered (for example, processing grapes into wine, or wool into yarn). IAS 41 requires bearer plants to be accounted for using IAS 16; other biological assets are measured at fair value minus costs to sell; changes in fair value of biological assets are included in profit or loss; and biological assets attached to land (for example, trees in a plantation forest) are measured separately from the land.

IAS 41.30 assumes biological assets may be valued. This presumption can be rebutted for a biological asset with no published market price and unsatisfactory alternative fair value assessments. The asset is valued at cost less depreciation and repair losses. Other biological assets must be measured at fair value less selling costs. If fair value is consistently measured, use fair value less selling costs.

Board Size

For two reasons, board size is a well-studied board attribute. For instance, it is thought that the size of the board of directors influences the firm's performance. The number of directors, in particular, shows the CEO's influence over the board, according to agency theory. Onyali and Okerekeoti (2018) define board size as the total number of company directors. This term emphasises the total number of business directors. It refers to the executive, non-executive, independent, male, or female directors. Kripa and Dorina (2016) defined board size based on efficacy, not headcount. He defined board size as the number of members that determines how well a board fulfils its fiduciary duties. For this study, board size is the total number of directors on each sampled firm's board, including the Chairman, CEO or managing director, executive directors, and non-executive directors (outside directors) in a particular financial year.

Yameen, Farhan, and Tabash (2019) found that a larger board size decreases the productivity of firms because the agreement with the CEO becomes more difficult when boards are large. Forbes and Milliken (1999) support Lipton and Lorsch by demonstrating that large boards are difficult to coordinate and free-riding is common among these boards. They also believe that large boards have a problem with making value-maximizing decisions.

Firm Size

A company's size can be determined by the total number of assets possessed or total sales within a certain period (Nnajieze, 2021). "Assets are economic resources possessed by an entity and whose cost (or fair worth) at the time of purchase may be objectively ascertained" (Anthony, 2012). According to Kartikasari and Merianti (2016), firm size can be calculated as the natural logarithm of total assets or total sales. The researcher utilised the natural logarithm of total assets in this research study because total assets are all resources owned by the company as a result of past transactions and are projected to bring prospective economic benefits to the company in the future. The larger a corporation, the more actions carried out in its commercial activities that will receive more attention from external parties such as the government,

investors, creditors, and economic analysts than a small company. Total assets will be used as a proxy for business size in this study.

Firm age

A company's age is determined by its founding (Paramitha & Rohman, 2020). Firm age is the time since a company's founding. Because age is so important in many parts of life, including business, it's thought that a long-established firm has greater knowledge in its industrial field and is better recognised than newbies. Yameen, Farhen, and Tabash (2019) define firm age as the company's age at analysis. The researcher determined the business age by subtracting the study year from the company's founding year. Age indicates a company's experience and learning (Olumide, 2010). Ageing reduces bodily function as an organism ages. This might be due to stiffness, inertia, or lost regeneration (Loderer & Waelchli 2009).

According to Olumide (2010), a firm's age reflects its acquired experience and is representative of learning. For listed companies, it is the continuous amount of time a firm has to stay in its current business from when it was established or when it was listed. However, as companies age, their ability to execute reduces. In biology, an increase in an organism's age produces ageing, which are symptoms associated with a deterioration in body functioning. This can happen in businesses because of rigidity, inertia, and a loss of capability for renewal (Loderer & Waelchli, 2009).

Theoretical Framework

The study was anchored on the Stakeholder theory by Edward Freedman (1984).

Stakeholder Theory

Edward Freeman developed stakeholder theory in 1984. According to theory, an organisation's stakeholders are all those affected by its activities. Stakeholder theory defines stakeholders as "groups without whose support the firm would cease to exist." These groups include customers, employees, suppliers, political action groups, environmental groups, local communities, the media, financial institutions, and groups. This approach presents the business environment as an ecosystem of interdependent groups that must be satisfied for long-term organisation and success. The idea of stakeholders emphasises how a good firm never loses sight of everyone engaged in its success. A company will fail if it treats its employees poorly, says stakeholder theory. Same thing will happen if it pushes its programmes on communities. If a company ignores its stakeholders, it can't succeed. The company can't exist if its stakeholders are dissatisfied and disappointed.

According to this theory, a company may achieve its aims through satisfying its stakeholders (Freeman & Philips, 2002). A firm should be responsible for all stakeholders' interests, which may hinder it from achieving its aims (Freeman & Philips, 2002). Stakeholders help a company reach its goal. A firm should satisfy shareholder wishes, which might affect its success

(Deegan, 2004). A firm must share facts to convince stakeholders that its actions are legal (Megnan & Fawell, 2004).

Empirical Review

Ibrahim and Danjuma (2020) investigated the impact of corporate governance on the performance of Nigerian listed deposit money banks. Corporate governance is proxied by board size, board composition, and firm size. Return on Asset was used to assess the performance of Nigerian listed deposit money banks over five years (2015-2019). Data for the study were gathered from secondary sources, specifically audited annual reports of fifteen (15) Nigeria Stock Exchange-listed banks (NSE, 2017). The regression result revealed a significant relationship between board composition, the board size, firm size and the ROA of Nigerian deposit money banks.

Koji, Adhikary, and Tram (2020) investigated the relationship between corporate governance and financial performance in the Japanese manufacturing industry for publicly traded family and non-family firms. The analysis uses data from Bloomberg from 2014 to 2018 and includes 1412 firms (861 non-family and 551 families). Using regression analysis, the firms show that board size promotes non-family firm performance while having little effect on family firm performance.

Muhammad (2020) evaluated the effect of corporate governance on the quality of earnings. This study includes firms listed on the PSX in the food, agriculture, pharmaceutical, and manufacturing sectors. The entire sample size for analysis is 107 businesses from various manufacturing sectors from 2007 to 2016. Overall, the results demonstrate CEO duality and board size, on the other hand, have had a significant detrimental impact on earnings quality.

Okoye, Olokoyo, Okoh, Ezeji, and Uzohue (2020) investigated the relationship between Nigerian governance practises and bank profitability. It uses the size of the bank's board of directors and the directors' share as a proxy for corporate governance, while return on assets and return on equity indicate financial performance. The study includes firm size as a controlled variable. The Generalized Method of Moments estimates reveal that board size, directors' equity, and firm size all have a significant impact on the financial performance of Nigerian banks.

Owiredu and Kwakye (2020) investigated the impact of corporate governance standards on the financial performance of Ghanaian banks. Data for the study were collected from the annual reports and financial statements of the sampled banks from 2007 to 2016. The data was analysed using the random effect model. This study discovered a significant positive relationship between board size and financial performance of Ghanaian banks as evaluated by ROA and ROE.

Shrivastav and Kalsie (2020) investigated the relationship between internal corporate governance mechanisms and the firm performance of NSE-listed companies. Tobin's Q and

MBVR were used as market-based indicators, whereas ROA and ROE were used as accounting-based measures. Econometric analysis is carried out on a panel of 178 non-financial NSE listed firms from 2011 to 2018 using the regression models. The results show that Board size have a significant negative influence on firm performance metrics.

Umar, Norfadzilah, Hussaini, and Habibu (2020) evaluated the relationship between corporate governance in the board of directors and the financial performance of Nigerian banks. Furthermore, secondary data from the annual reports of fifteen (15) banks listed on the Nigeria Stock Exchange from 2013 to 2015 were included in the research. The random-effect model revealed that the relationship between board genders, the board size, and ROA was statistically negligible. While there is a significant relationship between firm size and ROA. The relationship between bank age and ROA was shown to be negatively significant. The finding on board size contradicts the finding of Warrad and Khaddam (2020) who reported a significant effects of board size on ROE when two controlled factors, firm size and return on assets, are considered.

Kwaltommai, Enemali, Duna, and Ahmed (2019) investigated the impact of firm characteristics and financial performance of consumer goods firms in Nigeria from 2007 to 2016 utilising financial and non-financial data from annual reports of the five listed consumer goods firms in Nigeria. According to Pearson correlation and multiple regressions, firm age has a positive relationship with financial performance, and leverage has a positive relationship with financial performance as well. The finding on firm age contradicts the finding of Kassi, Rathnayake, Louembe, and Ding (2019) found that firm age has a significant negative influences on the financial performance of the companies.

Okunbo and Oghuvwu (2019) investigated the impact of firm age and size on the entrepreneurial performance of Nigerian small and medium-sized businesses. Based on primary data from a purposive sampling of hundred (100) small and medium firms, the assumptions were validated using the ordinary least square regression approach. The study discovered a significant and positive relationship between firm age, size, and entrepreneurial performance. Haykir and elik (2018) found that younger firms enjoy better earnings until they reach a particular age. When they reach that age threshold, older firms outperform younger firms. The finding is in line with the findings of Mutende, Mwangi, Njihia, and Ochieng (2017) who found that firm size and firm age have a significant negative moderating influence on the relationship between free cash flows and financial performance.

We haven't found a study in Nigeria that examines the influence of firm characteristics on the biological assets of listed firms. Most previous studies were overseas. Nigerian studies focused on firm performance and characteristics. Also, from the examined literature, researchers seemed to purposely neglect the agricultural sector of the economy despite the benefits of agricultural output to Nigeria's economy, hence the present study used evidence from agricultural firms registered on the Nigeria Stock Exchange.

METHODOLOGY

Research Design

The study was based on *ex-post facto* research design, *ex-post facto* research design is used to determine the responsiveness of biological assets to board size, firm size, and firm age of Agricultural and Agro-allied companies quoted in the Nigeria Exchange Group as of December 2020. There are a total of five agro-allied firms listed on the Nigeria Exchange Group. Only the three companies dealing with biological assets under Nigeria's agricultural sector were sampled, they include Ella Lakes PLC, Okomu Oil palm company plc and Presco Plc. Secondary data were sourced from the annual report and accounts of the sampled firms.

Model Specification

The ordinary least squares regression technique was used for data analysis. Explicitly, the model is specified thus:

$$\text{Log BIOA}_t = \beta_O + \beta_1\text{LogDER}_t + \beta_2\text{LogROA}_t + \beta_3\text{LogCRATIO}_t + \beta_4\text{LogBSZE}_t + \beta_5\text{LogTA}_t + \beta_5\text{LogFAGE}_t + \varepsilon_t \quad -(\text{Eq. 2})$$

LogBIOA_t = Biological Assets at time t (Dependent variable),
LogDER_t = Leverage at time t,
LogROA_t = Profitability at time t,
LogCRATIO_t = Liquidity at time t,
LogBSZE_t = Board Size at time t,
LogTA_t = Firms' Size at time t,
LogFAGE_t = Firms' Age at time t,
β_0 = Constant/intercept of the regression model,
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \; and \beta_6$ = Coefficients of DER, ROA, CRATIO, BSZE. TA, and FAGE respectively in the regression model,
ε_t = Stochastic error (white noise) associated with the model

Data Analysis

Table 4.2.1: Descriptive Statistic of the Industry Level Panel Data

	LOG(BIOA)	DER	ROA	CRATIO	BSZE	LOG(TA)	FAGE
Mean	21.62661	0.760601	0.180007	2.463177	10.27586	23.38775	29.13793
Median	22.96395	0.646739	0.071957	1.349729	10.00000	24.12615	35.00000
Maximum	25.14405	1.546262	3.041586	15.50807	12.00000	25.14405	44.00000
Minimum	17.36550	0.216364	-0.193416	0.010215	9.000000	20.84545	9.000000
Std. Dev.	2.771130	0.415646	0.569000	3.445826	0.996299	1.572594	12.03187
Skewness	-0.666021	0.372056	4.586919	2.666303	0.308359	-0.783007	-0.533225
Kurtosis	1.684274	1.784582	23.68629	9.607519	2.098021	1.943810	1.612578
Jarque-Bera	4.235775	2.454057	618.7658	87.11600	1.442636	4.311257	3.700222
Probability	0.120285	0.293162	0.000000	0.000000	0.486111	0.115830	0.157220
Observations	29	29	29	29	29	29	29

Source: Computed by Researcher Using Eviews 10.0 Statistical Software

Table 4.2.1 above shows the variable description of the 29 observations of the panel data of the Agricultural firms in Nigeria. The normality of the distribution of the data series is shown by the coefficients of Skewness, Kurtosis and Jarque-Bera Probability. From Table 4.2.1, the probability of the Jarque-Bera Statistics for all the variables (focal and explanatory) have a significant p-value except for leverage (0.293162), board Size (0.486111), and firm size (0.115830), firm age (0.157220). The rest of the variables are as follows: Biological assets (0.120285), profitability (0.000000) and liquidity (0.000000). The significance of the p-value depicts non-normal distribution for the variables studied except for leverage, the board size, firm size and firm age. This was further confirmed by the skewness coefficients which are greater than one in all the variables under study. The kurtosis coefficient provides a second level of confirmation that all the variables are not normally distributed with the following coefficients, biological assets (1.684274), profitability (23.68629) and liquidity (9.607519). This is the case of the data extracted from annual reports and accounts of the sampled companies from the Agricultural sector in Nigeria.

Table 4.2.2: Covariance Analysis Result of the Industry Level Panel Data

Covariance Analysis: Ordinary
Date: 09/13/21 Time: 12:14
Sample: 2011 2020
Included observations: 29
Balanced sample (listwise missing value deletion)

Covariance Correlation t-Statistic Probability	BIOA	DER	ROA	CRATIO	BSZE	TA	FAGE
BIOA	3.06E+20 1.000000						
DER	-2.30E+09 -0.321634 -1.765048 0.0889	0.166804 1.000000 ----- -----					
ROA	-2.91E+08 -0.029812 -0.154978 0.8780	0.032977 0.144418 0.758368 0.4548	0.312597 1.000000 ----- -----				
CRATIO	-8.96E+09 -0.151433 -0.796047 0.4329	0.233918 0.169156 0.891813 0.3804	-0.054538 -0.028809 -0.149759 0.8821	11.46428 1.000000 ----- -----			
BSZE	5.98E+09 0.349262 1.936786 0.0633	-0.144687 -0.361874 -2.017055 0.0537	-0.067229 -0.122828 -0.643103 0.5256	-0.784926 -0.236802 -1.266481 0.2162	0.958383 1.000000 ----- -----		
TA	2.58E+20 0.620627 4.112800 0.0003	5.94E+08 0.061150 0.318343 0.7527	-1.32E+09 -0.099217 -0.518103 0.6086	-2.60E+10 -0.323290 -1.775195 0.0871	1.11E+10 0.476158 2.813630 0.0090	5.65E+20 1.000000 ----- -----	
FAGE	-7.20E+10 -0.348391 -1.931291 0.0640	-1.597438 -0.330832 -1.821630 0.0796	0.848121 0.128308 0.672262 0.5071	7.104560 0.177480 0.937093 0.3570	0.375743 0.032464 0.168779 0.8672	-1.29E+11 -0.458193 -2.678554 0.0124	139.7741 1.000000 ----- -----

Source: Computed by Researcher Using Eviews 10.0 Statistical Software

Table 4.2.2 reveals that there is a weak (32% approx.) and negative relationship between biological assets and leverage, with t-statistic: -1.765048 and probability: 0.0889. Biological assets and profitability also share a negative and weak relationship (3% approx.) with t-statistic -0.154978 and probability: 0.8780. Biological assets and liquidity also share a negative and

weak relationship (15% approx.) with t-statistic -0.796047 and probability: 0.4329. Biological assets and Board size also share a positive and weak relationship (34% approx.) with a t-statistic of 1.936786 and a probability of 0.0633. Biological assets and firm size also share a positive and strong relationship (62% approx.) with a t-statistic of 4.112800 and a probability of 0.0003. Biological assets and firm age also share a negative and weak relationship (34% approx.) with t-statistic -1.931291 and probability: 0.0640.

Table 4.2.3: Regression Analysis Result of the Industry Level Panel Data

Dependent Variable: LOG(BIOA)
Method: Panel Least Squares
Date: 09/13/21 Time: 12:53
Sample: 2011 2020
Periods included: 10
Cross-sections included: 3
Total panel (unbalanced) observations: 29
White cross-section standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	-1.084084	0.428212	-2.531653	0.0198
ROA	0.165128	0.079948	2.065437	0.0521
CRATIO	0.027407	0.023770	1.153041	0.2625
BSZE	0.061339	0.167269	0.366711	0.7177
LOG(TA)	0.533754	0.582579	0.916192	0.3705
FAGE	-0.068716	0.070604	-0.973265	0.3420
C	11.24256	10.93507	1.028119	0.3162

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.974410	Mean dependent var	21.62661
Adjusted R-squared	0.964175	S.D. dependent var	2.771130
S.E. of regression	0.524508	Akaike info criterion	1.796414
Sum squared resid	5.502171	Schwarz criterion	2.220747
Log-likelihood	-17.04800	Hannan-Quinn criter.	1.929309
F-statistic	95.19623	Durbin-Watson stat	1.064167
Prob(F-statistic)	0.000000		

Source: Computed by Researcher Using Eviews 10.0 Statistical Software

Table 4.2.3 shows that leverage has a significant and negative effect on biological assets, with a probability value that is less than 0.05(0.0198) and a t-statistic that is greater than 2(-2.531653). Profitability has an insignificant and positive effect on biological assets with a probability that is less than 0.05(0.0521) and a t-statistic that is greater than 2(2.065437). Also,

liquidity has an insignificant and positive effect on biological assets with a probability that is less than 0.05(0.2625) and a t-statistic that is less than 2 (1.153041). Furthermore, Board size has an insignificant and a positive effect on biological assets with a probability that is less than 0.05(0.7177) and a t-statistic that is less than 2 (0.366711), Firm size has an insignificant and a positive effect on biological assets with a probability that is less than 0.05(0.3705) and t-statistic that is less than 2 (0.916192) and firm age have an insignificant and a negative effect on biological assets with a probability that is less than 0.05(0.3420) and t-statistic that is less than 2 (-0.973265).

The table further depicts that a unit change in leverage will reduce biological assets by 1.084. While a unit change in profitability and liquidity will increase biological assets by 0.165 and 0.027 respectively. Furthermore, a unit change in board size and firm size will increase biological assets by 0.061 and 0.533 respectively. Lastly, a change in firm age will reduce biological assets by 0.0687. The adjusted R-squared (R^2) indicated that about 96% of the changes in the biological asset are accounted for by the explanatory variables. The remaining 4% could be explained by other factors capable of influencing the biological assets of firms in the Agricultural sector in Nigeria. The probability of the F-statistic is significant which shows the statistical fitness of the multiple regression results. There is an absence of serial autocorrelation in the panel data extracted from annual reports and accounts of Agricultural companies in Nigeria as suggested by Durbin-Waston Stat of 1.06.

Test of Hypotheses

Statement of Decision Rule: Reject H_0 if P-value is less than the A-value calculated (0.05) and accept the null hypotheses if the reverse becomes the case.

Hypotheses Four: Board size does not have a significant effect on the biological assets of Nigeria Agricultural firms.

Decision: From the panel regression analysis in Tables 4.2.3, the P-value of 0.7177 > 0.05. Therefore, the null hypothesis is accepted and the alternative hypotheses rejected. This implies that board size does not have a significant impact on the biological assets of Nigeria's Agricultural Industry.

Hypotheses Five: Firms' size does not have a significant effect on the biological assets of Nigeria Agricultural Firms.

Decision: From the panel regression analysis in Tables 4.2.3, the P-value of 0.3705 >0.05. Therefore, the null hypothesis is accepted and the alternative hypotheses rejected. This implies that firm size does not have a significant impact on the biological assets of Nigeria Agricultural firm.

Hypotheses Six: Firms' age does not have a significant effect on the biological assets of Nigeria agricultural Firms.

Decision: From the panel regression analysis in Tables 4.2.3, the P-value of 0.3420 > 0.05. Therefore, the null hypothesis is accepted and the alternative Hypotheses are rejected. This implies
that firm age does not have a significant impact on the biological assets of Nigeria's Agricultural firm.

DISCUSSION OF FINDINGS

In the test of hypothesis one, the panel regression analysis reveals that board size does not have a significant impact on the biological assets of Nigeria's Agricultural Industry. This means the number of the board in the company cannot influence the biological assets. This shows that biological assets cannot be affected irrespective of the number of boards that possess managerial skills and educational backgrounds. The findings are also consistent with the findings of Carolina, Kusumawati and Chamalinda (2020) that found that board size does not influence biological assets disclosure.

In the test of hypothesis two, the panel regression analysis reveals that firm size does not have a significant impact on the biological assets of Nigeria's Agricultural firm. The findings show the relevance of total assets in biological assets, this implies that the ability of a firm in the Agricultural industry to sustain its operation is not linked to its total assets. The study also shows that Firm size does not have any effect on biological assets. The findings are also not consistent with the findings of Carolina, Kusumawati and Chamalinda (2020) that found that firm size does not influence biological assets disclosure. However, the findings of the current study were consistent with the findings of Falinkhatun, Dini and Hanggana (2019) and Goncalves and Lopez (2013) which revealed that firm size significantly influences biological assets disclosure.

In the test of hypothesis three, the panel regression analysis reveals that firm age does not have a significant impact on the biological assets of Nigeria's Agricultural firm. This means that the age of the firm has no significant influence on the biological assets. However, as firm age increases, the biological assets of agricultural firms decrease. This could be a result of a lack of innovation by the board and the management. No prior studies have established the same finding, making this study the first in this area.

Summary of Findings

The findings are summarized as follows:

i. Board size has a positive and insignificant (P-value of 0.7177 > 0.05) effect on the biological assets of agricultural firms in Nigeria.
ii. Firm size (measured by total asset) has a positive and insignificant (P-value of 0.3705 >0.05) effect on the biological assets of agricultural firms in Nigeria.
iii. Firm age has a negative and insignificant (P-value of 0.3420 > 0.05) effect on the biological assets of agricultural firms in Nigeria.

CONCLUSION AND RECOMMENDATION

The study examined the responsiveness of biological assets to board size and firm size. From the analysis, leverage has a negative and significant influence on biological assets, while profitability, liquidity, board size, and firm size have a favourable but negligible effect. Age has a negative and insignificant effect on the biological assets of Nigerian agricultural firms. The study therefore conclude that firm size and board size cannot predict biological assets of agricultural firms. Hence, the researcher made the following recommendation:

i. Agricultural firms should maintain a robust board size so that they can continue to reap the benefits of the two good heads theory. They should also ensure that the board size does not reach a saturation point where decision-making will be very difficult.
ii. Efforts should be made to ensure continuous firm growth because of the positive link it has with biological assets.
iii. Firms are encouraged to continuously effect changes in both assets and other activities that may be affected by the age of the firm. Management should maintain current innovations in the industry to attract new investors, boost productivity and enhance shareholders' funds.

There is a paucity of research in Nigeria that examined factors that affect the biological assets of quoted agricultural firms in Nigeria, despite the importance of this kind of asset in the growth of agricultural companies in Nigeria. Most of the prior studies on biological assets were done overseas. Also, from the reviewed literature, researchers seemed to intentionally avoid the agricultural sector of the economy despite the benefits of agricultural produce to Nigeria's economy, hence, the present study contributed to the reservoir of knowledge by establishing that board size, firm size, and firm age have a nonsignificant effect on biological assets. Subsequent studies should conduct an empirical review of fair value accounting on biological assets measurement.

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