

Firm Size and Revenue Reserve of Agricultural Firms in Nigeria

Judethadeus Chukwuebuka Oshim¹, Dr. Ifeyinwa Elizabeth Nnajeze² & Alex O. Igwe³.

Department of Accountancy,

Enugu State University of Science and Technology, Agbani. Enugu State.

doi: <https://doi.org/10.37745/ejaifr.2013/vol11n9117>

Published August 12 2023

Citation: Oshim J.C., Nnajeze I.E. and Igwe A.O. (2023) Firm Size and Revenue Reserve of Agricultural Firms in Nigeria, *European Journal of Accounting, Auditing and Finance Research*, Vol.11, No. 9, pp.1-17

ABSTRACT: *The study evaluated the effect of firm size on the revenue reserve of agricultural firms in Nigeria. The objectives of the study were to ascertain the effect of total assets, turnover, and the number of employees on revenue reserve of agricultural firms in Nigeria. The study adopted an ex-post-facto research design, covering the period between 2012 and 2021. Secondary data were extracted from the annual reports and accounts of the sampled agricultural firms in Nigeria. A multiple regression technique was used for the data analysis. From the analysis of the study, it was revealed that total asset has a statistically nonsignificant negative effect on retained earnings of agricultural firms in Nigeria with a regression coefficient of -1.153966 and a P-value of 0.7517. However, turnover has a statistically significant positive effect on retained earnings of agricultural firms in Nigeria with a regression coefficient of 4.772568 and a P-value of 0.0002. In line with the findings on turnover, number of employees has a statistically significant positive effect on retained earnings of agricultural firms in Nigeria with a regression coefficient of 8.693119 and a P-value of 0.0440. This implies that firm size has a significant effect on retained earnings of agricultural firms in Nigeria. It was recommended therefore that agricultural firms in Nigeria should manage the trade-off between acquiring assets with the profit for the year and retaining for investment in other operations of the business such as wages and salaries and other overheads. They should engage in promotions and other programmes that will encourage customers to buy their products. This will increase their turnover and subsequently increase their Retained Earnings. Agricultural businesses require manpower, hence they should ensure that they have enough staff to enable them to carry out their business activities effectively which will guarantee profitability and maximum retained earnings.*

KEYWORDS: firm size, revenue reserve, agricultural firms, total assets, turnover, number of employees, retained earnings

INTRODUCTION

Financial performance is a critical indicator and reference point for all stakeholders in most organizations throughout the world (Umukoro et al., 2020; Ojeka et al., 2019; Nwanji et al., 2020; Okere et al., 2019). This is due to the fact that the more cash an organization can generate, the easier it is for management to reward stakeholders, make profits, satisfy all financial

obligations, and expand retained earnings. As a result, participation in ethical activities that create money and contribute to the longevity of a certain firm has become crucial for management (Umukoro et al., 2020).

A firm's size has a considerable impact on the kind of relationship it has both within and outside of its working environment. The larger a firm, the more influential it is over its stakeholders. According to Uwuigbe (2019), one of the corporate methods used by corporations to get a competitive edge over their rivals is firm size. The size of the main four audit firms is one of the fundamental reasons for their global significance (Uwuigbe 2019). Mulyono and Khairurizka (2009) contend that a firm's size affects its ability to generate profits (Jafari, Gord, and Beerhouse, 2014; Otekunrin et al., 2019). Larger firms may be able to create things at much cheaper costs than smaller ones. Modern businesses aspire to grow in size in order to get a competitive advantage over their competitors via decreased production costs and increased market share.

Most agricultural firms have been unable to meet market expectations due to a variety of issues. Apart from energy concerns, other challenges that firms have faced include weak financing circumstances. Manufacturers continue to whine as a result of increasing interest rates and a lack of long-term financing. Similarly, macroeconomic metrics were thrown off in the fourth quarter of 2020 when the Naira's exchange rate fell by roughly 20% after a relatively long period of stability. The combination of high interest rates and currency depreciation may result in increased inflation. To perform successfully in this challenging climate, agricultural firms must rely on retained earnings.

For a number of reasons, corporate savings are the best source of financing. For example, firms are discouraged from acquiring new equity since extra stock may cause the share price to fall. Essentially, an organization looking to acquire funds from outside sources must be prepared to meet the lender's conditions. According to Basse, Edom, and Aganyi (2016), the insignificant cost of sourcing funds through external means, such as interest payments on loans, debentures, and leases, dividends paid on shares, rent and royalty payment, loan repayment, redeemable debenture redemption, redeemable preference share redemption, and so on, serves as a significant impediment to raising funds through this medium. Furthermore, the heightened disclosure requirements placed on these firms limit their ability to raise funds from outside sources (Scott, 2003). As a result, retained earnings are the most important source of capital for Nigerian agricultural firms. As a result, it is necessary to investigate the variables impacting retained earnings, such as firm size.

Statement of the Problem

Despite heavily relying on revenue reserves for financing their business activities, agricultural firms have not been able to accumulate sufficient reserves that would eliminate the need for external funding with its associated costs. While performance factors have been discussed as the primary influencers on the revenue reserves of these firms, the significance of firm size in determining the level of reserves has also been recognized. Large firms are often associated with higher or increasing turnover, total assets, and workforce. However, the extent to which

these factors contribute to the inadequate revenue reserves in Nigerian agricultural firms remains to be explored. The continuous expansion of various firms has raised the need for an empirical examination of how firm size impacts the revenue reserves of listed firms in Nigeria, as some organizations and institutions have failed to achieve their going concern objective despite their substantial size. Therefore, this study aims to investigate the effect of firm size on the revenue reserves of agricultural firms in Nigeria.

Objectives of the Study

The main objective of the study is to ascertain the effect of firm size on the revenue reserve of agricultural firms in Nigeria. While the specific objectives are to:

- i. Ascertain the effect of turnover on retained earnings of agricultural firms in Nigeria.
- ii. Determine the effect of total assets on retained earnings of agricultural firms in Nigeria.
- iii. Investigate the effect of number of employees on retained earnings of agricultural firms in Nigeria.

REVIEW OF RELATED LITERATURE

Revenue Reserve

The revenue reserve refers to the reserve formed from a company's profits generated during a specific period, which is retained to fuel future business expansion or handle potential contingencies (Vaidya, 2021). Thirumalaisamy (2013) suggests that retained earnings play a crucial role in the funding strategy of companies experiencing above-average growth rates. Revenue reserves are built from the net profit generated by the company's core operations and serve as a means to rapidly expand the business. It is considered an excellent internal financing resource (Vaidya, 2021). Public corporations, however, tend to complement this source with a higher degree of external funding, while smaller businesses may rely solely on retained profits for growth. Over the long term, smaller enterprises tend to accumulate more savings compared to multinational corporations. Notably, the revenue reserve incurs no transaction or bankruptcy costs, making it the most cost-effective source of finance for a company (Falex, 2009). Additionally, Falex (2009) states that organizations allocating a portion of their revenue for investment in research and development experience greater growth and expansion.

Turnover

Turnover, as defined by Hellicar (2021), represents the total sales made by a business within a specific timeframe. This includes sales income and consultancy fees and is sometimes referred to as total income. It encompasses all types of income generated by an enterprise during an accounting period, comprising both income from ongoing operations and income from discontinued operations. Additionally, it encompasses income derived from regular business activities as well as extraordinary or exceptional income, as noted by Ramlall (2009). Total income encompasses all forms of the company's income, irrespective of whether it involves a cash flow or not, such as sales income from financial services and other income from advances during the prior period.

Total Asset

According to Maggini and Tsaklanganos (2012), assets are economic resources held by a company, expected to provide benefits for the firm's future operations. Total assets encompass the entire value of assets owned by an individual or entity. These assets hold economic value and are utilized over time to yield advantages for the owner. In the case of a business, these assets are typically recorded in the accounting records and are reflected on the statement of financial position. Common categories of assets include cash, marketable securities, accounts receivable, prepaid expenses, inventory, non-current assets, intangible assets, goodwill, and other assets, as noted by Investopedia (2020). Such assets can be utilized during challenging economic periods, serve as collateral during expansion endeavors, and contribute to maintaining a robust financial position. Sloan (2004) further classifies assets into current, non-current, and intangible assets. Non-current assets, encompassing buildings, plants, machinery, furniture, and fittings, among others, are acquired for operational purposes rather than resale, as highlighted by Singh and Pandey (2008).

Number of Employees

In today's business landscape, attracting and retaining high-quality employees holds even greater significance from a managerial standpoint. Various trends, such as globalization, the rise of knowledge work, and rapid technological advancements, underscore the necessity for firms to acquire and retain valuable human capital. As highlighted by Hinkin & Tracey (2000), while there may be variations across countries, the analysis of turnover costs and labor shortages in crucial industries worldwide has emphasized the paramount importance of retaining key employees for organizational success.

While strategic human resource researchers, as noted by Hatch & Dyer (2004), are actively exploring the causal connections between human resource practices and firm performance, Shaw, Gupta, & Delery (2005) emphasize that most studies regard voluntary turnover as a critical component in this equation. Acknowledging the vital role that employee retention plays in organizational outcomes, businesses are increasingly focused on implementing effective strategies to attract and retain top talent in the face of the evolving global business environment.

Theoretical Framework

The Pecking Order Theory, introduced by Donaldson (1961), stands as one of the most influential theories regarding corporate leverage. In contrast to the idea of firms seeking an optimal mix of debt and equity financing to minimize their cost of capital, this theory proposes a well-defined order of preference for sources of finance when firms contemplate funding their long-term investments. According to the theory, a firm's primary choice should be utilizing internal funds, such as revenue reserves, followed by debt and then external equity. Donaldson argues that as firms become more profitable, their borrowing decreases since they possess sufficient internal finance to undertake investment projects. When internal finance is insufficient, firms should turn to external sources, with bank borrowings or corporate bonds being the most preferable. Finally, if internal funds, bank borrowings, and corporate bonds are exhausted, issuing new equity capital becomes the last and least preferred option for financing.

Firms that heavily rely on revenue reserves enjoy the advantage of avoiding transaction costs and bankruptcy costs. Such firms do not need to pay interests or dividends for these funds, making revenue reserves the most sought-after funding option in corporate finance. This aligns with the Pecking Order Theory, providing the foundation for this study's anchoring in the theory.

Empirical Review

Solabomi and Babajide (2017) conducted a study to explore the impact of four firm characteristics (size, organisational structure, age, and systemic importance) on performance disclosures by Nigerian banks using the balanced scorecard (BSC) model. The study focused on publicly-listed banks in Nigeria, operating from 2012 to 2014. Data analysis involved descriptive statistics, t-test, and Analysis of Variance (ANOVA) at a 5% significance level. The results indicated that there were no significant differences in the extent of performance disclosure across the four BSC perspectives and the overall BSC measure based on the four firm attributes studied.

Kazzah et al. (2017) investigated the relationship between firm characteristics and the financial performance of listed deposit money banks in Nigeria over an eleven-year period (2005 to 2015). Multiple regressions were utilized to test their research hypothesis, and the findings revealed a positive and statistically significant impact of firm characteristics on the financial performance of the industry. The researchers recommended that firms should identify specific characteristics to enhance their financial performance.

Olawale et al. (2017) examined the effect of firm size on the performance of non-financial firms in Nigeria. They used a panel data set of 12 non-financial firms operating in Nigeria from 2005 to 2013 and analyzed the data using various regression models. The results showed that firm size, in terms of total assets, had a negative effect on performance, while firm size, in terms of total sales, had a positive effect on the performance of Nigerian non-financial companies.

Mwaniki and Omagwa (2017) focused on the relationship between the asset structure and the financial performance of firms quoted under the commercial and service sector at the NSE in Kenya. They conducted a census on all firms listed in this sector for five years, from 2010 to 2014, and performed multiple regression analysis using SPSS version 21. The study revealed that asset structure significantly affected financial performance, with Property, Plants and Equipment, and long-term investments and funds having a statistically significant effect, while current assets and intangible assets did not show statistical significance.

Inyiama et al. (2017) evaluated the relationship between assets growth rate and the financial performance of manufacturing firms in Nigeria. They selected six firms from the twenty-two listed manufacturing firms on the Nigeria Stock Exchange Market (NSE) and collected secondary data for a ten-year period (2006 – 2015). Pearson Product Moment Correlation Matrix and Multiple Regression were used in data analysis, revealing that non-current assets growth rate and net assets growth rate of manufacturing firms in Nigeria were positively and

strongly related to the firms' profit during the period, while current assets growth rate showed a positive but weak relationship with profit.

Akani and Sweneme (2017) explored the effects of macroeconomic aggregates on the retention ratio of selected quoted manufacturing firms in Nigeria from 1981 to 2014, utilizing secondary data and various statistical techniques like Ordinary Least Squares, Error correction mechanism, and Autoregressive Distributed Lag (ARDL) Bounds approach to cointegration. The study found that interest rate had a negative influence on retention ratio, while oil price, capital market development, and money supply had positive impacts. The financial sector's development showed a positive relationship, but inflation rate had a negative impact.

Masood (2017) analyzed the determinants of retained earnings in profitable cement companies in the cement sector of India over sixteen years. Multiple linear regression was used to identify the determinants of retained earnings, and the study found that profit after tax, debt-equity ratio, and inventory had a positive and significant impact, while dividends paid had a negative and significant effect on retained earnings.

Iheduru and Okoro (2018) investigated external factors determining the retained earnings of quoted manufacturing firms in Nigeria using the Ordinary Least Square method with a multiple regression model. The study found that oil price had a positive impact on the retention rate of the selected manufacturing firms, while the exchange rate and interest rate had negative effects. The money supply had a harmful impact on the dividend payout rate, while the inflation rate positively influenced the retention rate.

Akinkoye and Akinadewo (2018) evaluated the relationship between retained earnings and the market value of firms in Nigeria using data from 75 non-financial firms listed on the Nigeria Stock market during the period 2003 to 2014. Descriptive and multiple regression models were employed, and the study found a positive and significant relationship between retained earnings, earnings per share, dividend payout, and the value of firms, while market value showed a positive but non-significant association with financial leverage.

Masood (2018) examined the determinants of retained earnings in profitable steel companies in the steel sector of India for sixteen years. Multiple linear regression was used, and the study found that profit after tax and current ratio had a positive and significant impact on retained earnings, while dividends paid and corporate tax had a negative and significant impact. Reserves, debt-equity ratio, investments, and cash flow showed a neutral and insignificant effect on retained earnings.

Nwanganga (2018) studied the determinants of retained earnings of quoted manufacturing firms in Nigeria for a ten-year period (2009 to 2018) using panel data regression analysis and the Pecking Order Theory. The study found that earnings retention ratio (ERR) had an inverse and insignificant effect on return on assets (ROA), dividend payout ratio (DPR) had a direct and insignificant effect on ROA, while net profit margin (NPM) had a direct and significant effect on ROA of quoted manufacturing firms in Nigeria.

Akparhuere, Duru, and Ogbu (2019) assessed the effect of asset management efficiency on the corporate performance of building and construction companies in Nigeria using the ex-post facto research design and secondary data collected over ten years (2006-2017). The study found that net asset turnover and working capital turnover did not have a significant effect on the performance of building and construction companies, but inventory turnover had a significant effect on their corporate performance.

Soyemia and Olawale (2019) examined the impact of firm characteristics on the quality of financial reporting of listed manufacturing firms in Nigeria using multiple regression analysis. The study included firm size, firm tangibility, profitability, and growth as firm characteristics. The results showed that firm size had a positive and significant effect on financial reporting quality, while tangibility had a negative and significant effect. Firm profitability had a positive influence, while firm growth had a negative significant effect on financial reporting quality.

Efuntade and Akinola (2020) investigated the impact of firm characteristics on the financial performance of quoted manufacturing firms in Nigeria using a descriptive and cross-sectional research design for 14 years. Secondary data from five selected quoted manufacturing firms were obtained from annual reports, and panel least square regression model was used for analysis. The study found that all the independent variables (Firm Age, Firm Size, Sales Growth, Liquidity, and Leverage) jointly and strongly affected the financial performance of manufacturing firms in Nigeria, as measured by return on assets.

Umukoro et al. (2021) examined the effect of firm size on the three levels of cash flow in listed banks in African emerging economies using multiple regression analysis with the STATA statistical software tool. The results revealed that for the operating level of cash flow, all countries used in the study, except Kenya, should continue to employ firm size as a corporate strategy method, as it increases operating cash inflow. For the financing level of cash flow, all countries except Nigeria should continue to utilize firm size, as it showed a significant value in the regression. The investing level of cash flow produced significant P-values for all countries except Botswana.

Gaps in Empirical Review

From the above literature, it is clear that there is little research on firm size and revenue reserve in Nigeria. The few studies that were done were in industries other than consumer goods. The only study that particularly focused on firm size was Umukoro et al (2021). The researchers examined the relationship between firm size and the performance of banks in Nigeria. This created a gap in the literature in other sectors, especially the agricultural sector. Also, most of the previous research period of coverage ended in 2018, hence, creating a period gap. Consequently, the current study filled the identified gap by studying the effects of firm size on the revenue reserve of agricultural firms in Nigeria extending the period covered to 2021.

METHODOLOGY

Research Design

The research aimed to examine the effect of firm size on the revenue reserve of agricultural firms in Nigeria. It adopted an ex-post facto research design based on historical data. The study focused on the agricultural sector of Nigeria's economy, specifically analyzing 5 publicly quoted firms on the Nigeria Stock Exchange as of December 31, 2021.

Secondary data was used for the research, with time-series data extracted from the annual reports and accounts of the selected agricultural firms listed on the Nigeria Exchange Group from 2012 to 2021. The population for the study consisted of 5 agricultural firms listed on the Nigeria Exchange Group at the end of 2021.

To determine the sample size, the study purposively selected three agricultural firms that provided the necessary and required data for the study during the period from 2012 to 2021. The selected firms were Livestock Feeds Plc, Okomu Oil Palm Plc, and FTN Cocoa Processors Plc. The selection was based on the availability of relevant and reliable data in the companies' statement of comprehensive income and statement of financial position for the relevant years.

Model Specification

The composite multiple regression (prediction) model is statistically specified as follows:

$$RETEARN_{ti} = \beta_0 + \beta_1 TO_t + \beta_2 TA_t + \beta_3 NOE_t + \epsilon_t \quad \text{[Equation (1)]}$$

Where;

RETEARN	Retained Earnings
TO	Turnover
TA	Total Asset
NOE	Number of Employee

c_{it} is the non-observable individual effect while ϵ_{it} is the disturbance or error term for firm i in the year t

β_0	Coefficient (constant) to be estimated
$\beta_1 - \beta_3$	Parameters of the independent variables to be estimated
t	Current period

DATA PRESENTATION AND ANALYSIS**DATA ANALYSIS****Table 4.2.1 Descriptive Statistics**

	LOG(RETEARN)	LOG(TA)	LOG(TO)	LOG(NOE)
Mean	1.583209	16.04454	15.14510	5.144774
Median	11.56679	15.52153	15.98542	4.700439
Maximum	17.27995	18.00171	17.43703	6.575076
Minimum	-15.80097	14.54418	11.31233	4.248495
Std. Dev.	14.95066	0.978181	1.735880	0.828517
Skewness	-0.114605	0.654442	-0.751165	0.650782
Kurtosis	1.061699	2.000780	2.130325	1.623505
Jarque-Bera	4.761933	3.389519	3.766665	4.486007
Probability	0.092461	0.183643	0.152082	0.106139
Sum	47.49627	481.3361	454.3530	154.3432
Sum Sq. Dev.	6482.147	27.74830	87.38508	19.90676
Observations	30	30	30	30

Source: E-views 10 software, 2022

Table 4.2.1 above reveals the variable description of the 30 observations of the panel data for sampled agricultural firms in Nigeria. The normality of the distribution of the data series is judged by the outcome of 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 insignificant p-values as follows Retained Earnings (0.092461), Total Assets (0.183643), Turnover (0.152082), and Number of Employees (0.106139). The insignificance of p-values depicts normal distribution for all the variables studied. This was further confirmed by the skewness coefficients which are not greater than one in all the variables under study with the following outcomes Retained Earnings (-0.114605), Total Assets (0.654442), Turnover (-0.751165), and Number of Employees (0.650782). The kurtosis coefficient provides a second level of confirmation that all the variables are normally distributed with the following coefficients Retained Earnings (1.061699), Total Assets (2.000780), Turnover (2.130325), and Number of Employees (1.623505). This is the case of the data extracted from annual reports and accounts of sampled agricultural firms listed on the Nigeria Stock Exchange.

Regression Results (OLS)

After the application of the ordinary least square (OLS) estimation method on the model earlier suggested in the previous section, the following results shown in the table below were obtained.

Table 4.2.2 Multiple Regression Result [Dependent Variable: Log (RETEARN)]

Variable	Coefficient	Standard Error	t-Stat	p-Value
LOG(TA)	-1.153966	3.609049	-0.319742	0.7517
LOG(TO)	4.772568	1.104074	4.322689	0.0002
LOG(NOE)	8.693119	4.107660	2.116319	0.0440
C	-96.90709	38.13720	-2.541012	0.0174
R ² = 0.73, Adjusted R ² = 0.69, F-Stat = 23.01132, Prob(F-stat) = 0.0000, D.W. Stat. = 0.96				

Source: *E-views 10 software, 2022*

Total Assets: Total Assets has a coefficient of -1.153966 which shows that a unit increase in Total Asset will decrease the Retained Earnings of agricultural firms in Nigeria by 1.15. The value of the t-statistics ($-0.319742 < 2$) and the probability of the t-Statistic ($0.7517 > 0.05$) show that Total Assets have a nonsignificant effect on the Retained Earnings of agricultural firms in Nigeria.

Turnover: Turnover has a coefficient of 4.772568 which shows that a unit increase in Turnover will increase the Retained Earnings of agricultural firms in Nigeria by 4.77. The value of the t-statistics ($4.322689 > 2$) and the probability of the t-Statistic ($0.0002 < 0.05$) show that Turnover has a significant effect on the Retained Earnings of agricultural firms in Nigeria.

Number of Employees: Number of Employees has a coefficient of 8.693119 which shows that a unit increase in the Number of Employees will decrease the Retained Earnings of agricultural firms in Nigeria by 8.69. The value of the t-statistics ($2.116319 > 2$) and the probability of the t-Statistic ($0.0440 < 0.05$) show that the Number of Employees has a significant effect on the Retained Earnings of agricultural firms in Nigeria.

Statistical Criteria (First Order Tests)

The value of the Adjusted R² is 0.69, which tells us that 69% of the changes in the Retained Earnings are explained by the independent variables, while the other 31% are explained by other factors capable of influencing Retained Earnings other than Total Asset, Turnover, and Number of Employees. These other factors are contained in the error term. The f-test is used to check for the overall significance of the model. If the value of the probability of the f-stat (p-value: 0.0000) is less than 0.05 at a 5% critical value, the model is said to be significant and statistically fit. The Durbin Watson Statistic (0.96) shows the presence of positive autocorrelation in the time series data.

Table 4.2.3: Correlation Analysis Result

	LOG(RETEARN)	LOG(TA)	LOG(TO)	LOG(NOE)
LOG(RETEARN)_	1.000000	0.685578	0.776537	0.722112
LOG(TA)	0.685578	1.000000	0.597739	0.892286
LOG(TO)	0.776537	0.597739	1.000000	0.555351
LOG(NOE)	0.722112	0.892286	0.555351	1.000000

Source: *Eviews 10.0 Software, 2022*

Table 4.2.5 above shows the correlation results of the variables of the study. The table shows how the various independent variables of the study relate to each other and the dependent variable. The table depicts that there is a strong (68% approx.) and positive relationship between Retained Earnings and Total Assets (TA/RETEARN). Retained Earnings and Turnover (TO/ RETEARN) also share a positive and strong relationship (78% approx.). Furthermore, Retained Earnings and Number of Employees (NOE/ RETEARN) also share a positive and strong relationship at approximately 72%.

TEST OF HYPOTHESES

The three hypotheses formulated in section one of this study were tested using the following decision rule:

Restatement Decision Rule

According to Gujarati and Porter (2009), the decision rule involves accepting the alternate hypothesis (H_1) if the sign of the coefficient for the independent variable is either positive or negative, the modulus of the t-Statistic > 2.0 and the P-value of the t-Statistic < 0.05 . Otherwise, accept H_0 and reject H_1 .

Hypothesis One

H_0 : Total assets have a nonsignificant effect on retained earnings of agricultural firms in Nigeria.

H_1 : Total assets have a significant effect on retained earnings of agricultural firms in Nigeria.

Decision

The regression coefficient in Table 4.2.2 shows that Total Asset has a statistically negative effect on Retained Earnings of agricultural firms in Nigeria. The values for the t-statistic (-0.319742) and probability of the t-statistic (0.7517) show that Total Asset has a statistically nonsignificant effect on Retained Earnings in the industry.

Hypothesis Two

H_0 : Turnover has a nonsignificant effect on Retained Earnings of agricultural firms in Nigeria.

H_1 : Turnover has a significant effect on Retained Earnings of agricultural firms in Nigeria.

Decision

The regression coefficient in Table 4.2.2 shows that Turnover has a statistically positive effect on Retained Earnings of agricultural firms. The values for the t-statistic (4.772568) and probability of the t-statistic (0.0002) depict that Turnover has a statistically significant effect on Retained Earnings in the industry.

Hypothesis Three

H_0 : Number of employees has a nonsignificant effect on Retained Earnings of agricultural firms in Nigeria.

H_1 : Number of employees has a significant effect on Retained Earnings of agricultural firms in Nigeria.

Decision

The regression coefficient in Table 4.2.2 shows that the number of employees has a statistically positive effect on Retained Earnings of agricultural firms. However, the values for the t-statistic (2.116319) and probability of the t-statistic (0.0440) shows that the Number of Employee have a statistically significant effect on Retained Earnings in the industry.

DISCUSSION OF RESULTS

In hypothesis testing one, the regression analysis yielded a remarkable discovery on the link between total assets and retained profits of agricultural enterprises in Nigeria. The study demonstrated a statistically negative and nonsignificant impact, showing that as total assets grow, retained profits of these businesses tend to decline. This finding matches well with the researcher's original predictions, since it is fair to assume that a growth in assets would demand equivalent investments, leading to a fall in retained earnings. It is worth mentioning that previous to this study, no other research has particularly explored the influence of total assets on retained profits in the context of agricultural enterprises in Nigeria, making our analysis essential in addressing this knowledge gap. By adding this essential insight, our research broadens the knowledge of how total assets play a role in defining the financial performance of agricultural enterprises and offers a framework for additional inquiry in this area.

During the examination of hypothesis two, the regression analysis unveiled a strong and positive association between turnover and retained earnings of agricultural firms in Nigeria. The conclusion implies that when turnover rises, the retained earnings of these firms likewise see a commensurate rise. This data coincides closely with the researcher's original assumptions, since a jump in sales would naturally lead to larger profits, eventually leading to increasing retained earnings. Remarkably, previous to our study, no other research has particularly gone into studying the influence of turnover on retained earnings in the context of agricultural firms in Nigeria, hence underscoring the originality of our inquiry and its role in filling this gap in existing knowledge. By providing empirical data confirming the significant role of turnover on retained earnings, our study gives valuable insights that increase the grasp of the financial dynamics of agricultural firms, enabling a better understanding of their development drivers. During the evaluation of hypothesis three, the regression analysis indicated a substantial and positive link between the number of employees and retained earnings of agricultural firms in Nigeria. The data imply that when the total staff inside these firms rises, their retained earnings likewise see a commensurate expansion. This study accords with the logical notion that a bigger number of workers may lead to improved production, sales, and eventually, better profitability. As profits grow, so do the retained earnings. Remarkably, previous to our study, no prior research has explicitly studied the influence of the number of workers on retained earnings in the setting of agricultural firms in Nigeria, underlining the relevance of our research in filling this gap in the current literature. By providing empirical evidence supporting the influential role of employee count on retained earnings, our study contributes valuable insights that enhance the understanding of the financial dynamics within agricultural firms, providing a foundation for further exploration and informed decision-making in this area.

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

Summary of Findings

- i.Total assets have a statistically nonsignificant negative effect on retained earnings of agricultural firms in Nigeria with a regression coefficient of -1.153966 and a P-value of 0.7517.
- ii.Turnover has a statistically significant positive effect on retained earnings of agricultural firms in Nigeria with a regression coefficient of 4.772568 and a P-value of 0.0002.
- iii.Number of employees has a statistically significant positive effect on retained earnings of agricultural firms in Nigeria with a regression coefficient of 8.693119 and a P-value of 0.0440.

Conclusion and Recommendations

Nigeria's agricultural sector plays a crucial role in the country's economy, contributing a substantial portion of its GDP. Notably, between July and September 2021, agriculture accounted for nearly 30 percent of the total GDP, marking a notable six percent increase from the previous quarter. This sector holds significant importance as it provides livelihoods for many Nigerians, in contrast to the oil industry, which benefits only a limited portion of the population.

To sustain the sector's immense contributions, agricultural firms must have sufficient capital for investment in key areas of their operations. Retained earnings represent a cost-free financing source available to these firms, making it essential to handle them with utmost seriousness. However, the size of these firms may also influence the amount they reserve for further investment in their growth.

In this context, the study aimed to ascertain the effect of firm size on the revenue reserve of agricultural firms in Nigeria. The data analysis revealed interesting findings. While total assets exhibited a nonsignificant negative effect on retained earnings, turnover and the number of employees displayed a significant positive effect on retained earnings for agricultural firms in Nigeria.

The Adjusted R-Squared value demonstrated that 69% of changes in retained earnings within the industry could be explained by the variables of total assets, turnover, and the number of employees. The remaining 31% might be attributed to other factors capable of influencing retained earnings in the sector. Thus, the study concludes that firm size significantly impacts the retained earnings of agricultural firms in Nigeria. Based on the findings, the study provides essential recommendations to enhance the financial performance of agricultural firms:

Efficient Capital Management: Agricultural firms in Nigeria should utilise smart capital management approaches to establish a balance between acquiring assets and saving income for important investments. Careful care should be devoted to picking investments that assist to long-term growth and sustainability while providing suitable reserves for unforeseen challenges.

Customer-Centric techniques: To boost their retained earnings, agricultural firms might adopt customer-centric strategies, including targeted promotions and imaginative marketing activities. Engaging with customers and understanding their needs may not only boost product sales but also promote brand loyalty, producing a good effect on the bottom line.

Investment in Human Capital: Recognizing the crucial role of human resources, agricultural firms should prioritize investing in their workforce. Adequate personnel numbers and skill development programs will increase operational efficiency, productivity, and overall performance, resulting to better profitability and higher retained profits.

Diversification and Value Addition: Agricultural firms could study diversification and value addition alternatives within the sector. Expanding product lines, discovering new markets, and adding value to present things can open routes for bigger sales and better retained profitability. Sustainable Practices: Embracing sustainable agricultural practices may generate long-term benefits for firms in Nigeria. By using eco-friendly and socially responsible strategies, these firms may appeal to environmentally conscious consumers and investors, consequently garnering more significant investments and enhancing retained earnings.

Financial Reporting Transparency: Transparency in financial reporting is vital for keeping investor confidence and attracting prospective investors. Agricultural firms should produce accurate and transparent financial reporting, presenting stakeholders with a full view of the firm's financial health and performance.

Risk Management: Developing comprehensive risk management procedures is crucial for mitigating probable financial downturns. Agricultural firms should proactively identify and handle issues that can impair their profitability, hence preserving their financial stability and retained profits.

Contribution to Knowledge

The fundamental goal of research is to expand the reservoir of knowledge. In this context, our study aims to assess the factors influencing the growth of agricultural firms in Nigeria. Through a thorough review of existing literature, we discovered a noticeable gap in the research landscape, as no prior work had explored the relationship between total assets, turnover, and the number of employee shares with retained earnings of agricultural firms in Nigeria. As a result, our findings hold immense significance in the realm of knowledge, as they not only address this void but also contribute substantially to the existing understanding of the subject matter. By shedding light on these critical factors, our study adds valuable insights to the body of knowledge, enriching the understanding of agricultural firm growth in the Nigerian context.

REFERENCES

- Akani, H. W & Sweneme, Y. (2017). Macroeconomic aggregates and retention ratio of quoted firms in Nigeria. *European Journal of Accounting Auditing and Finance Research*, 5(10), 1-11.
- Akinkoye, E. & Akinadewo, S., I. (2018). Retained earnings and firms' market value: Nigeria experience. *The Business and Management Review*, 9(3), 482-496.

- Akparhuere, G., O., Eze, N., T., and Unah, N., A. (2015). Effect of capital structure on retained earnings in the oil and gas sector: Evidence from Nigeria. *Issues in Business Management and Economics* 3(10), 120-132.
- Bassey, E. B., Edom, G., O., & Aganyi, A., A. (2016). Assessing the impact of retained profit on corporate performance: empirical evidence from Niger mills company, Calabar, Nigeria. *European Journal of Business and Innovation Research*, 4(1), 36-47.
- Efuntade, A. O. & Akinola, A. O., (2020). Firm characteristics and financial performance in quoted manufacturing companies in Nigeria. *International Journal of Business and Finance Management Research*, 7, 25-32.
- Ekwe, M. C. & Inyiama, O. I. (2014). Revenue reserves and financial performance in the brewery industry: Evidence from Nigeria. *Journal of Applied Economics and Finance* 1(2), 117-131.
- Hatch, N. W., & Dyer, J. H. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic Management Journal*, 25, 1155–1178.
- Hellicar, L. (2021). What is turnover in business and how do you work it out? <https://www.simplybusiness.co.uk/knowledge/articles/2021/05/what-is-business-turnover/>
- Hinkin T. R. & Tracey B. J. (2000). Employee turnover does more than reduce service quality and damage employee morale-it hits a hotel's pocketbook. *Cornell Hotel and Restaurant Administration Quarterly* 41(3), 14-21. DOI: 10.1016/S0010-8804(00)80013-0
- Iheduru, G. & Okoro, C. U. (2018). Macroeconomic variables and retained earnings of quoted manufacturing firms in Nigeria: A time-variant study. *International Journal of Accounting & Finance Review*, 3(1), 33-47.
- Investopedia (2020). Retained Earnings. Available Online at: <https://www.investopedia.com/terms/r/retainedearnings.asp>.
- Inyiama, O.I., Ugbor, Oluchukwu, R.N., & Nnenna, C.V. (2017). Evaluation of the relationship between assets growth rate and financial performance of manufacturing firms in Nigeria. *International Journal of Managerial Studies and Research*, 5(10), 63-73.
- Jafari, S., Gord, A., & Beerhouse, M. (2014). The effect of debt, firm size, and liquidity on investment cash flow sensitivity of listed companies on the Tehran stock exchange. *Arabian Journal of Business and Management Review*, 2(10), 94-102.
- Masood, S. (2018). Determinants of retained earnings in profitable steel companies in India: A study of the steel sector. *International Journal of Trend in Research and Development*, 4(5), 245-249.
- Mulyono, M., & Khairurizka, R. (2009). The effect of financial ratios, firm size, and cash flow from operating activities in the interim report on the stock return. *Chinese Business Review*, 8(6), 44-55.
- Mwaniki, G. & Omagwa, J. (2017). Asset structure and financial performance: a case of firms quoted under commercial and services sector at the Nairobi securities exchange, Kenya. *Research Journal of Finance and Accounting*, 8(4), 192-200.
- Myers, S.C. Majluf, D.N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221.

- Nwanji, T. I., Howell, K. E., Faye, S., Otekunrin, A. O., Eluyela, D. F., Lawal, A. I., ... Eze, S. C. (2020). Impact of foreign direct investment on the financial performance of listed deposit banks in Nigeria. *International Journal of Financial Research*, 11(2), 323-347. <https://doi.org/10.5430/ijfr.v11n2p323>
- Ojeka, S., Adegboye, A., Adegboye, K., Umukoro, O., Dahunsi, O., & Ozordi, E. (2019). Corruption perception, institutional quality and performance of listed companies in Nigeria. *Heliyon*, 5(10). <https://doi.org/10.1016/j.heliyon.2019.e02569>
- Okere, W., Eluyela, D. F., Lawal, A. I., Ibidunni, O., Eseyin, O., Popoola, O., & Awe, T. (2019). Foreign expatriates on board and financial performance: a study of listed deposit money banks in Nigeria. *The Journal of Social Science Research*, 5(2), 418-423. <https://doi.org/10.32861/jssr.52.418.423>
- Oladipo, O. A., Iyoha, O. F., Fakile, A. S., Asaley, A. J., & Eluyela, D. F. (2019a). Do government taxes have implications on manufacturing sector output? Evidence from Nigeria. *Journal of Management Information and Decision Sciences*, 22(3), 181-190.
- Oladipo, O. A., Iyoha, O. F., Fakile, A. S., Asaley, A. J., & Eluyela, D. F. (2019b). Tax revenue and agricultural performance: evidence from Nigeria. *Problems and Perspectives in Management*, 17(3), 342-349. [https://doi.org/10.21511/ppm.17\(3\).2019.27](https://doi.org/10.21511/ppm.17(3).2019.27)
- Olawale, L.S., Ilo, B.M. & Lawal, F.K. (2017). The effect of firm size on the performance of firms in Nigeria. *The International Journal of Finance*, 2(4), 45-49.
- Otekunrin, A. O., Nwanji, T. I., Agba, D. Z., Olowookere, J. K., Fakile, S. A., Ajayi, S. A., & Oladiran, T. (2018). Outsourcing of accounting services and strategic cost management method: (A case study of Dangote flour PLC and Doyin Investment Nig. LTD). *Proceedings of the 32nd International Business Information Management Association Conference, IBIMA 2018*, 8452-8465.
- Ozordi, E., Adetula, D. T., Eluyela, D. F., Aina, A., & Ogabi, M. (2019). Corporate dynamism and cash holding decision in listed manufacturing firms in Nigeria. *Problems and Perspectives in Management*, 17(4), 1-12. [https://doi.org/10.21511/ppm.17\(4\).2019.01](https://doi.org/10.21511/ppm.17(4).2019.01)
- Ozordi, E., Eluyela, D. F., Uwuigbe, U., Uwuigbe, O. R., & Nwaze, C. E. (2020). Gender diversity and sustainability responsiveness: evidence from Nigerian fixed money deposit banks. *Problems and Perspectives in Management*, 18(1), 119-129. [https://doi.org/10.21511/ppm.18\(1\).2020.11](https://doi.org/10.21511/ppm.18(1).2020.11)
- Shaw, J. D., Gupta, N., & Delery, J. E. 2005. Alternative conceptualizations of the relationship between voluntary turnover and organizational performance. *Academy of Management Journal*, 48, 50-68.
- Solabomi, A. and Babajide, O. (2017). Firm characteristics and performance disclosure in annual reports of Nigerian banks using the balanced scorecard. *Euro Economica*, 36(1), 102-111.
- Soyemia, K. A. & Olawale, L. S. (2019). Firm characteristics and financial reporting quality: evidence from non-financial firms in Nigeria. *International Journal of Economics, Management, and Accounting*, 27(2), 445-472.
- Thirumalaisamy, R. (2013). Firm growth and retained earnings behaviour - A Study on Indian Firms, *European Journal of Business and Management*, 5(27), 76-84.

- Umukoro, O.E., Uwuigbe, O.R., Obigbemi, I.F., Babajide, B.S., Eluyela, D.F., & Ofe, I. (2021). Firm size and financial performance among listed banks of emerging economies in Africa. *Research in World Economy*, 12, 340.
- Uwuigbe, U., Uwuigbe, O. R., & Okorie, B. (2015). Assessment of the effects of firms' characteristics on earnings management of listed firms in Nigeria. *Asian Economic and Financial Review*, 5(2), 218-228.
- Vaidya, D. (2021). What is Revenue Reserve? <https://www.wallstreetmojo.com/revenue-reserve/>