MODERATING EFFECT OF EXTERNAL FACTORS ON THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF LISTED AGRICULTURAL COMPANIE IN NIGERIA

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Abstract

This study examined the moderating effect of external factors on the relationship between capital structure and financial performance of listed agricultural companies in Nigeria. The study adopted ex-post factor research design with moderated regression model, used to analyze the data of dependent and independent variables used. The population comprised of all the agricultural companies listed on the Nigerian Exchange Group. There are five (5) agricultural companies quoted on the Nigerian Exchange Group as at December 31, 2024. Due to small nature of the population, all the five companies were used. Secondary data was extracted from the audited financial reports and accounts of the listed agricultural companies for the period of 2018 to 2022. With the aid of SPSS version 23 as technique for data analysis, the study concluded that external factors influence the relationship between capital structure and financial performance of agricultural companies in Nigeria. Therefore the study recommended amongst others that, agricultural businesses should use moderate debt levels in their capital structure to avoid paying a high cost of capital. High levels of interest payments reduce the availability of internal funds for investment.

Keywords: Interest Rate, Capital Structure, Financial Performance, Agricultural Companies

Introduction

In Nigeria, the agricultural sector is an essential part of the economy, contributing significantly to employment, GDP, and export earnings. However, companies in this sector face unique challenges such as fluctuating commodity prices, climate change, and inadequate infrastructure (Akinlo, 2017). These challenges can affect the effectiveness of capital structure decisions, as the financial performance of agricultural companies may be influenced by these external variables.

The corporate finance landscape today reveal that, managers grapple with the dual challenges of improving their companies' financial performance and determining the optimal business funding option. These managers also face the triple demand of generating wealth for investors, maintaining business operations, striking a balance between risk and return, and contributing to overall economic growth (Jensen & Meckling, 1976). Despite existing evidence suggesting that debt is a primary source of funding a firm's long-term activities and has a significant impact on its performance, finding the ideal capital structure remains a persistent challenge (Naz et al., 2016).

Capital structure refers to the mix of debt and equity used by a firm to finance its activities (Akinlo, 2017). For companies, the decision between debt financing (loans or credit) and equity financing (ownership stakes) is a critical one, influencing profitability, liquidity, and financial stability. Financial performance, typically measured by profitability ratios such as Return on Assets (ROA) or Return on Equity (ROE), is often impacted by the leverage decisions SMEs make.

Financial performance is a measure of how well a company manages its resources and generates revenue. Financial performance predominantly shows the sector of a business outcome as well as results, showing the overall financial health condition of the business sector over a particular time period (Naz et al., 2016). They further asserted that it shows how well a firm utilizes her resources in minimizing the wealth and profitability of the shareholders, which in turn increase shareholder value over time. It is a measure of how well a company is managing its resources and achieving its financial goals.

Capital structure, referring to the mix of debt and equity financing used by firms, plays a critical role in determining their financial stability and profitability (Modigliani & Miller, 1958). For agricultural companies in Nigeria, capital structure decisions are influenced not only by internal factors but also by external factors such as macroeconomic conditions, industry-specific variables, and governmental policies. These external factors can either amplify or dampen the impact of capital structure on financial performance.

Capital structure decisions are crucial in determining a company's financial performance. Firms with high leverage (i.e., greater debt relative to equity) are expected to experience higher returns on equity (ROE), as debt financing can leverage the returns on invested capital (Kraus & Litzenberger, 1973). However, excessive debt can lead to financial distress, higher costs of borrowing, and lower profitability, especially in the context of the agricultural sector, where revenue is often volatile and uncertain (Jensen & Meckling, 1976). The forms of mix

of the debt-equity can be in various forms; unlevered firm (100% equity and 0% debt),levered firm (0%equity and 100% debt) and a percentage of debt which can be referred to as capital mix (Ahmad & Shehu, 2022).

The moderating effect of external factors on the relationship between capital structure and financial performance implies that the influence of capital structure on financial outcomes may vary under different external conditions. In a stable and supportive environment, firms may be able to leverage debt more effectively, improving profitability. However, during periods of high inflation, fluctuating exchange rates, or poor policy implementation, the negative impacts of leverage may outweigh its benefits, leading to poor financial performance (Moral-Benito, 2013). For example, in Nigeria, where the agricultural sector faces cyclical downturns due to fluctuating commodity prices, firms with high levels of debt may struggle to maintain profitability when prices fall, as debt servicing costs remain constant (Sani & Obasan, 2019). Agricultural companies in Nigeria must carefully consider these external factors when making capital structure decisions, as the success of such decisions is not solely dependent on internal financial management but also on the broader economic and regulatory environment. This paper explores the moderating effect of external factors on the relationship between capital structure and financial performance of listed agricultural companies in Nigeria.

Objectives of the Study

The main objective of this study was to ascertain moderating effect of external factors on the relationship between capital structure and financial performance of listed Agricultural Companies in Nigeria. The specific objectives were to:

i. Examine the moderating effect of interest rate on the relationship between total debt to total assets and financial performance of listed Agricultural Companies in Nigeria.
ii. Examine the moderating effect of interest rate on the relationship between total debt to equity and financial performance of listed Agricultural Companies in Nigeria.

Hypotheses

Ho1: Interest rate has no moderating effect on the relationship between total debt to total assets and financial performance of listed Agricultural Companies in Nigeria.

Ho2: Interest rate has no moderating effect on the relationship between total debt to total equity and financial performance of listed Agricultural Companies in Nigeria.

Literature Review

Concept of Financial Performance

Performance is the most imperative measure for profitable of a company (Matar & Eneizan, 2018). Financial performance predominantly shows the sector of a business outcome as well as results, showing the overall financial health condition of the business sector over a particular time period (Naz, Ijaz & Naqvi, 2016). They further asserted that it shows how well a firm utilizes her resources in minimizing the wealth and profitability of the shareholders. It measures a company's health condition financially over a given period (Matar & Eneizan, 2018; Naz et al., 2016) and shows the performance by the leadership (executive) of the firm (Matar & Eneizan, 2018). It is very important to users of financial information as it reflects the going concern of the firm. A firm with higher financial performance is likely to attract more investors that the one with lower financial performance. When a firm records high financial performance, it means that the firm effectively and efficiently utilized her resources well. Almajali etal. (2012) are of the opinion that a higher financial performance of a company means more effective and efficient the firm is using its available resources and afterward "contributes at the macro in the country's economy." A total assessment of financial performance of a firm takes into consideration various methods of measurement. Naz, Ijaz & Naqvi (2016) opined that though diverse ways are used in measuring financial performance, financial ratio is the most common one been used in finance and statistical inference fields.

Omondi and Muturi (2013) state that "financial performance can be measured by growth in profitability, production capacity, sales growth and utilization of the capital and financial resource." this study will use return on assets as one of the indicators of profitability. Financial performance refers to the evaluation of a company's ability to generate revenue, manage expenses, and ultimately deliver profits over a specific period. It is a critical indicator of the economic health, operational efficiency, and overall success of an organization. This concept serves as a cornerstone in assessing the viability of businesses and informs strategic decision-making for management, investors, and other stakeholders.

Financial performance is a multidimensional concept that serves as a barometer for a company's success and sustainability. By leveraging robust analytical tools and understanding its components, stakeholders can make informed decisions that drive growth and stability.

Interest Rate

Interest Rate is the percentage at which interest is charged or paid on a principal amount over a specified period of time. It represents the cost of borrowing money or the return on investment for holding assets. Interest rates play a fundamental role in financial markets, influencing individual and business decisions related to borrowing, lending, and investment (Mishkin, 2015). Interest rates serve as the "price" of money. When individuals or companies borrow money, they are essentially paying for the right to use someone else's capital. Similarly, when they deposit money into a bank account or buy bonds, they earn interest as a return on their savings or investment.

For borrowers, higher interest rates increase the cost of borrowing, which could discourage people and businesses from taking out loans. Conversely, lower interest rates make borrowing cheaper, potentially stimulating economic activity (Mankiw, 2021).

For Lenders/Investors, interest rates represent the return on lending money or investing capital. Higher rates offer greater returns, attracting more investments into fixed-income securities like bonds or savings accounts (Mankiw, 2021).

Total Debt to Total Assets

The Total Debt to Total Assets ratio is a financial metric used to assess a company's financial leverage. It represents the proportion of a company’s assets that are financed by debt, giving an indication of the company's overall debt level relative to its assets. This ratio is an essential tool for investors, creditors, and analysts when evaluating the risk associated with a company's financial structure.

The formula for calculating the Total Debt to Total Assets ratio is:

$$\text{Total Debt to Total Assets} = \frac{\text{Total Debts}}{\text{Total Assets}}$$

Interpretation

Higher Ratio: A higher Total Debt to Total Assets ratio suggests that a company is heavily reliant on debt to finance its assets. This can indicate higher financial risk, as the company has a greater obligation to service its debt.

Lower Ratio: A lower ratio suggests that a company has a more conservative approach to leveraging its assets, which might lower its financial risk, but could also indicate that it is not fully utilizing the potential of debt to fund growth or operations.

Total Debt to Total Equity

The Total Debt to Total Equity ratio (often abbreviated as D/E ratio) is a financial metric used to evaluate a company's financial leverage by comparing its total debt to its shareholder equity. This ratio helps assess the proportion of debt a company uses to finance its assets in relation to the equity invested by shareholders. It is an important indicator of financial risk, indicating how much of the company's financing comes from debt versus equity (Brigham & Ehrhardt, 2013).

The formula for calculating the Total Debt to Total Equity ratio is:

$$\text{Total Debt to Total Equity} = \frac{\text{Total Debts}}{\text{Total Equity}}$$

Interpretation

High D/E Ratio: A higher debt-to-equity ratio suggests that a company is heavily reliant on debt for financing its assets, indicating higher financial leverage. While this can magnify returns during periods of economic growth, it also increases the company's financial risk, as it must meet its debt obligations regardless of market conditions.

Low D/E Ratio: A lower ratio indicates that a company is more conservatively financed with equity. While this may reduce the risk of financial distress, it could also suggest that the company is not fully utilizing debt to leverage growth opportunities, potentially limiting its return on equity.

Empirical Review

Ebe et al. (2024) investigated the effect of debt financing on financial performance of listed consumer goods companies in Nigeria. The study addressed a number of objectives: to examine the effect of debt to equity ratio on return on assets of listed consumer goods companies in Nigeria; ascertain the effect of total debt ratio on the return on assets of listed consumer goods companies in Nigeria; and determine the effect of long-term debt ratio on the return on assets of listed consumer goods companies in Nigeria. The study adopted secondary panel data obtained from firms' annual reports and accounts from 2011 to 2022 and expo facto research design. Descriptive statistics was used to analyze the data and OLS Regression analysis was employed to test the hypotheses at 5% level of significance. The results revealed that debt-equity ratio was insignificant and negative effect on return on assets of listed

consumer goods companies in Nigeria, similarity total debt ratio is not significant also documented negative relationship on return on assets of listed consumer goods companies in Nigeria, while long term debt ratio was also not significant at 5% level though has positive effect on return on assets of listed consumer goods companies in Nigeria.

Surbhi and Priti (2023) discussed the efficacy of debt financing on financial performance of the organization and it's purely depends upon the findings of previous related literatures. For this purpose, Web of Science and SCOPUS database has been taken as base to collect the required information while it includes documents of all time spans available, from 1985 to 2022, in database. After gathering the data, a systematic literature review has been performed and encountered that debt indicators have a significant negative impact on indicators of financial performance. Long-term debt, total debt, debt-equity ratio has significant but negative impact on firm performance which support the upshots of 'pecking-order' theory. Short-term debt has mixed effect on performance indicators. Control variables have also been evaluated like age, size, tangibility, liquidity, corporate tax, growth opportunities etc. and discovered that size, growth and liquidity portray a positive impression while age and tangibility have negative efficacy on monetary performance of the concern.

Ahmed et al. (2022) examined the influence that capital structure of a firm has on financial performance of listed agricultural firms in Nigeria. The study adopted ex-post facto research design. The population consisted of 5 Agricultural firms listed on Nigerian Exchange group. Secondary data were obtained from the annual reports and accounts listed agricultural firms for a period of five years beginning from 2017 to 2021. Multiple regression technique was employed for data analysis. The study reveal that, long term debt ratio has negative insignificant relationship with return on assets, while short term debt, total debt ratio and total equity ratio have positive significant influence on return on assets.

Akaji et al. (2021) examined the effect of Debt Financing on Performance of Firms in Nigeria. The study measured debt financing using the variables of long term debt financing (LTDF), short term debt financing (STDF) and preferred stock financing (PSF) while firms performance was measured using Return on equity (ROE). Three hypotheses were formulated to guide the investigation and the statistical test of parameter estimates was conducted using OLS Regression Model. The research design used is Ex Post Facto design and data for the study were obtained from the NSE Factbook, Annual Reports and Accounts. The findings of the study showed that Debt Financing has significant and positive effect on firms'

performance in Nigeria at 5% significant level. The study concluded that debt financing has improved firms performance over the years.

Abubakar (2020) study was carried out to determine the effect of financial leverage on the financial performance, using secondary data obtained from the annual reports of 7 quoted Oil and Gas firms in Nigeria, and the Nigerian stock exchange (NSE) daily official lists over the period 2005- 2016. Descriptive statistics such as mean, median, minimum, maximum, standard deviation, coefficient of variation, skewness and kurtosis were used in data presentation, while random effects panel estimator is applied in determining the effect of financial leverage variables as short-term debt ratio (STDR), long-term debt ratio (LTDR) and total-debt equity ratio (TDER) on the financial performance measured by the return on equity (ROE). The regression results from the random effects model (REM), the best panel estimator in this study as revealed by the F-test and the Hausman test for best model selection, indicate that STDR and LTDR have no significant effect on the financial performance, and TDER has a negative significant effect on the financial performance denoted by ROE.

Ohaka et al. (2020) study explored the effect of debt financing on firm's financial performance in Nigeria. The study adopted the random sampling techniques to arrive at the sample size of the study. Secondary data was used in the study. Panel econometric tools were used to analyze the panel data of various companies across sectors in the capital market. The results of the analysis revealed that, size of the firm; short term debt and long term debt have positive and significance impact on the financial performance of listed firms in Nigeria capital market.

Theoretical Review

Market Timing Theory

Market Timing Theory (MTT) is a concept in corporate finance that explains a firm's capital structure based on the relative timing of financing decisions. Proposed by Baker and Wurgler (2002), the theory suggests that companies issue equity when stock prices are overvalued and repurchase equity or issue debt when stock prices are undervalued. Unlike traditional theories that emphasize an optimal capital structure, MTT posits that firms do not target a specific debt-to-equity ratio but instead make financing decisions based on market conditions.

In the context of Nigerian agricultural companies, the application of MTT sheds light on how firms navigate financing in an environment characterized by economic volatility, limited access to capital markets, and sector-specific challenges.

The theory perceives that managers issue securities depending on the time varying costs of relative equity and debt and thus issuance decisions have a long-term effect on capital structure because the observed capital structure at any particular date is the outcome of prior issuance decision thus firms prefer to issue equity when the relative cost is low and prefer to issue debt when equity cost is high (Moral-Benito, 2013).

Since the promised payments to bondholders are fixed, stockholders are entitled to what is left over after the fixed payments; stock prices are more sensitive than bond prices to any proprietary information about the firm's future performance. If management has favorable information that is not yet reflected in market prices, the release of such information will cause a larger increase in stock than in bond prices, and so the current stock price will appear more undervalued to managers than current bond prices (Moral-Benito, 2013).

Implication of this theory is that for a firm to avoid diluting the value of existing stockholders' claims, the companies that are profitable uses for more capital but believe their shares not to be undervalued will generally choose to issue debt rather than equity (Moral-Benito, 2013).

Conversely, managers who think their companies are overvalued are more likely to issue equity and, what amounts to the same thing, to make stock-for-stock acquisitions. The importance for management is to recognize here is that most companies issuing new equity those that are undervalued as well as those that are overvalued should expect a drop in their stock prices when they announce the offering.

Methodology

Research Design

This research work adopted ex-post factor research method. Moderated regression model was used to analyze the data of dependent variable and independent variables in this study. Multiple regression model was applied to determine the direct relationship between dependent variable and independent variables.

The population for this study comprise of all the agricultural companies listed on the Nigerian Exchange Group. There are five (5) agricultural companies quoted on the Nigerian Exchange Group as at December 31, 2024. Due to small nature of the population, all the five companies were used. The study was limited to listed companies due to lack of readily available data from private companies not listed in NGX.

The listed Agricultural companies are presented in the table below:

Table 1: Listed Agricultural Companies in Nigeria

S/N	COMPANY	TICKER
1	Ellahlakes Plc	Ellahlakes
2	FTN Cocoa Processors Plc	Ftncocoa
3	Livestock feeds Plc	Livestock
4	Okomu Oil Palm Plc	Okomu Oil
5	Presco Plc	Presco

Techniques of Data collection

Data from the study was obtained from secondary sources. The data was extracted from the audited financial reports and accounts of the listed agricultural companies for the period of 2018 to 2022.

Model Specification

The model used for this paper was an adaptation and modification of the works of Ahmed and Shehu (2022) thus:

$ROAit = \beta 0it + \beta 1\ LTDAit + \beta 2STDAit + \beta 3TDTAit + \beta 4TDTEit + \beta 5SIZEit + \varepsilon$ - - - - - 1

The model was modified to suit the current study below:

$ROAit = \beta 0it + \beta 1TDTAit + \beta 2TDTEit + \beta 3TDTA*ITRit + \beta 4TDTE*ITR\ it + \varepsilon$ - - - - - 2

Where:

ROA = Return on Assets

TDTA = Total Debt to Total Assets

TDTE = Total Debt to Total Equity

it = Firm *i* in time *t*

ε = error term

$\beta 1 - \beta 4$ = coefficients

Measurement of Variables

Table 2: Measurement of Research Variables

Variable	Type of Variable	Definition/Measurement	Sources
Financial	Dependent	Proportion of profit after	Tivde and Alhassan

Performance (ROA)		tax to total assets, ROA = PAT/TA	(2023)
Total Debt to Total Assets (TDTA)	Independent	Total debts/total assets	Ahmed and Shehu (2022)
Total Debt to Total Equity (TDTE)	Independent	Total debts/total equity	Ahmed and Shehu (2022)

Data Analysis and Discussion of Findings

Descriptive Statistics

This section contained the description of the properties of the variables, ranging from the mean of each variable, minimum, maximum and standard deviation described in table 2 below:

Table 3: Descriptive Statistics

Variables	Obs	Mean	Maximum	Minimum	Std. Dev.
ROA	50	.368	49.00	.201	10.75639
TDTA	50	.641	8.00	.512	1.14018
TDTE	50	.282	4.00	.211	0.83666
ITR	50	19.36	31.40	17.89	15.1847
TDTAITR	50	26.72	32.00	19.03	5.02991
TDTEITR	50	.308	41.00	23.132	7.94984

Source: Researcher's Computation (2024) based on SPSS Version 23 Output

Table 3 revealed the descriptive statistics, which showed that the mean value of return on assets (ROA) of the firms was 37% with a standard deviation of 11%. The maximum value for ROA is 49% for all the firms in a year, while the minimum is 20% signifying that the ROA of the firms is relatively high, with most of the firms generating a profit of at least 26.1%. However, there are two outliers, one with a very high ROA of 49% and the other with a very low ROA of 20%.

The mean value of total debt to total assets ratio (TDTA) of the firms was 6.4% with a standard deviation of 1.14%. The maximum value for TDTA is 8% for all the firms in a year, while the minimum is 5%.

The mean value of total debt to total equity ratio (TDTE) of the firms was 3.08% with a standard deviation of 0.83%. The maximum value for TDTE is 4% for all the firms in a year, while the minimum is 2%.

The moderated mean value of total debt to total asset ratio of the firms was 27% with a standard deviation of 5.02%. The maximum value for TDTA is 32% for all the firms in a year, while the minimum is 19%. The moderated mean value of total debt to total equity of the firms was 30% with a standard deviation of 7.95%. The maximum value for TDTEITR is 41% for all the firms in a year, while the minimum is 23%.

Table 4: Correlations

	ROA	TDTA	TDTE	ITR	TDTAITR	TDTEITR
ROA	1					
TDTA	-0.5422	1				
TDTE	0.1611	0.6289	1			
ITR	-0.0497	-0.0495	-0.1281	1		
TDTAITR	0.3169	0.34001	0.2138	0.5031	1	
TDTEITR	0.3765	0.0110	0.5938	0.7474	-0.2525	1

Source: Researcher's Computation (2024) based on SPSS version 23 Output

The correlation elements showed that return on assets (ROA) has negative correlation with Cost of Funds (-0.54) while positive correlation with debt capitalization ratio (0.16), debt to equity (0.32) and TDTE (0.37). The correlation coefficient between ROA and Cost of Funds is -0.54, which is a strong negative correlation. This means that there is a negative relationship between the two variables. In other words, as the Cost of Funds increases, the ROA decreases.

A correlation coefficient of -0.54 is considered to be significant at the 0.01 level, which means that there is less than a 1% chance that the correlation is due to chance. Therefore, we can conclude that there is a significant negative relationship between ROA and Cost of Funds.

The correlation coefficients between ROA and Capitalization Ratio, Debt to Equity Ratio, and interest rate are 0.16, 0.31, and 0.37, respectively. These are all positive correlations, but they are not as strong as the negative correlation between ROA and Cost of Funds.

A correlation coefficient of 0.16 is considered to be weak, a correlation coefficient of 0.31 is considered to be moderate, and a correlation coefficient of 0.37 is considered to be strong. Therefore, the positive moderated correlations between ROA and interest rate, Debt to Equity Ratio, and Firm Size are all weak to moderate.

However, it is important to note that correlation does not equal causation. Just because two variables are correlated does not mean that one causes the other. There could be other factors that are causing the correlation. In this case, it is possible that the negative correlation between ROA and cost of funds is due to the fact that firms with higher cost of funds are less profitable, which leads to lower ROAs. However, it is also possible that there are other factors at play, such as the level of competition in the industry or the efficiency of the firm's operations.

The correlation matrix also revealed that the moderation of total debt to total assets and total debts to total equity with interest rate produced a positive correlation amongst the dependent and independent variables.

Table 5: Panel Regression Result

ROA	Coef.	**Std. Err.**	**T-statistics**	**P-value**
TDTA	0.0011	0.0012	0.93	0.357
TDTE	-0.2262	0.0469	-4.54	0.000
ITR	0.0003	0.0142	0.21	0.835
TDTAIRT	.550712	0.2082	1.30	0.571
TDTEIRT	0.6450	0.3583	1.80	0.007

Number of obs = 75

F = 56.48

Prob> F = 0.0004

R-squared = 0.8237

Adj R-squared = 0.7531

Root MSE = 0.6969 -

Source: Researcher's Computation (2024) based on SPSS Version 23 Output

The regression results reveal an overall R^2 of 0.8237. This signifies the coefficient of determination of the proportion or percentage of the total variation in the dependent variable as a result of the entire independent variables jointly. This result implies that total debt to total assets, total debt to total equity and interest rate jointly explain about 82% of variations in financial performance in the agricultural companies in Nigeria, while the remaining 16% of the total variation is caused by factors not included in the model. Accordingly, the value of the F-statistic is 56.48 with a corresponding p-value of 0.0004 which signifies the fitness of the model. This serves as substantial evidence to conclude that the independent variable and the moderator variable selected are suitable for the study.

The study finds evidence that suggests that interest rate has a positive significant moderating effect on the relationship between total debt to total assets and financial performance of quoted agricultural companies in Nigeria. This is evidenced by the coefficient of .550712 and the corresponding probability of 0.571 which is significant at a 5% level of confidence. It, therefore, means that there is a 55% increase in financial performance when decreased interest rate interacts with total debt to total assets in the area covered by the study while holding other factors constant.

Based on the coefficient 0.01 and p-value 0.35, the study concluded that, a positive significant relationship exist in capital structure of agricultural firms when interacted with interest rate at 5% level of significance. Therefore we accept the null hypothesis and conclude that, interest rate has moderating effect on the relationship between total debt to total assets and financial performance of Agricultural Companies listed Nigerian Exchange Group (NGX).

The summary of the regression in Table 4 again showed that interest rate positively and significantly moderates the relationship between total debts to total equity of quoted listed companies in Nigeria. This assertion is supported by the coefficient of 0.6450 and a p-value of 0.007 which is statistically significant given that the p-value is less than 0.05. This result indicate that higher interest rate enhance total equity capitalization. Therefore, we reject the null hypothesis which says interest rate has no moderating effect on the relationship between total debts to equity of agricultural firms listed on NXG.

Conclusion and Recommendations

The study determined the moderating effect of external factors on the relationship between capital structure and financial performance of listed agricultural companies in Nigeria, to examine the relationship between total debts to assets and financial performance of agricultural firms in Nigerian, to investigate the effect of total debts to equity ratio on financial performance of agricultural firms in Nigeria.

The study concluded that external factors influence the relationship between capital structure and financial performance of agricultural companies in Nigeria. This was evidenced in the analysis conducted. Based on the coefficient 0.01 and p-value 0.35, the study concluded that, a positive significant relationship exist in capital structure of agricultural firms when interacted with interest rate at 5% level of significance.

The study also found evidence that suggested interest rate to have a positive significant moderating effect on the relationship between total debt to total assets and financial performance of quoted agricultural companies in Nigeria. This is evidenced by the coefficient of .550712 and the corresponding probability of 0.571 which is significant at a 5% level of confidence.

Recommendations

From the conclusions, the following recommendations were made:

i. Agricultural businesses should use moderate debt levels in their capital structure to avoid paying a high cost of capital. High levels of interest payments reduce the availability of internal funds for investment.

ii. Agricultural companies should also go for long-term loans instead of short-term loans to enable them to invest in capital equipment and machinery, because it is difficult to make loan repayments of short-term debt financing that was used for long -term investments.

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