

# Effect of Financial Leverage on Company Performance: A Study of Selected Quoted Companies in Nigeria

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#### ABSTRACT

This work examined the effect of financial leverage on company performance: A Study of selected quoted companies in Nigeria. The main objective of this work was to investigate the effect of financial leverage on company performance using selected quoted companies in Nigeria for the period 2010-2015. The specific objectives of this work were aimed at determining the extent to which debt to total asset, debt to equity ratio, short-term debt to total asset, long-term debt to total asset and the interaction of debt to total asset and debt to equity ratio have affected performance of selected quoted companies in Nigeria. Five research questions and five hypotheses were formulated to achieve the objectives of this study. Multiple Regression Analysis using Ordinary Least Square statistical techniques was used to test the fitness of the model as well as the five hypotheses formulated for this study. Secondary data were employed in this work for analysis which were collected from Nigerian Stock Exchange Fact book and financial statement of the ten selected quoted companies. Among the five hypotheses tested; null hypothesis two was accepted while null hypotheses one, three, four, five were rejected. The results revealed that debt to equity ratio has no significant



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effect on company performance while debt to total asset, shortterm debt to total asset, long-term debt to total asset and the interaction of debt to total asset and debt to equity ratio have significant effect on company performance measured by return on equity. The major findings revealed that debt-equity ratio has no significant effect on company performance while debt ratio, shortterm debt to total asset, long-term debt to total asset and the interaction of debt to total asset and debt-equity ratio have significant effect on company performance. This work therefore concludes that debt to equity ratio has not contributed to high performance of selected quoted companies in Nigeria while debt to total asset, short-term debt to total asset, long-term debt to total asset and the interaction of debt to total asset and debt to equity ratio have contributed significantly to the performance of selected quoted companies in Nigeria. The study recommends among others that an appropriate debt-equity mix should be adopted by quoted companies if they must improve their financial performance, survive and remain competitive in business. Keywords: Financial leverage, Company performance, Quoted Companies, Nigeria

#### INTRODUCTION

Recently, many researchers have contended that financial leverage is the top most factors among other factors that affect the firms' profitability. The importance of capital to a business cannot be over-emphasized. It is the foundation upon which the business operates. A company can finance its investments by debt or equity or both, and a company may also use preference shares. The ratio of the fixed-charge sources of funds, such as debt and preference shares to owners' equity in the capital structure is described as financial leverage or gearing (Pandey, 2010). The other alternative term 'trading on equity' is derived from the fact that it is the owners' equity that is used as a basis to raise debt.

Financial leverage decision is a vital one since the performance of a firm is directly affected by such decision; hence, financial managers should trade with caution when taking debt-equity mix decision. There are



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various alternatives of debt-equity ratio, these includes; 100% equity: 0% debt, 0% equity: 100% debt and X% equity: Y% debt (Dare & Sola 2010). From these three alternatives, option one is that of the unlevered firm, that is, the firm that shuns the advantage of leverage (if any). Option two is that of a firm that has no equity capital. This option may not actually be realistic or possible in the real life economic situation, because no provider of funds will invest his money in a firm without equity capital. This partially explains the term "trading on equity", that is, it is the equity element that is present in the firm's capital structure that encourages the debt providers to give their scarce resources to the business. Option three is the most realistic one in that, it combines both a certain percentage of debt and equity in the capital structure and thus, the advantages of leverage (if any) is exploited.

There are two main benefits of debt for a company. The first one is tax shield, interest payments usually are not taxable; hence the debt can increase the value of a firm. Second benefit is that debt disciplines managers use free cash flows of the company to invest in projects to pay dividends, or to hold-on cash balance. But if the firm is not committed to some fixed payments such as interest expenses, managers could have incentives to "waste" excess free cash flows. That is why in order to discipline managers, shareholders attract debt. It has been argued that profitable firms were less likely to depend on debt in their capital structure than less profitable ones, and that firms with high growth rates have high debt to equity ratios (Akintoye, 2008; Harris & Raviv, 1991; Krishnan & Moyer, 1997; Tian & Zeitun, 2007). However, this mix of debt and equity has long been the subject of debate concerning its determination, evaluation and accounting.

Therefore, right choices of the combination of debt and equity are very important for the managers of companies. Those companies who dislike borrowing funds for the financing of their assets have to rely completely on equity financing; therefore they are free from any fixed amount of



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charges to pay which means there is no financial leverage associated with that company. It is obligatory that every individual, organization, parastatals have to give special focus towards the most important questions on the amount of financial leverage, associated cost of capital and their impact on firms' performance. Mostly, firms take money from lenders in order to increase sales volume which leads to higher earnings, such money which companies have taken from lenders show the financial leverage associated with that company. Generally, financial leverage is measured by ratio of total debt which a company owes and total assets show the extent to which a company has used borrowed funds in order to finance its capital structure.

#### Statement of the Problem

The motivation for this study emanated from the fact that many researchers have conducted different studies on financial leverage in different sectors of the economy but a gap still exist in their varying findings. Researchers are not in agreement in terms of the causal order of these constructs, and suggest that empirical justification is necessary to determine the true nature of this relationship. Findings from (Abubakar, 2015; Akinmulegun, 2012; Akhar, 2012; Babalola, 2014; Akinyomi,2013; Taiwo, 2012; showed that financial leverage has positive significant effect on company performance.

Conversely, other studies reported that financial leverage has insignificant effect on company performance (Mohammed, 2010; Zeitun, 2007; Majumdar and Chhiber,1999; Zeitun and Tian, 2007). Based on the various empirical studies carried out both in other countries and in Nigeria as enumerated above, a varying gap still exist and a consensus has not been reached on the effect of financial leverage on company performance. This identified gap is a problem which this present study seeks to solve. The findings from the previous empirical studies are at best inconclusive as the debate has not been resolved.



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Most importantly, this study advances on Abubakar (2015) study which is one of the most recent studies on the subject matter. Abubakar (2015) suffered a limitation of examining the effect of only two financial leverage variables: debt to total asset and debt-equity ratio on the company performance using ten (10) companies listed on the Nigerian Stock Exchange. Hence, this study broaden the scope by utilizing a larger sample size of ten (10) different companies of the Nigerian economy and examined the effect of five financial leverage variables namely; debt ratio, debt-equity ratio, short-term to total asset ratio and long- term debt to total asset as well as the interactive effect of debt ratio to debt to equity ratio on the performance of 10 selected quoted companies in Nigeria.

This study is also interested in finding out the resultant effect of the interaction of two variables (debt ratio and debt to equity ratio) on company performance of the selected quoted companies in Nigeria. In the Light of the above challenges, this study seeks to investigate the effect of financial leverage on company performance of selected quoted companies in Nigeria.

#### Objectives of the Study

The main objective of the study is to investigate the effect of financial leverage on performance of selected quoted companies in Nigeria. The specific objectives of the study are;

- 1. to investigate the effect of debt to total asset on company performance of selected quoted companies in Nigeria.
- 2. to determine the effect of debt to equity ratio on company performance of selected quoted companies in Nigeria.
- 3. to determine the effect of short-term debt to total asset on company performance of selected quoted companies in Nigeria.
- 4. to investigate the effect of long-term debt to total asset on company performance of selected quoted companies in Nigeria.



5. to determine the interactive effect of debt ratio and debt-equity ratio on company performance of selected quoted companies in Nigeria.

## **Research Questions**

Based on the objectives of this study, the following research questions are formulated:

- 1. What is the effect of debt to total asset on performance of selected quoted companies in Nigeria?
- 2. What is the effect of debt to equity ratio on performance of selected quoted companies in Nigeria?
- 3. How significant is the effect of short-term debt to total asset on performance of selected quoted companies in Nigeria?
- 4. To what extent has long-term debt to total asset affect performance of selected quoted companies in Nigeria?
- 5. What is the interactive effect of debt to total asset and debt-equity ratio on performance of selected quoted companies in Nigeria?

## Statement of Hypotheses

The following hypotheses are formulated in their null structures to guide the study;

- HO<sub>1</sub>: Debt to total asset has no significant effect on performance of selected quoted companies in Nigeria.
- HO<sub>2</sub>: Debt to equity ratio has no significant effect on performance of selected quoted companies in Nigeria.
- HO<sub>3</sub>: Short-term debt to total asset has no significant effect on performance of selected quoted companies in Nigeria.
- HO<sub>4</sub>: Long-term debt to total asset has no significant effect on performance of selected quoted companies in Nigeria.
- HO<sub>5</sub>: Debt ratio and debt-equity ratio interaction has no significant effect on performance of selected quoted companies in Nigeria.



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## Significance of the Study

It is expected that this study is of immense benefit to company proprietors (owners), customers, future researchers and the government. The company proprietors, managers and other stakeholders are to benefit from this study in that they are enabled from the findings of this study to take wise managerial decisions and actions relating to debt funding. It is of great value to government agencies, policy makers as it helps them to either increase or decrease the volume of bonds and loans they may seek to obtain from foreign countries or even in Nigeria.

This study also serves as reference source to future researchers on the related issues bordering on debt financing. It is of great benefit to students, academic community and the general public as it will expose and assist them in understanding the impact of financial leverage factors on Nigerian firms' debt financing choices and consequently, how they affect performance. This study is also significant to company owners in examining firms' specific factors that affect the performances of Nigerian firms from the view point of their debt financing.

## Scope and Limitation of the Study

This study is limited to studying the effect of financial leverage on performance of selected quoted companies in Nigeria. Precisely, the study is limited to studying ten companies selected from different sectors of the Nigerian economy. The selected companies are Dangote Cement Nigeria Plc., Unilever Plc., Multiverse Plc., Dangote Flour Mill Plc., PZ Cussons Plc., Diamond Bank, Glaxo Smithkline Consumer Plc., 7 up Bottling Plc., Oando Plc., and Cadbury Plc. A time frame of six years was utilized which covers from 2010 - 2015. This study is constrained by the fact that relevant data needed for the study were difficult to generate. The researcher handled this limitation by collecting the data needed for the study from CBN statistical bulletin and from the financial statement of account of the selected quoted companies under review.



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## REVIEW OF RELATED LITERATURE

#### Leverage

Pandey (2010) opines that the financing or leverage decision is a significant managerial decision because it influences the shareholder's return and risk and the market value of the firm. The ratio of debt-equity has implications for the shareholders' dividends and risk, this affect the cost of capital and the market value of the firm.

## Concept of Financial Leverage

Pandey (2010) defined financial leverage as the use of the fixed charges sources of funds, such as debt and preference capital along with the owner's equity in the capital structure. Ibenta (2005) views financial leverage as the ratio of total debt to total equity. Egungwu (2010) opines that financial leverage occurs when a firm obtains financing for its investment from sources other than the firm's owners. Nkechukwu (2009) defines financial leverage as the extent to which debt is used in a firm's financial structure or the ratio of total debt to total assets of total value of the firm. Hawari (1996) financial leverage refers to the use of third party funds in financing in order to increase operating profit and taxes, which is loans ratio to total liabilities.

## Financial Performance

Almajali (2012) argues that there are various measures of financial performance. For instance return on sales reveals how much a company earns in relation to its sales, return on assets explain a firm's ability to make use of its assets and return on equity reveals what return investors take for their investments. Company's performance can be evaluated in three dimensions. The first dimension is company's productivity, or processing inputs into outputs efficiently. The second is profitability dimension, or the level of which company's earnings are bigger than its costs. The third dimension is market premium, or the level at which company's market value is exceeds its book value. Cohen, Chang and Ledford (1997) measured accounting returns using Return on Assets



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(ROA). They indicated that return on assets (ROA) is widely used by market analysts as a measure of financial performance, as it measures the efficiency of assets in producing income.

## Financial Structure:

Financial structure includes all items of liabilities and equity, while liabilities include short-term and long-term liabilities, in other words, funds sources obtained by the company to finance its investments, whether short-term or long-term. It is important to differentiate between financial structure concept and capital structure, since capital structure means long-term (long-term liabilities + equity) funding sources, while financial structure (funding structure) include; short-term and long-term liabilities + equity. Company's financial structure is of great importance in investment and financing decisions, due to its impact on profitability, as well as risk degree faced by the company due to its dependence and expanding on debt.

#### Measuring Firm Performance

Firm performance from an accounting literature perspective hinges on company profitability and performance of stocks in the capital market. The measures of firm performance based on literature can be broadly classified into two namely the market oriented measures and the accounting oriented measures. Some of the authors provide evidence that boards prefer accounting measures market to measures in evaluating managerial performance. Accounting based measures are adopted in the study as performance measures because they provide the most available data. This section gives a brief overview of the prominent market and accounting based measures.

#### Return on Assets

ROA gives an idea as to how efficient management is at using its assets to generate earnings. It is often computed by dividing Profit after



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tax by total assets alternatively, it can be calculated by dividing Earnings before Interest and Tax (EBIT) by total assets.

## Profit margin

This accounting based performance measure can be tagged as forward looking because profit for the period is measured against sales for the current period. Profit margin is calculated as profit after tax divided by turnover or net sales. The essence is that it provides information on the percentage of profit that sales are able to generate.

## Tobin's Q

Tobin's Q-ratio (Q), is hybrid in nature. It is measured by dividing the sum of the market value of equity and the book value of debt by the book value of total assets. It is however difficult to get the required information relating to the market value of debt issued by Nigerian companies, since these are not usually disclosed in their financial reports.

## Return on Equity (ROE)

Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. It is often viewed as a hybrid measure of firm performance because it incorporates profit which is accounting based and equity which is market based. The measure is determined by dividing profit by equity.

#### Theoretical Framework

This work is anchored on Intermediate theory as propounded by Pandey (2010)

**Intermediate Theory by Pandey (2010):** This theory states that a judicious mix of debt and equity can increase the value of the firm by reducing the weighted average cost of capital up to a certain level of



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debt. According to him, the benefit of debt is basically the tax-shield effect that arises due to deductibility of interest payments. This implies that a firm has an optimal capital structure when WACC is minimum, thereby maximizing the value of the firm. It also entails that debt funds are cheaper than equity funds which implies that the cost of debt plus the increased cost of capital, together on a weighted basis, will be less than the cost of equity that existed on equity before debt financing. He opines that WACC decreases only within a reasonable limit of financial leverage and reaching the minimum level, it starts increasing with financial leverage.. He posited that financial leverage is very critical to the survival and performance of corporate entities.

Therefore, this study is anchored on this theoretical framework stated above which serves as the foundation for investigating the effect of financial leverage on performance of selected quoted companies in Nigeria. The theoretical framework for this study is very pertinent as it is the basis on which financial leverage stands since firms trading on debt run less risk due to tax shield than those trading on equity financing.



#### Figure 1: Model of the study Source: Developed by the researcher, 2016.

The diagram on figure 1: illustrates the theoretical model of this study which serves as guide or pathway to the solution to the problem identified in this study through the conceptualization, operationalization and measurement of the independent and dependent variables of this study. We developed a theoretical model that captures how the



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independent variables  $(X_{r-6})$  and the dependent variable (Y) are measured. The framework utilized debt to total asset, debt-equity ratio, short-term debt to total asset and long-term to total asset and the interaction of debt ratio to debt-equity ratio as proxies for financial leverage while return on equity (ROE) which is accounting measure is used to proxy financial performance. It is on this model that our hypothetical propositions are analyzed, tested and interpreted.

#### Review of Related Empirical Studies

Many empirical studies have been conducted both internationally and nationally on the effect of financial leverage on company performance. Some of the previous studies are reviewed in this section in order to create gap in literature.

Innocent, Ikechukwu and Nnagbogu (2014) conducted a study on the effect of financial leverage on financial performance: evidence from quoted pharmaceutical companies in Nigeria for the period 2001-2012. Financial leverage surrogated by debt ratio (DR), debt-equity ratio (DER), and interest coverage ratio (ICR) was used as independent variable while financial performance proxied by ROA was used as dependent variable. The study utilized secondary data sourced from financial statements of 3 pharmaceutical companies quoted on the Nigerian Stock Exchange. Descriptive statistics, Pearson correlation and multiple regressions were employed in order to determine the effect of financial leverage variables on company performance measured by ROA. The results showed that debt to total asset and debt-equity ratio have negative and insignificant effect on ROA. Interest coverage ratio has a positive and significant effect on ROA in Nigerian pharmaceutical industry. The study also revealed that on the aggregate, financial leverage variables have no significant effect on financial performance of sampled companies.



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Thaddeus and Chigbu (2012) studied the effect of financial leverage on bank performance using 6 banks from Nigeria. The study utilized secondary data from Nigerian Stock Exchange Facts book and the financial statements of the sampled banks. Debt-equity and coverage ratios were used as proxies for financial leverage and hence constituted the independent variables, while earning per share (EPS) represented performance was the dependent variable. Multiple regression technique was used to establish the effect of financial leverage on performance of sampled banks. The findings revealed mixed results. While some banks reported significant positive relationship between leverage and performance, others revealed significant negative relationship between leverage and performance..

Gweyi, Minoo and Luyali (2013) conducted a study on the Determinants of Financial Leverage of Savings and Credit Co-operative Societies in Kenya. The study sampled 40 Saccos, registered by Sacco Society Regulatory Authority (SASRA) which extended from the period 2010 to 2012. For the data analysis, regression model was employed; the explanatory variables comprised of firm size, growth rate, liquidity, profitability and tangibility, whereas the explained variable was the leverage ratio. The results show that for Saccos; there were statistical significant relationships between financial leverage and variables measured. The results from the study revealed that firm size has significant relationship with leverage at 99% confidence level, whereas liquidity and tangibility have significant relationship with leverage at 95% confidence level.

Akande (2013) studied the effect of financial leverage on firm performance using 10 Nigerian firms. They applied the Ordinary Least Square (OLS) regression analysis on panel data collected from financial statements of 10 Nigerian firms over 20 years from 1991- 2010. ROA, ROE, EPS and DPS on one hand and DC (total debts to capital employed) on the other hand, which were surrogated for firm's



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performance and debt financing respectively. The findings show that positive relationships exist between DC and ROE, EPS and DPS, while negative relationship exists between DC and ROA. The study therefore, concluded that financial leverage considerably impact on firm performance.

Akinmulegun (2012) conducted a study on the Effect of Financial Leverage on Corporate Performance of Selected Companies in Nigeria for the period (1999-2006). They employed OLS method to analyze the data collected from the Nigerian Stock Exchange to determine the effect of financial leverage on performance of those firms. The econometric findings presented in his study evidenced that leverage shocks (debt/equity ratio) have significant effect on corporate performance especially when the net assets per share (NAPS) is used as an indicator of corporate performance in Nigeria over the period covered by the study. Earnings per share depend on feedback shock and less on leverage shock. Also, the outcome exposed that the influence shock on earnings per share indirectly disturb the net assets per share of firms as the majority of the shocks on the net assets per share was received from earnings per share of the firms.

Akinyomi (2013) conducted a study on impact of financial leverage on performance using three manufacturing companies selected randomly from the food and beverage categories in Nigeria under a period of five years (2007-2011) using the static trade-off and the pecking order theory point of view. He adopted the use of correlation analysis method and revealed that each of debt to capital, debt to common equity, short term debt to total debt and the age of the firms' is significantly and positively related to return on asset and return on equity but long term debt to capital is significantly and relatively.

Taiwo (2012) investigated the effect of financial leverage on company performance using ten firms listed on the Nigerian Stock Exchange for a



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period of five years (2006 - 2010) from the static trade-off, pecking order and agency theory point of view. In his findings, he employed the Pesaran unit root test and also Panel Least Square test in his study. His study revealed that the sampled firms were not able to utilize the fixed asset composition of their total assets judiciously to impact positively on their firms' performance.

Maina and Kondongo (2013) examined the effects of debt-equity ratio on performance of firms listed at the Nairobi Securities Exchange for the period 2002- 2011. The study found that firms as listed at Nairobi Securities Exchange rely more on short-term debt. The result also revealed that significant negative relationship exists between debtequity ratio and measures of performance used in the study. The findings of the study also supported MM theory that capital structure is relevant in determining the performance of a firm.

Al-Taani (2013) investigated the relationship between capital structure and firm's performance across 45 lordanian manufacturing companies listed on Amman Stock Exchange for a period of 5 years from 2005-2009. The variables used in the study were; return on assets (ROA), profit margin (PM), short-term debt to total assets (STDTA), long-term debt to total assets (LTDTA) and total debt to equity (TDE). ROA and PM constituted the dependent variables and were used as proxies for performance, while STDTA, LTDTA and TDE represented the independent variables and were taken as proxies for capital structure. Multiple regressions in which ROA was regressed on STDTA, LTDTA and TDE, and PM was also regressed on the same explanatory variables were used. The results revealed that there is no significant relationship between STDTA and ROA, TDE and ROA, STDTA and PM, LTDTA and PM, as well as TDE and PM. The result also reveals that significant negative relationship exists between LTDTA and ROA.



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Rehman (2013) investigated the relationship between financial leverage and financial performance of 35 listed sugar companies in Pakistan for a period of 6 years from 2006 - 2011. Correlation technique was used to test financial leverage proxied by debt-equity ratio as independent variable and financial performance surrogated by EPS, NPM, ROA, ROE and sales growth as dependent variables. The results revealed that financial leverage has a positive relationship with ROA and sales growth, and negative relationship with EPS, NPM and ROE.

Yoon and Jang (2005) conducted a study on the relationship between return on equity (ROE), financial leverage and firm size of 62 restaurant firms in US for the period 1998 to 2003 using ordinary least square (OLS) regression. Results showed that high leveraged firms were less risky in both market and accounting-based performance measures. The findings also revealed positive relationship between financial leverage and measures of performance. Furthermore, the result indicate that firm size had a more dominant effect on ROE than debt, and regardless of the level of leverage, smaller firms were relatively more risky than larger firms.

Ujah and Brusa (2013) examined the effects of financial leverage and cash flow volatility on earnings management in United States of America using 559 firms in US for a period of 20 years from 1990 to 2009. The findings revealed that financial leverage as well as cash flow has significant impact on the extent to which firm's manage their earnings. The results also revealed that earnings management of firms varies according to the nature of industry they belong.

Aziz, (2014) conducted a study on the impact of capital structure on firm performance in Pakistan: A study of food sector listed on Karachi Stock Exchange. The study analyzed the relationship between capital structure and company's performance. Sample contained 33 listed companies from food sector in Pakistan. Debt ratios including debt to



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equity, short-term debt to total assets and long-term debt to total assets were used as explanatory variables while return on assets and earnings per share were used as proxy for performance. Multicollinearity, heteroskedasticity, contemporaneous correlation and auto correlation were tested. Based on the analysis of the study using PCSE along with Prais-winsten regression technique; the result of regression analysis revealed negative relation between capital structure ratios and firms' performance. Also, only debt to equity ratio has significant effect on company's performance. Negative relationship among some capital structure ratios lead to the conclusion that food sector firms are not utilizing debt properly in their capital structure.

Akhtar (2012) investigated the effect of Financial leverage and Financial Performance: Evidence from Fuel & Energy Sector in Pakistan. A sample of 20 listed public limited companies from Fuel and Energy sector listed on Karachi Stock Exchange (KSE) was employed for the study. The main variables used in the study consist of a dependent variable which is financial performance of fuel and energy sector while an independent variable for the study was financial leverage in fuel and energy sector. The result revealed that financial leverage has significant and positive effect on financial performance.

Consequently, based on the evidence captured from the review of above empirical studies, there is no consensus yet on the extent to which financial leverage has affected company's financial performance. Therefore, this study is needed in order to uncover the effect of financial leverage on company performance in Nigerian locality. This study seeks to provide empirical evidence using existing financial leverage theory in order to contribute to existing body of knowledge. Thus: by investigating the effect of financial leverage on company performance of selected quoted companies in Nigeria.



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#### Summary of Empirical Related Literature Reviewed

Based on the available literature reviewed; some authors' findings indicated that financial leverage has significant positive effect on company performance: Akinmulegun (2012); Akhar (2012); Akinyomi (2013); and Taiwo (2012). Conversely, some authors found that financial leverage has a significant (negative) effect on company performance; where performance was measured using return on equity. Based on their findings, financial leverage has negative and significant effect on company performance; Khalaf, 2013; Mahmoudi, 2013; Majumdar and Chhiber, 1999; Zeitun and Tian, 2007). It is pertinent to note that studies from Africa countries on the subject matter are still few and scanty which include: Akande, 2013; Akinyomi, 2013; Taiwo, 2012; Bassey,2013; Akinmulegun,2012; findings on financial leverage and profitability found positive and significant effect whereas Thaddeus, 2012; & Innocent, 2014) result between financial leverage and company performance found negative and insignificant effect.

#### Gap in Related Literature Reviewed

Many studies have been conducted on financial leverage and its effect on company performance by many researchers in various sectors in different parts of the world with different findings; as a result of the different ways they conceptualized, operationalised and measure the variables.

1. Unresolved Debate: Findings from (Abubakar, 2013; Akinmulegun, 2012; Akhar, 2012; Babalola, 2014; Akinyomi,2013; Taiwo, 2012; showed that financial leverage has a significant effect on company performance. Conversely, other studies reported that financial leverage has insignificant effect on company performance (Al-taani, 2013; Khalaf, 2013; Hasan, 2012; Mahmoudi, 2013).

2. The previous studies focused more on the use of two or three variables whereas we extended our study to five variables.



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- 3. Some of the researchers on the previous studies we reviewed were concentrated on studying related firms while we made our work sectional.
- 4. Geographical gap: Scanty literature in Nigeria as against many empirical studies abroad.
- 5. Absence of interaction of variables: No interaction of two or more variables by previous researchers in order to get the resultant effect or outcome.
- 6. Model application gap: Failure of some of the researchers to develop model that captured the operationalisation of many variables.

## METHODOLOGY

This study adopted ex-post facto research design which focuses mostly on secondary data. Ex- post facto research design according to Nwaorgu (2006) opined that in ex-post facto research design, the researcher only attempts to link some already existing effect or observation to some variables as causative agents and the researcher finds that the subject are already assigned to the various levels of the variables whose effects are being investigated. Therefore this study adopted ex-post facto research design by collecting already existing data thereby averted any form of manipulations.

## Area of the study

Since the researcher used only the secondary source of data, the area of the study is concentrated on selected companies under review as quoted on the Nigerian Stock Exchange (NSE).

## Population of the study

The target population for the study consists of 180 companies (source: Nigerian Stock Exchange Facts Book, 2016).



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## Sample and Sampling Techniques

The researcher utilized simple random sampling technique and selected 10 companies out of 180 companies quoted on the Nigerian Stock Exchange. This is in line with the previous studies done by Taiwo (2012); and Akanda (2013). Therefore the selected companies are: Dangote Cement Nigeria Ltd., Unilever Plc., Multiverse Plc., Dangote Flour Mills, P.Z Cussons, Diamond Bank Plc., Glaxo Smithkline Plc., 7up Bottling Plc., Oando Plc., Cadbury Plc. The study covered six accounting period of the selected companies' Annual Report and Financial Statement from 2010 – 2015. The sample for this study was taken from 10 companies quoted on the Nigerian Stock Exchange (NSE) during the period of this study.

## Method of Data Collection

In carrying out the study, we utilized secondary data which were collected from the annual reports and financial statement of accounts of the selected companies quoted in Nigerian Stock Exchange Statistical Bulletin.

## Method of Data Analysis

Multiple Regression analysis using Ordinary Least Square statistical technique was used to carry out the analysis in order to describe the data set and to investigate the effect of financial leverage on company performance of selected quoted companies in Nigeria. E-View version 8 software package facilitated the computations. MS excel package was also utilized to collate the raw data for onwards computations.

**Decision Rule:** Accept null hypothesis if the P-value is not within the range of research acceptable stipulated significant level (0.01, 0.05, 0.10) and reject null hypothesis if the P-value is within the stipulated significant level (1%, 5%, 10%).



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## Model Specification and Operationalization of Variables

We developed a model that captures how the independent variables and the dependent variable were measured. Our study utilized debt to total asset, debt-equity ratio, short-term debt to total asset and long- term to total asset and the interaction of debt ratio to debt-equity ratio as proxies for financial leverage while return on equity (ROE) which is accounting measure was used to proxy financial performance. These variables were also measured by the previous empirical studies (for example, Akande, 2013; Innocent et al., 2013, Maina & Kondongo, 2013; Rehman, 2013; Thaddeus & Chigbu, 2012). Moreover, an empirical model is formulated which based profoundly on the use of panel data methodology. This study used panel data analysis which is a combination of time series and cross sectional data analysis because it is the most useful for it.

## Dependent Variable: Company Performance:

Literature uses a number of different measures of firm's performance, those measures include accounting based measures calculated from firm's financial statements such as ROE, ROA, EPS, ROI and GM .This study used one of the common accounting-based performance measures to evaluate the firm's performance which is ROE. Return on Equity (ROE) is calculated by dividing net income plus interest expenses with total assets. Some writers such as Innocent, Ikechukwu, Nnagbogu, 2014; Thaddeus and Chigbu, 2012; Akande, 2013) among others, utilized ROA and EPS as performance proxies in their studies.

#### Independent Variable:

Five different independent variables were used in the analysis. The independent variables used to test the hypotheses are firm financial leverage variables, which are depicted as:

- DR: Debt to total asset
- DER: Debt-equity ratio
- STDTA: Short-term debt to total asset.



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LTDTA: Long- term debt to total asset

DRDER: Interaction of debt ratio and debt-equity ratio The study utilized multiple linear regression analysis to determine the effect of independent variable (X) on the dependent variable (Y).

#### The Regression model for the study is thus;

ROE =  $\beta o + \beta I DR + \beta 2 DER + \beta 3 SDTA + \beta 4 LDTA + \beta 5$ /DR<sup>\*</sup>DER +  $\mu$ Where FL = Financial Leverage (X) and ROE = Return on Equity (Y) DR = Debt to total asset (Debt ratio) DER = Debt- Equity STDTA = Short-term debt to total asset LTDTA = Long- term debt to total asset /DR<sup>\*</sup>DER = Interaction of Debt ratio and Debt to Equity ratio  $\mu$  = Error term

## DATA PRESENTATION AND ANALYSIS

The empirical analysis of this study is necessitated through a statistical mechanism: Ordinary Least Square (OLS) Regression technique. The justification is because it portrays unique estimating properties such as unbiasness, efficiency, consistency and when compared to other linear unbiased estimates, the OLS also shows the effect of independent variables on the dependent variable. The data used in running the multiple regression analysis are presented in the appendix pages.

ROE	DR	DER	STDTA	LTDTA	IDRDER
0.148742	0.590880	2.235702	0.455949	0.137688	1.413291
0.149177	0.586444	1.422645	0.452437	0.115027	1.004544
0.572435	0.898676	8.869294	0.824112	0.317674	4.883985
-0.605425	0.170106	0.204973	0.105750	0.046565	0.187539
0.232957	0.183748	2.122612	0.180417	0.073262	1.140180
-0.840812	-0.127409	1.798113	0.112658	0.902161	1.654589
4.675730	2.136402	5.710878	2.386131	2.878873	5.261186
11.74152	11.689030	42.25355	10.890839	6.813026	33.46588
	ROE 0.148742 0.149177 0.572435 -0.605425 0.232957 -0.840812 4.675730 11.74152	ROE DR   0.148742 0.590880   0.149177 0.586444   0.572435 0.898676   -0.605425 0.170106   0.232957 0.183748   -0.840812 -0.127409   4.675730 2.136402   11.74152 11.689030	ROE DR DER   0.148742 0.590880 2.235702   0.149177 0.586444 1.422645   0.572435 0.898676 8.869294   -0.605425 0.170106 0.204973   0.232957 0.183748 2.122612   -0.840812 -0.127409 1.798113   4.675730 2.136402 5.710878   11.74152 11.689030 42.25355	ROE DR DER STDTA   0.148742 0.590880 2.235702 0.455949   0.149177 0.586444 1.422645 0.452437   0.572435 0.898676 8.869294 0.824112   -0.605425 0.170106 0.204973 0.105750   0.232957 0.183748 2.122612 0.180417   -0.840812 -0.127409 1.798113 0.112658   4.675730 2.136402 5.710878 2.386131   11.74152 11.689030 42.25355 10.890839	ROE DR DER STDTA LTDTA   0.148742 0.590880 2.235702 0.455949 0.137688   0.149177 0.586444 1.422645 0.452437 0.115027   0.572435 0.898676 8.869294 0.824112 0.317674   -0.605425 0.170106 0.204973 0.105750 0.046565   0.232957 0.183748 2.122612 0.180417 0.073262   -0.840812 -0.127409 1.798113 0.112658 0.902161   4.675730 2.136402 5.710878 2.386131 2.878873   11.74152 11.689030 42.25355 10.890839 6.813026

## Table 1: Descriptive Statistics

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Probability	0.002821	0.0429766	0.000000	0.040555	0.033157	0.000000	
Sum Sum Sq. Dev.	7.437105 2.659187	29.54402 1.654407	111.7851 220.7687	22.79746 1.594969	6.884395 0.262998	70.66455 63.70051	
Observations	60	60	60	60	60	60	
Source: e-vie	ew version	8 computat	ions output				

Table 1: shows the descriptive statistics of the variables for the selected companies under review for the period 2010-2015. It presents the standard deviation, the mean, the maximum and minimum values of the data set obtained from the annual reports. From the table, the descriptive statistics show that during the period under review, debt to total asset, debt to equity ratio, short term debt to total asset, long term to total asset and the interaction of debt to total asset and debt to equity ratio are averaged 59%, 2.23%, 46%, 14%, and 41% respectively.

The debt to total asset reveals that 59% of selected companies' total assets are financed by debt indicating that they are averagely leveraged with some percentage above 50%. While Debt to Equity is 2% which is relatively low indicating that the owner's contribution is relatively low compared to debt. The mean value of short term to total asset is 46% and that of long term to total asset is 14%; showing that selected quoted companies employed more of short term debt than long term debt in their capital structure. The interaction of debt to total asset is 41% showing that the combination of debt and equity is below average.

Moreover, the minimum and maximum values of debt to total asset are 89% and 17% respectively showing very high variation in debt to total asset indicating that while some companies are employing as high as 89% debt in their capital structure some are utilizing only 17% debt in their capital structure. The minimum and maximum values of debt to equity are 8.86% and 20% showing that owner contribution is relatively low in those selected companies. The minimum and maximum values of short-term to total asset are 10% and 80% indicating that those



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companies employed more of short term debt as high as 80% while others employed short term debt as low as 10%.

The minimum and maximum values of long-term to total asset are 4% and 31% which is comparable low when compared to short term debt. In addition, the descriptive statistics also show that ROE as a measure of company performance is averagely 14% indicating that shareholders are receiving low returns for their investment when compared to their contribution. The minimum and maximum values of ROE are -0.6054 and 0.5724 respectively indicating that while some are experiencing negative return on equity, others are generating as much as 57% on return on equity. This result may be surprising considering that those quoted companies are from different sectors of the economy which may vary in terms of volume of transaction, staff strength, assets, ownership structure amongst others.



#### Table 2: Multiple Regression Analysis Result

Dependent Variable: ROE Method: Least Squares Date: 05/17/16 Time: 18:33 Sample (adjusted): 0002- 0060 Included observations: 59 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C DR DER STDTA LTDTA IDRDER	0.217887 0.550514 0.006341 0.532246 0.917992 0.029437	0.046101 0.283280 0.010195 0.260979 0.302210 0.014274	4.726334 1.943355 0.621978 2.039421 3.037600 2.062269	0.0000 0.0589 0.5374 0.0479 0.0041 0.0456
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.925150M 0.914196 0.068846 0.194328 64.11675 84.45980 0.000000	fean dependent S.D. dependent Akaike info crite Schwarz criterio Hannan-Quinn Durbin-Watson	var t var erion on criter. stat	0.141902 0.235029 2.379865 2.106981 2.276742 2.190160

Source: E view computations output, 2016.

#### Interpretation of the Regression Result

A close and careful observation of our regression result in table 2: reveals that the  $\mathbb{R}^2$  which is the coefficient of determination or test of goodness of fit among the variables is seen to be high as depicted on the table. The  $\mathbb{R}^2$  shows the total variation in the dependent variable that can be explained by the independent variables aggregated together. However, the closer the  $\mathbb{R}^2$  is to 100, the better the fitness of the model. From our regression result on table 2:  $\mathbb{R}^2 = 92.5\%$ . This implies that the independent variables can explain about 92.5% of the variations in the dependent variable, leaving the remaining 7.5% variation which would by accounted for by other variables outside the model as captured by the error term.



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The **adjusted**  $\mathbb{R}^2$  is 91.4%. The implication is that even with an adjustment in the independent variables, they were able to explain about 91.4% of the change or effect in the dependent variable.

The **F-statistics** measures the overall significance of the explanatory parameters. From the result in table 2, our computed value for F-statistic is 84.45980, while its probability value is **0.0000**. Since 0.0000 is less than the stipulated significant level, we accept the **model** and state that the model is good as well as fit for our study. Also, it shows that there is a significant relationship between the variance of the parameter estimates and that of the independent variables. This means that the parameter estimates are statistically significant in explaining the relationship in the dependent variable.

The Durbin–Watson statistics measures the presence or otherwise of auto correlation in our model. When the value of DW is closer or a little bit above 2, it means there is the absence of auto correlation among the explanatory parameters (Koutsoyiannis, 1997). Based on table 2 above, we find out that the value of our DW estimate is 2.1. This satisfies the above stated condition and implies the absence of auto correlation among the explanatory variables.

A'priori Criteria: This is conducted to ascertain the a'priori expectations which examined the magnitude and signs of the parameter estimates. The regression result has confirmed that the parameters have conformed to our theoretical a'priori expectations of having positive effect in all the variables. From the result on table 2, it is observed that all the variables ranging from, DR, DER, STDTA, LTDTA, and IDRDER exhibited a positive relationship with the ROE. This implies that an increase in any of the variable increases the return on equity respectively, in their corresponding percentage. Sequel to this, it is obvious that all the variables conform to our theoretical expectations as depicted on the coefficient column of the regression result.



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The **t-test** measures the statistical significance of the individual parameters in the model. From our table 2 we find out that debt to total asset is statistically significant at 10% level of significant, and debt to equity ratio is statistically not significant at 10% research stipulated acceptable level of significance, this is shown in the probability column as it has high probability value of 0.5374 which is out of research acceptable level of significance. However, short-term debt to total asset is statistically significant, at 5% level of significant, given its t-value as 2.039421 and p-value of 0.04. In addition, from table 2, we also find out that long-term debt to total asset is statistically significant, as its t-value is 3.02210 and its p-value is 0.004. Lastly, we found from the result on table 2: that the interaction of debt ratio and debt to equity ratio is statistically significant at 5% level of and its p-value is 0.004. Lastly, we found from the result on table 2: that the interaction of debt ratio and debt to equity ratio is statistically significant at 5% level of significance given its t-value as 2.062269 and its p-value as 0.04.

#### Test of Hypotheses

The researcher in this study, precisely in chapter one formulated a hypothesis and this have to be verified in order to find out the validity or otherwise of such propositions.

## Test of Hypothesis One:

- HO<sub>r</sub>: Debt to total asset has no significant effect on performance of selected quoted companies in Nigeria.
- HA<sub>r</sub>: Debt to total asset has significant effect on performance of selected quoted companies in Nigeria.

From the result in table 2; we find out that its t-value is 1.943355 while its corresponding probability value is 0.0589. **Decision**: Since 0.0589 is within the acceptable stipulated level of significance, we conclusion that  $HO_{r}$  is rejected and  $HA_{r}$  accepted. By implication, we accept the alternative hypothesis  $(HA_{r})$  which says that debt to total asset has significant effect on performance of selected quoted companies in Nigeria.



## Test of Hypothesis Two:

HO<sub>2</sub>: Debt to equity ratio has no significant effect on performance of selected quoted companies in Nigeria.

HA<sub>2</sub>: Debt to equity ratio has significant effect on performance of selected quoted companies in Nigeria.

From the result on table 2 above, it was observed from the t-statistics column that the t-value of debt-equity ratio is 0.621978 with the probability value of 0.5374. **Decision:** since 0.5374 is greater than the research acceptable level of significant (0.10); we reject the alternative (HA<sub>2</sub>) and accept the null hypothesis (HO<sub>2</sub>) which says that debt to equity ratio has no significant effect on performance of selected quoted companies in Nigeria.

## Test of Hypothesis Three:

- HO<sub>3</sub>: Short-term debt to total asset has no significant effect on performance of selected quoted companies in Nigeria.
- HA<sub>3</sub>: Short-term debt to total asset has significant effect on performance of selected quoted companies in Nigeria.

Thus drawing inference from our regression model result on table 2, it could be observed that the t-statistic of short-term debt to total asset value is 2.039421, with its probability value of 0.0479. **Decision**: since its probability value of 0.04 is within the research stipulated acceptable level of significant, we accept the alternative HA<sub>3</sub> and reject HO<sub>3</sub> and conclusion that short-term debt to total asset has significant effect on performance of selected quoted companies in Nigeria.

## Test of Hypothesis Four:

HO<sub>4</sub>: Long term debt to total asset has no significant effect on performances of selected quoted companies in Nigeria.

HA<sub>4</sub>: Long term debt to total asset has significant effect on performances of selected quoted companies in Nigeria

From the regression result on table 2, it shows that the t-statistics for long-term debt to total assets is 3.037600 while its probability value is



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0.0041. **Decision**: In addition, its probability value is within the stipulated acceptable level of significance. We accept the alternative hypothesis and reject the null hypothesis, we therefore conclude in favor of alternative hypothesis which states that long-term debt to total asset has significant effect on performance of selected quoted companies in Nigeria.

#### Test of Hypothesis Five

HO<sub>5</sub>: The interaction of debt ratio to debt equity ratio has no significant effect on performance of selected quoted companies in Nigeria.

HA<sub>s</sub>: The interaction of Debt ratio to debt equity ratio has significant effect on performance of selected quoted companies in Nigeria.

From the result on table 2, it shows that the t-statistics for the interactive effect of debt ratio and debt to equity ratio is 2.062269 while its corresponding probability value is 0.0456. **Decision**: Since 0.0456 is within the stipulated acceptable level of significance, we reject Ho<sub>5</sub> and accept HA<sub>5</sub>. By implication, we accept the alternative hypothesis (HA<sub>5</sub>) which says that the interaction of Debt ratio to debt equity ratio has significant effect on performance of selected quoted companies in Nigeria.

## DISCUSSION OF RESULTS

Based on research objective one; to determine the effect of debt to total asset on company performance of selected quoted companies in Nigeria coupled with its corresponding research question one and tested hypothesis no:1; the multiple regression result as shown on table 2, revealed that the p-value is 0.059 which is less than 0.10 the research stipulated acceptable significant level; thus a statistical significant index which is not in agreement with the null hypothesis; therefore Ho<sub>1</sub> is rejected and Ha<sub>1</sub> accepted. Therefore the conclusion drawn from the result is that debt to total asset has statistically significant effect on the performance of the selected quoted companies in Nigeria. This implies that debt to total asset has significant effect on company performance of



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the selected quoted companies in Nigeria. This is in line with the findings of the following researchers: Aziz (2014); Aburub (2012); found that debt to total asset has significant effect on company performance. On the other hand, it is in converse with the findings of Innocent, Ikechukwu and Nnagbogu (2014); Chinaemere and Anthony (2012); who found that debt ratio has no significant effect on company performance.

On a similar note, based on research objective two to determine the effect of debt to equity ratio on company performance of selected quoted companies in Nigeria coupled with its corresponding research question two and tested hypothesis no: 2; the multiple regression result as shown on table 2:, revealed that the p-value is 0.5374 which is greater than 0.10 the research stipulated acceptable significant level; thus showing no statistical significant which is in agreement with the null hypothesis; therefore Ho, is accepted and Ha, rejected. Therefore the conclusion drawn from the result is that debt to equity ratio has no statistically significant effect on the performance of the selected quoted companies in Nigeria. This implies that debt to equity ratio has no significant effect on company performance of the selected quoted companies in Nigeria. This is in line with the findings of Innocent, Ikechukwu and Nnagbogu (2014); Aziz (2014); Al-Taami (2013) who found that debt to equity ratio has no significant effect on company performance. This is in converse with the findings of the following researchers: Rehman (2013); Maina and Kondongo (2005); who found that debt to equity ratio has significant effect on company performance.

Moreso, in line with research objective three; to determine the effect of short-term debt to total asset on company performance of selected quoted companies in Nigeria coupled with its corresponding research question three and tested hypothesis no:3; the multiple regression result as shown on table 4.2.0, revealed that the p-value is 0.04 which is less than 0.05 the stipulated acceptable significant level; thus showing statistical significant which is in agreement with the alternative



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hypothesis; therefore Ho<sub>3</sub> is rejected and Ha<sub>3</sub> accepted. Therefore the conclusion drawn from the result is that short-term debt to total asset has statistically significant effect on the performance of the selected quoted companies in Nigeria. This implies that short-term debt to total asset has significant effect on company performance of the selected quoted companies in Nigeria. This is in line with the finding of Saeed (2013); who found that short-term debt to total asset has significant effect on company performance. This is also, in converse with the findings of the following researchers: Aziz (2014) and Akinyomi (2013) who found that short-term debt to total asset has no significant effect on company performance.

Nevertheless, based on the research objective four; to determine the effect of long-term debt to total asset on company performance of selected quoted companies in Nigeria coupled with its corresponding research question four and tested hypothesis no 4; the multiple regression result as shown on table 2, revealed that the p-value is 0.0041 which is less than 0.05 the stipulated acceptable significant level; thus showing statistical significant which is in agreement with the alternative hypothesis; therefore  $Ho_4$  is rejected and  $Ha_4$  accepted. Therefore the conclusion drawn from the result is that long-term debt to total asset has statistically significant effect on the performance of the selected quoted companies in Nigeria. This implies that long-term debt to total asset has significant effect on company performance of the selected quoted companies in Nigeria. This is in line with the finding of Saeed (2013) who found that long-term debt to total asset has significant effect on company performance. This is also, in converse with the findings of the following researchers: Aziz (2014) and Al-Taani (2013) who found that long-term debt to total asset has no significant effect on company performance.

Consequently, based on research objective five; to determine the effect of the interaction of the debt ratio and debt to equity ratio on company



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performance of selected quoted companies in Nigeria coupled with its corresponding research question five and tested hypothesis no:5; the multiple regression result as shown on table 4.2.0, revealed that the p-value is 0.045 which is less than 0.05 the stipulated acceptable significant level; thus showing statistical significant effect which is in agreement with the alternative hypothesis; therefore Ho<sub>5</sub> is rejected and Ha<sub>5</sub> accepted. Therefore the conclusion drawn from the result is that the interaction of debt ratio and debt to equity ratio has statistically significant effect on the performance of the selected quoted companies in Nigeria. This implies that debt ratio and debt to equity ratio jointly has significant effect on performance of the selected quoted companies in Nigeria. This equally portrays the uniqueness of this study.

#### Summary of Findings

Based on the result of analysis and hypotheses tested, the following findings were made:

- 1. Debt to total asset has significant effect on the performance of the selected quoted companies in Nigeria.
- 2. Debt to equity ratio has no significant effect on the performance of the selected quoted companies in Nigeria.
- 3. Short-term debt to total asset has significant effect on the performance of the selected quoted companies in Nigeria.
- 4. Long-term debt to total asset has significant effect on the performance of the selected quoted companies in Nigeria.
- 5. Interaction of debt ratio and debt-equity ratio has significant effect on the performance of the selected quoted companies in Nigeria.



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## CONCLUSION

Based on the findings, we conclude that debt to total asset, short-term debt to total asset, long-term debt to total asset and the interaction of debt ratio and debt-equity ratio have significantly contributed in improving the performance of the selected quoted companies in Nigeria. Long-term debt to total asset, short-term debt to total asset and the interaction of debt ratio and debt equity ratio as well as debt to total asset are significantly instrumental with resounding contributory effect on the performance of the quoted companies in Nigeria. The study therefore concludes that long-term debt to total asset is the most important predictor of financial leverage and most significant determinant of company performance.

## RECOMMENDATIONS

Based on the findings and conclusions drawn from the findings, we make the following recommendations:

- 1. Financial leverage decision is very critical to the survival and performance of corporate entities. Quoted companies should therefore continue to employ appropriate proportion of debt mix in order for them to consistently improve on return on equity.
- 2. Managers are advised to improve on debt-equity mix which will help to boost the performance of their businesses for utmost survival and sustainability.
- 3. Since corporate firms leverage increases shareholder returns, there is need for continual improvement on short-term debt to total asset for enhanced performance of companies.
- 4. Firms should employ more of long-term debt to total asset since it increases firms' returns on equity which is of interest to both potential and prospective shareholders.



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5. There is need for institutionalization and operationalization of the interaction of debt ratio and debt to equity mix since it has significant effect on the performance of the quoted companies in Nigeria.

#### Suggestion for Further Studies

This study is limited to the fact that only quoted companies in Nigeria were studied. Therefore, the findings of this study ought not be generalized to non quoted companies. However, only ten quoted companies in Nigeria were sampled for this study, using the period of 6 years (2010- 2015). Since five financial leverage variables (debt-equity ratio, debt ratio, short-term debt to total asset, long-term debt to total asset & interaction of debt ratio and debt to equity ratio) and one financial performance variable (ROE) were used in this study while interest coverage as well as other financial performance indicators such as return on assets, net interest margin, earnings per share, dividend per share, profit after tax etc. were excluded for this study. Thus given these limitations on the scope of this study, hence suggestion for further study involving more samples and also additional variables; may be conducted in the following related areas:

i. Effect of financial leverage on company performance of non-quoted companies in Nigeria.

ii. Effect of financial leverage on company performance of micro finance banks in Nigeria.

iii. Effect of financial leverage on company performance of non-banks financial institutions in Nigeria.

#### Contribution to Knowledge

This study has contributed to knowledge in the following ways:

1. There is now an expanded record that shows the recent effect of financial leverage on company performance in the selected quoted companies in Nigeria.



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- 2. We successfully developed a model that interacted two variables (debt ratio & debt to equity ratio) which was not captured by the previous researchers.
- 3. Long-term debt to total asset has been proved to be the most important predictor of financial leverage and the most significant determinant of company performance among the selected quoted companies in Nigeria.
- 4. The significant effect of the interaction of debt ratio and debtequity ratio on the performance of selected quoted companies in Nigeria also portrays the uniqueness of this study.

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