

CAPITAL STRUCTURE AND FIRM PERFORMANCE OF NON-FINANCIAL LISTED FIRMS IN NIGERIA

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Citation: Ogunmakin, A.A., Adebayo, A.I. & Omodara, O.V. (2022). Capital structure and firm performance of non-financial listed firms in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 3(1), 367-383

ABSTRACT

Abstract: the study was embarked upon to investigate the effect of capital structure on firm performance of non-financial listed firms in Nigeria. The study adopted an ex-post-facto research design and secondary data was gathered to analyze the relationship between the variables. The population of the study consisted on twenty-one (113) non-financial firms listed on the Nigeria Exchange Group. Purposive sampling technique was employed to select 76 non-financial listed firms in Nigeria. Data for the study were gathered from annual reports of selected firms for the period of 5 years (2015-2020) and analyzed using Generalized Method of Moments (GMM) estimator. The collected data were analyzed using correlation and regression analysis. From the results of the findings, the findings revealed that CA has positive and significant influence on ROA, ROE, EPS, LQ and ATG. Based on these findings, the study concludes that capital structure has statistical and significant impact on firm performance of non-financial listed firms on Nigeria Exchange Group. Hence, the study concluded that there exists strong positive relationship between return on asset, return on investment, earning per share, liquidity and asset tangibility which is significant. Based on the findings, it was recommended that return on asset, return on investment, earning per share, liquidity and asset tangibility are important variables to consider when the management of listed non-financial companies in Nigeria decides to mediate on capital structure

Keywords: Capital Structure, Pecking Order, Return on Asset, Asset Tangibility

INTRODUCTION

The significance of manufacturing firms to the growth of the nation and the living standard of its populace cannot be overstressed. Manufacturing firms reduce

unemployment and equally contribute to the overall development of the nation. Manufacturing firms, particularly those that produce industrial goods, engage in the production of raw materials equipment and machines to be used by other firms. Manufacturing firms are also growing well in Nigeria as there is an increase in the numbers of firms in the industry in Nigeria (Ajibola, Wisdom & Qudus, 2018). The importance of manufacturing firms to the nation's wellbeing engendered stakeholders like the government, customers, investors and even researchers to be concerned about their performance level, most especially their financial performance.

Financial performance is a general term used to describe the wellness of a firm and the returns on the pooled resources used for the operational activities. Bilafif and Ibrahim (2019) explained financial performance as the utilization of resources efficiently in order to achieve stated goals, which results into a reasonable increase in profitability indexes. With regards to this study, financial performance is an expression of the amount, cost, or result of activities in a quantifiable manner which shows how good or poorly a business performs financially.

Studies by anarfo (2014), Awan and Amin (2013), Baker and Wurgler (2017), Basit and Irwan(2017), Brendea (2018), Dat (2017) to mentioned a few offer greater insight for a deeper understanding of the nexus between stock price and manufacturing performance. Other studies believed stock prices could be determined by micro and macro-economic factors (foon et all 2018). These factors which include book value of the firm, dividend per share, earnings per share, price-earnings ratio and dividend cover (Gompers, Ishii & Metrick, 2013).

Studies by (Fan, 2012; Chipa & Wamiori,2016; Frank & Goyal, 2019; Ajibola, Wisdom & Qudus, 2018; Hovakimian et al, 2019; Nelson & Peter, 2019; Ahmed & Amina, 2019; Kausar, 2014; Bilafif & Ibrahim, 2019; Nagasa, 2019) to mentioned a few offer greater insight for a deeper understanding of the nexus between capital structure and manufacturing performance. Other studies believed that firm performance could be determine by return on asset (ROA), TOBIN's Q, return on investment (ROI), return on equity (ROE), and Earnings Per Share (Maryam, Muhammed, Mahmud & Abubakar, 2020; Binh & Tram, 2020; Asen, Nwude, Idamoyibo, Ufodiama & Udo, 2021; Temuhale & Ighoroje, 2021)

Furthermore, most of these studies in Nigeria only concentrated on certain sectors of the economy (such as manufacturing, trade, and financial services), ignoring an important of non-financial listed firm to the Nigerian economy, which accounts for about 48 percent of the country's gross domestic product (NBS). This omission implies that there is still a lack of clear empirical evidence on the subject, necessitating further

research into other areas of the economy. As a result, the research problem of this study was to examine the relationship between various capital structure and firm performance of non-financial listed firms in Nigeria. The research question of this study aimed to answer was as stated below:

- i. What is the relationship between capital structure and firm performance of non-financial listed firms in Nigeria?

The null hypothesis of this study was as stated below:

H₀₁: capital structure does not have significant effect on the firm performance of non-financial listed firms in Nigeria

LITERATURE REVIEW

Capital is the cornerstone of an organization's financial strength. It supports the company's procedures by provided that a cushion to engage its actions and unexpected losses when problems arise, so that the company can continue to operate in a reasonable and feasible way while solving or resolving problems. The organization continues to provide assurances that it will fulfill its obligations to stakeholders and can maintain confidence in the financial soundness of the organization. In the production process, consumption creates wealth. It is said that these materials or objects are factors of production, usually divided into people, machines and money (including the fourth type of information). Therefore, capital is an important aspect of any business organization. (Hovakimian et al,2019)

According to Maryam, Muhammed, Mahmud and Abubakar (2020), capital structure has developed wide recognition in financial economics after Franco Modigliani and Merton Miller opined in 1958 that given homogeneous anticipations, frictionless markets, the capital structure framework of a firm is insignificant. Even though it is connected to the firm's most fundamental principles, determining the optimal capital structure is an important and time-sensitive task for management. A company's capital structure refers to the distribution of its stock and debt holdings, which is used to finance its day-to-day operations. Therefore, the structure of a firm's capital can be evaluated as the sum of liabilities, equity and debt, and their arrangement, organization, and configuration, in order to affect the performance, valuation and the firm's funds. (Nassir, 2016)

The measurement of capital structure can apply the use of total debt, equity, long term debt, short term debt, as measure of capital structure are commonly employed, by most the studies reviewed. Olawale and Olaniyan (2017) added that debt implies borrowing

from third party and not giving up ownership. In this context, debt indicates an agreement between a debtor (borrower) and a creditor (lender); in form of leases, bonds, notes, certificates, debentures and mortgages (Akinleye & Akomolafe, 2019). Thereby, total debt is the aggregate of the fund borrowed from a third party to run the affairs of an organization.

Meero (2017) posited the increase in total debt provides an opportunity for companies to raise capital. It allows them to acquire the necessary funds needed for their capital expenditure. The unique aspect of an increase in debt is that it requires the lender to be paid back the amount borrowed plus interest over a fixed period of time.

Firm Performance

A greater focus is being placed on economic performance in almost every aspect of human endeavor in recent years. It's possible to categorize performance into a variety of different subcategories, depending on the kind of performance. There are several facets to a performance. Based on a wide range of viewpoints in academia, researchers and academics have conceptualized the term "performance." Consider Meero (2017) differentiated between the end product and the process by which it was achieved while studying performance. After that, he explained that performance is the consequence of a long-term effort to attain a certain objective or outcome. He went on to suggest that the result might be described as a performance in and of itself, according to him. Organizational performance is defined as the ability to identify the results of an organization's activities, as stated by Negaza,(2016). A firm's performance is determined by how well it utilizes its limited resources, according to Binh and Tram (2020). In addition, he said that rather than seeing performance as a culmination or outcome, we should think of it as a process.(Mursalim & Kusuma, 2018)

The financial performance of a corporation may be assessed using a number of different measures, including return on asset (ROA), TOBIN's Q, return on investment (ROI), return on equity (ROE), earnings per share (EPS), market share (MS), revenue growth (RG), and cost merit. Some indicators to look for when evaluating non-financial or market-based performance are market share and sales growth, customer and employee satisfaction, organization survival and stability and management of risk, stakeholder management, risk management of productivity, relational and social capital and behavioral performance (Nenu et al,2017)

Return on Asset (ROA):The return on assets (ROA) of a company is an accounting-based assessment that assesses the operational and financial success of the company (Olarewaju, 2019). The ratio is calculated in such a way that the greater the return on

assets (ROA), the more productive the use of assets is to the benefit of shareholders. Profitability is measured by the efficiency with which a firm utilizes its assets in order to serve the economic interests of its owners (Nirajini & Priya, 2013). Return on assets, often known as ROA, is a fundamentally important financial performance metric that is used by each and every business. According to Ajibola, Wisdom, and Qudus (2018), the return on asset is a financial ratio that displays the rate of return that a company makes in proportion to the value of the assets that the company owns. In other words, the return on asset shows how much money a company makes in relation to the value of its assets. It illustrates how well a company makes use of its resources to meet the goals it has set for itself. As a consequence of this, return on assets is a measurement that determines how profitable an organization is in relation to the total value of its assets. (Nirajini & Priya, 2013)

Return on Equity (ROE): Accordingly, return on equity (ROE) is a measure of a firm's performance on the basis of the amount of the equity of its shareholders. A company's return on equity is calculated by dividing the company's net income by the equity of its shareholders. As stated by Sunday and Samson (2019), ROE is salient to the ordinary shareholders because it shows the rate of return that has been earned by an organization in relation to the amount of capital that the equity holders provided after the deduction of the amount used to settle other suppliers of capital. Return on Equity is beyond a measure of a company's profit, it is commonly used to evaluate a company's efficiency. Obim et al,(2014) postulated that ROE measures the profit attributable to ordinary shareholders as a percentage of the book value of their investment in a company. To find out the value of return on equity, the amount of net returns that a company has available to its shareholders is divided by its shareholders' equity.

Profit after Tax: This is the amount made by a firm after deducting all tax-related expenditures. Profit after tax is frequently a more accurate representation of a business's true earnings and hence can be more useful. This is a metric that examines a business's profitability before it must pay corporate income tax. Except for income tax, it deducts all expenditures from revenue, including interest and operational expenditures. Additionally, it assesses a business's success by examining earnings earned before taxes are deducted. It is used to determine a business's operational and non-operating earnings before taxes are deducted. Numerous businesses seek to increase profitability and cash flow by lowering their investment in current assets using techniques such as effective credit underwriting and receivables collection, as well as just-in-time inventory management. Additionally, businesses strive to finance a large percentage of their current assets through current liabilities, such as accounts payable and accruals, in order to save money (Sabin, & Miras, 2015).

Earnings Per Share (EPS) is a financial term that refers to the part of a company's earnings that is allocated to each share of common stock after taxes and preferred stock distributions (Gul, Faiza & Khalid, 2011). Earnings per share as defined by Obim et al (2020), are a measure of a company's profitability. The EPS may be calculated in two ways: basic and completely diluted. Fully diluted earnings per share — which takes into account the possible dilutive impact of warrants, stock options, and instruments convertible into common stock — is typically regarded as a more accurate metric and is more frequently reported. EPS might be further segmented based on the time covered. Profitability can be measured in terms of historical earnings (trailing), recent earnings (current), or expected future earnings (forward). EPS is calculated as (Net Income – Preferred Dividend) / Average Number of Shares Outstanding. (Saeedi & Mahmood 2016)

Theoretical Review

The study is grounded upon the Pecking Order Theory and Modigliani–Miller Theory. Pecking Order theory was propounded by Myers and Majluf (1984). This theory encompasses the conception that a firm would have exhausted its internal resources before opting for other means to finance its activities. In essence, the ideology guiding pecking order covers the condition in which an organization depletes its internal sources of financing before choosing a source of finance externally. In a condition where it is not possible to raise debt, equity capital would function as the final recourse. Literature affirms that this theory forecasts a negative link between the structure of an organization's capital and its performance. That is, pecking order theory does not put the term of an optimal leverage into consideration.

Modigliani–Miller (M & M) Theory is also called the theory of irrelevance and it was established by Franco Modigliani and Merton Miller in the 1950s. It is believed to be the first theory that talked about capital structure when it advocated that the structure of a firm's capital is irrelevant when determining firms' financial performance. Modigliani and Miller (1958) posited that without taxes, and in a perfect capital market, the structure of a company's capital does not influence its value at all. They explained that it is because there would be no tax shield benefits. This theory upholds that a firm's worth increases when it incurs more debt and this helps the firm to realize financial sustainability. This theory supports the practice of using debt than other internal capital.

The theory states that if a company uses debt instead of internal capital, it will be in a better position to take advantage of its tax benefits. This theory actually has four basic assumptions: (i) investors' wishes are the same as the firm's wishes (ii) existence of perfect market, i.e. absence of transaction cost, absence of insolvency cost, all investors

can easily attain information, and corporate bodies can borrow individuals large sum of money at the same rate without limit, a seller and buyer exists for every business (iii) companies are divided in into similar profit classes and companies that are in the same category have identical risk and the earn the same amount (iv) absence of taxation (initially) (Obim et al, 2020).

Empirical Review

Empirical research spanning six years was carried out by Haniand and Zouhour (2019) on the capital structure and performance of the banking sector in Middle Eastern countries (between 2011 and 2016). Using panel regression and 143 different banks' data, the study indicated that the economic conditions of the area had a significant impact on the capital structure of the banking industry across the period of time that was being investigated. Because the study at hand covered the years 2011 to 2016, it is questionable whether or not the results can be applied to the contemporary political, economic, or business climate. The current study is based on this basis and tries to bridge the gap.

Research was carried out by Cuibing (2019) under the title "The Relationship Between Capital Structure and Profitability of US Manufacturing Companies: An Empirical Analysis." In order to complete this study, historical data covering the years 2009-2018 was extracted from the audited financial reports of 15 different manufacturing companies located in the United States. Using approaches based on panel analysis, experimental regression models of capital structure and profitability ratios are developed. The result reveals that the capital structure does have a substantial influence on the entire profitability of the organization that underlies the study.

Binh and Tram (2020) used data from 1998 to 2017 to analyze the relationship between capital structure and company performance in Vietnam. Corporate performance is adversely associated to capital choices, according to descriptive and random-effects meta-regression analysis, which points to a trade-off model with agency costs and pecking order theory. The present research will utilize panel regression analysis instead of the descriptive and random-effects meta-regression analysis methods employed in the previous study.

Dian (2020) looked into how capital structure, profitability, and firm size influenced earnings management. Companies with manufacturing kinds listed on the Indonesia Stock Exchange from 2013 to 2017 make up the study's population. Purposive random sampling was used to collect samples. Fixed effects estimate is used in data analysis. The findings revealed that a company's capital structure, profitability, and size had an impact

on earnings management. The researcher is interested in looking at the impact of capital structure on manufacturing business performance in Nigeria.

Obim et al (2020) investigated the influence of capital structure on business profitability using data from Pakistan's car industry. From 2006 to 2012, data was taken from relevant firms' publications and the Pakistan Statistics Board's website. To forecast the outcome, regression analysis and correlation tests are employed with the aid of the statistical tool SPSS. According to the findings, capital structure (debt/equity) is adversely related to profitability, implying that as debt capital increased, businesses' profitability decreased and vice versa. The research in question focused on Pakistan's car industry. The focus of this research is on Nigerian manufacturing companies.

Schulz (2017) investigates how the capital structure of manufacturing and allied companies that are listed on the Kenyan stock market affects the profitability of such companies. The examination of the data, the analysis of the data, and the interpretation of the data all made use of descriptive and inferential statistics. According to the findings of the study, the amount of equity funding received has a significant bearing on the net profits of Kenyan manufacturing and associated companies that are publicly traded. According to the findings of the study, one method by which a company may raise money for its business operations is by selling shares of its stock. This method is referred to as equity financing. In the current study, a proxy for capital structure was determined by comparing total debt to total assets, total debt to total equity, short term debt to total assets, and long term debt to total assets. In the prior study, equity was the only variable considered.

Ahmad (2016) investigated the impact of capital structure on the financial performance of Kenyan commercial banks using regression analysis. From 2005 to 2014, data was collected over a ten-year period. The findings revealed that increasing debt has a favorable impact on financial performance, resulting in increased profitability. While the previous research concentrated on Kenya's banking sector, the present study focused on Nigeria's manufacturing business.

Sabin and Miras, (2015) investigated the influence of capital structure on Malaysian listed industrial product business performance from 2011 to 2015. The data is analyzed using descriptive statistics and multiple regression. The research discovered that industrial goods companies' financial structures significantly depend on equity financing. Aside from that, the regression results revealed that debt to equity has a negative influence on ROA, whereas total debt and total equity ratios had negligible effects. ROE is negatively impacted by debt to equity, positively impacted by total debt, and insignificantly impacted by total equity. Aside from that, debt to equity has a negative

effect on ROE, total debt has a positive effect on ROE, and total equity has no effect on ROE. Finally, debt to equity has a negative significant effect on earnings per share, total debt ratio has a positive significant impact on earnings per share, and total debt has an insignificant influence on earnings per share. The present research investigates the relationship between capital structure and firm performance of non-financial listed firms in Nigeria.

METHODS

Sample and Data Collection

The study employed ex-post-facto research design because data needed for the study already exists and data for seventy-six firms listed on the Nigeria Exchange Group as shown in Table 1 for five years (2015-2020) were utilized to achieve the objective of the study. The period was chosen because the latest issue of the corporate governance code in Nigeria was issued in 2018, and in order to capture the COVID-19 pandemic period of 2019 and 2020. The study used Generalized Method of Moments (GMM) estimator to analyze data collected.

Table 1. List of Selected Non-Financial Listed Firms for the Study

Sectors	Population	Sample	Percentage %
Agriculture	5	4	80
Conglomerates	5	5	100
Construction & Real Estate	9	2	22
Consumer goods	20	16	80
Healthcare	10	6	60
ICT	9	4	44
Industrial goods	15	10	67
Natural Resources	4	4	100
Oil & gas	11	8	73
Services	25	17	68
Total	113	76	

Source: Authors compilation, (2022).

Measurement of Variables

This section describes the measurement of the variables of the study, as shown in Table 2.

Table 2 Measurements of proxies for variables of the study

S/N	VARIABLES	SYMBOL	MEASUREMENT	PREVIOUS STUDIES
	Dependent Variable			
1	Capital Structure	CAP	Non-current liabilities divided by total asset.	Kim et al (2020)
	Independent Variables			
1	Return on Assets	ROA	Net Profit after Tax/ Total Assets	Samuel (2016), Orege, (20)
2	Return on Equity	ROE	Net Equity of Total Assets	Abdul and Fasirah (2017)
3	Earnings Per Share	EPS	Net Income – Preferred Dividend) / Average Number of Shares Outstanding	Muhammed and Fateh (2016),Dian,(2020), Binh and Tram (2020)
4	Liquidity	LQ	Current Assets/Current Liabilities	
5	Asset Tangibility	ATG	Fixed Assets/ Total Assets	Cuibing (2019),, Bello & Lasisi, (2020)

Source: Authors Compilation (2022)

Research Model:

This study model was adapted from the work of Kim et al,(2020) as shown below.

$$CAP = \beta_0 + \beta_1.ROA_{it} + \beta_2.ROE_{it} + \beta_3.EPS_{it} + \beta_4.ATG_{it} + \varepsilon \dots\dots\dots (3.2)$$

Where: CAP= Return on Equity, β_0 = Constant, β_1 , β_2 , β_3 , β_4 ,= Slope Coefficient, ROA= Return on Asset, ROE= Return on Equity, EPS= Earnings Per Share, ATG= Asset Tangibility
YEAR= Dummy variable of the time under study, ε = Error Term.

FINDINGS AND DISCUSSIONS

Descriptive Statistics

Table 3 shows mean value of CAP which is the dependent variable was -5.23 with standard deviation of 0.41 which measured the extent to which the data series dispersed around the mean. Skewness as a measure of asymmetry of the distribution of the series around the mean had a positive value of 1.62. This implies that CAP has a long right tail and hence most of the factors including the ROA, ROE, EPS, LQ and ATG have long right tails and influence on CAP. In addition, Kurtosis as a measure of the peakness or flatness of the distribution of a series was 4.02 as against 3.0 expected for normally distributed data series, CAP was peaked relative to normal. The mean response scores of ROA, ROE, EPS, LQ and ATG were 5.27, 2.06, 0.09, 2.85 and 2.14 with standard deviation of 7.32, 0.14, 10.21, 4.00 and 17.17, respectively. There where great

differences between the value of EPS across sampled companies as evident by very high standard deviation of 126.09. The gaps between the maximum and minimum clearly indicated that the firms under study are similar. The values of kurtosis implies that most of the study variables, particularly, ROE, EPS, LQ and ATG, were highly peaked. Apart from ATG and EPS, other study variables were positively skewed.

Table 3. Descriptive Statistics of Variables

Variables	Maximum	Minimum	Mean	SD	Kurtosis	Skewness
CAP	1.81	-4.37	-5.23	0.41	4.02	1.62
ROA	9.82	1.53	5.27	7.32	2.02	0.19
ROE	202.90	-312.06	-2.06	0.14	11.66	1.12
EPS	0.59	-0.94	0.09	10.21	79.97	27.77
LQ	57.13	-0.22	2.85	4.00	53.87	5.37
ATG	176.27	79.92	2.14	17.17	38.48	-1.05

Source: Authors computation, (2022).

Where **CAP**= Capital Structure, **ROA**= Return on Asset, **ROE**= Return on Equity, **EPS**= Earnings Per Share, **LQ**= Liquidity, **ATG**= Asset Tangibility,

Correlation Analysis

Correlation between variables is examined in Table 4 to test multi-collinearity problem. The study find that most of the correlation between variables are low, with all coefficient being less than 0.8, the limit to have multi-collinearity problem suggested by previous research (Gujarati & Porter, 2003) cited in Khanh and Thu (2019). This is a clear indication of non-existence of multi-collinearity problem.

Table 4. Pearson correlation coefficient matrix

Variables	CAP	ROA	ROE	EPS	LQ	ATG
CAP	1.000					
ROA	-0.006	1.000				

ROE	0.007	-0.004	1.000			
EPS	0.515	-0.047	0.060	1.000		
LQ	-0.233	-0.035	0.155	-0.005	1.000	
ATG	-0.173	-0.142	0.211	0.053	0.156	1.000

Source: Authors computation, (2022).

Where **CAP**= Capital Structure, **ROA**= Return on Asset, **ROE**= Return on Equity, **EPS**= Earnings Per Share, **LQ**= Liquidity, **ATG**= Asset Tangibility,

Robustness Test

Table 5 show the result of Variance Inflation Factor (VIF). The highest VIF value computed was 1.25 for ROA and the mean VIF across variables is 1.13. VIF values between the threshold of 5 and 10 are potential indicators of multicollinearity. However, all VIF values were significantly lower than the threshold of 5 and thus showed that, there is no significant problem of multicollinearity across the study model variables.

Table 5. Variance Inflation Factor

Variables	VIF	Tolerance
ROA	1.25	0.802432
ROE	1.16	0.859906
EPS	1.16	0.861157
LQ	1.16	0.862564
ATG	1.13	0.882099
MEAN	1.13	

Source: Authors computation, (2022).

Where **ROA**= Return on Asset, **ROE**= Return on Equity, **EPS**= Earnings Per Share, **LQ**= Liquidity, **ATG**= Asset Tangibility,

Panel Unit Root test of the Variables

Table 6 shows that all the variables exhibit stationarity at their level at 5% level of significance using Levin, Lin and Chu test which is considerably powerful test according to (Westerlund & Breitung, 2009). Having rejected the null hypothesis of the test that all the panels contain a unit root, we cannot rule out the alternative of homogeneity implying stationarity in the data generating process.

Table 6. Panel Unit Root test of the Variables

Variable	Statistic	P-Value
CAP	-3.0738	0.0011
ROA	-2.9385	0.0016
ROE	-9.1848	0.0000
EPS	-7.9547	0.0000
LQ	-8.5729	0.0000
ATG	-9.3079	0.0000

Source: Authors computation, (2022).

Where **CAP**= Capital Structure, **ROA**= Return on Asset, **ROE**= Return on Equity, **EPS**= Earnings Per Share, **LQ**= Liquidity, **ATG**= Asset Tangibility,

Discussion of Findings

- The findings of the study that was conducted revealed that capital structure is positively impacted by the firm performance of the listed non-financial firm in term of return on asset, return on investment, earning per share ,liquidity and asset tangibility .This was discovered as a result of the research that was carried out. The findings of the investigation have positive and significant effect on the performance of the companies as well as other stakeholders, as the following points will explain:
- According to the findings of this research, the level of financial performance significantly improved as the amount of equity grew. This suggests that the management of the company supports greater equity rather than loans in order to increase the profitability of the business.
- The research revealed evidence to support the hypothesis that a company's capital structure makes a significant contribution to the financial performance

measured in term of return on asset, return on investment, earning per share, liquidity and asset tangibility. This indicates that an increase in both total assets and long-term loans utilized by non-financial companies in Nigeria adds to an improvement in the profitability of the businesses' owners.

Implication of the findings

Outcome of the analysis carried out unveiled that capital structure have a positive effect on the firm performance represented by return on asset, represented by return on asset, return on equity, earning per Shae, liquidity and asset tangibility of non-financial listed firm in Nigeria manufacturing firms in Nigeria. The outcomes of the analysis have significant implication to the non-financial firms and other stakeholders on the following notes:

- i. This study found out that capital structure increases at a significant level as return on asset increased. This implies that the management encourages sound capital structure in order to enhance profitability of the non-financial listed firms.
- ii. The study found evidence that show capital structure in terms of total debt, long-term debt and total asset notably contributes to the financial performance of non-financial firms. This implies that more capital structure in term of long-term debts and total assets employed by non-financial listed firms in Nigeria contributes to the betterment the earnings of their shareholders.
- iii. Finally, the use of financial performance in erm of earning per share short-term debt tends to contribute to the returns of shareholder at a minimal level. By implication, manufacturing firms' management discourages the use of short-term debt to run the affairs of the organization. Short term debt is relatively more expensive and contribute to low profitability of non-financial listed firms.

Conclusion

This study has been able to provide empirical information on the nature of the relationship between capital structure and performance of manufacturing firms in Nigeria, 2015 – 2020. Time series data over the period of 2015 to 2020 were obtained from the Nigeria Exchange Groupe as well as the annual report of non-financial listed firms used. The tool of panel data analysis employed in the study included correlation, regression and Hausman test. The statistical and econometric tests included test of

individual significance of the variables using t-test and f-test for the overall significance of the variables used. The econometric test was based on regression and correlation was used and to ascertain to avoid the problem of multicollinearity among the independent variable use. The Hausman test was used in determining the optimal model between the fixed and the random models. It was discovered that the fixed model was a better fit model for the analysis.

However, this study offers empirical evidence on the effect of capital structure on firm performance in Nigeria. The study has established the fact that, capital structure has positive and significant effect on firm performance such as return on asset, return on investment, earning per share, liquidity and asset tangibility.

Recommendations

Sequel to the existence of positive and significant relationship between capital structure and firm performance of non-financial listed firms (2015 – 2020) established by this study, it is important for all stakeholders to recognize the importance of increasing returns on investments and returns on assets. Therefore, the study recommends the following:

- Every policy to reduce debt financing by the management of the firms must be pursued vigorously. Reduction in debt financing will increase the returns on investments and assets.
- Again, increased in equity financing has a positive and significant relationship with return on assets and return on investment. Therefore, management of these firms should make every effort to increase equity capital structures so as to increase the return on assets and return on investment of the firms.
- It is also recommended that in building the capital structure of the non-financial listed firms, there should be more mix of equity financing and less use of debt financing so as to increase the potential profits of the firms' overtime.

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