Firm Size, Financial Leverage and Firm Performance: Evidence from Firms Listed in the Non-Financial Sectors of the Nigeria Stock Exchange

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Abstract: This study examined the moderating effects of firm size on the financial leverage - performance relationship of nonfinancial firms in Nigeria. The study used the ex-post facto research design and secondary data was adopted from annual reports of 50 non-financial firms listed on the Nigeria Stock Exchange as at 31 December 2019. The data used was for the period of 2010 - 2019 and multiple regression tool was used to analysed the data collected. The findings of this study shows that debt ratio (β = -0.459; p < 0.05) has a significant negative relationship with financial performance of listed non-financial firms as at 31 December, 2019. Also, introducing firm size as a moderating variable led to a (β =0.043; p < 0.05) significant positive effects on the leverage - performance relationship. The study concluded that financial leverage affects the financial performance of non-financial firms in Nigeria and that firm size has effects on the leverage-performance relationship. The study recommended that management must determine their organization optimal capital mix and also put their firm size into consideration before deciding the amount of debt finance to be included in the capital.

Keywords: firm size, financial leverage, firm performance, non-financial firms, debt ratio, return on assets

I. INTRODUCTION

ne of the core functions of management is to take financing decision for the organization. Financing decision is an essential and crucial decision making due to its ability to shape the future direction of an organization. It is a major decision that determines the survival and well-being of an organization. Also it is considered vital aspect of the management function because it is capable of influencing shareholders' wealth and risk taken. Management must decide on the cheapest way of financing their investment plans in order to maximize shareholders' wealth and for the survival of the firm [12]. Organization may be financed by debt, equity or both but the reality is that most organizations are financed by a mix of the two. The practice of having a mix of debt and equity is called financial leverage. An organization entirely financed by equity is said to be unlevered while the one financed by both equity and debt is termed levered. The expectation of all stakeholders is that management will take a financing decision that gives the organization an optimal capital structure. This is essential because the capital mix employed by an organization will affect its performance. Financial leverage can help to increase the shareholders'

return on their investment and also help to enjoy the tax advantage benefits associated with borrowing. It is believed that performance would be boosted if the managers make the right decision in terms of capital financing. More returns would be expected if the returns earned on utilization of borrowed capital is higher than the cost of assessing such debt capital. Financial leverage is the usage of borrowed sum to fund investment in expansion of a firm's asset base and to generate returns. It is an investment strategy whereby loan sum is used to the possibility of returns on investment.

A. Statement of Problem

[7] stated that arriving at an optimal mix of equity and debt is a major financing decision issue confronting organizations. Having an adequate source of financing capable of maximizing shareholders' wealth is a common problem that management keep facing [38]. [2] affirms that managers have difficulty in arriving at an optimal proportion of debt and equity capital. According to [15] the major reason why an organization considers using financial leverage is to ensure good dividend for shareholders on their investment. Financial leverage is the means through which an organization improves its performance [30]. [15] asserted that the ability of financial leverage to improve shareholders' dividend is based on the believed that fixed-charge capital can be obtained at a cost lower than the firm's returns on investment. [41] is of the position that debt financing has two main benefits to an organization. First is that the interest paid on debt capital are exempted from tax (tax shield) and this can enhances the value of the organization. The other benefit is that it restrict managers from wasteful spending as excess free cash flows that would have been available to them will be committed to payment of fixed interest. [41] however stated that these benefits does not mean organization should be encouraged to increase the debt proportion of their capital structure because certain costs are associated with debt financing. Hence he suggested that there is need for an optimal debt-equity proportion between complete equity financing and complete debt financing.

Some studies in Nigeria ([43], [4], [40], [41], [14], [7], [24]) has studied possible links between leverage and performance with some establishing significant positive relationship and some concluding on significant negative relationship while

others asserted that there is insignificant and not consequential relationship. [26] asserted that the cause for contradictory and inconsistent results in the findings on the connections between financial leverage and firm performance is contingency and situational factors. [46] opined that these factors can altered the extent of the connection between financial leverage and financial performance and further asserted that one of such factor is the firm size. According to [16] the size of an organization is a vital factor that influences its interaction with the external environment. Large organizations plays an important role in the business world and possessed the power to influence stakeholders [46] and with its increasing acceptance and links to outside business environment size of a firm is a vital factor for consideration in financing decisions [49]. It is therefore important to examine whether firm size influences the relationship between financial leverage and performance.

B. Objectives of the Study

This study will seek to achieve the following objectives:

- Whether financial leverage has effect on the financial performance of firms listed in the non-financial sectors of the Nigeria Stock Exchange
- Whether firm size has a moderating effect on the relationship between financial leverage and financial performance of firms listed in the non-financial sectors of the Nigeria Stock Exchange

C. Research Hypotheses

The study will test the following null hypotheses:

 H_01 : Financial leverage does not have effect on firm performance of non-financial firms listed on the Nigeria stock exchange.

 H_02 : Firm size has no moderating effect on the financial leverage and financial performance of non-financial firms listed on the Nigeria stock exchange.

D. Significance of the Study

The study empirically examined the effects of firm size on financial leverage of non-financial firm performance in Nigeria. Therefore contributing to the general body of knowledge. This study is significant to the following stakeholders: management of businesses, financial consultants, financial analyst, government officials, investors, intending investors, researchers and the general public to know whether size plays any role in the link between leverage and performance.

II. LITERATURE REVIEW

A. Conceptual Review

1) Financial Leverage: According to [7] financial leverage evaluate the mixture of debts and equity that a firm use in executing its investment opportunities. Financial leverage is an expression of the usage of equity and debt by a firm to finance its assets [41]. [5] stated that financial leverage is the level of loan finance in the capital structure of an organisation. [41] opined that financial leverage increases in relation to debt increase. [2] asserted that financial leverage is the ratio of loans to total liabilities and it is described as the usage of third part funds for financing organisation operations in order to gear-up operating profit and taxes. They further opined that financial leverage is the effort of an organisation to use fixed financial charges to effect changes in their profits before interest and tax.

[44] explained that financial leverage is the amount of loans and preference shares compare to equity of the firm in the capital structure. Financial leverage is the percentage of a company's loan capital compare to the value of its equity [33].

[3] explained that an organisation with a portion of debt in its capital structure is known to be a levered organisation, while an organisation that is entire financed by equity is said to be unlevered. An all equity financed firm is unlevered, while a firm financed by mixture of ownership equity and debt is levered ([44], [10]). A debt with a maturity period of less than a year is referred to as short-term debt and debts with more than a year before maturity is called long-term debt [3].

According to [27], the firm used financial leverage to raise more on the fixed charges funds than it spent. They went on to say that the primary motivation for businesses to use financial leverage is to increase shareholder value in favorable economic conditions. [10] asserted that leverage ensure that a greater potential returns is available to the investors.

[15] stated that the expectation that financial leverage will yield more dividend to shareholders is realizable if loans are obtained at costs lesser than the company's return on assets.

However, if the investment becomes worthless, potential loss will be greater because all accrued interest and the principal on the loan would still need to be repaid [10]. [41] therefore conclude that financial leverage is a two-edged sword is capable of increasing the shareholders' dividends as well as bringing loss to them.

2) Financial Performance (FP): [25] define performance as an organization's ability to acquire and manage resources in ways that give it a competitive advantage. Firm success is a multifaceted construct that includes factors like operational efficiency, corporate integrity, and organizational survival [47]. Accounting-based metrics like return on assets and return on equity, as well as stock market measures like Tobin's Q and market return, have been used to assess financial performance ([13], [21]). Accounting-based metrics, according to [19], are generally recognized as credible indicators of financial performance. Accounting-based financial performance illustrates past or short-term results, while market-based financial performance reflects future or long-term results [22].

3) Debt Ratio: [17] stated that debt ratio (DR) is a measurement of total debts involved in the finance of total assets. According to [7], a higher debt ratio indicates high

leverage and reduces debt potential. According to [37], using a large amount of debt has the benefit of providing a tax shelter, which increases profitability. However, high leverage will put you at risk of being taken over by a borrower, causing financial distress and increasing agency costs [35].

4) Return on Assets (ROA): The return on total assets (ROA) is a key measure of an entity's growth in terms of business operations. The return on assets (ROA) is a metric that measures how effectively a business has used its assets to generate profit. According to [48] ROA measures a company ability to generate profits using owned assets. ROA is used to determine the rate of return on total assets after interest expense and taxes, [11]. [34] stated that ROA is a financial ratio that measures the extent to which a firm uses its assets to generate profits. A higher ROA signifies a better performance.

Calculation of Return on Assets: ROA is determined by comparing available net profit to total assets, according to [11].

ROA = <u>Net Income</u>

Total Assets

5) *Firm Size:* The size of a firm is a significant factor that influences performance. Large firms enjoys economies of scale which gives them a competitive edge over smaller firms and therefore become more efficient. [1] asserted that larger firms reports good returns due to competitive advantage over smaller firms. Also large firms has access to loan facilities at a lower rates because they are considered to be credit worthy and less prone to bankruptcy due to their bigger size.

6) Non-Financial Firms: Non-financial firms are companies that majorly engage in the production, marketing and provision of goods and non-financial services. They are firms operating in sectors other than the financial sector, examples are companies operating in the manufacturing, Agricultural, oil, health care, service sectors, etc. Ownership of nonfinancial firms could be public, private or foreign.

B. Theoretical Review

The theories upon which this study is based are the trade-off theory and the pecking order theory.

1) Trade-off theory: The trade-off theory stipulates that an organisation will decide the proportion of its capital that should be debt by balancing the cost and benefits of using it. [18] stated that the theory as propounded by [31] focus on a balance between cost of bankruptcy and the tax-saving benefit of using loan.

[41] asserted that the theory recognized the advantage of debt financing which is tax shield and the cost of debt financing which is the bankruptcy costs and the financial distress costs. The theory then tries to create a balance between the benefit and costs of using debt for financing. [39] stated that a tradeoff between tax-shield and bankruptcy cost determine the optimal debt ratio of an organization. According to [7] the trade-off theory suggests that a firm should keep employing the usage of a ratio of debt capital until an optimal level is reached where further debt yield no benefit. They further asserted that the theory established a direct link between capital structure and performance.

2) Pecking Order Theory: This theory was propounded by [36]. According to the pecking order theory firms follow a pattern in making selections from the available sources of capital. In accordance with the pecking order theory, organisations have 3 distinct sources of funding, namely internal, external debt and external equity financing [39]. They claimed that internal funding is the least expensive, preceded by debt financing, which is more expensive, and external equity sources, which is the most expensive of all. Organizations would prefer above all others to raise funds internally before considering raising fund through external debts while their last option is to raise fund through external equity [20]. [44], also stated that managers would only resort to issuing of shares only after there is no available internal finance to use. The firm will prefer using its retained earnings and would only consider external funding when that is not enough. However, when using external funds, debt financing because of its tax-shield benefit will be considered first before equity. ([32], [45]). [7] explained that the theory predicts a negative link of capital structure and performance.

C. Empirical Review

Several studies have empirically considered the link between financial leverage and performance with mixed results.

[41] used debt-equity and debt ratios as indicators for leverage and ROE as an indicator for financial performance in a study to investigate the correlation between financial leverage and bank financial performance in Nigeria. For the years 2005 to 2017, data for eight DMBs in Nigeria was collected. The data was tested using correlation and regression analysis, and the study discovered a negative significant connection between debt-equity ratio and ROE, as well as a negative but negligible connection between debt ratio and ROE.

[3] assessed financial leverage with short-term debt, long-term debt, and debt-equity ratios, while financial performance was proxied by ROE, in a study to analyse the impacts of financial leverage on financial performance of three (3) quoted firms in the Nigerian agricultural sector between 2005 and 2017. Descriptive statistics and Pooled Ordinary Least Squares were used. The study discovered that short-term debt has a negative significant impact on FP, while long-term debt has a positive significant impact on ROE, according to the research.

For the period 2012-2016, [6] investigated the impact of financial leverage on financial performance using six (6) listed firms from the Nigeria Stock Exchange's Insurance sector.

The debt ratio and debt-to-equity ratio were used as financial leverage ratios, and ROA and ROE were used as proxies for financial results. The data was analyzed using descriptive statistics, correlation, and regression techniques. According to the findings, debt and the debt-to-equity ratio have a substantial negative impact on ROA and ROE.

In a study to assess the impact of leverage on firm performance in Nigeria, [7] used debt ratio, debt-equity ratio, and interest cover ratio as leverage metrics, while return on capital employed (ROCE) was used as a financial performance metric. They chose 7 companies listed in the food and beverage sector as of December 31, 2017, using probabilistic random sampling and data from 2007 to 2016. Ex-post facto analysis was used in this report, and panel regression was used to analyze the results. According to the results of the report, debt ratio and debt-to-equity ratio have a positive and important relationship with ROCE, while interest cover ratio has a positive but not significant relationship with ROCE.

For the period 2006 to 2015, [39] evaluated the impact of financial leverage on firm results using thirteen (13) deposit money banks listed on the Nigeria Stock Exchange. Financial leverage was measured using interest cover, debt-equity, and debt ratios, while firm output was measured using profitability, size, productivity, market capitalization value, and liquidity. Using the multiple regression methodology, the study discovered that financial leverage is positively and significantly linked to profitability and performance, according to the report, but it has no impact on scale, liquidity, or market capitalization value.

All of the studies above have one thing in common: they only looked at the direct impact/relationship of financial leverage on firm performance, ignoring the possibility of an indirect effect of firm characteristics variables on the financial leverage-firm performance relationship.

Other research, on the other hand, have looked at the relationship between financial leverage and firm success in a more indirect way, using various variables as a moderator between them.

As moderator in the relationships between company growth and performance among 50 Karachi Börse enterprises in Pakistan, [1] examined the effect of corporate size in 2012. Market capitalization was used as a proxy for companies, total asset growth as a proxy for growth and ROA as a proxy for corporate outcomes. The data were analyzed by means of regression methods and the effect of corporate size on the connection between corporate growth and firm results was moderated.

The mediative impact of the FL on the link between the size of the company and the FP of eight (8) sugar companies in Kenya from 2008 to 2018 were explored in a study led by [8]. The study concluded that the relationship between firm size and results is negatively mediated by the regression of data from the panels. [29] studied FP as a moderator on the relationship between the financial leverage and returns of 47 pharmaceutical companies in the Indian National Stock Exchange.

The debt-to-equity ratio was used to calculate leverage, while ROE was used to proxy results and Investor Returns was calculated using share price appreciation and dividends paid to shareholders. The data was analyzed using moderated panel regression, and the analysis found that financial performance did not moderate the relationship between financial leverage and shareholder return.

[46] used 304 Pakistani non-financial firms from 2005 to 2013 to examine the moderating effect of firm size on the leverageperformance relationship. The study uses the ROA as a proxy for firm performance, and the debt-to-equity ratio as a proxy for leverage. The data was analyzed using the panel regression methodology, and the study's conclusion was that firm size moderated the leverage-performance relationship.

The role of competitive strategy as a moderator in the association between FL and industrial firm performance in Jordan was investigated by [9]. The study measured efficiency using ROA and the market-to-book ratio. Using panel data regression, the researchers discovered that competitive strategy moderated the relationship between FL and performance.

For the period 2007 to 2017, [28] examined the moderating effect of firm growth on capital structure and FP of two petroleum firms in Kenya. The study used ROA and ROE to assess results, while DR, DER, and CDR were used to assess capital structure. This study used descriptive statistics and hierarchical regression analysis to evaluate data and found that firm growth rate moderated the correlation between capital structure and financial performance significantly.

[24] used 101 non-financial firms listed on the Nigeria Stock Exchange from 2003 to 2007 to investigate the impact of firm size on the nexus between leverage and firm results. Firm performance was measured using ROA, ROE, and Tobin Q. The data was analyzed using Hansen's (1999) threshold regression model. The study discovered that the connection between leverage and firm output is dependent on the size of the business.

From the above, only one study in Nigeria was noticed that examined the indirect effect of firm size on leverage – performance relationship.

III. RESEARCH METHODS

For events already existing the ex-post facto design was employed to collect and study data. The population for this study consists of all 111 listed companies in the non-financial sectors (Industrial goods, Services, Oil & Gas, Natural Resources, ICT, Healthcare, Consumer goods, Construction/Real Estate, Conglomerates, and Agriculture) of the Nigeria stock exchange as at 31 December 2019. However, using judgmental sampling technique, 50 firms listed in the non-financial sector were selected and used for this study. The selected firms that cut across all the nonfinancial sectors are those with complete data needed for this study. This study used secondary data gotten from the financial statements of the selected firms. The period of this study is 2010- 2019.

Financial leverage is the study's independent variable and it is proxy by debt ratio (DR); the dependent variable is firm performance and its proxy by return on assets (ROA) while firm size is the moderating variable. Regression analysis was used to analysed the data for this study.

The model regressed the independent and moderating variables against the dependent variable and the result was used to measure the ability of these variables to fulfill this study's objectives and also used to evaluate the study's hypotheses. The regression model is presented in the equation below:

 $ROA_{it} = \beta_0 + \beta_1 DR_{it} + \beta_2 DR_{it} * LogFS_{it} + e_{it}$

Where β_0 stands for the intercept, $\beta_1 - \beta_2$ represents the coefficients and e is the error term.

where:

ROA = Return on Assets

DR = Debt Ratio

FS = Firm Size

Measurement of Variables used for the Study

	Variables	Measurements
Dependent Variable:	Return on Assets (ROA)	Earnings before interest and tax divided by Total Assets (EBIT/Total Assets)
Independent Variable	Debt ratio (DR)	Total Debts divided by Total Assets
Moderating Variable	Firm Size (SFS)	Log of Total Asset

Using STATA 13, the link between ROA and the independent variable as well as the effect of the moderating variable were estimated through multiple regression analysis.

IV. DATA ANALYSIS AND RESULT

A. Data Analysis

Variable	Minimum	Maximum	Mean	Std. Dev.
ROA	-0.254	3.328	0.080	0.263
Debt Ratio (DR)	0.039	19.441	0.860	1.926
DR*FS	0.284	92.499	5.547	9.346

Source: Authors' computation, 2021

Table I shows that the ROA which represents firms ' financial performance varied from

-0.254 to 3.328 with a mean of 0.080 and a standard deviation of 0.263. The minimum ROA of the sample firms was -0.254

while the firm with highest ROA recorded a return of 3.328. The average ROA of the sample firms is 0.080 and the standard deviation is 0.263.

The table further showed that the debt ratio of the firms ranges from 0.039 to 19.441, the mean and standard deviation of the debt ratio of the firms are 0.860 and 1.926 respectively. The firm with the lowest debt to assets ratio has a ratio of 0.039 and the highest has a debt to assets ratio of 19.441.

Table II: Pre-Estimation Checks

Test	Chi-square	P-value
SK		0.0000
Wald	3.2e+05	0.0000
Wooldridge	100.46	0.0000

Source: Authors' computation, 2021

Based on the assumption of normal distribution. The study carried out normality test using SKtest at 5%, the result gives a P-value of 0.0000 which is significant, implying that the residual is not normally distributed. Further on assumption of homoscedasticity, the study carried out a modified Wald test and the result is $x^2 = 3.2e+05$ with a P-value of 0.0000 which is less than 5% significant level revealing the presence of heteroskedasticity. Wooldridge test for auto correlation in panel data was conducted at 5% and the result (F = 100.46, P < 0.05) shows there is no autocorrelation among the variables.

Table III: Post-Estimation Check

Test	Chi-square	P-value
Hausman	223.95	0.0000

Source: Authors' computation, 2021

Due to the panel nature of the data, hausman test was conducted at 5% significant level. Evidence from the test gives a Chi-square value of 223.95 and a P-value of 0.0000 which is less than the significant level of 0.05. This means that the result is significant and therefore the fixed effect model is preferred.

As a result of the problem of normality distribution and heteroskedaticity noted earlier, the study used robust standard error for fixed effect to take care of the issue.

Table IV: Fixed Effect Regression Results

Variables	Model
Constant	0.775(2.29)*
Debt Ratio	-0.459 (-7.69)*
DR*FS	0.043 (3.25)*
R ²	0.3887
F Value	8319.60
P Value	0.0000

Source: Authors' computation, 2021

Note: 1. Value of the t statistics in parenthesis. 2. Level of significant is at 5%.

From the regression table above R^2 is 0.389, this indicates that 39% of changes in the return of assets of the tested organization are occasioned by the independent variables (debt ratio and firm size) while other variables not tested in this study account for 61% changes in the return of assets (ROA).

The F-statistics is measured at 5% level of significance and the result gives F-value of 8319.60 with a P-value of 0.0000. This shows that the result is significant at 5% and it means that the collection of the independent variables (i.e. debt ratio and firm size) has a significant effect on the dependent variable (ROA)

B. Discussion of Findings

1) Debt Ratio and financial performance

From the table, debt ratio has a co-efficient of -0.459. The implication of this is that for every additional one naira debt obtained by the tested organizations there will be 46kobo reduction in the firms' return on assets. This means that as debt proportion increases the organization performance will be adversely affected. This is so because of the cost of debt that will increase as more debts are obtained. Hence management should be able to identify a point when sourcing for more debt is not a right decision. This is the essence of the trade-off theory, management should be able to decide the proportion of their capital that would be financed by debts by being comparing and matching the costs and benefits of using debt capital.

2) Firm Size on debt ratio and financial performance

From the above result, when firm size was introduced into the model, the firm size-debt ratio co-efficient was 0.043. The introduction of firm size into the model changed the relationship in the earlier result between debt ratio and ROA. The result means that any one naira increase in firm size and debt ratio leads to an increase of about 4k in the return on assets. This means that firm size has a moderating effects on the connection between financial leverage and firm performance of non-financial organisations. A comparison between this result and the earlier result between debt ratio and financial performance shows that moderating firm size on debt ratio changed the direction of the effect of debt ratio on ROA as it gives a positive coefficient which implies that as firm grows larger, they will be able to assess more loan capital and then enjoy economies of scale on their operations this will in turn led to better performance.

C. Test of Hypotheses

1) Hypothesis one

The t-statistics for the first hypothesis was carried out at 5% level of significant and the result gives a t-value of -7.69 with a probability of 0.000 that is less than the 5% significant level which means that the result is significant. Based on this result, the null hypothesis was rejected and the alternative hypothesis was accepted. It was therefore concluded that financial

leverage (debt ratio) has a significant effect on financial performance (return on assets) of non-financial organisations. Bringing in the co-efficient of the result which is -0.459 means that debt ratio has a negative significant effect on ROA. This finding is in line with the findings of [6] and [41] but contrary to the findings of [7] and [39] who postulated that debt ratio has a positive significant connection with performance

2) Hypothesis two

This hypothesis was tested at 5% significant level, the result shows a t-value 3.25 and a probability value of 0.013 which is less than the significant level. This means that the test is significant, we therefore rejected the null hypothesis and accepted the alternative hypothesis. We therefore concluded that firm size has a moderating effect on the relationship between financial leverage and financial performance. This finding is in consonance with the findings of the work done by [1], [46] and [24].

V. CONCLUSION

This study offers empirical proof of the moderating effect of firm size on the leverage-performance association. This study conclude that financial leverage has a significant effect on firm performance and that firm size is a factor that can influence the relationship between financial leverage and performance. Precisely, this study established that financial leverage has a significant negative effect on return on assets (ROA). Furthermore, the result of this study revealed that firm size as a moderator has a positive and significant effect on the nexus between debt ratio and ROA.

VI. RECOMMENDATIONS

The outcomes of this research has some practical implications. Firstly, the results clearly established that debt financing has a significant effect on firm performance. Furthermore, outcome of this study shows that size has the potential of influencing the leverage-performance relationship. This study therefore put forward the following recommendations:

- Financing decision by management should be taken in line with the wealth maximization goal of the shareholders.
- Management should determine the optimal capital mix for their company so as to enhance financial performance.
- Because of its advantage of tax shield, management should effectively employ debt financing in their capital structure.
- Usage of debt financing should be strictly monitor so as to ensure that the cost of debt does not outweigh the benefits of debt financing.
- Decision makers should put their firm size into consideration before deciding on the amount of debt to involve in their finances so as to guide against any negative influence of leverage on performance. Large-sized firms are at more vantage position to

benefit from leverage than the small-sized firms, hence, when thinking of getting debt as a financing option, size must be considered as a major factor that influence the impact of leverage on performance.

REFERENCES

- Abbasi, A., & Malik, Q.A. (2015). Firms' Size Moderating Financial Performance in Growing Firms: An Empirical Evidence from Pakistan. International Journal of Economics and Financial Issues, 5(2), 334-339.
- [2] Abdul, A., & Adelabu, I. T. (2015). Impact of financial leverage on firm performance: Evaluation of total Nigeria Plc. International Journal of Science Commerce and Humanities, 3(6), 91-119.
- [3] Abdulkarim, G., Ahmadu, A., & Sulaiman, A.S. (2019). Impact of Financial Leverage on the Financial Performance of Quoted Agriculture Firms in Nigeria. Retrieved from www.researchgate.net on 4th February 2020
- [4] Abdulrashid I.S., Pofi, W.K., Saminu, I.D., & Mohammad, Y. (2017). Effect of Capital Structure on the Performance of Deposit Money Banks. International Journal of Accounting & Finance Review. 1 (1).
- [5] Abubakar, A. (2016). Financial leverage and financial performance: Evidence from the health care sector of the Nigerian stock exchange from 2005- 2014. ADSU Journal of Economics and Interrelated Disciplines, 1 (2), 45- 64
- [6] Adeyemi, A.Z., Unachukwu, J.C., & Oyeniyi, K.O. (2017). Capital Structure and Its Effect on the Financial Performance of Nigerian Insurance Industry. International Journal of Business & Law Research, 5(3), 8-15.
- [7] Afolabi, A., Olabisi, J., Kajola, S.O., & Asaolu, T.O. (2019). Does leverage affect the financial performance of Nigerian firms? Journal of Economics and Management, 37(3), 32-48
- [8] Akinyi, R.T., Ombok, B.O., & Oima, D.O. (2019). Mediating Effect of Financial Leverage on the Relationship between Firm Size and Financial Performance of Sugar Firms in Western Kenya. International Journal of Education and Research. 7(9)
- [9] Al-Rdaydeh, M., Almansour, A.Y., & Al-Omari, M.A. (2018). Moderating effect of competitive strategies on the relation between financial leverage and firm performance: Evidence from Jordan. Business and Economic Horizons, 14(3), 626-641
- [10] Andy, C.W.C., Chuck, C.Y.K., & Alison, E.L. (2002). The Determination of Capital Structure: Is National Culture a Missing Piece of the Puzzle? Journal of International Business Studies, 33, 19-32.
- [11] Brigham, E. F., & Houston, J.F. (2001), Financial Management, Translation by Erlangga Publishing Team. Eight Edition, II Book. Erlangga Publishing, Jakarta.
- [12] Chen, L.J., & Chen, S.-Y. (2012). How does the pecking order theory explain capital structure? Chang Jung Christian University, Taiwan Economic Theory, 13(4), 341-360.
- [13] Combs, J., Crook, T., & Shook, C. (2005). The dimensionality of organizational performance and its implications for strategic management research. Chapter in research methodology in strategy and management. Eds. 2. D. J Ketchen and D. D. Bergth. Pp. 259-286.
- [14] Ekwueme, C. M., & Atu, O.G. (2018). Capital Structure and Firms Financial Performance in Nigeria Quoted Insurance Companies. Account and Financial Management Journal. 3 (5), 1530-1542. DOI:10.31142/afmj/v3i5.01, I.F. - 4.614
- [15] Enekwe, C.I., Agu, C.I., & Eziedo, K.N. (2014). The Effect of Financial Leverage on Financial Performance: Evidence of Quoted Pharmaceutical Companies in Nigeria. IOSR Journal of Economics and Finance (IOSR-JEF), 5(3), 17-25
- [16] Ezeoha, A. E. (2008). Firm size and corporate financial-leverage choice in a developing economy: Evidence from Nigeria. The Journal of Risk Finance, 9(4), 351–364.
- [17] Ezeamama, M. C. (2010). Fundamentals of financial management (1st Ed). Enugu, Nigeria: EMA Press.

- [18] Frank, M. Z., & Goyal, V. K. (2011). Trade-off and Pecking Order Theories of Debt. Handbook of Empirical Corporate Finance, 15, 135-202.
- [19] Gentry, R. J., & Shen, W. (2010). The relationship between accounting and market measures of firm performance: How strong is it? Journal of Managerial Issues, 12 (4), 514- 530.
- [20] Gweji, M.O., & Karanja, J. (2014). Effect of Financial Leverage on Financial Performance of Deposit Taking Savings and Credit Co-operative in Kenya. International Journal of Academic Research in Accounting, Finance and Management Sciences, 4 (2), 180-188.
- [21] Hoskisson, R., Hitt, M., Wan, W., & Yiu, D. (1999). Theory and research in strategic management: Swings of pendulum. Journal of Management, 25, 417-456.
- [22] Hoskisson, R., Johnson, R., & Moesel, D. (1994). Corporate divestiture intensity in restructuring firms- effects of government strategy and performance. Academy of Management Journal, 37, 1207-1251.
- [23] Hult, G., Ketchen, D., Griffith, D., Chabowski, B., Hamman, M., Dykes, B.... Cavusgil, S. (2008). An assessment of the measurement of performance in international research. Journal of International Business, 39, 1064-1080.
- [24] Ibhaguia, O.W., & Olokoyo, F.O. (2018). Leverage and firm performance: New evidence on the role of firm size. North American Journal of Economics and Finance, 45 (57–82).
- [25] Iswatia, S., & Anshoria, M., (2007), The Influence of Intellectual Capital to Financial Performance at Insurance Companies in Jakarta Stock Exchange (JSE), Proceedings of the 13th Asia Pacific Management Conference. Melbourne.
- [26] Jermias, J. (2008). The relative influence of competitive intensity and business strategy on the relationship between financial leverage and performance. The British Accounting Review, 40, 71–86.
- [27] John-Akamelu, R.C., Iyidiobi, F.C., & Ezejiofor, A.R. (2017). Leverage and Financial Performance: Evidence from Nigerian Food Production Firms. European Journal of Research and Reflection in Management Sciences, 5(4),
- [28] Kamau, J.K., Mogwambo, V., & Muya, J. (2018). Revisiting Capital Structure and Financial Performance: The Moderating Role of Firm Growth Rate: Evidence from Kenyan Petroleum Firms. International Journal of Social Sciences and Information Technology, IV(X)
- [29] Kannadhasan, M., Goyal, V., & Charan, P. (2016). The Role of Financial Performance as a Moderator on the Relationship between Financial Leverage and Shareholders Return. Journal of Modern Accounting and Auditing, 12(7), 379-387
- [30] Kenn-Ndubuisi, J.I., & Nweke, C.J. (2019). Financial Leverage and Firm Financial Performance in Nigeria: A Panel Data Analysis Approach. Global Journal of Management and Business Research: C Finance, 19(4).
- [31] Kraus, A., & Litzenberger, R. H. (1973). A State-Preference Model of Optimal Financial Leverage. Journal of Finance, 28(4), 911–922.
- [32] Luigi, P., & Sorin, V. (2014). A review of the capital structure theories. Bucharest, Romania: Academy of Economic Studies, Faculty of Finance.
- [33] Lumby, S., & Jones, C. (2011). Corporate finance: Theory and practice (8th ed.). United Kingdom: Centage learning.
- [34] Mohd, H., Muammar, K., & Ainatul, U (2014). Influence analysis of Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), Debt to Equity Ratio (DER), and current ratio (CR), against corporate profit growth In Automotive In Indonesia Stock Exchange. International Journal of Academic Research in Business and Social Sciences, 4(12)
- [35] Mule, R. K., & Mukras, M. S. (2015). Financial leverage and performance of listed firms in a frontier market: Panel evidence from Kenya, European Scientific Journal, 11(7), 171-184.
- [36] Myers, S. C. (1984). The capital structure puzzle. The Journal of finance, 39(3), 574-592. <u>https://doi.org/10.1111/j.1540-6261.1984.tb03646.x</u>

- [37] Myers, S. C. (2002). Capital structure. Journal of Economic Perspectives, 15(2), 81-102.
- [38] Njeri, M. M. K., & Kagiri, A. W. (2013). Effect of capital structure on the financial performance of banking institutions listed in Nairobi securities exchange, International Journal of Science and Research, 4(2), 25-42.
- [39] Nwanna, I.O., & Ivie, G. (2017). Effect of Financial Leverage on firm's Performance: A Study of Nigerian Banks (2006 -2015). International Journal Recent Science Research. 8(7), 18554-18564.
- [40] Nwude, E.C., & Anyalechi, K.C. (2018). Impact of Capital Structure on Performance of Commercial Banks in Nigeria. International Journal of Economics and Financial Issues. 8(2), 298-303.
- [41] Okoye, G.O. (2019). Financial Leverage and Profitability Performance of Financial Institutions in Nigeria. Global Journal of Education, Humanities and Management Sciences, 1(2), 203 - 207
- [42] Onaolapo, A. A., & Kajola, S. O. (2010). Capital structure and firm performance: Evidence from Nigeria. European Journal of Economics, Finance, and Administrative Sciences, 25, 70-82.
- [43] Onyenwe, N. I., & Glory, I. (2017). Effect of financial leverage on firm's performance: A study of Nigerian banks (2006-2015).

International Journal of Recent Science Research, 8(7), 18554-18564. <u>http://doi.org/10.24327/ijrsr.2017.0807.0530</u>

- [44] Pandey, I.M. (2010). Financial Management (10th ed.). New Delhi, India: Vikas Publishing House PVT Ltd.
- [45] Paramasivan, C., & Subramanian, T. (2016). Financial management. New Delhi, India: New Age International Publisher.
- [46] Qamar, M.A.J., Farooq, U., & Akhtar, W. (2016). Firm Size as Moderator to Leverage-Performance Relation: An Emerging Market Review. Journal of Poverty, Investment and Development .Vol.23
- [47] Richard, P., Devinney, T., Yip, G. & Johnson, G. (2009). Measurement organizational performance: Towards methodological best practice. Journal of Management, 35, 718-804.
- [48] Rosikah, Dwi, K.P., Dzulfikri, A.M., Muh, I.A., & Miswar, R. (2018). Effects of Return on Asset, Return On Equity, Earning Per Share on Corporate Value. The International Journal of Engineering and Science, 7(3), 06-14
- [49] Voulgaris, F., Asteriou, D., & Agiomirgianakis, G. (2004). Size and Determinants of Capital Structure in the Greek Manufacturing Sector. International Review of Applied Economics, 18(2), 247– 262.