The study considered the influence of managerial ownership and debt financing on financial performance of manufacturing firms listed on the Nigerian Stock Exchange. The panel regression model utilized secondary data for a period of ten (10) years to 2020. The study sampled twelve (12) listed manufacturing firms in Nigeria. Findings revealed a negative effect of total debt on financial performance of selected quoted manufacturing firms in the period. The managerial ownership also negatively influences the financial performance of the sampled companies. The results clearly demonstrate that the interaction of debt financing and managerial ownership does not significantly influence the financial performance of listed manufacturing firms in Nigeria implying very weak
moderating effect. The study recommends that listed manufacturing firms should consider their retained earnings to finance their operations instead of relying on debt finance, and directors should only own minority shareholding right in their companies as ownership of major shares cannot influence borrowing plans of the business.

**Keywords:** Managerial ownership, financing, performance, equity and moderating influence

1. **Introduction**

Finance decision as one of the financial management decisions cannot be ignored by corporate entities, policy makers, financial analysts and trade promoters. It focuses on available options of financing business and investment opportunities, settlement of day to day operating expenses and maintenance of cost of capital. More importantly, where a business raises its finance shall determine how much it will be run profitably or not. Therefore, attention should ensure effective management of borrowed funds. On the other hand, capital structure model has already built up funds structures for a going concern business, such as equity, preference share and debt. Aziz (2019) observed that companies should be able to strategize their activities with a mix of equity and debt in order to increase their market value. Though, excessive debt may overstretch the firm’s financial capacity, excessive equity weakens proprietorship premium and opens the company to outside control (Owoloja, Gbajumo, Umoru, Babatunde, & Ilimezekhe, 2020).

Debt implies borrowing, that is, any fund that is subject to the payment of fixed return, such as long term loans, preference shares and debentures (Alalade et al., 2015). However, debt capital with its associated risk and return, involves parting away funds from their owners. It is the interest rate companies, persons, or group of individuals pay on debt collected. It is supported by cost of debt capital, and from the borrowers’ point of view, Onkware, Joshua, and Muya (2021) see it as the opportunity cost of making a specific investment. This cost has to exist in order to check financial managers’ excess and reckless spending on unprofitable and personal material things.

Sunday and Onatuyeh (2019) were of the view that proper review of the different debt variants remains necessary. This would help to identify their individual effect on various performance returns. The short term debts, long term debts and total debts are usually used as the debt components. Orji, Nwadiator and Agubata (2021), Oghenero and Samuel (2021), Owoloja et al. (2020), Sunday and Onatuyeh (2019), Usman, Samaila and Dalhat (2018), Kalu and Ken (2016) and Oyesola (2009) used different measures of debt finance to locate their individual and aggregate influence
on various sets of performance indices. Their findings have not been uniform due to a large number of factors ranging from study period, difference in settings and methodological approaches. However, none of these researches seem to acknowledge the possible influence of managerial ownership on the relation between debt financing and firms’ performance. Therefore, against this background, the present study attempts to close the gap determine whether or not managerial ownership moderates the relationship between debt financing and financial performance of manufacturing firms on the Nigerian Stock Exchange. This is desirable in view of the fact that managers have influential responsibility to utilize both human and capital resources in their respective firms. The following null hypotheses are stated as below:

**Ho**: Debt financing does not significantly impact on the financial performance of manufacturing firms quoted on the Nigerian Stock Exchange.

**Ho**: Managerial ownership and debt financing do not have significant moderating influence on the financial performance of manufacturing firms quoted on the Nigerian Stock Exchange.

### 2. Literature Review and Theoretical Framework

Financial performance is the capacity to work profitably, proficiently and successfully and withstands ecological dangers while exhibiting the current chances and aptitude to develop (Onkware et al, 2021). They also declared financial performance of a firm as that which can be analyzed in terms of profitability, dividend growth, sales turnover, asset base, capital employed among others. Sunday and Onatuyeh (2019) measured financial performance with such profitability indicators as earning per share, dividend per share, return on assets, return on equity among others. Kalu and Ken (2016) viewed financial performance as that which can be measured based on variables that involve productivity, returns, growth or even customers satisfaction. Alalade and Victor (2015) added that financial performance can be reflected in profit maximization, maximization of return on assets and maximization of shareholders’ return.

Debt finance has been the use of borrowed funds to run an operation of a business entity. It includes long term debt, short term debt and total debt. The long term debt represents the percentage of funds borrowed to finance assets of the firm and repayable after more than one year. These include debentures, bonds and long term loans issued by commercial banks (Orji, Nwadiator & Agubata, 2021). They all carry different interest rates with some higher than the others. The long term facilities are required for expansion purposes as the expansion processes of firms
include acquisition of plant and machinery for the business, land and buildings, information and communication technology installations and upgrades.

The total debts measure the total amounts of assets financed by creditors taking into consideration investors’ funds. These tell the proportion of corporate assets that are financed by long term and short term debt capital. The total debt capital ratio could enable creditors and loan issuers to examine the difference between financing with equity capital and total debts. In another words equally expressing the position of Alalade and Victor (2015), even though debt financing may be highly disadvantageous to firm, if not properly motivated it equally has the advantage of tax reduction on the firm which could make it important for consideration. The short term debts are borrowed monies with repayable period up to 12 months, and are used to fund current assets investment. They also showed that more debts could increase shareholders risk but when the conditions are right, it could increase their returns substantially, (Orji et al. 2021). Similarly, the long term debt is the percentage of assets financed with debt which is payable after more than one year. This includes debentures, bonds and long term loans issued by commercial banks (Orji, Nwadiator & Agubata (2021).

The managerial ownership is concerned with the percentage of equity shares owned by management (Ida, Made & Mintarti, 2015). It includes the shareholders who run the affairs of the company. Bodunde, Clement and Rosemary (2016) argued that the need to mitigate the agency problem has brought about the managerial ownership with a view to improving corporate performance. Even then delegation of control to professional managers by owners is not compromised. Consequently, Jensen and Meckling (1976) as cited by Bodunde, et al. (2016), concluded that increasing managerial stake in the equity holdings of firms would serve as incentive to connect the interests of the managers with those of the shareholders. They also claimed that managers might possess superior information about potentials of a company over and above those possessed by the shareholders. Against this backdrop, the extent to which managers will deplore their expertise in getting the company to maximize its potential and hence firm value will depend on their ownership stake in the firm.

Oghenero and Samuel (2021) examined debt structure and performance of selected multinational companies in Nigeria. From the results, total debt ratio had negative and significant impact on return on capital employed. Also, other debt components of total debt and short term debt ratios had positive and statistically insignificant influence on return on equity. However, long term debt to asset ratio produced
negative and statistically insignificant impact on return on equity. The results of study by Orji et al (2021) using Ordinary Least Square regression technique reported significant and positive impact of debt financing on firms’ performance in Nigeria. The study recommended debt finance to equity finance to improve performance. These studies ignored the role of managerial ownership in debt financing.

Mamaro and Tsholofelo (2020)’s study found that long term debt to asset ratio negatively influenced financial performance of retail businesses. Their findings are consistent with the trade off theory. Therefore, it was concluded that the possible reason could be that most established retail firms prefer internal finance sources to debts. Also, Aziz (2019) revealed negative effect of debt finance on performance of the selected firms. Therefore, his study recommended that the companies in Pakistan should use less level of debt because it decreases the performance of companies in Pakistan. Though managerial ownership influence was considered, the finding remains limited to the sampled Pakistan corporate firms.

Sunday and Onatuyeh (2019) examined the effect of debt financing on the performance of listed consumer goods firms in Nigeria. The results revealed debt ratios to have positively significant impact on performance of consumer goods firms quoted on the Nigerian Stock Exchange. Oyesola (2009) showed that debt finance significantly influenced the performance of Nigerian listed firms. From the results it was obvious that firms in Nigeria largely used short term debt finance.

Jensen and Meckling (1976) showed that in an agency theory, debt is used where the ability to exploit profitable investment opportunities cannot be met from the resources of the shareholders. Therefore, in order to implement business expansion programmes, debts are taken with agency costs. The debts should go a long way to mitigate agency cost and discipline managers who understand that they have to repay the loans with interests as at when due.

Jahanzeb, Sai-ur-Rehman, Norkhairul, Meisam and Aiyoub (2014) declared that the trade-off theory’s original version came into being after the debate of Modigliani-Miller theorem (1958). That when the irrelevance theorem was added with the corporate income tax, this favored benefit for debt, that is it shields the earnings from taxes. Firm’s managers evaluate and analyze the various costs and benefits of several alternatives of leverage plans. They posit that most of the time it is presumed that the interior solution should be obtained so that balance can be acquired between marginal costs and benefits.
3. Methodology and Data
The study used secondary data from a population of forty-three (43) listed manufacturing firms for the period of 2011 to 2020. A sample size of twelve (12) companies was selected using judgmental sampling. According to Tongco (2007) the judgmental sampling is the deliberate choice of research data for convenience reasons. As for this study, reason is not far from data easy accessibility and disclosure. The study also used Ordinary Least Square regression to analyze the panel data collected for 10 years each of the twelve (12) sampled firms.

This study adopted the econometric model as was used by Aziz (2019) which portrays linear relationship between the managerial ownership, debt components and financial performance as follows:

\[ y = \alpha + \beta_1 x + \varepsilon \]  
\[ y = \text{The dependent variable; financial performance} \]
\[ \alpha = \text{The constant term} \]
\[ \beta = \text{The coefficient/parameter of the independent variable; TDA, MOS} \]
\[ \varepsilon = \text{The error term} \]

Total Debt ratio (TDA) = Total Debt to Total Assets Ratio
Managerial Ownership (MOS) = Percentage of directors’ share capital of the firm’s total share capital
Return on Equity = Profit after tax to Equity ratio.
Total Debt to Asset ratio and Managerial Ownership (TDA*MOS) = The interaction of managerial ownership and Total debt ratio

\[ \text{ROE} = f(TDA, MOS, TDA*MOS) \]  
\[ \text{ROE}_{it} = \beta_0 + \beta_1 TDA_{it} + \beta_2 MOS_{it} + \beta_3 TDA*MOS_{it} + \varepsilon \]  

4. Results and Discussions
The table below provides the results of the data analysis as well as the discussions of findings of the study

| Table 1: Regression Results |
|-----------------------------|
| Variables | Coefficient | T-value | P-value | VIF | TV  |
|----------|-------------|---------|---------|-----|-----|
| TDA      | -1.034      | -1.51   | 0.000   | 3.457 | 0.289 |
| MOS      | -0.236      | -2.66   | 0.009   | 2.995 | 0.334 |
| TDA*MOS  | -0.0364     | -0.07   | 0.943   | 1.25  | 0.799 |
| Constant | 0.928       | 9.07    | 0.000   |       |     |
| F-statistics | 32.798 |         | 0.000   |       |     |
The table 1 above shows an $R^2$ value of 0.533 which suggests that the predicting variables explain variations in the return on equity at the rate of 53.3%. This proves also the statistical fitness of the model implying that the variables were properly selected and used in the study. It is supported by the F-statistics of 32.798 whose p-value of 0.000 is significant at 1%.

From the table, the total debt with the parameter of -1.034 indicates that a unit change also decreases return on equity by 1.034. This result shows that debt finance as measured by total debt to asset ratio impacts negatively on financial performance of firms. The measurement of the effect of the independent variable on the dependent variable is at 5% significant level. The p–value of 0.000 confirms that total debts have significantly negative effect on financial performance. The finding is consistent with the work of Sunday and Onatuyeh (2019).

Similarly, the managerial ownership with a parameter of -0.236 shows that a unit increase in managerial ownership while other predicting variables remain unchanged, the return on equity will decrease at the rate of 0.236. This is in support of the agency cost theory that suggested directors’ ownership of the minority firm’s equity. At the threshold of 5% significant level, the p – value of 0.000 implies that managerial ownership significantly influences financial performance of listed manufacturing firms in Nigeria.

Further, the table shows a negative relationship between total debt to asset ratio\ managerial ownership and financial performance with a coefficient of -0.0364 and a t-value of -0.07. The correlation is statistically insignificant at a p-value of 0.943. This result demonstrates that financial performance decreases with the interaction between debt finance and managerial ownership. Even though there is evidence of negative correlation between the interactive variables, the results indicate clearly that the moderating effect is statistically insignificant.

5. Conclusions and Recommendations
Based on the results, the study concludes that there exists a significant and negative influence of total debt finance on return on equity. This affirms that companies’ profitability growth mostly results from internal finance sourcing with less borrowing. The study also confirms the agency cost theory that sees the existence of relationship between the managerial ownership and firms’ performance. The
negative association places the directors to have minority shareholding in order to improve financial performance and avert some risk. The study also concludes that the interaction between debt finance and managerial ownership does not significantly influence financial performance of quoted manufacturing companies on the Nigerian Stock Exchange.

The study, therefore, recommends that firms should rely on their retained earnings because debt financing reduces financial performance. The firms should also consider allowing the directors to have limited minority shareholding for the purpose of improving their financial performance, and should diversify their funds into other profitable business opportunities in order to increase finances.

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