

Capital Structure Decisions and Shareholders' Wealth Maximization of Quoted Consumer Goods Companies in Nigeria

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Abstract

Capital structure decisions are done deliberately by managers of quoted companies with the expectation of achieving optimal benefits for the shareholders. An appropriate mix of the debt and equity in the capital structure will go a long way in maximizing shareholders' wealth. In quoted consumer goods companies in Nigeria, debt and equity capital have been used together in financing total assets and it is expected that optimal benefits get to the shareholders who are the real owners of companies. Hence, this study was conducted to examine the influence of capital structure decisions on shareholders' wealth maximization of quoted consumer goods companies in Nigeria from the period of 2013 to 2022. The ex-post facto research design was employed in the study. The population was made up of twenty-one (21) quoted consumer goods companies in Nigeria on the floor of Nigerian Exchange (NGX) Group as at December 2022 and fifteen (15) entities were sampled for the study. The dependent variable was Shareholders' Wealth Maximization (MCA) while the independent variable was Capital Structure Decisions (CSD) measured by Long-Term Debts (LTD) and Total Equity (TE). Panel data were collected from annual reports and financial statements of the sampled entities from 2013 to 2022. The sourced data were analyzed using descriptive and inferential statistics. Pooled panel linear regression technique was used in the study. From the analyses, it was discovered that LTD and TE had positive and significant influence on MCA of quoted consumer goods companies in Nigeria. It was concluded, by the researcher, that capital structure decisions had positive and significant influence on shareholders' wealth maximization of quoted consumer goods companies in Nigeria. It was recommended that long-term debt capital should be sourced more and invested appropriately on viable investment opportunities with higher maturity period more than the duration of the long-term debt for the purpose of improving upon shareholders' wealth maximization. It was also recommended that equity capital should be used more to finance the operations of quoted consumer goods companies in Nigeria other than debt capital other than debt capital.

Keywords: Capital Structure Decisions, Shareholders' Wealth Maximization and Quoted Consumer Goods Companies.

1. INTRODUCTION

Quoted entities are owned by shareholders and are managed and operated by directors. Therefore, the strategies and policies formulated and implemented in the organization by the directors and managers are done by considering the interest of the shareholders who are the prime owners of the entity. The decision taken by directors and managers are to ensure that wealth or value is maximized substantially as a reward for the funds contributed through the acquisition of shares. For the purpose of maximizing the wealth or value of shareholders of companies, directors and managers are faced with different kinds of decisions such as investment, dividend and financing (capital structure) decisions (Duru *et al.*, 2018). Investment Decision has to do with the kind of decision taken by managers or directors of quoted companies to improve upon the wealth of shareholders (Retkaputri and Husodo, 2021). It is associated with the application of surplus funds to optimize opportunities identified or evaluated at a given time with the anticipation of realizing maximum returns. Investment decision is associated with acquisition of assets for the purpose of realising maximum returns that could help in the maximization of shareholders' wealth (Kehinde, 2018).

Dividend decisions is associated with the policy of dividends adopted by managers of companies. Dividend decisions are associated with policies maintained by managers of quoted companies on how the proportion of profit are distributed to equity shareholders as dividend and the proportion to retain in different accounting period. Financing or capital structure decisions are associated with the selection and combination of funding approaches in the composition of capital structure of a company (Kehinde, 2018). Of all the decisions taken by managers in quoted companies, capital structure decision is the ultimate because financial resources are needed in all aspects of the activities that are conducted in the organizations. Also, the other types of decisions revolve around capital structure decision. It is critical to investigate the role of capital structure decision on the wealth of the equity shareholders in quoted companies specifically consumer goods entities in Nigeria. Quoted companies in Nigeria take capital structure decisions over the years for the purpose of influencing various financial performance indicators including shareholders wealth.

According to Egiyi and Okafor (2022), the combination of funds used by quoted companies are mainly debt and equity and the purpose is to maximise financial performance and wealth of the shareholders. Quoted entities in Nigeria have used different combination of debt and equity in the capital structure with the aim of realising abundant growth in terms of profitability and market value. In some accounting periods, the expectation is achieved while in other accounting periods the opposite is the case. Capital structure decisions are undertaken on the level of long-term debt, total equity and retained earnings to be used in financing investments considered viable by companies. Thus, as companies continue to exist, capital structure decision is a continuous phenomenon that is undertaken by managers of companies to influence the internal process of their entities positively and contribute immensely to the variables of shareholders' wealth maximization. When capital structure decision brings about optimal combination of debt and equity in a capital structure of a company, the wealth of shareholders is created and in such a situation, key variables like market capitalisation, market value of equity, share price and price earnings (P/E) ratio will be higher (Oyinloye *et al.*, 2020).

Shareholders' wealth maximization is defined as the improvement or decline in the key variables of shareholders' value in an accounting period. Shareholders' wealth maximization is

influenced by the decisions of directors or managers in organization. This simply means that the various accounting attributes presented in financial statements of companies and controlled by managers are meant to influence shareholders' wealth maximization. In this case, capital structure decisions are some of the policies or decisions influenced by the managers which means that capital structure decisions are meant to influence the variables of shareholders' wealth maximization of quoted companies. This is why Adenugba *et al.* (2016) stated that when optimal combinations of debt and equity position is achieved by a quoted company, shareholders' wealth is certain to be created abundantly. Shareholders' wealth maximization could be measured by both book value and market value indicators such as return on assets (ROA), earnings per share (EPS), share price, P/E ratio, market capitalization, market value of equity and Tobin's Q (Akintunde *et al.*, 2021; Retkaputri and Husodo, 2021).

The influence of capital structure decisions on shareholders' wealth maximization are considered as some of the essential responsibilities of directors and managers in modern organizations in discharging their duties in accordance with the interest of the owners. The level of growth in variables of shareholders' wealth maximization are considered critical in measuring the performance of directors in recent time. Several studies have been conducted in this area of interest with different empirical results, different study areas, different sectors and different variables (Awan *et al.*, 2018). Particularly in quoted consumer goods companies in Nigeria, studies on capital structure decisions and shareholders' wealth maximization appears inconclusive because of inadequate studies and inconsistent results derived. For instance, in the study of Akintunde *et al.* (2021), non-financial companies were considered in Nigeria and in the study of Omabu *et al.* (2021), industrial goods companies in Nigeria were considered. Also, different measurements for shareholders' wealth maximization were adopted by previous researchers such as market value added, economic value added and earnings per share.

Capital structure decisions and shareholders' wealth maximization is an emerging issue of research in the literature of accounting and finance. Of all the previous studies conducted, it appears that the studies on related area of interest for quoted consumer goods companies in Nigeria are limited. In the literature, it seems that the influence of long-term debt on shareholders' wealth maximization have not been examined extensively and only in the study of Duru *et al.* (2018) where book value of dividend per share was used in measuring shareholders' value where long-term debt had positive and insignificant influence on shareholders' value. Also, capital structure decision or financial leverage on performance of quoted companies in Nigeria were mostly conducted by previous researchers. The few studies that were related used diverse proxies for shareholders' wealth and the empirical results obtained for long-term debt and total equity were inconsistent in different studies.

Some studies concluded that long-term debt has positive and significant influence on shareholders' wealth while others claimed that total equity had positive and substantial influence on shareholders' wealth. This indicated that there is conflicting empirical evidence in this related area of interest which this study is expected to address. The need to establish the influence of long-term debt on shareholders' wealth maximization indices is an essential activity to direct the attention of managers on the quantum of long-term debt to maintain in their financial structure in seeking to maximise the wealth of the shareholders. Also, to establish the influence of long-term debt on shareholders' wealth maximization will contribute meaningfully to the stock of literature in this area of interest. On this note, this study was conducted to examine the influence of variables of capital structure decisions, such as long-

term debts and total equity, on shareholders' wealth maximization represented by market capitalization of quoted consumer goods companies in Nigeria by taking into consideration the period of 2013 to 2022.

The main objective of the study was to examine the influence of capital structure decisions on shareholders' wealth maximization of quoted consumer goods companies in Nigeria. The specific objectives of the study were to:

- i. evaluate the influence of long-term debts on market capitalization of quoted consumer goods companies in Nigeria.
- ii. evaluate the influence of total equity on market capitalization of quoted consumer goods companies in Nigeria.

2. REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

Related variables captured in the objectives of this study were reviewed expansively. These were basically anchored on capital structure decisions and shareholders' wealth maximization.

2.1.1 Capital Structure Decisions

Capital structure decision consists of two basics terms regarded as financing and decision. The two terms are regarded as management related key words. When looking at financing, it is important to know that an organization cannot exist without adequate funds to acquire assets and to run an organization smoothly (Akintunde *et al.*, 2021). According to Atiyet (2012), adequate financing is required in line with investment opportunity of an organization especially the ones evaluated and regarded as viable projects. In the literature of accounting and finance, when the term financing is mentioned, the view of any individual is always on the long-term debt and equity contained in the capital structure of a company. for this reason, financing could be said to be the available avenue for sourcing for funds for acquisition of assets which could in turn bring about meaningful return into the organization. It is important to know that the essence of financing assets is to realise adequate returns within an accounting period or in a long run. In the view of Geoffrey *et al.* (2017), managers of organization are required to select the optimal source of funding their projects or assets for the fact that the opportunity of acquiring debt or equity capital is possible.

It is based on the cost of funds that usually provides managers of entity the opportunity to use a particular financing method for their assets or their identified viable projects (Akintunde *et al.*, 2021). According to Modigliani and Miller (1963), the capital structure of a company is usually made up of debt and equity. This simply means that the financing activities of a company are usually based on debt and equity funds of a company. On the other hand, decision is associated with the activity of selecting the best alternative that will satisfy a manager or suite to the requirements of operating activities at any given time. Before decision is taken for any activity, there must be various alternatives made available at the time (Duru *et al.*, 2018). Evaluation of the numerous alternatives must be conducted before the optimal alternative is selected. This simply means that planning is complemented with the decision as

stated by Kehinde (2018). When effective planning is conducted, the ultimate goal is to take effective decision that will bring about abundant return or growth to the organization.

In the view of Mehta (2014), decision is regarded as one-time activity that is taken by a manager or director in an organization and eventually, the outcome of the decision is usually assessed at the end of accounting period. The activity of assessing the effectiveness of decision taken is called control where the actual result achieved is compared with the target or standard. It is often anticipated that decision should bring about optimal results but, on several occasions, the opposite is always realised where the decision taken by a manager brings about lower productivity or performance. In this case, those charged with the responsibility of taking a particular decision must be individuals who are equipped with adequate knowledge on the area of business activity before they are allowed to take decision or pilot an affair in an organization for the purpose of mitigating loss (Retkaputri and Husodo, 2021). In putting the key words together, we have capital structure decision. Capital structure decision is one of the responsibilities of managers in an organization in ensuring that optimal outcomes are achieved (Atiyet, 2012).

According to Omabu *et al.* (2021), the decision on financing is an essential activity that must be carried out by an individual who has the necessary capability in an organization. Many organizations on the floor of Nigerian exchange (NGX) group are faced with the problem of sourcing for funds appropriately for the investment opportunities. Also, appropriate mix of capital is a challenging issue because of the prevailing risks involved. On this note, managers are often on the view to strike the balance of debt and equity funds in their capital structure in such a way that the total debt does not affect the numerous financial performance indices negatively (Jeroh, 2020). Capital structure decision is defined as the deliberate action of managers in selecting the appropriate source of financing that will bring about maximum or optimal result to the organization (Muhammad and Isah, 2017). Capital structure decision could be seen as the use of debt and equity that is expected to yield optimal result in financing total assets used for the generation of total revenue in an organization (Cyril *et al.*, 2019).

The expectation of managers in the use of any form of financing technique in an organization is for the purpose of achieving higher return in terms of profit and other financial performance indicators. On many occasions, the expectation of managers does not always come through where the capital used in financing total assets might turn out to affect various financial performance indicators negatively including shareholders' wealth. In the view of Wet and Retkaputri and Husodo (2021), the costs and the risks of utilizing certain funding techniques are usually used as a benchmarks or yardsticks for selecting the source of capital by managers in companies and this is why in some cases, debt capital of a company is greater than equity capital while in some cases, equity capital is more than debt capital. When the costs and risks of utilizing debt capital in financing total assets are high, more of equity is usually used in financing total assets or viable projects in such organization. On the other hand, when the costs and risks of using equity capital are on the high side, more of the debt capital is usually acquired to finance total assets (Olaoye and Adesina, 2022).

Also, when managers in organization observe that the costs of already acquired debt is affecting shareholders' wealth or financial performance indicators, some of the long-term debt might be converted into equity in what is regarded as debt-to-equity swap (Olaniyi *et al.*, 2022). Managers are required to monitor effectively the performance of each of the funding approach

in the overall growth of a company and to compare the expectation with the actual result achieved so as to review the composition of capital structure of the company as this might have long-run implications on the wealth of shareholders as well as the productivity of the organization in terms of financial performance indicators. In the opinion of (Kehinde, 2018), when optimal composition of capital is appropriately decided by managers, wealth of shareholders must be affected positively. For this reason, the optimality of capital structure decision is often assessed on the influence of capital structure on shareholders' value or wealth. This simply means that the yardsticks for measuring the effectiveness and efficiency of capital structure decisions taken by the managers include profit, share price and market capitalization.

2.1.2 Long-term Debts

Long-term debt is another method of financing investment or asset of a company. As the name indicates, the debt is of long-term nature that takes more than one accounting period for the principal amount to be paid to the holder (Akeem *et al.*, 2014). On the statement of financial position, long-term debt is often regarded as non-current liabilities. The proportion of long-term debt is usually expected to be higher than short-term debt in a capital structure to help in financing investment or acquire long-term asset with ease (Olaniyi *et al.*, 2022). In the view of Muhammad and Isah (2017), long-term debt is described as a kind of debt in which the holder(s) are to be paid the principal amount beyond one account period. The accumulation of long-term debt is usually considered as ideal act when there are adequate and viable investments available for managers to put in available funds and realise larger returns in terms of profit (Oyinloye *et al.*, 2020).

On the other hand, when there is no adequate and viable investment to acquire long-term debt to save an entity much financial risk, it is considered appropriate for short-term debt to be sourced or no debt because the funds to be acquired is with costs that must be paid from the returns realised from investments made with the debt capital. In a situation where long-term debt capital is sourced without any investment, it means that the interest from such capital is incurred without any value added to the financial performance indices of the company (Duru *et al.*, 2018). This simply means that long-term debt must be sourced when viability of projects is ascertained. According to Ofulue *et al.* (2022), management of long-term debt is required especially in a situation where a company is faced with different kinds of viable projects or investments. The cost of the debt is an important element to be used in deciding the amount of long-term debts to source and invest. Appropriate measurement is required to be conducted on already existing long-term debt of a company reported on statement of financial position of the company (Kehinde, 2018).

Fundamentally, there are two accounting ratios that could be used in assessing the magnitude of already accumulated long-term debt for a company and these are long-term debt to total assets and long-term debt to total equity. Long-term debt to total assets is the ratio of non-current liabilities to total assets of a company. Because of the drive for sourcing long-term debt, when the ratio of non-current liabilities to total assets is higher and greater than fifty percent (50%), it could be described that such company has had enormous and viable long-term investments that could add to the wealth of shareholders of the company on the long run (Mehta, 2014). This is because the amount of long-term debt accumulated by a company goes along with available investments evaluated. On the other hand, when the ratio of non-current liabilities to total assets is lower, it could be described that the company has lower or no

available and viable long-term investments to commit funds into and as such, there is no need to source for long-term debt.

When non-current liabilities to total assets is lower than fifty percent (50%), it is described as a situation whereby the proportion of long-term debt used in financing total assets does not expose the company to higher financial risk of servicing the debt (Akintunde *et al.*, 2021). When long-term debt to total assets is higher for a company in an accounting period, it is a possible indication that more long-term debt should not be accumulated in the capital structure as this could impact negatively on the profitability of the company. Non-current liability to total equity is a ratio that describes the proportion of long-term debt to total equity of a company (Retkaputri and Husodo, 2021). It measures the proportion of long-term debt and equity in an accounting period. When the ratio is greater than one, it is said to be a situation where long-term debt is greater than total equity in the capital structure of a company which is typically known as highly geared capital structure.

When the ratio of long-term debt to total equity is less than one, it is said to be a situation in a company where long-term debt is less than total equity and this is often described as an ideal situation especially where the aggregate of the short-term debt and the long-term debt will still not be greater than fifty percent (50%) of the total capital (Egiyi and Okafor, 2022). Effective management of long-term debt is required to be conducted by managers of companies especially those elements of non-current liabilities that are acquired with interest to be payable on agreed period. Effective management of long-term debt help an organization to realise optimal benefits from the funds acquired. Total long-term debt accumulated by a company is expected to affect shareholders' wealth positively because the essence of sourcing for the funds is to invest appropriately into high yield investment that could affect the profitability position of the entity positively (Oyinloye *et al.*, 2020).

When accumulated long-term debt in a company's capital structure affects that shareholders' wealth negatively, reassessment of the numerous components of long-term debt is required so as to separate the debt with higher interest rate or the ones that are not needed by the company to reduce this negative implication on the wealth of shareholders as well as financial performance. On this note, long-term debt is one of the variables of capital structure decisions in this study. The direction of the long-term debts accumulated will be ascertained on shareholders' wealth maximization of quoted consumer goods companies in Nigeria by establishing the influence using relevant statistical tools in this study.

2.1.3 Total Equity

Equity is a long-term financial instrument used in financing total assets of companies. Equity capital originated from selling of equity shares to the general public for subscription. It is described as funds provided by shareholders through the acquisition of shares (Ajibola *et al.*, 2018). This is why it is called shareholders fund because it is attributed to the owners of companies. Equity share capital does not carry any rate of interest and the equity shareholders normally take the residual of their companies (Akeem *et al.*, 2014). In the view of Bui and Pham (2023), the composition of capital structure is often made up of both debt and equity. This simply means that the possible combination usually made by entities is to ensure that appropriate mix of these two sources of fundings is achieved to raise the various financial performance indicators including shareholders' wealth.

From the perception of interest rate, it is often believed that equity capital is a cheaper source of financing assets of entities because it does not compel the borrower(s) to pay any interest to the holders as the holders or lenders are the real owners of the company (Kehinde, 2018). For the fact that dividends are usually distributed to equity shareholders, companies are not compelled to pay dividends in every accounting period and there is no law that could compel a quoted company to distribute dividends to equity shareholders in every accounting period (Olaoye and Adesina, 2022). For this reason, companies could part with equity capital and conduct operation with ease without considering the interest on capital to be paid to the holders. On the statement of financial position of a company, the aggregate of debt and equity is equal total assets. This simply means that when total debt is larger, total equity will be lower in the capital structure of a company.

In a situation where the capital structure of a company is made up of lower equity, it is a position whereby the managers of a company should decide on the possible action to undertake to mitigate the financial risk in the entity. In reducing the financial risk of a company accumulated from debt capital, the total debt could be reduced by converting some of the long-term debt to equity or by returning the principal amount of the long-term debt to the holders irrespective of the period of maturity (Omabu *et al.*, 2021). When total equity is higher than total debt in the capital structure of a company, such capital structure is described as lowly geared funding and as such, financial risk of the company is lower (Adenugba *et al.*, 2016). In assessing the magnitude of equity in the capital structure of a company, equity to asset ratio is usually recommended to compute the proportion of equity capital. In the view of (Egiyi and Okafor, 2022), when the proportion of debt is sixty percent (60%), it therefore means that the proportion of equity is forty percent (40%).

In this case, equity to total assets ratio is described as the ratio of equity to total assets of a company accumulated in an accounting period. The ratio reveals the proportion of equity capital used in financing the total assets of companies (Retkaputri and Husodo, 2021). When total equity in a capital structure of a company exerts positive and significant on shareholders' wealth maximization of companies, it could be said that appropriate mix of total equity is achieved by the entities and as such, the continuous use of more equity is recommended in such capital structure. Total equity is one of the variables of capital structure decisions considered in this study and it is expected that the direction of the variables on shareholders' wealth is ascertained. Thus, this study is meant to establish empirical influence of total equity on shareholders' wealth maximization of quoted consumer goods companies in Nigeria.

2.1.4 Shareholders' Wealth Maximization

Shareholders' wealth maximization cannot be mentioned in the literature of finance without looking at the goals of financial management. This simply means that before wealth of shareholders is created, there are supporting factors presented on financial statements of companies. For wealth of shareholders to be created effectively, the contribution made by the shareholders through acquisition of equity shares must be used in the running of the business activities (Awan *et al.*, 2018). As the funds of shareholders and other stakeholders are used in the running of business organization, adequate returns are expected to satisfy both the shareholders and other stakeholders who provide the funds. The financial statements prepared and presented by directors of companies normally report the indicators that could be viewed by any user if the company is doing well in all manner of transparency or not (Carini *et al.*,

2017). When several indicators suggest that a company is performing well, it could be substantiated that value of shareholders are built as the operation of the entity is continuous (Retkaputri and Husodo, 2021). As shareholders' wealth are built, it could also be said that shareholders' wealth is created.

It is no longer new that quoted companies are owned by shareholders and their interest must be maximised in the conduct of business activities (Adenugba *et al.*, 2016). When strategies are formulated in any quoted entity, the interest of the owners, who are equity shareholders, must be taken into consideration order than the interest of the directors (Adenugba *et al.*, 2016). Transparency and accountability are expected in every aspect of entity as the ultimate goal of quoted companies is to maximise the wealth of shareholders. According to Pandey (2010), the main goal of financial management in any organization is to achieve basically two things and they are profit maximization and wealth maximization. Profit maximization is the process of designing policies in organizations to achieve the highest profit in an accounting period that is capable of improving shareholders' value or wealth (Akintunde *et al.*, 2021). It is important to know that profit maximization is a supplementary factor to shareholders' wealth maximization. This simply means that without profit being maximized, the wealth of shareholders will not be maximized as well.

In this case, when shareholders' wealth maximization is mentioned, it is important for any individual to view that in such a company, profit has been maximised in different accounting period which gave rise to the shareholders wealth maximization (Awan *et al.*, 2018). Profit maximization is often achieved on a short run while wealth maximization is often achieved on a long run. Profit maximization depends on the policies formulated by managers in an organization which is always within on accounting period while shareholders wealth maximization anchor on the strategies implemented by the directors. This simply means that as profit is maximised within one accounting period, the wealth of the shareholders might not be maximised in the same accounting period but as profit is maximised continuously in different accounting periods, the effect is felt on shareholders' wealth on the long run (Chabachib *et al.*, 2020).

For this reason, shareholders' wealth maximization is described as the totality of returns earned by shareholders which exceeds their initial funds contributed through the acquisition of equity shares (Endri, 2019). The maximization of shareholders' wealth is something that takes more than one accounting period to be manifested. In other words, shareholders' wealth is escribed as the aggregate of returns earned by the shareholders from their funds contributed which exceed the weighted average cost of capital (WACC) of their company (Endri and Fathony, 2020). This simply means that for wealth of shareholders to be maximised, the returns earned by them must exceed the WACC of their firm. There are indicators that show if the wealth of shareholders is growing continuously as organization is operating. These factors are broadly classified into book value and market value attributes. The factors that present to the shareholders the level of their wealth as their entity is existing is regarded as shareholders' wealth maximization (Geoffrey *et al.*, 2017).

According to Harsha *et al.* (2018), shareholders' wealth maximization is defined as the process by which funds contributed by equity shareholders are utilised by directors in organization in formulating and implementing strategies that are capable of improving upon the wealth of the shareholders more than what they have contributed through the acquisition of

shares. In this case, shareholders' wealth maximization is associated with the level of value added from the initial capital contributed by them in acquiring shares (Harsha *et al.*, 2018). Based on this definition, it could be said that shareholders' wealth maximization is almost similar to shareholders' wealth maximization for the fact that as wealth are created continuously, the essence is to maximise the wealth while shareholders' wealth maximization is seen as the highest point of wealth achieved by Shareholders in terms of market price, capital gain and cash dividends received (Harsha *et al.*, 2018).

Shareholders' wealth maximization depends solely on the yardsticks of return on investment (ROI) which are used to monitor the level of wealth created or made by shareholders from the operation of their companies (Akuno and Kariuki, 2019). When the indicators of shareholders' wealth maximization are higher, it could be said that the wealth of shareholders in the organization have been created maximally. Shareholders' wealth maximization is associated with improvement in value of shareholders when a company realises more than the cost of capital invested. Improvement in value is also attributed to increase in profitability and other book value indicators (Ali *et al.*, 2018). As wealth of shareholders is created, various indicators are expected to be improved. The factors that could influence shareholders' wealth maximization cut across the variables of capital structure decisions, such as total debt, long-term debt, short-term debt and total equity, profitability, investments or acquisition of non-current assets and liquidity management.

When any variable computed from the presented accounting data on financial statements exerts positive and significant influence on shareholders' wealth maximization, it could be stated that such variable has been effectively managed with the policies in the organization to help in maximizing the wealth of shareholders (Ofulue *et al.*, 2022). On the other hand, when a factor exerts negative and substantial influence on shareholders' wealth maximization of an entity, it could be substantiated that the policies of managers in the organization have not affected the variable positively and in this case, proper scrutiny of the variable is required to be conducted in future accounting periods. In this study, the extent to which the variables of capital structure decisions have affected shareholders' wealth maximization of quoted consumer goods companies in Nigeria will be established where the direction of each of the variables of capital structure decisions will be ascertained.

Market capitalization is an indicator of shareholders' wealth maximization because it presents the level of wealth generated for shareholders by a company. It could also be stated that the variable presents the worth of shareholders in different accounting period. The higher the market capitalization, the better the wealth of shareholders being created and the lower the market capitalization, the lower the wealth of the shareholders being created (Cyril *et al.*, 2019). Market capitalization is computed from the equity status of a company because it is attributed to equity shareholders and potential equity shareholders normally use the indicator to decide on the company to invest their surplus funds (Geoffrey *et al.*, 2017). Market capitalization is usually computed as equity shares outstanding multiplied by the market price of shares (Retkaputri and Husodo, 2021).

It could also be calculated as share capital of a quoted company reported by statement of its financial position divided by its nominal value multiplied by the market price of shares. For the purpose of arousing the interest of potential investors to invest their surplus funds into the operation of a company, managers are usually targeting higher price of shares to derive

larger market capitalization (Jeroh, 2020). This simply means that the magnitude of market capitalization could be influenced by the variables reported on financial statements of entities in which capital structure decision is one of such variables. To raise the price of shares as well as market capitalization, the performance of an entity in terms of financing techniques and cash flow position must be attractive to both existing and potential investors.

In modern organization, managers are always on the view of assessing the variables that determine the magnitude of market capitalization and several studies have been done on this area (Atiyet, 2012; Akintunde *et al.*, 2021). In most cases, the variables have always been those attributes reported on financial statements of entities. Market capitalization has been used in several studies to represent firm value, market value, shareholders' wealth maximization and so on (Muhammad and Isah, 2017; Omabu *et al.*, 2021). On this note, market capitalization is used as a proxy of shareholders' wealth maximization in this study. This means that the influence of capital structure decisions will be established on the market capitalization of quoted consumer goods companies in Nigeria.

2.1.5 Other Factors that Affect Shareholders' Wealth Maximization

There are several attributes that affect shareholders' wealth maximization other than variables of capital structure decisions. These attributes are also presented on financial statements of companies in any accounting period (Akuno and Kariuki, 2019). These attributes include revenue, profitability and size of assets. Revenue is defined as the proceeds realised from the sales of goods or services to buyers or consumers. The size of revenue realised in an accounting period is an essential determinant of other items of financial statements usually presented (Ali *et al.*, 2018). The sole activity of managers in any company is to maximise revenue in any accounting period (Daferighe and Edet, 2019). In other words, it could be said that investment in acquisition of assets for running of business is aimed at realising abundant revenue. For this reason, total revenue realised has a tendency of encouraging or sustaining the existence of a company.

When revenue made in an accounting period is higher and costs and expenses are held constant, it is possible that other accounting attributes such as profitability and equity will be influenced positively (Daferighe and Edet, 2019). When other accounting attributes affected as a result of revenue increase in an accounting period, market value of a company will be improved as well as shareholders' wealth maximization. One of the reasons a company will want to source for more long-term debt to invest is the revenue stream realised from the business. This simply means that the level of revenue realised from the operation of a company could arouse the interest of the directors to expand the segments of a company by sourcing for more debt capital. In this case, revenue is a determinant of capital structure decisions because of the need to grow the company. The curiosity to realise more revenue determines the level of debt capital to be acquired so as to take advantage of the size of the market for the products of a company as the size of the markets determine that level of demand for company's products (Duru *et al.*, 2018).

In the view of Harsha *et al.* (2018), when the size of market is larger for the products manufactured by a company, it is possible for a company to expand its scope by acquiring more assets to generate more revenue. As the size of revenue continue to determine the curiosity to raise more funds and invest, shareholders' wealth is affected positively for the fact that the market value of shares will be improved positively. For this reason, revenue could be

considered as a variable that affects shareholders' wealth maximization of quoted consumer goods companies in Nigeria. Profitability of a company is one of the attributes that determines market value of a company or shareholders' wealth maximization. Profit is often defined as the differences between total revenue and costs or expenses in an accounting period. In accounting, there are different kinds of profit often reported on statement of profit or loss account (Harsha *et al.*, 2018). The types of profits include gross profit, operating profit, profit before tax and net profit also known as profit for the year.

When profitability realised in an accounting period is larger, the equity position and cash position will be affected positively especially when the profit realised constitute high proportion of cash (Jeroh, 2020). As profits made by a company in an accounting period affect cash flow position and equity, market value is expected to be influenced positively as well. The direction of profit on shareholders' wealth maximization is often established in an empirical study like this. Thus, profitability is one of the variables that could influence shareholders' wealth maximization of quoted consumer goods companies in Nigeria. Size of assets is another determinant of shareholders' wealth maximization. The total assets acquired and accumulated by a company has the tendency of affecting market price of shares (Kehinde, 2018). Investors are comfortable in investing in a company where the total assets are larger compared to other companies whose total assets are lower. This is because an entity with larger assets has more strength and reputation in the market to generate more revenue than a company with lower assets (Kehinde, 2018).

In the view of Matar and Eneizan (2018), a company with larger assets is capable of employing competent directors to formulate and implement sound strategies that could bring about optimal growth in the entire company. This is how essential size of assets is to shareholders' wealth maximization. In considering the total assets accumulated by a company as a determinant of market value, it is critical to understand that the composition of these assets is more important than the total assets itself. This is because a company with higher proportion of non-current assets compared to current assets is better than a company with higher rate of current assets compared to non-current assets (Talreja *et al.*, 2023). The reason is because accumulation of non-current assets than current assets could help a company to realise more revenue and profits as revenue is directly linked to the total non-current assets accumulated by an entity in an accounting period. On this note, size of assets is considered as one of the attributes that could influence shareholders' wealth maximization of quoted consumer goods companies in Nigeria.

2.2 Theoretical Review

2.2.1 Shareholder Theory

Shareholder theory was developed and made known by Friedman (1962). The theory was formulated for organization that wishes to achieve optimal growth in its operation as well as maximising output with its limited resources. The theory made it known to owners of organization who are regarded as shareholders the kind of individuals that should pilot the activities of companies for the purpose of maximising the benefit of shareholders. It requires that for any quoted entity to survive and grow its operation, the tasks in the organization must be run or piloted by individuals with adequate skills and experiences in the related business activities. This simply means that it is not any kind of person that should handle the activities of business organization rather, it must be a person that have acquired adequate skills and in

the related activities of the company. With diverse entities in an economy like Nigeria, it is often anticipated that managers and employees that could run a manufacturing entity should not just be employed in financial service company to handle the same position as activities are different in the two companies.

The aim of ensuring that managers and employees with adequate skills are employed to handle critical activities in an organization is to ensure that wealth of shareholders is maximized (Duru *et al.*, 2018). In accordance with this theory, for the fact that there are other stakeholders who have one interest or the other in the operation of an entity, the interest of the shareholders should be considered prime in the decisions taken by managers. The essence of ensuring that wealth of shareholders is maximised is for the fact that they are known to be the real owners of companies and as a matter of fact, they are expected to take the residual of their companies (Kehinde, 2018). The shareholders referred to in this theory is the equity shareholders who contribute funds for the running of business organization through the acquisition of equity shares (Mehta, 2014). In the opinion of Friedman (1962), the interest of the equity shareholders should be considered as the basis of any decision to be taken by managers in the organization for the sole aim of maximising their benefits in terms of improving their wealth or share value.

The theory explained further that there are several activities that require the action of managers to decide on what to do, how to do, when to do and the anticipated benefit to realise. All the procedures to be adopted in the conduct of any activity should be for the interest of the equity shareholders and not for the interest of the managers or the employees. This simply means that the decisions taken by managers is to ensure that the wealth of equity shareholders is maximised. Capital structure decisions are some of the decisions that must be taken by managers or directors of quoted companies to ensure that adequate wealth is realised for the equity shareholders. When debt capital is used in financing of assets in organization with interest rate on the face value as decided by managers, the ultimate goal is to achieve larger market capitalization, increase in share value as well as increase in other market performance indicators (Akintunde *et al.*, 2021).

This theory is related to the present study because in quoted consumer goods companies in Nigeria, capital structure decisions are undertaken by managers which is associated with the use of debt and equity capital to finance total assets and the primary aim of the entities is to optimise the wealth of shareholders. The key variables of capital structure decisions which are long-term debt and total equity are decided by managers who have acquired skills and experiences in the area of business solely to create more wealth for the shareholders. It is on this note that the shareholder theory is adopted in this study.

2.3 Empirical Review

Atiyet (2012) assessed the impact of financing decision on the shareholder value creation. The study was conducted to investigate the effect of financing decision on the shareholder value creation. The study was conducted to cover the period of six (6) years (1999 to 2005). Financing decision being the independent variable was measured by self-financing, equity issue, debt, growth rate, profitability, investment opportunities and size while the dependent variables (shareholders' wealth maximization) was measured by market value added and economic value added. To establish the influence of the predictors on the dependent variable, panel data were sourced from the financial statements of the entities studied. Data analysis was conducted using regression approach. The results obtained revealed that self-

financing had direct and significant influence on shareholder value creation. Also, equity issue supply had negative but significantly influence on shareholder value. Thus, financial debt positively and significantly influenced economic value added while its influence on market value added was negative.

Geoffrey *et al.* (2017) in a study to ascertain the determinants of shareholders' wealth among listed financial firms on the Nairobi securities exchange. The key variables of the study were growth (GT), dividend pay-out ratio (DPR), leverage (LEV) (independent variables) and shareholders' wealth proxied by market price per share (dependent variable). Financial companies in Nairobi securities exchange (NSX) were sampled for the study. Data were sourced from the financial statements of the companies and the data were analysed using descriptive statistics and regression technique. The results of the analyses revealed that MPS had a positive and inconsequential impact on dividend paid by the firms. It was concluded that leverage is negatively but insignificantly influenced shareholders' wealth. Thus, it was recommended government should make policies of encouraging dividend pay-out when there is a need to raise more revenue from dividend withholding tax.

Muhammad and Isah (2017) examined the determinants of shareholders' value creation of listed building materials firms in Nigeria. The study covered the period of seven (7) years from 2007 to 2014. The key variables in the study were debt, growth, return on assets, dividend and shareholders' value creation. Eight building materials entities listed on the floor of Nigerian exchange (NGX) group were sampled for the study. Data were obtained from the financial statements of the entities. The data were analysed using regression technique. The results indicated that dividend, debt and return on assets on shareholders' value while growth had negative but significant influence on shareholders' value. Thus, it was recommended that policies that will motivate firms to pay dividend to their shareholders should be design as this is capable of increasing the value of shareholders.

Duru *et al.* (2018) assessed the influence of leverage on shareholders' value of Nigeria consumer goods firms (2007-2017). The study was conducted to cover the period of eleven (11) years from 2007 to 2017. The independent variable was leverage measured by dividend per share (DPS), total debt (TD), short term debt (STD), long-term debt (LTD) and total debt-to-equity (TDE) while the dependent variable shareholders' value. The sample size of the company consisted of five (5) consumer goods companies in Nigeria. Relevant data in relation to the variables of the study were obtained from the financial statements of the companies sampled. Data analyses were conducted using descriptive statistics and ordinary least square (OLS) regression approach. The analyses revealed that TD, LTD, STD had direct and inconsequential influence on dividend paid to shareholders while TDE had a positive and insignificant influence on shareholders return of consumer goods firms in Nigeria.

Kehinde (2018) investigated shareholders' wealth maximization, capital structure and management satisfaction in Nigeria corporate organizations: The goal mix dynamisms. The dependent variable of the study was share market value (SMV) while the independent variables were total debt (TD) And total equity (TE). Data was collected from both structured questionnaire and financial statements of the studied entities. The study was conducted to cover ten (10) years (2004 to 2013). Data analysis was conducted using simple linear regression approach correlation coefficient. The results obtained from the analyses indicated that organization assets portfolio and leverage had significant influence on shareholders' wealth

measured by SMV of the firm. Thus, it was recommended that there should be a balance between investments in assets, dividend payment and leverage in business organizations. This is due to the fact that market value of the firm is capable of improving the shareholders' wealth.

Akintunde *et al.* (2021) in a study to investigate financing decision and shareholders' wealth maximisation of Nigerian listed companies. The study was conducted to cover the period from 2008 to 2017. The sampled size of the study consisted of thirty-five (35) non-financial firms listed on Nigerian exchange (NGX) group. Financing decision being the independent variable was proxied by self-financing (SEF), equity-financing (EQF) and debt-financing (DEF). Relevant data in relation to the variables of the study were collected from the financial statements of the listed manufacturing entities in Nigeria study. The extracted data were analysed using descriptive statistics regression technique. The results obtained from the data showed that financing decision had consequential influence on market value-added. The results also showed that SEF had material influence on market value-added and EQF had adverse and consequential influence on market value-added.

Ofulue *et al.* (2022) investigated financial leverage and financial performance of quoted industrial goods firms in Nigeria. The study covered the period of thirteen years (2008 to 2020) and fourteen (14) quoted industrial goods entities in Nigeria were sampled. The independent variable of the study was financial leverage proxied by debt-to-equity ratio (DER), short term debt ratio (STDR), long-term debt ratio (LTDR) and the dependent variable was financial performance measured by cash value added (CVA). Panel data were sourced from the financial statements of the entities and the data were analysed using Pearson correlation and panel least square (PLS) regression technique. The results obtained showed that DER and LTDR had adverse and consequential influence on CVA while STDR had direct and consequential influence on CVA.

Olaniyi *et al.* (2022) investigated capital structure and firm performance of listed manufacturing firms in Nigeria stock exchange. The period of the study was from 2005 to 2020. The dependent variable in the study was firm performance measured by return on assets (ROA) and return on equity (ROE) while the independent variable was capital structure proxied by total debt (TOD), equity (EQU) and total assets (TOA). Secondary data were extracted from the financial statements and annual reports of the selected entities. The data obtained for the study were analysed using both descriptive and inferential statistics. From the results obtained from the analyses, it was discovered that ROE had a material influence on the performance of Nigerian manufacturing companies, TOD had an insignificant influence on the performance of stock price.

Olaoye and Adesina (2022) assessed capital structure and financial performance of manufacturing companies in Nigeria. The study covered the period of twelve (12) years from 2009 to 2020. The proxies for capital structure being the independent variable in the study were total debt to total assets (TDTA), short-term debt to total assets (SDTA) and long-term debt to total assets (LDTA) while the dependent variable was financial performance proxied by debt-to-equity ratio (DER), return on assets (ROA), return on equity (ROE), net profit margin (NPM). Relevant data in relation to the variables in the study were extracted from the financial statements of the sampled manufacturing firms in Nigeria. The obtained data were analysed using descriptive and inferential statistics. The results obtained from the analyses were as follows: first, DER had negative and immaterial ROA of the selected firms. Second, DER had

a positive and material influence on ROE and positive and insignificant influence on NPM. Third, TDTA had a direct but immaterial influence on all the financial performance proxies. Last, SDTA and LDTA adverse and inconsequential influence on all the dependent variables.

Bui and Pham (2023) conducted a study on effect of capital structure on firm value: A study of companies listed on the Vietnamese stock market. The study aimed to investigate the influence of capital structure on firm value of listed companies in Vietnamese. The study was conducted to cover the period from 2012 to 2022 and the study had about eight thousand, four hundred and fifty-nine (8459) observations. The dependent variable of the study was firm value measured by Tobin's Q, return on assets (ROA) and return on equity (ROE) while the independent variable of the study was capital structure proxied by long-term loan (LTL), short-term loan (STL) and debt ratio (DR). Data for the study were obtained from the financial statements of seven hundred and sixty-nine (769) companies listed in Vietnamese stock market. The data were analysed using ordinary least squares (OLS), fixed effects model (FEM), random effects model (REM) and generalized least squares (GLS). The results of the analysis showed that DR exerted substantial influence on firm value. LTL exerted positive and inconsequential influence on firm value. Also, it was found that STL and DR exerted negative influence on firm value, ROE and ROA.

Talreja *et al.* (2023) examined the effects of capital structure (CS) and growth of firm (GOF) on firm's value (FV): A mediation analysis. The study was conducted to investigate the influence of capital structure and firm growth on firm value. The study was conducted to cover the period from 2015 to 2019 and thirty-six (36) manufacturing firms listed in Pakistan stock exchange (PSX) were sampled for the study. The key variables of study were Growth rate (GR) (mediating variable) was one of the independent variables used, firm value measured by the model of Tobin's Q (dependent variable), capital structure (CS) proxied by long-term debt to total asset (LTDTA), short-term debt to total assets (STDTA), retained earnings (RE) and debt ratio (DR). Real gross domestic products rate (RGDP) and real rate of interest (RRI) were the control variables used in the study. To establish the influence of the dependent variable on the independent variable, data were extracted from the annual reports of the sampled manufacturing entities in PSX, and the data were analysed using descriptive statistics, correlation analysis and multiple regression analysis. From the analysis it was found that CS and GOF exerted positive and consequential influence on firm value.

3. METHODOLOGY

The *ex-post facto* research design technique was employed in this study because the study required secondary data obtainable from financial statements of the sampled quoted consumer goods companies in Nigeria in accordance with the view of Geoffrey *et al.* (2017), an empirical study that requires secondary data was one whose relevant data have been published or presented in recognized bulletins and which a researcher could retrieved. This study was an example of such study whose data were obtained from audited financial statements of the entities to study. Thus, the adoption of this research design enabled the researcher to examine the influence of capital structure decisions and shareholders' wealth maximization of quoted consumer goods companies in Nigeria.

The population of the study was made up of the aggregate quoted consumer goods companies in Nigeria whose stocks were traded on the stock market of Nigeria regarded as Nigerian Exchange (NGX) Group. The quoted consumer goods companies in Nigeria as at 31st

December, 2022 were twenty-one (21) considered by the researchers in this study as the population. For this reason, the population of this study was twenty-one (21) quoted consumer goods companies in Nigeria.

The sample size of this study was drawn from the aggregate population of twenty-one (21) quoted consumer goods companies in Nigeria on the floor of NGX. Fifteen (15) quoted consumer goods companies were drawn and sampled for the study from the sub-sector of manufacturing entities in Nigeria considered in the study. The quoted consumer goods companies used as the sample size were those with available data for the relevant variables of the study and for the period chosen as well as the researcher being able to retrieve the annual reports and financial statements.

The purposive sampling technique was used in the study. This enabled the researcher to draw an appropriate sample size for the study by considering an appropriate technique of selection (Endri, 2019). In drawing the sample size, only those companies operating as single entities as well as the possibility of the researcher being able to retrieve the financial statements for the extraction of relevant data in accordance with the respective variables of this study.

The data for the study were collected from the financial statements of the quoted consumer goods companies in Nigeria sampled for this study. The data collected from the annual reports and financial statements of quoted consumer goods companies are the ones that are associated with the key variables of capital structure decisions and market capitalization. The type of data used are panel data obtainable from the year 2013 to 2022. The method used in data collection process is secondary because the study depends on historical data of the nature and the data are available on financial statements of the sampled companies already prepared and published by management of entities (Endri, 2019).

The dependent variable of this study was shareholders' wealth maximization (SWM) measured by market capitalization (MCA), and the independent variable was capital structure decisions decomposed into Long-Term Debts (LTD) and Total Equity (TE). From the variable description, the justification for the adoption of the linear regression technique in establishing the influence of independent variables on dependent variable was clearly observed. These are presented on Table 3.1:

Table 3.1: Variable Description

S/N	Variable	Abbr.	Measurement	Apriori Expectation
1.	Market Capitalization	MCA	Market capitalization is measured as market price per share multiplied by equity shares outstanding (Harsha <i>et al.</i> , 2018; Krishna and Kumar, 2018).	
2.	Long-Term Debts	LTD	Long-term debt is measured as the aggregate of non-current liabilities (Duru <i>et al.</i> 2018; Egnyi and Okafor, 2022).	Positive
3.	Total Equity	TE	Total equity is the sum of share capital, share premium and retained earnings (Retkaputri and Husodo, 2021; Chabachib <i>et al.</i> , 2020).	Positive
4.	Revenue (Control Variable)	REV	Revenue is the aggregate sales made in an accounting period (Carini <i>et al.</i> , 2017; Awan <i>et al.</i> , 2018).	Positive

Source: Researcher's Compilation (2024)

The key variables of this study as stated on the Table 3.1 regarded as variable description were broadly classified into two and these are shareholders' wealth maximization and capital structure decisions. Shareholders' Wealth Maximization (SWM) will be measured by Market Capitalization (MCA) while capital structure Decision was divided into sub-variables as stated above. Revenue (REV) was chosen as a control variable of this study. With the nature of data collected and the objectives of the study suggested the application of panel linear regression technique as suitable tool adopted. Based on the gap in the literature and in line with previous studies conducted in the related area of interest, the adapted empirical models were stated appropriately in line with the variables in each of the objectives of the study:

$$MCA_{ij} = \beta_0 + \beta_1 LTD_{ij} + \beta_2 REV_{ij} + e_t \quad \text{Equation (3.1)}$$

$$MCA_{ij} = \beta_0 + \beta_1 TE_{ij} + \beta_2 REV_{ij} + e_t \quad \text{Equation (3.2)}$$

The data for this study was analysed using both descriptive and inferential analytical tools. The descriptive statistics was used to examine the nature of the data relating to both capital structure decisions and shareholders' wealth maximization while the inferential statistics was used to establish the influence of variables of capital structure decisions on shareholders' wealth maximization measured by market capitalization. In this regard, mean, standard deviation, minimum and maximum were the tools to be used to describe the nature of the relevant data collected. The inferential statistics is the multiple linear regression used in the study based on the models formulated. In line with the nature of the data collected from the sampled entities of quoted consumer goods companies in Nigeria, panel linear regression will be adopted. Analyses were done with the aid of E-View-10.

The various statistical tools of the regression used were R^2 , Adjusted R^2 , t-Statistic (t-Stat), variance inflation factor (VIF), Durbin-Watson (DW) Statistic, P-value and F-ratio. P-value is a margin to be used to either accept or reject hypothesis, VIF are to be used in the study in testing for the existence of multi-collinearity in the multiple linear regression model while the DW statistic is to be used in testing for the presence of first order autocorrelation. All tests are to be conducted based on 5% level of significance.

4. DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Data Analysis

4.1.1 Descriptive Statistics

The descriptive statistics for each of the variables of MCA, LTD, TE and REV were computed and presented on Table 4.1:

Table 4.1: Descriptive Statistics

Statistics	MCA	LTD	TE	REV
Mean	1.74E+08	17833941	46913970	1.12E+08
Median	56585907	5694313.	23458807	58373845
Maximum	1.23E+09	1.66E+08	1.81E+08	8.33E+08
Minimum	766260.0	62287.00	4608386.	297666.0
Std. Dev.	2.90E+08	29069547	52681991	1.37E+08
Skewness	2.384534	2.965384	1.192692	1.989893
Kurtosis	7.810799	13.19698	3.254949	8.006544
Jarque-Bera	286.7988	869.7020	35.96908	255.6511
Probability	0.000000	0.000000	0.000000	0.000000
Sum	2.61E+10	2.68E+09	7.04E+09	1.69E+10
Sum Sq. Dev.	1.25E+19	1.26E+17	4.14E+17	2.81E+18
Observations	150	150	150	150

Source: Researcher's Computation (2024)

From Table 4.1, Shareholders' Wealth Maximization (MCA) had ₦174,000,000, ₦56,585,907, ₦1,230,000,000, ₦766,260.0 and ₦290,000,000 respectively for mean, median, maximum, minimum and standard deviation. The mean indicated that the average of MCA was ₦174,000,000. The median showed that the middle of MCA was ₦56,585,907. The standard deviation of ₦290,000,000 showed the level of deviation from mean in relation to MCA of quoted consumer goods companies in Nigeria was high. Skewness of 2.3845 presented that the data for MCA were positively skewed. Kurtosis value of 7.81079 showed that the data collected for MCA were above normal curve. The Jarque-Bera statistical value of 286.799 ($p < 0.05$) showed that the data for MCA had no attributes of normality.

From Table 4.1, Long-Term Debt (LTD) had ₦178,000,000, ₦5,694,313, ₦16,600,000, ₦62,287.00 and ₦29,069,547 respectively for mean, median, maximum, minimum and standard deviation. The mean indicated that the average of LTD was ₦178,000,000. The median showed that the middle of LTD was ₦5,694,313. The standard deviation of ₦29,069,547 showed the level of deviation from mean in relation to LTD of quoted consumer goods companies in Nigeria which was high. Skewness of 2.96538 presented that the data for LTD were positively skewed. Kurtosis value of 13.1969 showed that the data collected for LTD

were above normal curve. The Jarque-Bera statistical value of 869.7020 ($p < 0.05$) showed that the data for LTD had no attributes of normality.

From Table 4.1, Total Equity (TE) had ₦46,913,970, ₦23,458,807, ₦18,100,000, ₦4,608,386 and ₦52,681,991 respectively for mean, median, maximum, minimum and standard deviation. The mean indicated that the average of TE was ₦46,913,970. The median showed that the middle of TE was ₦23,458,807. The standard deviation of ₦52,681,991 showed the level of deviation from mean in relation to TE of the quoted consumer goods companies in Nigeria which was high. Skewness of 1.19269 showed vividly that the data for TE were positively skewed. Kurtosis value of 3.25495 showed that the data obtained for TE were above normal curve. The Jarque-Bera statistical value of 35.9691 ($p < 0.05$) showed that the data for TE had no attributes of normality.

From Table 4.1, Revenue (REV) had ₦11,200,000, ₦58,373,845, ₦83,300,000, ₦297,666.0 and ₦13,700,000, respectively for mean, median, maximum, minimum and standard deviation. The mean indicated that the average of REV was ₦11,200,000. The median showed that the middle of REV was ₦58,373,845. The standard deviation of ₦13,700,000 showed the level of deviation from mean in relation to REV of the quoted consumer goods companies in Nigeria which was high. Skewness of 1.98989 presented clearly that the data for REV were positively skewed. Kurtosis value of 8.00654 showed that the data collected for REV were above normal curve. The Jarque-Bera statistical value of 255.651 ($p < 0.05$) showed that the data for REV had no attributes of normality.

4.1.2 Check of Multi-Collinearity

The variance inflation factor (VIF) was computed and presented on Table 4.2:

Table 4.2: Variance Inflation Factor (VIF)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	7.53E+14	1.856394	NA
LTD	1.120312	3.198214	2.319398
TE	0.479334	5.861277	3.259280
REV	0.114135	3.822819	3.269495

Source: Researcher's Computation (2024)

From Table 4.2, it was observed that the centered VIF for all the predictors was less than ten (10) regarded as the benchmark for deciding the existence of multi-collinearity statistically. From the computed results, it was stated by the researchers of this study that multi-collinearity was not present in the predictors (independent variables) of this study.

4.1.3 Correlation Matrix

Simple correlation for all the variables was computed and presented on Table 4.3:

Table 4.3: Correlation Matrix

Correlation	LTD	MCA	REV	TE
LTD	1.000000			
MCA	0.449766	1.000000		
REV	0.372547	0.514531	1.000000	
TE	0.506212	0.366320	0.422542	1.000000
Probability	LTD	MCA	REV	TE
LTD	-----			
MCA	0.0000	-----		
REV	0.0000	0.0000	-----	
TE	0.0000	0.0000	0.0000	-----
Observations	LTD	MCA	REV	TE
LTD	150			
MCA	150	150		
REV	150	150	150	
TE	150	150	150	150

Source: Researcher's Computation (2024)

From the correlation analysis presented on Table 4.3, it was observed that there was no indication of multicollinearity that existed in the pair of independent variables. This was because the correlation coefficient between one independent variable and the other was less than seventy percent (70%). The relationship between LTD and MCA was 44.98% (p-value<0.05) the relationship between TE and MCA was 36.63% (p-value<0.05) and the relationship between REV and MCA was 51.45% (p-value<0.05).

4.1.4 Unit Root Test

The unit root test was conducted on all the variables of this study which were MCA, LTD, TE and REV using second difference. The results of the analysis were presented on Table 4.4:

Table 4.4: Stationarity Test

Method	Statistic	Prob.**
ADF - Fisher Chi-square	332.062	0.0000
ADF - Choi Z-stat	-17.3129	0.0000

** Probabilities for Fisher tests are computed using an asymptotic Chi square distribution. All other tests assume asymptotic normality.

Intermediate ADF test results D(UNTITLED,2)

Series	Prob.	Lag	Max Lag	Obs
D(LTD,2)	0.0000	8	13	139
D(MCA,2)	0.0000	4	13	143
D(REV,2)	0.0000	3	13	144
D(TE,2)	0.0000	3	13	144

Source: Researcher's Computation (2024)

From Table 4.4, it was observed that all the variables in this study had no problem of instability because of the fact that the p-value for the statistics computed was significant which suggested that the entire data used for the study were stable. Thus, it showed that the influence of capital structure decisions on shareholders' wealth maximization of consumer goods quoted companies in Nigeria was not subjected to variability in a shorter period.

4.1.5 Model Estimation and Test of Hypotheses

4.1.5.1 Hypothesis One

The pooled linear panel regression results in relation to shareholders' wealth maximization (MCA) and Long-Term Debt (LTD) were presented on Table 4.5:

Table 4.5: Pooled Linear Panel Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	48222672	26154798	1.843741	0.0672
LTD	1.889530	0.940670	2.008708	0.0264
REV	0.818008	0.199196	4.106551	0.0001
R-squared	0.284385			
Adjusted R-squared	0.274648			
F-statistic	29.20882	Durbin-Watson stat		1.922797
Prob(F-statistic)	0.000000			

Dependent Variable: MCA

Source: Researcher's Computation (2024)

From Table 4.5, R^2 showed that 28.44% variation in Market Capitalization (MCA) during the period of this study was caused by the influence of Long-Term Debt (LTD) and Revenue (REV). Adjusted R^2 showed that exact 27.46% variation in MCA during the period of this study was caused by the influence of LTD. From the computed value of F-statistics of 29.2088 (prob.-value<0.05), it was discovered that both R^2 and Adjusted R^2 were significant. The Durbin-Watson (DW) statistic of 1.92279 showed that there was no first order autocorrelation in the pooled linear panel regression model. LTD and REV exerted positive and significant influence on MCA (p-value<0.05) of quoted consumer goods companies in Nigeria.

The result of the analyses for LTD and REV were in compliance with the *a priori* expectation. The constant (β_0) of ₦48,222,672 showed the level of MCA during the period of this study as LTD and REV were held constant and insignificant (p-value>0.05). The null hypothesis, which states that total equity does not significantly influence market capitalization of quoted consumer goods companies in Nigeria in Nigeria, was rejected and the alternative hypothesis, which states that total equity significantly influence market capitalization of quoted consumer goods companies in Nigeria, was accepted.

4.1.5.2 Hypothesis Two

The pooled linear panel regression results in relation to shareholders' wealth maximization (MCA) and Total Equity (TE) were presented on Table 4.6:

Table 4.6: Pooled Linear Panel Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	62776264	27402047	2.290933	0.0234
TE	0.968634	0.419975	2.306409	0.0064
REV	1.392875	0.260952	5.337675	0.0000
R-squared	0.274754			
Adjusted R-squared	0.264887			
F-statistic	27.84490	Durbin-Watson stat		1.912646
Prob(F-statistic)	0.000000			

Dependent Variable: MCA

Source: Researcher's Computation (2024)

From Table 4.6, R^2 showed that 27.48% variation in Market Capitalization (MCA) during the period of this study was caused by the influence of Total Equity (TE) and Revenue (REV). Adjusted R^2 showed that exact 26.49% variation in MCA during the period of this study was caused by the influence of TE. From the computed value of F-statistics of 27.84490 (prob.-value<0.05), it was discovered that both R^2 and Adjusted R^2 were significant. The Durbin-Watson (DW) statistic of 1.91265 showed that there was no first order autocorrelation in the pooled linear panel regression model. TE and REV exerted positive and significant influence on MCA (p-value<0.05) of quoted consumer goods companies in Nigeria.

The result of the analyses for TE and REV were in compliance with the *apriori* expectation. The constant (β_0) of ₦62,776,264 showed the level of MCA during the period of this study as TE and REV were held constant and significant (p-value<0.05). The null hypothesis, which states that total equity does not significantly influence market capitalization of quoted consumer goods companies in Nigeria in Nigeria, was rejected and the alternative hypothesis, which states that total equity significantly influence market capitalization of quoted consumer goods companies in Nigeria, was accepted.

4.2 Discussion of the Findings

From Table 4.5, it was observed that Long-Term Debt (LTD) exerted positive and significant influence on Shareholders' Wealth Maximization (MCA) of quoted consumer goods companies in Nigeria. The result of the analyses for LTD was in compliance with the *apriori* expectation. Long-term debts are kinds of debts that are expected to take more than one accounting period for its repayment of principal. When debt capital is sourced by managers of quoted companies, it is expected that the investments available are of long-term in nature for the company to break even or achieve its initial capital outlay. When appropriate amount of long-term debt is sourced and invested with adequate returns that supersede the costs of the funds, the long-term debt capital sourced might contribute positively and significantly to shareholders' wealth maximization.

This is because the returns derived from the investments usually improve the profitability of the companies which help to augment the wealth of the shareholders. This is the case in this study where long-term debt exerted positive and significant influence on market

capitalization which is the variable of shareholders' wealth maximization. In other words, it could be said that the long-term debt capital accumulated by the managers of quoted consumer goods companies in Nigeria had been used appropriately on investments that yield optimal returns to the companies which supersede the costs of the debt. The result of this study was in line with the study of Kehinde (2018) who investigated shareholders' wealth maximization, capital structure and management satisfaction in Nigeria corporate organizations: the goal mix dynamisms and discovered that leverage exerted positive and significant influence on shareholders' wealth. The result of this study was not in line with Akintunde *et al.* (2021) who undertook a study to investigate financing decision and shareholders' wealth maximisation of Nigerian listed companies.

From Table 4.6, it was observed that Total Equity (TE) exerted positive and significant influence on Shareholders' Wealth Maximization (MCA) of quoted consumer goods companies in Nigeria. The result of the analyses for TE was in compliance with the *a priori* expectation. Equity capital is a cheaper source of financing especially when retained earnings are utilised. This is because the costs involved are less compared to debt capital and at the same time, the providers of such funds are regarded as owners. When equity capital is properly utilised in an entity, wealth of the shareholders could be created abundantly especially when it is less expensive. This is why in this study total equity exerted a positive and significant influence on shareholders' wealth maximization measured by market capitalization. The result of this study was in line with the study of Kehinde (2018) who investigated shareholders' wealth maximization, capital structure and management satisfaction in Nigeria corporate organizations: The goal mix dynamisms and found that total equity exerted positive and significant influence on shareholders' wealth.

5. CONCLUSION AND RECOMMENDATIONS

The influence of capital structure decisions on shareholders' wealth maximization of quoted consumer goods companies in Nigeria was established. Panel regression approach (pooled linear panel approach) was employed in the study. From the results of empirical analyses, it was concluded by the researchers that capital structure decisions had significant influence on shareholders' wealth maximization of quoted consumer goods companies in Nigeria. The outcomes of the individual variables of capital structure decisions revealed that Long-Term Debt (LTD) and Total Equity (TE) exerted positive and significant influence on shareholders' wealth maximization (MCA) of quoted consumer goods companies in Nigeria.

In accordance with the empirical findings of this study, the following recommendations were suggested:

- i. Long-term debt capital should be sourced more and invested appropriately on viable investment opportunities with higher maturity period more than the duration of the long-term debt for the purpose of improving upon shareholders' wealth maximization.
- ii. The managers of quoted consumer goods companies in Nigeria should continue to maintain high retention ratio for the purpose of raising total equity in different accounting periods and use same to maximize the wealth of shareholders.

- iii. In sourcing for more debt capital, the components of long-term debt should be more than short-term debt to bring about financial match which could help the companies to achieve improvement in shareholders' wealth.
- iv. Equity capital should be used more to finance the operations of quoted consumer goods companies in Nigeria other than debt capital other than debt capital.

REFERENCES

- Adenugba, A. A., Ige, A. A. and Kesinro, O. R. (2016). Financial leverage and firms' value: a study of selected firms in Nigeria. *European Journal of Research and Reflection in Management Sciences*, 4(1): 14-22.
- Ajibola, A., Wisdom, O., and Qudus, O. L. (2018). Capital structure and financial performance of listed manufacturing firms in Nigeria. *Journal of Research in International Business and Management*, 5(1): 81-89.
- Akeem, L. B., Edwin, T. K., Kiyanjui, M. W., and Kayode, A. M. (2014). Effects of capital structure on firm's performance: Empirical study of manufacturing companies in Nigeria. *Journal of Finance and Investment Analysis*, 3(4): 39-57.
- Akintunde, A., Nwabuisi, N. P., and Oyeyemi, O. G. (2021). Financing decision and shareholders' wealth maximisation of Nigeria listed companies. *Business and Finance Journal*, 12(1): 18-35.
- Akuno, M. O., and Kariuki, M. I. (2019). Effect of firm characteristics on the financial performance of energy and petroleum firms listed in the Nairobi Securities Exchange, Kenya. *Journal of Economics and Finance*, 10(6): 44-52.
- Ali, M., Mahmoud, A., Fadi, A., and Mohammad, O. (2018). Factors affecting the corporate performance: Panel data analysis for listed firms in Jordan. *Academy of Accounting and Financial Studies Journal*, 22(6): 1-10.
- Atiyet, B. A. (2012). The impact of financing decision on the shareholder value creation. *Journal of Business Studies Quarterly*, 4(1): 44-63.
- Awan, A. G., Lodhi, M. U., and Hussain, D. (2018). Determinants of firm value: A case study of chemical industries of Pakistan. *Global Journal of Management, Social Sciences and Humanities*, 4(1): 46-61.
- Bui, T. N., X. H., and Pham, K. T. (2023). The effect of capital structure on firm value: A study of companies listed on the Vietnamese stock market. *International Journal of Financial Studies*, 11: 1-20.
- Carini, C., Comincioli, N., Poddi, L., and Vergalli, S. (2017). Measure the performance with the market value added: Evidence from CSR companies. *Sustainability*, 9(21): 1-19.
- Chabachib, M., Hersugondo, H., Ardiana, E., and Pamungkas, I. D. (2020). Analysis of company characteristics of firm values: Profitability as intervening variables. *International Journal of Financial Research*, 11(1): 60-70.
- Cyril, U. M., Echobu, O. J., and Chukwuemeka, M. C. (2019). Evaluation of the effect of financial factors on shareholders' value of listed pharmaceutical firms in Nigeria. *International Journal of Finance and Banking Research*, 5(5): 114-125.
- Daferighe, E. E., and Edet, J. P. (2019). Empirical investigation of determinants of financial performance of the listed oil and gas companies in Nigeria. *East African Scholars Journal of Economics, Business and Management*, 2(11): 16-34.
- Duru, A. N., Okpe, I. I., and Uche, O. C. (2018). Leverage and shareholders' value of Nigeria consumer goods firms (2007-2017). *Journal of Scientific Research*, 4(1): 9-33.

- Egiyi, M. A., and Okafor, V. I. (2022). An empirical examination of the effect of shareholder value on firm performance in Nigeria. *Global Journal of Auditing and Finance*, 4(1): 23-33.
- Endri, E. (2019). Determinant of firm's value: Evidence of manufacturing sectors listed in Indonesia Shariah Stock Index. *International Journal of Recent Technology and Engineering*, 8(3): 3995-3999.
- Endri, E., and Fathony, M., (2020). Determinants of firm's value: Evidence from financial industry. *Management Science Letters*, 10: 111-120.
- Friedman, M. (1962). *Capitalism and freedom*: University of Chicago Press, Chicago.
- Geoffrey, I., Mbithi, M., and Musiega, M. (2017). Determinants of Share holders' wealth among listed financial firms on the Nairobi securities exchange. *International Journal of Management and Commerce Innovations*, 4(2): 374-388.
- Harsha, V., Nikitha, M., Madhura, S., and Girish, S. (2018). Financial determinants of firm's value: Evidence from energy sector firms. *International Journal of Research and Analytical Reviews*, 5(4): 273-277.
- Jeroh, E. (2020). Corporate financial attributes and the value of listed financial service firms: The Nigerian evidence. *Academy of Accounting and Financial Studies Journal*, 24(2): 1-13.
- Kehinde, J. S. (2018). Shareholders' wealth maximization, capital structure and management satisfaction in Nigeria corporate organizations: The goal mix dynamisms. *Global Review of Accounting and Finance*, 9(1): 1-14.
- Krishna, K. H., and Kumar, P. (2018). Financial leverage and firm performance-An empirical study of selected public-sector undertakings listed at Bombay Stock Exchange (BSE), India. *International Journal of Business and Management Invention*, 7(12): 30-34.
- Matar, A., and Eneizan, B. M. (2018). Determinants of financial performance in the industrial firms: Evidence from Jordan. *Asian Journal of Agricultural Extension, Economics and Sociology*, 22(1): 1-10.
- Mehta, A. M (2014). Myth vs. Fact; influence of financial leverage on shareholder's return: An empirical study of sugar sector of Pakistan from year 2005-2010. *Journal of Finance and Bank Management*, 2(2): 105-114.
- Modigliani, F. and Miller, M. H. (1963). Corporation income taxes and the cost of capital; a correction. *The American Economic Review*, 53(3): 433-443.
- Muhammad, L. and Isah, A. I. (2017). Determinants of shareholders' value creation of listed building materials firms in Nigeria. *ATBU, Journal of Science, Technology and Education*, 5(2): 119-130.
- Ofulue, I., Ezeagba, C. E., Amahalu, N. N., and Obi, J. C. (2022). Financial leverage and financial performance of quoted industrial goods firms in Nigeria. *International Journal of Management Studies and Social Science Research*, 4(1): 172-181.
- Olaniyi, R. B., Abiloro, K. P., and Ilaniyan, N. O. (2022). Capital structure and firm performance of listed manufacturing firms in Nigeria stock exchange. *Economic Series*, 22(2): 149-167.
- Olaoye, C. O., and Adesina, O. D. (2022). Capital structure and financial performance of manufacturing companies in Nigeria. *Journal of Applied and Theoretical Social Science*, 4(4): 471-491.
- Omabu, S. E., Okoye, P. V. C., and Amahalu, N. N. (2021). Financial leverage and shareholders wealth creation of quoted industrial goods firms in Nigeria. *International Journal of Trend in Scientific Research and Development*, 5(6): 672-682.

- Oyinloye, L., Olaniyan, T. O., and Agbadua, B. O. (2020). Effect of financial leverage on shareholder's returns in a dynamic business environment. *Corporate Governance and Organizational Behaviour Review*, 4(2): 40-49.
- Pandey, I. M. (2010). *Financial management, tenth edition*. New Delhi: Vikas Publishing House Pvt Ltd, 1046p.
- Retkaputri, D., and Husodo, Z. A. (2021). The impact of firm leverage on shareholders' wealth in Southeast Asia. *Advances in Economics, Business and Management Research*, 177(1): 232-243.
- Talreja, K., Memon, M. F., Jatoi, W. A., and Bhutto, S. A. (2023). The effects of capital structure (CS) and growth of firm (GOF) on firm's value (FV): A mediation analysis. *Multicultural Education*, 9(1): 35-41.