EFFECT OF FIRM SIZE ON RETAINED EARNINGS OF CONSUMER GOODS FIRM IN NIGERIA (2015 -2024)

By

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ABSTRACT

The study examined 'the Effect Of Firm Size On Retained Earnings Of Consumer Goods manufacturing firm, Cadbury Nigerian Plc (2015 -2024)' Total assets, total sales, total number of employees and profit after tax were considered as independent variables while retained earnings was use as the dependent variables to proxy all the independent variables. Conceptual, theoretical and empirical review were used in reviewing the related literature. The study adopted ex- post facto research design. The data were gotten from the audited financial report of Cadbury Nigeria plc. The collected data were analyzed using panel data regression analysis and t-statistics. The study revealed that total assets (TA), total sales (TS), total number of employees (TNN) and profit after tax for the years have a significant effects on the retained earnings (RE) of Cadbury Nigeria Plc. Based on the result of the data, panel data analysis and the findings, the study concludes that total assets, total sales and profit after tax of the consumer goods manufacturing firms positively and significantly affect retained earnings of the firms. the study recommends that Cadbury Nigeria Plc increase their total assets, total sales, total number of employees and Profit after tax in order to increase the retained earnings of the firm.

Keywords: *Total Assets, Total Sales,Total number of employees, Retained Earnings*

INTRODUCTION

Background of the Study

Firm size is one of the decisive factors in the achievement of efficiency in operations of a business enterprise. Large-scale production is considered to bring the most economic results by the way of lower costs and higher returns. Therefore, there has been a tendency towards increase in the size of firms in order to engage in mass production and bulk sales in diversified markets. The generally accepted norm in modern economic analysis is that as the firm grows in size, the cost per unit of the firm would be declining. As a result of this, all firms tend to expand their scale of operations in order to spread their costs over larger output, thereby bring down the cost of production per unit (Sindhuja, 2017).

Firm size has other benefits apart from reduction in cost per unit. Bayyurt (2007), for instance, notesthat big firms have more competitive power when compared to small firms in fields requiring competition. Again, since they have a bigger market share, big firms have the opportunity to make more profit. In addition to this, big firms are able to seize the opportunity to work in the fields which require high capital rates since they have larger resources, and this situation provides them the opportunity to work in more profitable fields with little competition.

Notwithstanding the various benefits of large firms over small firms, some empirical studies suggest that continuous increase in the size of a firm could lead to diminishing instead of increasing return for the firms. In support of this assertion, Sindhuja (2017) opines that there is a limit to which firm can grow without adverse effect on its profitability. The study states that growth beyond that limit may give decreasing return per unit of investment due to managerial and financial strains. Thus, the problem of size is intimately connected with the laws of increasing and decreasing returns and the principles of division of labour. Pervan and Visic (2012) also suggest that large firms come under the control of managers pursuing self-interested goals and, therefore, profit maximization as the firm's objective function may be replaced by managerial utility maximization function. Also, Ross and Mitmick (1972) in their agency theory insist that firm growth most times benefits managers rather than stockholders. According to the theory, managers pursue growth because growth benefits them personally. It guarantees

employment and salary increases for managers due to the greater responsibilities of managing a larger firm.

Sindhuja (2017) identifies some measures of firm size as, the capital invested in the firm, value of product, number of employees of the firm, power used in production, amount of raw material used and the volume of out-put produced. Becker-Blease, Kaen, Eteban& Bauman (2010), Serrasqueiro and Nunes (2008) in their study used, total assets, total sales and number of employees as measures of firm size. This study will, however, adopt total assets, total sales, number of employees and profit for the year as proxies forfirm size and the objective is to determine their effect on retained earnings of consumer goods sector of the Nigeria manufacturing industry.

Dinayak (2014) describes retained earnings as that part of trading profits which is not distributed in the form of dividends but is rather retained in the business by the company directors for future expansion of the firm. Chasan, (2012)also states that retained earnings are retained capital, which is the portion of net income that management keeps to finance future growth and to pay down company debt. Merritt (2014) explains that retained earnings represent value "locked up" in the company which do not represent cash on hand but could be theoretically released to the owners if the company was liquidated. Mohamed (2010) opines that the primary purpose of retained earnings is for the company to reinvest the earnings into business opportunities that an organization has, describing it as an important internal financing which an organization obtains at least possible cost.

1.2 Statement of Problem

The size of a firm is one of the important factors influencing firm's performance. There are many indicators of firm size. The most popular firm size indicators are total assets, total sales, number of employees of the firm, amount of profit and volume of out-put produced. Lately, indicators like value of product produced, power used in production and amount of raw material consumed have been added as possible measures of firm size.

Large firms enjoy some benefits which small firms are unable to enjoy. For instance, as the size of a firm increases, the cost per unit of production reduces, thus firms size brings down cost of

production per unit. Big firms also have more competitive edge over small firms. Big firms have bigger market share, more investment opportunity and more potential to increase profitability. Big firms are able to seize the opportunity to businesses which require high capital since they have larger resources and this leads to economies of large scale. The competitive edge, large market share, investment opportunities, reduction in production cost per unit and other economies of large scale place large firms in a pedestrian to increase profitability, pay dividends and increase their retained earnings.

Other empirical studies, however, argue that firm size has no relationship with retain earnings. According to this school of thought, increase in the size of a firm leads to rigidity in operation, mismanagement of resources as managers capitalize on the size of the firms to pursue their personal goals instead of organizational objectives. These will lead to low profitability, losses and reduction in earnings retention. This implies that there is no consensus among scholars on the effect of firm size on retained earnings. This development instigated the current study to contribute to the ongoing studies by evaluating the effect of firm size on retained earnings of consumer goods manufacturing firms.

Objectives of the Study

The main objective of this study is to evaluate the effect of firm size on retained earnings of consumer goods manufacturing firms. The specific objectives of the study are to:

i. Assess the effect of total assets on retained earnings of consumer goods manufacturing firm.
ii. Determine the effect of total sales on retained earnings of consumer goods manufacturing firm.
iii. Appraise the effect of total number of employees on retained earnings of consumer goods manufacturing firm .
iv. Ascertain the effect of profit after tax for the year on retained earnings of consumer goods manufacturing firm.

Research Questions

The following research questions were raised to address the objectives of the study:

i. To what extent do total assets affect retained earnings of consumer goods sector of manufacturing industry?
ii. What is the effect of total sales on retained earnings of consumer goods manufacturing firm?
iii. To what extent does total number of employees affect retained earnings of consumer goods manufacturing firm?
iv. What is the effect profit for the year on retained earnings of consumer goods manufacturing firm?

Statement of the Hypotheses

i. Total assets do not significantly effects retained earnings of consumer goods manufacturing firm.
ii. Total sales do not significantly effects retained earnings of consumer goods manufacturing firm.
iii. Total number of employees does not significantly effects retained earnings of consumer goods manufacturing firm.
iv. Profit for the year does not significantly effects retained earnings of consumer goods manufacturing firm.

Significance of the Study

This study will be of significance to Nigeria manufacturing firm managers, investors of the manufacturing firms, and academic researchers of related discipline.

The manufacturing firm managers will no doubt benefit from this study. Specifically, the study will help the managers' in assets management, sales management, management of employees' related matters and above all, in managing the profitability of their firms. Effective and efficient management of the firm size will no doubt improve firm value and shareholders wealth.

Investors of the Nigeria manufacturing sector will also find this study useful in making sound investment decisions. Sound investment decisions are only possible when accurate and reliable information concerning the firms are provided on timely basis. This study will assist the

investing public in the Nigeria manufacturing sector by providing the information to them on timely bases.

Academic researchers of related discipline will equally benefit from this study. The study will prove rich and reliable materials to such researchers to enable them carry out further studies on related areas.

Scope of the Study

The study focused on the effect of firm size on retained earnings of consumer goods manufacturing firm from 2015-2024. Total assets, total sales, total number of employees and profit for the year are the independent variables and proxies for firm size while retained earnings is the dependent variable. Six consumer goods manufacturing sector firms listed on the Nigeria stock exchange were sampled for the study. The study, therefore, focused on Cadbury Nig. Plc. because it is a notable well-run company in Nigeria that has big size.

REVIEW OF RELATED LITERATURE

The study adopted three methods in reviewing the related literatures and they include; Conceptual Review, Theoretical Review and Empirical Review

Conceptual Review

Firm Size

The concept of firm size has been used to proxy numerous theoretical constructs ranging from risk to liquidity or even political costs As a result, firm size has been interpreted in many different ways yet none is generally accepted by all. In addition, the pursuit of a precise definition of firm size is considered by many as topical either because it is speculated that size may be multidimensional or because size is deemed to be essentially an ambiguous concept (Trigueiros, 2000).Robert, Mohamed and Onesmus(2015) consider the size of a firm as the amount and variety of production capacity and ability a firm possesses or the amount and variety of services a firm can provide concurrently to its customers. The study asserts that the generally accepted norm in modern economic analysis is that as the firm size expands, the cost per unit would be declining.

Underlying theoretical basis for arguing that a firm size is related to profitability can be found in the traditional neoclassical view of the firm and the concept known as economies of scale. Economies of scale may occur for various reasons such as financial (a large firm can get a better interest rate and also a better discount rate due to a large quantity that it buys); organizational reason (specialization and division of labour); technical reason (division of high fixed costs across large number of units) etc. In line with this concept, a positive relationship between firm size and profitability is expected (Pervan and Višić, 2012)

Most of the studies showed disagreement on the measure of firm size. It can be measured through total assets, total sales, and employment or through total profits. The industry factors, economic condition and competition have great influence on growth and profitability. These two factors are also closely related to the firm size which is an important indicator of both of them. Companies need to create balance between them to work efficiently and for the progress of the stakeholders (Kouser, Bano, Azeem and Hassan, 2012).

Total Assets

Any tangible or intangible economic resource that has an economic value and owned by any organization or any individual person is known to be an asset (Alvi, and Ikram, 2015). The basic accounting equation states that assets = liabilities + stockholders' equity. In the accounting industry, assets are defined as anything that a business owns, has value, and can be converted to cash. Assets are broken down into two main categories, current assets and noncurrent assets. Total assets are the sum of all current and noncurrent assets and must equal the sum of total liabilities and stockholders' equity combined (Hill, 2018).

Assets are property owned by the company in a certain period. Based on the way and duration, there are two types of assets: current asset and non-current assets asset. A firm that has suitable asset for collateral will get loan which will make the firm getting the source of funds easy and which increases the firm value. Total of assets owned by a firm indicates the firm size. The bigger the firm size, the easier it is to get internal or external source of fundswhich will affect the firm value itself (Setiadharma and Machali, 2017). Assets is the final amount of gross investment, cash and cash equivalent, receivables and other assets as they are presented in a statement of financial position. The investors review the company's total assets before

determining whether or not the business has enough existing value to make an investment(Bonnke, 2017).

Presentation of assets in the statement of financial position depends on the nature of business. In financial firms like banks, current assets and noncurrent assets are listed on the statement of financial position in order of liquidity, that is, according to how quickly an asset can be turned into cash. The current assets are listed before non-current assets.In manufacturing firms, however, reverse is the case, non-current assets are listed before the current assets. (Hill, 2018).Also unlike other firms where a current asset constitutes the bulk of their total assets, manufacturing firms' non-current assets constitutes the bulk of the total assets. In support of this, Iqbal and Mati (2012) note that non-current assets are about half of the total assets of the manufacturing firm and in a distribution firm. A greater return on investment can be obtained by having huge level of assets which are not current. Barron (2003) also opines that effective organization of non-current assets is the most important part of the entire corporation and in creating the value of shareholders. The study asserts that non-current assets cannot be converted into cash during a year of running a business.

Hill (2018) identifies the current assets of a typical manufacturing firm as cash which is the most liquid asset. Others are receivables, short-term loans, prepaid expenses, and inventory. Examples of non-current assets of a manufacturing firm include property, plants and equipment. Other things that are included as non-current assets are intangible assets such as product trademarks and/or web domain names. As with any and all assets, deprecation and appreciation may occur, the valuation of each asset is recorded on the statement of financial position as the assets purchase value.Scott, (2003) states that non-current assets of a manufacturing firms include the land, equipment and other assets which last for longer periods of time, The study opines that non-current assets are more revenue generating than the current assets but the risk involvement is more than the current assets as it is difficult to convert them into cash and their value also differ in different point of times than the current assets.

Total Sales

Total sales revenue, sometimes called gross sales, is the total amount realized from the sales of a firms' products and services in a given period. It can be represented in several ways, but it is typically formulated as total number of units sold times price per unit. It is important to

distinguish total sales revenue from total revenue. Total sales revenue or turnover are words that describe the amount of income that a firm receives from its normal business activities while total revenue includes income from other sources like interest, income from investments and any other sources as well as total sales. Total sales revenue is a very important metric for business owners/managers and investors alike as it provides a reasonably accurate projection of the near-term performance of the business (Browne, 2017).The study also asserts that sales revenue is very important to every business because sales revenue is the means through which firms' growth projections are translated into reality (Hand, 2005).

Siddiqui (2015), classifies sales **r**evenues into operating and non-operating sales revenue. According to the study, operating sales revenues are those that are generated from the firm's main or core business activities. This is the area through which a firm earns most of its income. A software development firm for instance, generates revenues by developing software or modules and selling it to clients. Non-operating sales revenue or other income includes revenues earned from sources outside a firm's normal business operations. Sales revenue from the sale of subsidiary or division of firms is non-operating sales revenue. The income is a one- time occurrence as the division cannot be sold again.

Number of Employees

An employee is one who is hired for a specific job or to provide labour and who works in the service of someone else (the employer). The study further states that anyone who performs services for an organization is an employee if the organization can **control** what will be done and how it will be done (Murray, 2017).

Aslam, Ghaffar, Talha and Mushtaq (2015), asserts that the most important resource of an organization are the employees also called the human resource. In an overall performance of an organization it is very important to retain an efficient and effective workforce. Motivated employees can add value to an organization by successfully achieving its targets. Odden and Kelley (2002), notes that the challenge for every organization and every manager in the organization is to satisfy each employee's personal needs. These needs they indicated included,

the need to belong (involvement), the need for recognition (feedback and rewards) and the need for growth.

Total number of employees is a natural measure of firm size because an increase in the size of a firm is associated with an increase in the total number of people working in the firm. However, some factors may deter firms from increasing their number of employees even as the firm increases in size. Bogdańska (2012) identifies high labor costs as one of the main barrier in increasing firm employment. The higher the wage, the more expensive employing new workers becomes. Consequently, employers limit the number of employees and those who want to take up new jobs remain jobless. The study also identifies high corporate tax as another barrier for firm employment. When corporate tax is raised, some firms reduce their employment while some hide their profits and hire people illegally. Delmar, Davidson, and Gartner (2003) also suggest that the used of sales and number of employees measures are among the most accurate growth indicator that can be used in testing the effect of firm growth on firm profitability and value. Kaen& Baumann (2003) affirm that measuring the employees enrolment and value added measurement are a better choice in measuring the size of the firm in organizational theories rather than sales or assets.

Profit for the year

Umobong (2015) describes profit or profitability as a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. The study asserts that the ability of a firm to continue to exist as a going concern depends on its ability to generate profit or attract equity capital and additional investors. Pimentel, Braga and Casa-Nova (2005) also describe profit or profitability as the final measure of economic success achieved by a company in relation to the capital invested in it. This economic success is determined by the magnitude of the net profit accounting or profit for the year.

Profitability is the ability to make profit from all the business activities of an enterprise. It measures management efficiency in the use of organizational resources in adding value to the business (Owolabi and Obida, 2012). Profitability may be regarded as a relative term measurable in terms of profit and its relation with other elements that can directly influence the profit.

Profitability is the relationship of income to some balance sheet measure which indicates the relative ability to earn income on assets. Whereas, profitability refers to the revenues earned by firms, against their operations and incurred expenses. In order to find the profitability level of firms, Profitability ratios are used, whereby where the firm stands in terms of profitability can clearly be examined. Enhancement of profitability is the ultimate purpose of every firm, and each of them strives to achieve optimum profitability (Khan and Ali, 2016).

Profit is influenced by a number of factors such as firm size, exports of the firm, reliance on debt, age, fixed asset growth and sales growth. There are many methods to measure profitability such as profit for the year (PAT), return on assets (ROA), return on equity (ROE) and return on sales (ROS) (Becker-Blease, Kaen, Eteban, & Bauman, 2010).

Profit for the year is a firm's earnings that could be distributed to its shareholders if it had no debt. In other words, it's the amount of cash earnings left over after all operating expenses and taxes have been paid for the year (Accounting Dictionary, 2016). Profit for the year is the net income of the organization less all taxes which can be fully retained by a company to be used in the business or distributed as dividends, if declared. The profit after-tax figure is considered the best measure of the ability of an entity to generate a return, since it incorporates both operating income and income from other sources, such as interest income. It is a measure of how competent a firm is in converting its revenue into profits, It isalso used in the process of margin analysis, which is used to compare companies within the same industry. It is closely watched by investors to see if the income-generating ability of a firm is changing over time. Investors also use profit for the year to determine how much a company actually earns and can also help determine whether a company needs to control its costs (Aldridge, 2015).

Retained Earnings

Chasan (2012) describes retained earnings as that portion of the net income of a firm that is retained by an organization rather than distributed to shareholders as dividends. The purpose is for the company to reinvest the reserves into business for purpose of expansion. It is an important internal financing which an organization obtains at least possible cost (Mohamed, 2010).

Altman (1993), asserts that a company's dividend policy is its long term financial strategy with regards to deciding how much earnings to pay out as against retaining them for investment in the company. It leads to division of profits between dividend payment to shareholders and reinvestment in the company. There are no transactions and bankruptcy costs associated with retained profits. Söderbom and Wambugu (2002) argue that retained earnings constitute a major source of finance for companies. Investors prefer capital gains over dividends because capital gain taxes can be deferred into the future and are taxed at a minimum rate while taxes on dividends must be paid as soon as they are received and are taxed at a relatively higher rate. The study also opines that whenever there is an increase in personal income tax of the shareholders, companies tend to retain and reinvest more of their earnings. Payment of earnings as dividend is associated with agency cost and an opportunity for existing shareholders is lost to reinvest their earnings for growth of the company.

Gilchrist and Himmelberg (1995) suggest that the level of retained earnings conveys information about growth prospects of companies. According to the study, grown firms pay lower dividends, reinvest more of their earnings, and provide a greater percentage of their total returns in the form of capital gains. Firms with a few major investment opportunities would limit paying out a larger percentage of their earnings. By contrast, high growth firms with lots of investment opportunities are likely to pay low dividends because they have profitable uses for their retained earnings. In an affirmation to this view, Falex (2009) asserts that smaller and faster growing companies tend to have a high retained earnings ratio to fuel research and development; it also fuels new products expansion. Mature firms on the other hand, tend to pay out a high percentage of their profits as dividends.

Theoretical Framework

The study is supported by two theories, namely, Growth of the Fitter theory developed by Alchian (1950) and the Agency Theory which was developed by Stephen Ross and Marr Mitmick (1972).

Growth of the Fitter Theory

Growth of the Fitter theory was propounded by Alchian (1950). According to this theory, fitness is depicted by the firm profit, and the profitable firms grow and survive in the market while the other firms exit due to poor performance (Kouseret al., 2012). Alchian (1950) theoretical study argued that fitter firms grow and survive, but less vigorous firms lose their market share and exit through the evolutionary selection mechanism. Thus, if profit rates reflect the degree of fitness, it is possible to predict that profitable firms will grow (Jang and Park, 2011). Delmar, Davidson and Gartner, 2003), suggests that more profitable firms may have higher potential to grow, since they have already shown a greater fit with the environment and may be are able to fund future competitive actions with their own cash flow.

Profitability limits the risk related to acquiring and relying on external resources of financing but also displays a satisfactory level of market demand. Mukhopadhyay and AmirKhalkhali (2010) posit that profit provides the funds for growth. A firm can grow internally through investments in development projects in various ways. It can take advantage of technological opportunities to grow through research and development, leading to product and process innovations. Empirically, firm growth and profitability both are of great concern for the organization but there is still no generalized relationship between firm growth and profitability.

This study is concerned with how manufacturing firm assets growth will impact on stock return (profitability) to the stakeholders of the firm. Specifically, the assets considered are those peculiar with manufacturing firms and they are, property, plant and equipments, inventory and trade receivables. On the other hand, growth of the fitters theory emphasized that firms fitness is depicted by firm profitability and only profitable firms grow and survive in the market in the long run while the other firms exit due to poor performance. This study is, therefore, anchored on this theory.

The Agency Theory

This theory was developed by Stephen Ross and Marr Mitmick in 1972. Ross and Mitmick (1972) argued that firm growth most of the times benefits managers rather than stockholders. They investigate what happens when managers, as opposed to owners, run large corporations.

Adam Smith (1776) pointed out that hired managers do not take as much care of their firms as do owners. According to agency theory, managers pursue growth because growth benefits them personally, growth guarantees employment and salary increases for managers due to the greater responsibilities of managing a larger firm. According to the theory, agency conflicts arise from the possible divergence of interests between shareholders (principals) and managers (agents) of firms. The Primary duty of managers is to manage the firm in such a way that it generates returns to Shareholders thereby increasing the profit figures and cash flow. Due to a non-rational and opportunistic behavior of agents (Jensen, 1994), the interests and decisions of managers are not always aligned to the shareholders' interests, resulting in agency costs or agency problems.

Fama and Jensen (1983) suggested that the agency problems could be minimized through the separation of the ratification and monitoring of decisions from the initiation and implementation of decisions. These decisions can be reflected in a conservative management of accounts receivables, reducing the risk involved in the business operation, such as to keep high level of inventories beyond the process cycle needs, to offer credit terms above the product turnover, to accept low payment terms not aligned to the market practices, and so on. In that case, these investment decisions would be translated in excess of accounts receivables. Therefore, the theory will help us try to investigate if firms that present monitoring mechanisms of managers' actions have lower level of accounts receivables requirement.

The main objective of this study is to evaluate the effect of firm size on retained earnings of consumer goods sector of manufacturing industry. Proponents of the agency theory assert that increase in firm size benefits managers personally because it guarantees their employment and also increase in their salary due to the greater responsibilities of managing larger firm. As a result of this development the managers pursue firm growth to the detriment of firm profitability, this in turn reduces firm retained earnings. Because of the relevance of this theory to the main objective of the study, it is anchored on the agency theory.

This study evaluated the effect of firm size on retained earnings of consumer goods sector of manufacturing industry. Firm size was represented with total assets, total sales, total number of

employees and profit for the year. Growth of the Filters Theory on the other hand opines that firm fitness is measures by the amount and consistent profitability of firm. It is only firms that can post profit consistently is fit and will grow while those firms which cannot make profit will die off and exit the market. The study is therefore, anchored on the growth of the Filters Theory.

Empirical Review

Total Assets and Retained Earnings

Ebiringa, Yadirichukwu, Chigbu, and Ogochukwu (2013) examined the effect of firm size and profitability on the extent of corporate social disclosures by Oil and Gas firms in Nigeria. A sample of twenty (20) quoted companies selected using the simple random sampling technique was utilized. Secondary data retrieved from content analysis of the audited financial reports of the selected companies for 2011 financial year was employed in the study. The ordinary least squares regression technique was used for data analysis. The findings among others show that an insignificant negative correlation exists between CSR disclosure and firm size. Profitability is significantly positively related to CSR disclosure of the companies. We recommend that there is urgent need for regulatory agencies to develop a CSR disclosure framework that focuses considerably on utilizing firm profitability and providing incentives and penalties as the case may be for firms' corporate social responsiveness level.

Kouser, Bano, Azeem , Hassan (2012) undertook an in-depth description of the inter-relationship between firm size, growth, and profitability of non-financial firms listed in Karachi stock exchange. Seventy (70) non-financial firms listed at Karachi Stock Exchange were sampled for the study. A panel data research technique was adopted using 700 observations of each of the variables of study. Log natural of total assets was used as the independent variable and proxy for firm size while return on assets was the dependent variable and proxy for firm profitability. Observations are collected for ten years (2001-2010). The study concluded that profitability has strong positive relationship with the growth of the firm; however, size has less significant and negative impact on the profitability. The study recommends a more long-term focus to examine the described relationships in the long run.

Inyiama and Chukwuani (2014) work was to determine the significance and nature of the interactions between firm size and financial performance in Nigeria brewery industry from 2000

to 2013. The Engle and Granger 2-step co-integration approach, in a simple regression framework, was adopted in the data analysis with a model to estimate the error correction period. The time series data were tested to avoid spurious regression, applying the Augmented Dickey Fuller (ADF) procedure. The test revealed that the study variables were integrated of the same order I(2), indicating a possible co-integration. Firm Size has both short and long term positive effect on EPS; with a significant long run influence. There is no causality running from either EPS to total assets or otherwise at both periods. The implication is that firm size does not granger cause EPS and vice versa in Nigeria brewery industry. The study further reveals that the distortions affecting EPS, resulting from firm size, in the long run, could be corrected in approximately six (6) months. Consequently, to improve on financial performance, the firms within the industry should strive to fully automate their production lines, thereby increasing their asset base in order to enhance product quality and packaging, meet the demands of customers at short notice, remain relevant amidst stern competition in the industry and avoid stock out costs.

Asgari, Pour, Zadeh and Pahlavan (2015) investigated the relationship between firm growth opportunities and firm size on changes ratio in retained earnings of listed companies in Tehran Stock Exchange. Financial data were collected from a sample of 101 companies listed in Tehran Stock Exchange during the period 2006 to 2011. Multiple regression analysis was used whereby panel data collected from the sampled firms were keyed into SPSS20 software, Eviews7 and Minitab16. With respect to the first hypothesis the study finds that there is an inverse and significant relationship between company's growth opportunities and changes ratio in retained earnings ratio of companies. Results of the second hypotheses also suggest that there is a direct and significant relationship between firm size and changes ratio in retained earnings of the sampled firms.

Karadeniz and İskenderoğlu(2011), wished to ascertain the variables affecting return on assets (ROA) of the tourism businesses listed in Turkey. A sample of firm listed in Istanbul Stock Exchange (ISE) was selected for the study. Total assets were used as the independent variable and measure of firm size while return on assets was used as the dependent variable and a measure of profitability. Multiple regression model was applied on the data obtained for the study Results of the study show that there are positive and statistically significant relations between total assets which have been used as a size indicator and return on assets.

Niresh and Velnamp (2014) conducted a study to explore the effects of firm size on profitability of quoted manufacturing firms in Sri Lanka from 2008 to 2012. A sample of 15 firms which were active in Colombo stock exchange was selected for the study. Return on assets and net profit were the dependent variables as well as measures of firm profitability while total assets and total sales were used as measures of firm size. Correlation and regression methods of analysis were used to analyze the data collected for the study. Result reveals no indicative relationship between firm size and profitability of listed manufacturing firms. Result further shows that firm size has no profound impact on profitability of the listed manufacturing firms in Sri Lanka.

Becker-Blease, Kaen, (2010), Etebari and Baumann (2010) examined the relation between firm size and profitability within 109 SIC four-digit manufacturing industries. The study was conducted in 2003 using regression analysis. Depending on our measure of profitability, the study found that profitability increases at a decreasing rate and eventually declines in up to 47 of the industries. No relation between profitability and size was found in up to 52 of our industries. These two categories account for 97 of our 109 industries. Profitability continues to increase as firms become larger in up to 11 industries. Hence, the relation between size and profitability is industry specific. But, regardless of the shape of the size profitability function, it was observed that profitability is negatively correlated with the number of employees for firms of a given size measured in terms of total assets and sales.

Robert, Mohamed and Onesmus (2015), conducted a study to investigate the effect of corporate size on profitability and market value of firms listed in Kenya stock exchange from 2010 to 2014. Firm which were active in Nairobi stock exchange during the period were sampled and data collected from them for the study. Panel correlation and multiple regression methods of analysis were used to analyze the data collected from the sampled firms. Finding shows that there is a positive significant relationship between firm size and profitability, whereas firm size insignificantly and positively predicts profitability. Finding also shows that corporate size has no statistically significant impact on firm market value.

Bashir, Abbas, ManzoorandAkram (2013) conducted a study to determine the factors affecting the firm performance in Food Sector of Pakistan. One-way fixed effect model was used due to the presence of cross-sectional fixed effect. Long term leverage, size, risk, tangibility and non-debt tax shield were found to be the factors significantly affecting the firm's financial performance in the Food Sector of Pakistan.

2.4.2 Total Sales and Retained Earnings

Ammar (2003) examined the nature of the size-profitability relationship on a sample of electrical contractors in USA from 1985-1996. Total sales was used as the independent variable and proxy for firm size while different profitability measures including retained earnings and profit for the year were used as the dependent variable. Both financial and economic data were used for the study. Using a first-order autoregressive model built into the error term, the study found a significant difference in terms of profitability between small, medium and large firms. The study reveals that profitability drops as firms grow larger than $50 million in sales.

Doğan (2016) investigated the effect of firm size on profitability in Turkey. Secondary data of 200 companies which were active in Istanbul Stock Exchange (ISE) between the years 2008-2011 were used. Return on Assets was used as indicators of firm profitability while total assets, total sales and number of employees were used as indicators of firm size. Multiple regression and correlation methods were used in the empirical analyses. The result of analysis indicates a positive relation between size indicators and profitability of firms. Control variables as the age of the firms and leverage rate have been found in a negative relation with ROA, but liquidity rate and ROA have been determined to have a positive relation. Keywords: Firm size, Profitability, Firm Performance, Turkey.

Vijayakumar and Tamizhselvan (2011) evaluated the relationship between firm size and firm profitability for firms operating in Southern India. A sample 15 firms operating in the South India was selected for the study. Total sales and total assets were the independent variables and measures of firm size while net profit margin and return on assets were the dependent variables and measures of firm profitability. Correlation model was applied on the data collected from the

sampled firms. The result reveals a positive relationship between size and profitability of quoted companies in South India.

BalochIhsan, Kakakhel and Sethi (2015) investigated the impact of firm size, asset tangibility and retained earnings on the financial leverage in Pakistan from 2006 to 2011. Auto mobile sector of the Pakistan economy was the focus of the study and specifically the sub-sectors chosen were: motor vehicles, trailers and auto parts. A sample of 22 firms was selected from these sub-sectors. The data in the study were secondary which was collected from the financial statement analysis document of non-financial companies listed on the Karachi Stock Exchange (KSE) covering the period from 2006 to 2011. Multiple regression model was used to determine the relationship between the underlying variables. Findings indicate that firm size and asset tangibility significantly affect financial leverage. Moreover, negative relationship was noted between the respective variables. It was found that retained earnings have no significant impact on financial leverage.

Taani and Banykhaled (2011) sampled sample of 40 companies listed in the Amman Stock Market and investigated the effect of accounting information earnings per share. The independent variables were size (total assets, total sales and cash flow from operation activities), profitability, liquidity, debit to equity, market ration. Regression analysis was the statistical model used for the study. Findings reveal that profitability ratio (ROE), market ratio (PBV), cash flow from operation/sales, and leverage ratio (DER) has significant impact on earnings per share.

Söderbom, Teal and Wambugu (2002) conducted a study to ascertain if firm size really affects earnings using data from manufacturing firms in Ghana and Kenya from 1995 to 2000. Four manufacturing sub-sectors were covered in both countries. The survey method used in data collection was face-to-face interviews with the firms' management. Total respondents in Ghanaian and Kenya were 4,695 and 1,910 respectively. The surveys used similar survey instruments, enabling comparisons across the countries. The sub-sectors covered were food processing, textiles and garments, wood and furniture, and metal-working including machinery. These sub-sectors comprise the bulk of manufacturing employment in both countries. The empirical results indicate that firm characteristics in both Kenya and Ghana are important determinants of earnings, when there are controls for fixed effects.

Biger, Nguyen and Hoang (2008) conducted a study to explore the relationship between financial leverage and firm characteristics from 2002 to 2003. Secondary data relating to the selected firms were obtained from the General Statistical Office, Vietnam. Correlation analysis was employed in analyzing the data collected for the study. Results show that financial leverage in Vietnamese firms increases with firm size and decreases with profitability and with non-debt tax shield. Result also reveals that firm's leverage increase with fixed assets and decrease with growth opportunities. It was further observed that corporate income tax has negative relationship with firm's financial leverage.

Gaur and Kesavan (2007) conducted a study to evaluate the effects of firm size and sales growth rate on inventory turnover in public listed firm in USA from 1985 to 2003. A sample of 353 public listed firms of US retailers was selected. Data were collected from the sampled firm forand correlation model was used for the analysis. Findings show that with respect to size, strong evidence of diminishing returns to scale was detected. Findings further show that with respect to sales growth rate, inventory turnover increases with sales growth rate, but its rate of increase depends on firm size and on whether sales growth rate is positive or negative. The results are useful in helping managers make aggregate-level inventory decisions by showing how inventory turnover changes with size and sales growth, in employing inventory turnover in performance analysis in benchmarking and working capital management and in identifying the causes of performance differences among firms and over time.

Chandrapala and Knápková (2013) carried out a study to ascertain the impact of firm specific factors on company financial performance. A sample of 974 firms listed in the Czech Stock Exchange was collected while data in the Albertina database was obtained and used for the study. The study covered a period of 2005 to 2008. The study found that the firm size, sales growth and capital turnover are having significant positive impact on financial performance of firms, while debt ratio and inventory reflect significant negative impact on financial performance of firms.

Asimakopoulos, Samitas and Papadogonas (2009), wished to determine the effect of firm size on the profitability of Greek non-financial firms for the period of 1995 to 2003. A sample of 191

Greek non-financial firms listed on the Athens Stock Exchange was selected for the study. Panel data estimation techniques were applied to analyze the data collected for the study. Findings show that firm profitability is positively affected by firm size, sales growth and investment and negatively affected by leverage and current assets. Also, leverage, current assets and the adoption of the Euro were negatively related to profitability.

Summary of Review of related Literature

It can be observed from table 2.5.1that most of the empirical studies reviewed on related topics were conducted outside Nigeria. Out of the forty two (42) studies reviewed, only three (3) of them were conducted in Nigeria while the remaining thirty nine (39) studies were conducted outside the country. The three studies conducted in Nigeria were: Inyiama and Chukwuani (2014) who conducted a study to determine the interactions between firm size and financial performance in Nigeria brewery. Ebiringa, et al (2013) who carried out a study to evaluate the effect of firm size and profitability on the extent of corporate social disclosures by Oil and Gas firms in Nigeria.Abiodun (2013) who investigated the effect of firm size on the profitability of manufacturing companies listed in the Nigerian Stock Exchange using a panel data set.

In addition to the few studies conducted in Nigeria, only a few studies were conducted in the manufacturing sector of the various countries, thereby creating more research gaps to be filled. As regards to period coverage, none of the studies was conducted in 2016. These research gaps prompted the present study to evaluate the effect of firm size on retained earnings of consumer goods sector of manufacturing industry from 2013-2022.

RESEARCH METHODOLOGY

Research Design

This study adopt*ed an ex-post facto* research design, where by historical financial data were collected from the published annual reports and accounts of the selected consumer goods manufacturing firms in Nigeria. The study was, therefore, based on past financial events of the selected consumer goods manufacturing firms in the country

Area of Study

The study was conducted in Nigeria and precisely on consumer goods sector of the Nigeria manufacturing industry during the period of 2015 -2025.

Nature and Sources of Data

Secondary data was the source of data for the study which were collected from the published annual reports and accounts of the selected consumer goods sector of the Nigeria manufacturing industry. The secondary data were made up of absolute figures for: total assets, total sales, total number of employees, and profit for the year and retained earnings of the sampled firms.

Population of the Study

Twenty two (22) consumer goods sector firms of the Nigeria manufacturing industry listed on the Nigeria Stock Exchange as at October 2022 constituted the population of this study.

Sampling Techniques

The study made use of purposive sampling technique. It also made use of Cadbury Nig. Plc on the basis that they disclosed their total number of employees in their annual report during the period covered by the study were considered in selecting the sample. In fact, this was the major determinant in selecting the sample.

Method of Data Collection

The method of data collection in this study is secondary method which was made possible through the use of journal articles and published annual reports and accounts of Cadbury Nig. Plc.

Method of Data Analysis

This study adopted a panel least square research technique using sixty observations of each of the variables of the study. The effects of the independent variables (total assets, total sales, number of employee and profit for the year) on the dependent variables (retained earnings) were analyzed using panel least square regression analysis. The four null hypotheses formulated for the study were tested using panel data regression analysis and t-statistics.

DATA PRESENTATION AND ANALYSIS

Data Presentation

The primary objective of this study is to evaluate the effect of firm size on retained earnings of consumer goods sector firm of Nigeria manufacturing industry. An ex-post facto research design was adopted. Secondary data were collected from the annual reports and accounts of the selected consumer goods sector manufacturing industry. The data obtained are presented in panel form in tables 4.1.1 while the raw data are attached as appendix one of the study.

Panel Data Presentation

OBSERVATION	Retained Earnings	Total Assets	Total Sales	No Of Employees	Profit After Tax
CADBURY NIG. PLC – 15	3093478	20352293	33990848	1425	1296533
CADBURY NIG. PLC – 16	4744187	23492656	37377497	1314	2596533
CADBURY NIG. PLC – 17	6265368	23681724	44481277	1091	4093822
CADBURY NIG. PLC – 18	6397861	25935341	46807860	1080	4180620
CADBURY NIG. PLC – 19	772731	32279958	54724749	1070	5491076
CADBURY NIG. PLC – 20	7896863	36497624	55547798	1240	5597613
CADBURY NIG. PLC – 21	7410556	43754114	60004119	1206	4724429
CADBURY NIG. PLC – 22	5541442	45736255	55754309	1292	2412243
CADBURY NIG. PLC – 23	6065887	50172484	59221748	1248	1192366
CADBURY NIG. PLC – 24	9752577	72491309	69777061	1207	3071885

Source: Author's Eviews 7.0 Output, 2025

4.2 Data Analysis

The data collected from the selected consumer goods manufacturing firms were analyzed using panel least squares regression analysis and the results presented in tables 4.2.1 and 4.3.4.

Descriptive Statistics

	Retained Earnings	**Total Assets**	**Total Sales**	**No Employees**	**OfProfit After Tax**
Mean	9898481.	37493330	44664365	1165.417	4214204.
Median	5614469.	28425102	34935650	1067.000	2504388.
Maximum	40139626	1.70E+08	1.82E+08	2921.000	23736777
Minimum	-15040003	1197182.	1510019.	188.0000	-296402.0
Std. Dev.	12903770	34453969	40142971	670.0877	5869708.
Skewness	0.897062	1.384475	1.330502	0.671381	2.132337
Kurtosis	2.870326	5.351192	4.811180	2.653851	6.891264
Jarque-Bera	8.089244	32.98795	25.90329	4.807068	83.32343
Probability	0.017516	0.000000	0.000002	0.090398	0.000000
Sum	5.94E+08	2.25E+09	2.68E+09	69925.00	2.53E+08
Sum Sq. Dev.	9.82E+15	7.00E+16	9.51E+16	26492037	2.03E+15
Observations	10	10	10	10	10

Source: Author's Eviews 7.0 Output, 2025

The descriptive statistics in the table 4.1.2 presents the statistical characteristics of all the observations. These include measures of central tendency, the mean and median. Dispersions in the series are also indicated using the standard deviation.

The results show mean to stand at NGN 9898481,NGN37493330, NGN 44664365, NGN1165.417 and NGN4214204 respectively with standard deviations of NGN12903770,NGN34453969,NGN40142971, NGN 670.0877 and NGN5869708 for retained earnings, total assets, total sales , number of employees and profit after tax respectively.

Results in the table also reveals that variables of retained earnings and number of employees have skewness value less than one while total assets, total sales and profit after tax are in excess of one. This implies that the data for all the variables are fairly distributed.

Results also indicate that the kurtosis coefficient of all the variables is less than three, except that of total assets, total sales and profit after tax which are significantly lighter than the kurtosis of a normal distribution. This confirms that the data series are fairly distributed.

Test of Hypotheses

In testing the four hypotheses formulated for the study, the decision rule was based on the significances of the t-statistics which are represented by the of p-values. Therefore, in arriving at a decision, the following steps were taken:

i. The hypotheses were restated in null forms,
ii. The decision criterion or criteria were stated,
iii. The presentation of the E-view result
iv. The null hypothesis is rejected or accepted based on the decision criterion or criteria.

Decision Rule:

Reject the null hypothesis if the critical value of p-value is greater than the critical value of t otherwise accept the null hypothesis. Critical value of t was obtained from the t-table using degree of freedom (DF) = 9 under 0.05. DF = (N-1) where N is the number of observations in each firm and 1 is a constant.

Test of Hypothesis One

Step One: Restatement of Hypothesis in Null Form: Total assets do not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry.

Decision rule: Reject the null hypothesis if p-value is less than the criteria value (0.05) significance level. Otherwise accept.

Table 4.3.1 Panel Regression Results

Dependent Variable: RETAINED_EARNINGS

Method: Panel EGLS (Two-way random effects)

Date: 06/27/23 Time: 20:55

Sample: 2013 2022

Periods included: 10

Cross-sections included: 1

Total panel (balanced) observations: 10

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	688863.1	2805178.	0.245568	0.8069
TOTAL__ASSESTS	0.245633	0.032324	7.599106	0.0000
	Effects Specification			
			S.D.	Rho
Cross-section random			5615348.	0.5786
Period random			1459016.	0.0391
Idiosyncratic random			4564775.	0.3823
	Weighted Statistics			
R-squared	0.498905	Mean dependent var		2418901.
Adjusted R-squared	0.490265	S.D. dependent var		6707352.
S.E. of regression	4788763.	Sum squared resid		1.33E+15
F-statistic	57.74641	Durbin-Watson stat		0.697184
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.675022	Mean dependent var		9898481.
Sum squared resid	3.19E+15	Durbin-Watson stat		0.325100

Source: Author's E-views 7.0 Output, 2025

The probability value of total assets in the table4.3.1 is 0.000 which is less than the 0.05 level of significance (0.000<0.05).This implies that the null hypothesis that total assets do not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry is rejected. Thus, it can be said that total assets significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry.

From the table 4.3.1 also, R^2 of 0.498905 shows that 50% variation in retained earnings was explained by changes in total assets while the remaining 50% could be explained by other factors capable of influencing retained earnings. This implies that the entire model is significant. Durbin Watson statistics (DW) is 0.325100 which closer to 0 than 2. This result indicates the presence of positive autocorrelation in the time series.

Test of Hypothesis two

Step One: Restatement of Hypothesis in Null Form: Total sales do not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry.

Decision rule: Reject the null hypothesis if p-value is less than the criteria value (0.05) significance level. Otherwise accept.

Table 4.3.2: Panel Regression Results

Dependent Variable: RETAINED_EARNINGS
Method: Panel EGLS (Two-way random effects)
Date: 06/27/23 Time: 20:38
Sample: 2013 2022
Periods included: 10
Cross-sections included: 1
Total panel (balanced) observations: 10
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2293444.	3306721.	-0.693571	0.4907

TOTAL__SALES	0.272968	0.029818	9.154491	0.0000
	Effects Specification			
			S.D.	Rho
Cross-section random			6778253.	0.7121
Period random			0.000000	0.0000
Idiosyncratic random			4309457.	0.2879
	Weighted Statistics			
R-squared	0.590987		Mean dependent var	1951052.
Adjusted R-squared	0.583935		S.D. dependent var	7164072.
S.E. of regression	4621049.		Sum squared resid	1.24E+15
F-statistic	83.80471		Durbin-Watson stat	0.712027
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.686291		Mean dependent var	9898481.
Sum squared resid	3.08E+15		Durbin-Watson stat	0.286150

Source: Author's Eviews 7.0 Output, 2025

The probability value of total sales in the table 4.3.3 is 0.000 which is less than the 0.05 significant level (0.000<0.05), this implies that the null hypothesis that total sales do not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry is rejected. Therefore, it can be stated that total sales significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry.

From table 4.3.2 also, R^2 value is0.590987 showing that 59% variation in retained earning was explained by changes in total sales while the remaining 41% could be explained by other factors capable of influencing retained earnings. This implies that the entire model is significant. Also Durbin Watson statistics (DW) value stands at 0.286150 which closer to 0 than 2. Thisagain indicates the presence of positive autocorrelation in the time series.

Test of Hypothesis three

Step One: Restatement of Hypothesis in Null Form: Total number of employees does not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry.

Decision rule: Reject the null hypothesis if p-value is less than the criteria value (0.05) significance level. Otherwise accept.

Table 4.3.3: Panel Regression Results

Dependent Variable: RETAINED_EARNINGS
Method: Panel Least Squares
Date: 06/27/23 Time: 21:06
Sample: 2013 2022
Periods included: 10
Cross-sections included: 1
Total panel (balanced) observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8936231.	1873678.	4.769352	0.0000
NO_OF_EMPLOYEES	825.6702	1487.904	0.554922	0.5818

Effects Specification
Cross-section fixed (dummy variables)
Period fixed (dummy variables)

R-squared	0.864609	Mean dependent var	9898481.
Adjusted R-squared	0.818453	S.D. dependent var	12903770
S.E. of regression	5498083.	Akaike info criterion	34.10088
Sum squared resid	1.33E+15	Schwarz criterion	34.65937
Log likelihood	-1007.026	Hannan-Quinn criter.	34.31933
F-statistic	18.73230	Durbin-Watson stat	0.438683
Prob(F-statistic)	0.000000		

Source: Author's Eviews 7.0 Output, 2023

The probability value of total number of employees in table 4.3.3 is 0.5818 which is greater than the 0.05 level of significance (0.5818>0.05). This implies that the null hypothesis that total number of employees does not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry is accepted. Thus, it can be stated that the total number of employees does not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry.

From table 4.3.3 also, the value of R^2 is 0.864609, this shows that 86% of the variations in retained earnings was explained by changes in total number of employees whereas the remaining 24% could be explained by other factors capable of influencing retained earnings of the firms. This implies that the entire model is significant. From the table also, the coefficient of Durbin Watson statistics (DW) stands at 0.438683, which is closer to 0 than 2. This result indicates the presence of positive autocorrelation in the time series.

Test of Hypothesis Four

Step four: Restatement of Hypothesis in Null Form: Profit after tax does not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry.

Decision rule: Reject the null hypothesis if p-value is less than the criteria value (0.05) significance level. Otherwise accept.

Table 4.3.4: Panel Regression Results

Dependent Variable: RETAINED_EARNINGS
Method: Panel EGLS (Two-way random effects)
Date: 06/27/23 Time: 21:01
Sample: 2013 2022
Periods included: 10
Cross-sections included: 1
Total panel (balanced) observations: 10
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4738477.	4026512.	1.176819	0.2441
PROFIT__AFTER_TAX	1.224431	0.208269	5.879096	0.0000
	Effects Specification			
			S.D.	Rho
Cross-section random			9123738.	0.7148
Period random			3739771.	0.1201
Idiosyncratic random			4384917.	0.1651
	Weighted Statistics			
R-squared	0.373405	Mean dependent var		1419032.
Adjusted R-squared	0.362602	S.D. dependent var		5465778.
S.E. of regression	4363726.	Sum squared resid		1.10E+15
F-statistic	34.56377	Durbin-Watson stat		0.611335
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.454919	Mean dependent var		9898481.
Sum squared resid	5.35E+15	Durbin-Watson stat		0.164779

Source: Author's Eviews 7.0 Output, 2025

The probability value of profit after tax in table 4.3.7 is 0.000, which is less than the 0.05 level of significance (0.000<0.05), this shows that the null hypothesis that profit after tax does not significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry is rejected. Therefore, profit after tax significantly affects retained earnings of consumer goods sector of Nigeria manufacturing industry.

From table 4.3.4 also, R^2value stands at0.373405, showing that 37% variation in retained earnings was explained by changes in profit after tax while the remaining 63% could be

explained by other factors capable of influencing retained earnings. This implies that the entire model is significant. The Durbin Watson statistics (DW) value also is 0.611335 which closer to 0 than 2. The result indicates the presence of positive autocorrelation in the time series.

Discussion of Findings

Test of hypothesis one, shows that the null hypothesis was rejected implying that total assets significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry. From table 4.3.1 also, the beta coefficient of total assets is positive (0.245633), suggesting that total assets positively affect retained earnings. Based on these facts, it can be said that total assets of consumer goods sector of Nigeria manufacturing industry positively and significantly affect retained earnings of the firms. This result was well collaborated by the t-statistics result. From table 4.3.1, the calculated value of t stands at 7.599106 which is well above the critical value of t 2.262. Thus, this result confirm that total assets of consumer goods sector of Nigeria manufacturing industry positively and significantly affect retained earnings of the firms.

This result is consistent with the findings of Karadeniz and İskenderoğlu (2011) who found a positive and statistically significant relation between total assets which has been used as a size indicator and return on assets. Abiodun (2013) who confirmed that firm size, both in terms of total assets and in terms of total sales, has a positive impact on the profitability of manufacturing companies in Nigeria. Inyiama and Chukwuani (2014) confirmed that firm size has both short and long term positive effect on EPS, with a significant long run influence. Stierwald (2010) who suggested that lagged profit, productivity, and size play major roles in explaining profitability. Becker-Blease, Kaen, (2010) who found that profitability continues to increase as firms become larger in up to 11 industries. Robert, Mohamed and Onesmus (2015) observed a positive significant relationship between firm size and profitability. Thirumalaisamy (2013) who found that level of earnings retained is very much influenced by the growth rate of the companies.

The result was, however, not in agreement with the findings of Abebe (2016) who concluded that there is no significant association between firm size and firm performance of manufacturing firms in Ethiopia. Darabi,Ataeizadeh, and Abdi (2014) demonstrated that there is significant and

inverse relationship between company's growth opportunities and changes ratio in retained earnings of companies.

Test of hypothesis two, shows that the null hypothesis was rejected implying that total sales significantly affect retained earnings of consumer goods sector of Nigeria manufacturing industry. Table 4.3.2 also shows that the beta coefficient of total sales is positive (0.272968), suggesting that total sales positively affect retained earnings. Based on these facts, it can be stated that total sales of consumer goods sector of Nigeria manufacturing industry positively and significantly affect retained earnings of the firms. Again, this result was collaborated by the t-statistics result in table 4.3.2. From the table, the calculated value of t stands at 9.154491 which is above the critical value of t 2.262. This result, therefore, confirms that total sales of consumer goods sector of Nigeria manufacturing industry positively and significantly affect retained earnings of the firms.

This result is consistent with the findings of Chandrapala and Knápková (2013) who confirmed that firm size, sales growth and capital turnover are having significant positive impact on financial performance of firms. Abiodun (2013) also confirmed that firm size, both in terms of total assets and in terms of total sales has a positive impact on the profitability of manufacturing companies in Nigeria. Asimakopoulos, Samitas and Papadogonas (2009), who found that firm profitability is positively affected by firm size, sales growth and investment and negatively affected by leverage and current assets. Ammar (2003) again reveals that profitability drops as firms grow larger than $50 million in sales. Doğan (2016) found a positive relation between size indicators (sales) and profitability of firms. Vijayakumar and Tamizhselvan (2011) on their own confirmed a positive relationship between size and profitability of quoted companies in South India.Taani and Banykhaled (2011) found that profitability ratio (ROE), market ratio (PBV), cash flow from operation/sales, and leverage ratio (DER) has significant impact on earnings per share.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

Based on data analysis, results of finding and the discussions, we summarize the findings of the study as follows:

i. That total assets of consumer goods sector of Nigeria manufacturing industry positively significantly affect retained earnings of the firms. The implication of this finding is that as total assets increase, retained earnings of the firms also increase and vice versa.

ii. That total sales of consumer goods sector of Nigeria manufacturing industry positively and significantly affect retained earnings of the firms. The implication of this finding is that as total sales increase, retained earnings equally increase and vice versa.

iii. That total number of employees of consumer goods sector of Nigeria manufacturing industry positively and insignificantly affect retained earnings of the firms. The implication of this finding is that as total number of employees increase, retained earnings also increase, but less than proportionately.

iv. That profit after tax of consumer goods sector of Nigeria manufacturing industry positively and significantly affect retained earnings of the firms. The implication of this finding is that as profit after tax increases, retained earnings also increase and vice versa.

Conclusion

This study was conducted to evaluate the effect of firm size on retained earnings of consumer goods sector firm of Nigeria manufacturing industry. An ex-post facto research design was adopted whereby historical data were collected from the annual reports and accounts of the six selected consumer goods manufacturing firms. The collected data were analyzed using panel data regression analysis and t-statistics. Based on the result of the data panel data analysis and the findings, the study concludes that total assets, total sales and profit after tax of the consumer goods manufacturing firms positively and significantly affect retained earnings of the firms while total number of employees of the firms also positively, but insignificantly affects the retained earnings.

Recommendations

Based on the findings, the discussions and the conclusion, we hereby recommend as follows:

i. That consumer goods manufacturing sector in Nigeria should increase their retained earnings by increasing their total assets. Total assets can be increased in many ways,

either by increasing long term assets like lands and building, plants and machinery, furniture and fittings and so on or by increasing current assets like inventory, trade receivables and so on.

ii. That consumer goods manufacturing sector in Nigeria should increase their retained earnings by increasing their total sales. Total sales can be increased through product promotion like advertising or sales promotion.

iii. That consumer goods manufacturing sector in Nigeria should increase their retained earnings by increasing their total number of employees. Total number of employees can be increased through expansion of internal facilities of the firms like branch expansion, increase in volume of output and so on.

iv. That consumer goods manufacturing sector in Nigeria should increase their retained earnings by increasing their profit after tax. Profit after tax can be increased by implementing new technologies, increasing volume of output and increasing total sales.

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APPENDIX I

RAW DATA OBTAINED FROM THE FIRMS

OBSERVATION	Retained Earnings	Total Assets	Total Sales	No Of Employees	Profit After Tax
CADBURY NIG. PLC – 13	3093478	20352293	33990848	1425	1296533
CADBURY NIG. PLC – 14	4744187	23492656	37377497	1314	2596533
CADBURY NIG. PLC – 15	6265368	23681724	44481277	1091	4093822
CADBURY NIG. PLC – 16	6397861	25935341	46807860	1080	4180620
CADBURY NIG. PLC – 17	772731	32279958	54724749	1070	5491076
CADBURY NIG. PLC – 18	7896863	36497624	55547798	1240	5597613
CADBURY NIG. PLC – 19	7410556	43754114	60004119	1206	4724429
CADBURY NIG. PLC – 20	5541442	45736255	55754309	1292	2412243
CADBURY NIG. PLC – 21	6065887	50172484	59221748	1248	1192366
CADBURY NIG. PLC – 22	9752577	72491309	69777061	1207	3071885

Source: Firms Annual Reports

APPENDIX: DESCRIPTIVE RESULT OF THE SAMPLED FIRM

	Retained Earnings	Total Assets	Total Sales	No Employees	Profit After Tax
Mean	9898481.	37493330	44664365	1165.417	4214204.
Median	5614469.	28425102	34935650	1067.000	2504388.
Maximum	40139626	1.70E+08	1.82E+08	2921.000	23736777
Minimum	-15040003	1197182.	1510019.	188.0000	-296402.0
Std. Dev.	12903770	34453969	40142971	670.0877	5869708.
Skewness	0.897062	1.384475	1.330502	0.671381	2.132337
Kurtosis	2.870326	5.351192	4.811180	2.653851	6.891264
Jarque-Bera	8.089244	32.98795	25.90329	4.807068	83.32343
Probability	0.017516	0.000000	0.000002	0.090398	0.000000
Sum	5.94E+08	2.25E+09	2.68E+09	69925.00	2.53E+08
Sum Sq. Dev.	9.82E+15	7.00E+16	9.51E+16	26492037	2.03E+15
Observations	10	10	10	10	10

Source: Author's Eviews 7.0 Output, 2023