IAA Journal of Management 9(1):33-49, 2022.
ISSN:2636-7300
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Asset Management and Financial Performance of Consumer Goods Firms in Nigeria

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ABSTRACT

The study examined the effect of asset management on financial performance of consumer goods firms in Nigeria. Receivable's turnover ratio, inventory turnover ratio, and property, plant and equipment turnover were the asset management indicators used for the study, while profit for the year was the dependent variable of the study. The specific objectives of the study were to ascertain the effect of receivables turnover ratio, inventory turnover ratio, and property, plant and machinery turnover on profit for the year of consumer goods firms in Nigeria. The study adopted an *ex-post-facto* research design, covering the period 2011 and 2020. Secondary data were extracted from the annual reports and accounts of the sampled consumer goods firms in Nigeria. Multiple panel regression analysis (fixed effect model) was used for the data analysis. In line with the specific objectives of the study, it was revealed that account receivables turnover has a negative (Coefficient -0.026855) and insignificant (p-value 0.7776) effect on profit for the year of consumer goods firms in Nigeria. Inventory turnover ratio was found to have a negative (Coefficient -0.518761) and significant effect (p-value 0.0000) on profit for the year. Property, plant and equipment turnover ratio has a negative (Coefficient -0.075517) and significant effect (p-value 0.0280) on profit for the year of consumer goods firms in Nigeria. This implies that inventory and property, plant and equipment can be used to predict profit for the year of consumer goods firms in Nigeria. It is therefore recommended that consumer goods firms in Nigeria should strive to manage their account receivables efficiently so as to reduce its negative effect on financial performance. They should be more effectively manage the credit it extends to customers and how quickly that short-term debt is collected or is paid. These consumer goods firms should always strive to maintain a good inventory level. This will help them turn around the negative effect inventory turnover has on financial performance. They should always strive to generate sufficient revenue so as to increase revenue generated per unit of Property, Plant and Equipment.

Keywords: Asset Management, Financial Performance, and Regression.

INTRODUCTION

Performance is the bottom-line for every organization, business and non-business alike. It is essential because non-performance can spell failure [1,2,3,4,5,6,7]. [8,9,10], posits that sustainability of a firm heavily depends on the ability and success of its financial management function. They, further, submit that corporate finance involves capital budgeting, capital structure, and asset management [11,12,13]. [14,15,16], state that the performance of a firm is primarily affected by a number of factors, one of the most important ones being its asset management. Assets are the life blood of every firm [17,18]. Financial Accounting Standards Board (FASB) defined assets as "probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events". Firms cannot start and/or expand without assets because they need assets to produce their products [19,20]. These assets measure

the ability of the firm to survive and compete with other firms [21]. [22], opine that it is normal for most businesses to own many different types of assets which are expected to produce benefits for the business for more than one accounting year which also requires special treatment. [23], suggests that the need for investment in assets varies greatly among companies as manufacturing firms depend on the structure of assets which consist of two types, namely: non-current and current assets for the effective and efficient running of the organization. In addition, he opined that the productive engine of every business organization is the noncurrent assets and that how well the capital-intensive firms utilize their assets determines the difference between profit and loss [24]. He also notes that if the property, plant and equipment (PPE) are idle or not generating enough cash flow, this may impact on the value and financial health of the business [25]. However, [26] suggest that no firm can be sustained without some investment in corporate assets. They, further, opine that investment in assets like land, building, plant and machinery, fixtures, fittings and long-term prepayments enhances the productive capacity and long-term profitability of firms [27]. This category of corporate assets does not change frequently and they are purchased to enhance the productive capacity of a firm and ensure increase in sales given that a firm acquires plant and machinery and other productive noncurrent assets for the purpose of generating sales [28]. So, corporate assets have significant role in determining the efficiency of the firm's operation. Traditionally, there is a positive relationship between manufacturing companies and non-current assets because the nature of these companies require a high percentage of non-current assets to transfer the raw materials into finished goods [29]. [30], opine that the assets structure in the manufacturing companies tend to increase investment in non-current assets and decrease same in current assets. Moreover, the massive growth in non-current assets should lead to increased profit because the utilization of these assets means more products and sales [31]. This study therefore evaluates the effect of the management of these assets on financial performance of selected listed consumer goods firms in Nigeria.

Statement of the Problem

Over the years, strong demographics, the rising middle-income class and steady economic growth positioned Nigeria as an attractive investment destination for Fast Moving Consumer Goods (FMCG) players globally. However, sluggish economic recovery, tight consumer spending and widening income inequality have slowed the growth in the consumer goods sector since the 2008 global economic recession. This is apparent given that average GDP growth has slowed to 1.7% post-recession compared with the 4.8% recorded pre-recession. Similarly, the harsh operating environment given poor infrastructure, rising inflation, trade and foreign exchange restrictions, porous land borders and logistical setbacks have also dampened the performance of industry players. The demand and supply disruptions caused by COVID-19 coupled with weaker oil prices have laid the foundation for a looming economic recession. The slump in global oil prices created foreign exchange illiquidity, thus posing a major challenge for consumer goods firms who depend largely on imported raw materials for production. Apart from systematic risks that can affect the performance of manufacturing firms in Nigeria, managerial (unsystematic) risks can also exert some level of impact on the performance of consumer goods firms. The managers of firms also hold the keys to successes of their organization. They are the ones that take decisions on all aspects of the firm such as asset base, liquidity, and so on. They have it as a duty to manage the organization's assets. Assets are used to generate revenue, increase business value, and facilitate the running of the business. When properly managed, asset will be of immense benefit to the firm. It guarantees steady profits for the organization, then, increased dividends

for the shareholders. Asset structure and management can decide the financial success or failure of a firm. Despite the huge market judged by high increasing population in the country, the Nigerian consumer goods sector is still bedevilled with various challenges manifesting in the form of high inventory of unsold finished products, low profits, and poor or inadequate capital for investment. This is characterized by none competitiveness of Nigerian manufactured products. It is obvious that economic issues played a part in this poor performance. However, the extent to which management deficiencies attributes to this poor performance remains to be known. Consequently, this study evaluated the effect of asset management on financial performance of consumer goods firms in Nigeria.

Objectives of the Study

The main objective of the study is to evaluate the effect of asset management on financial performance of consumer goods firms in Nigeria. In a bid to achieve this primary objective, the study must strive to achieve the following specific objectives.

i. Evaluate the effect of account receivables turnover ratio on profit for the year of consumer goods firms in Nigeria.
ii. Ascertain the effect of inventory turnover ratio on profit for the year of consumer goods firms in Nigeria.
iii. Determine the effect of property, plant and equipment (PPE) turnover ratio on profit for the year of consumer goods firms in Nigeria.

Research Questions

In line with the specific objectives of the study, the following research questions guided the discussions in this study:

i. What is the effect of account receivables turnover ratio on profit for the year of consumer goods firms in Nigeria?
ii. What is the effect of Inventory turnover ratio on profit for the year of consumer goods firms in Nigeria?
iii. What is the effect of property, plant and equipment (PPE) turnover ratio on profit for the year of consumer goods firms in Nigeria?

Statement of the Hypotheses

In order to achieve the stated objectives and answer the research questions, the following null hypotheses were formulated for this research:

i. Account receivables turnover ratio does not positively affect profit for the year of consumer goods firms in Nigeria.
ii. Inventory turnover ratio does not positively affect profit for the year of consumer goods firms in Nigeria.
iii. Property, plant and equipment (PPE) turnover ratio does not positively affect profit for the year of consumer goods firms in Nigeria.

REVIEW OF RELATED LITERATURE

Conceptual Review

Account Receivables Turnover

Accounts receivable (AR) is the balance of money due to a firm for goods or services delivered or used but not yet paid for by customers. Receivable turnover is very important indicator to show the efficiency of the company in performing its financial activities. The Receivable Turnover (RT) ratio provides insight into the quality of the firm's receivables and how successful the firm is in its collections [32]. This ratio is calculated by dividing receivables into annual net credit sales [33]. [34], posit that receivable turnover could depict a very valuable

information, but mainly the ratio tells us the number of times accounts receivable have been turned over (turned into cash) during the year. The higher the turnover, the shorter the time between the typical sale and cash collection. Additionally, the receivables turnover ratio indicates how often, on average, receivables resolve-that is, are received and collected during the year [35]. [36], states that managing accounts receivables involves five steps which include determining to whom to expand credit, establishing an installment period, monitoring collections, evaluating the liquidity of receivables, and in the long run cash receipts from accounts receivables holders. He takes note of that the basic piece of managing accounts receivables is determining to whom credit ought to be stretched out and to whom it ought not. This is on the grounds that numerous organizations increase sales by being liberal with their credit arrangement, however they may wind up extending credit to unsafe clients who don't pay. Additionally, if the credit arrangement is too tight, sales will be lost [37].

$$\text{Accounts Receivable Turnover} = \frac{\text{Net Credit Sales}}{\text{Average Accounts Receivable}}$$

Inventory Turnover Ratio

Efficient inventory management is vital for the successful functioning of manufacturing and retailing organizations. Inventory consist of raw materials, work in progress, spare parts or consumables, goods in transit and finished goods. It is not necessary that an organization will have all these inventory classes, but whatever may be the inventory items, they need efficient management as, generally, substantial share of the company's funds is invested in inventory. The inventory management of any organization represents an important decision-making function at all stages of the product manufacturing, distribution and sales chain. Apart from being a major portion of total current assets of many organizations, according to [38] inventory often represent as much as 40% of the capital of industrial organizations. [39], also stated that inventory represents 33% of a company's assets and as much as 90% of working capital. As inventory constitutes a major segment of a company's assets, it is crucial that good inventory management practice is put in place to ensure the organization's growth and profitability to sustain the business as a going concern. Inventory management is the art and science of maintaining stock levels of a given group of items incurring the least cost consistent with other relevant liquidity and profitability targets and objectives set by management [40]. According to [9], one of the essential tools for analyzing and evaluating the firm's liquidity and quality of inventories is the inventory turnover ratio which measures the average rate of speed at which inventories move through and out of a company. Inventory turnover ratio (ITR) is calculated as Average Inventory/Cost of Goods.

Property, Plant and Equipment (PPE) Turnover Ratio

No organization can be sustained without some investment in property, plant and equipment. Investment in non-current asset like land, building, plant and machinery, fixtures, fittings and motor vehicle enhance the productive capacity of firms. Profits can be generated by investing in such assets to ensure long term profitability. This category of assets does not change frequently and they are purchased to produce and sell more. Therefore, efficiency in the use of property, plant and equipment should be judged in relation to sales. [14], opined that non-current asset turnover ratio measures the efficiency with which a firm is utilizing its investment in property, plant and equipment. It also indicates the adequacy of sale in relation to investment in non-current asset. Generally, ahigh property, plant and equipment turnover ratio indicates efficient utilization of non-current asset in generating sales, while a low ratio indicates inefficient

management and utilization of non-current asset.

Financial Performance

Performance has been viewed by many authors in various ways. [16], defined performance as an achievement of tangible, specific, measurable, worthwhile and personally meaningful goals. Performance is the ability of an organization to gain and manage the resources in several different ways to develop a competitive advantage. Literature usually distinguishes between two types of performance, financial or economic performance and innovative performance. This study concentrated on financial performance. [19], defined performance as valuable results, accomplishment, or contributions of an individual or an organization, regardless of preferred or mandated process. The financial performance indicator used in this study is profit for the year.

Return on Equity (ROE)

Return on equity is one of the all-time favourites and perhaps most widely used overall measure of corporate financial performance [9]. This was confirmed by Monteiro (2006) who stated that ROE is perhaps the most important ratio an investor should consider. The fact that ROE represents the end result of structured financial ratio analysis, also called Du Pont analysis [13] contributes towards its popularity among analysts, financial managers and shareholders alike. DuPont analysis also states that ROE is one of the most important financial ratios and profitability metrics which is often said to be the ultimate ratio or the 'mother of all ratios' that can be obtained from a company's financial statement as it measures how profitable a company is for the owner of the investment, and how profitably a company employs its equity. [19], state that shareholder value is created when the equity returns of a company exceed the cost of that equity and it can also be described as present value of all future cash flows, less the cost of debt. Return on equity seems an appropriate measure of investment profitability.

Theoretical Framework

This work is anchored on asset profitability theory because the theory suggests that sufficient assets may reduce risk and bankruptcy cost, thus improving the performance of the firm.

Asset Profitability Theory

Asset profitability theory by [9] stated that increase in current asset to total assets ratio has a negative effect on firms' profitability, while on the other hand, increase in current liabilities to total liabilities ratios has a positive effect on profitability of firms. This theory notes that decrease in current asset to total assets ratio as well as increase in the ratio of current liabilities to total liabilities ratios, when considered independently, lead to increased profitability coupled with a corresponding increase in risk. Increase in the ratio of current assets to total assets reduces profitability because it is assumed that (i) current assets are less profitable than non-current asset; and (ii) short-term funds are less expensive than long-term funds. Decrease in the ratio of current assets to total assets result in an increase in profitability as well as risk.

Empirical Review

Account Receivables Turnover and Financial Performance

[11], examined the impact of working capital management on the profitability of Nigerian quoted Manufacturing firms. Data were sourced from a sample of 22 manufacturing firms for the period 2000-2011. Generalized least square multiple regressions were used to test the five Hypotheses formulated for the study. Results show that, accounts payable ratio had negative relationship with the industries' profitability. On the other hand, accounts Receivable ratio had positive and significant relationship with profitability. Stock turnover ratio had negative and significant relationship with profitability. [15], examined the impact of

working capital management on profitability of selected quoted Nigeria manufacturing companies from 2006-2015. Secondary panel data was used for the study. The results showed that Account collection period (ACP), Account payment period (APP), and Inventory Turnover in Days (ITID) have negative effect on the Net Operating Profitability of quoted manufacturing companies in Nigeria. [19], examined the effect of working capital management on the profitability of brewery firms in Nigeria. This study adopts the ex-post-facto research design and employed the Ordinary Least Square (OLS) regression technique in analyzing the data. The findings suggest that the management of the number of days account receivables are outstanding, numbers of days inventory are held, and cash conversion cycle are significant factors in the accomplishment of the profitability objective of brewery firms in Nigeria. [20], examined the effects of working capital management i.e. inventory management, receivable management and payable management, on the performance of the non-financial firms in Pakistan. Panel data of 280 nonfinancial firms enlisted in Pakistan Stock Exchange have been analyzed from 2000 to 2016. Firms' profitability was proximate with return on assets and return on equity; whereas for growth i.e. sales growth and asset growth were used. Results suggest inventory management does influence the firms' growth and Payable management significantly affects the firms' profitability. However, only receivable management influences both profitability and growth. [19], examined the relationship between working capital management and profitability of food and beverages manufacturing firms listed on the Nigerian Stock Exchange. The study used secondary data of 120 firm-year observations between 2002 and 2011. Survey research design was adopted. The data were analysed using Descriptive Statistics, Correlation Analysis and Multiple Regression Analysis. The study found an insignificant relationship between Cash Conversion Cycle and Net Operating Profit. Also, Account Collection Period has significant negative relationship with Net Operating Profit while Inventory conversion Period and Account payment period have insignificant negative relationship with Net operating profit of food and beverages manufacturing companies in Nigeria. [19], evaluated the relationship between assets growth rate and financial performance of manufacturing firms in Nigeria. Six (6) firms were selected from the twenty-two (22) manufacturing firms listed on the Nigeria Stock Exchange Market (NSE) and secondary data collected from the firms for ten years' period (2006 – 2015). Using Pearson Product Moment Correlation Matrix and Multiple Regression, result shows that non-current assets growth rate and net assets growth rate of manufacturing firms in Nigeria positively and strongly related with the profit for the year of the firms for the period of 2006 – 2015, while current assets growth rate positively and weakly related with the profit for the year of the firms for the period.

[20], examined the influence of corporate governance principles on banks financial performance in Ghana. Data for the study was gathered from the annual reports and the financial statements of the sampled banks from the period 2007-2016. Random effect model was used to analyse the data. This study found a significant positive relationship between board size and financial performance measured by ROA and ROE of banks in Ghana. Additionally, the study found a statistically positive relationship between foreign ownership and financial performance measured by ROE and ROE. Interestingly, the study outcome further indicated positive but no statistical relationship between board independence and institutional ownerships and ROA and ROE of the sampled banks in Ghana. [30], examined the relationship between internal corporate governance mechanisms and firm performance of NSE listed companies. Firm performance has been measured using Tobin's Q and MBVR as market-based measures and ROA and ROE as accounting-based measures.

Econometric Analysis is performed using Fixed Effect with-in and Least Square Dummy Variable model, Random effect model and Feasible Generalized Least Square model on a panel of 178 non-financial NSE listed firms for a period of eight years from 2011-2018. The results concluded that Board parameters are the important internal corporate governance mechanisms impacting firm performance in the Indian context. Board size, Board Composition, Board independence and CEO Duality have a significant negative impact on firm performance measures; on the other hand, Chairman Identity has a significant positive impact on firm performance. However, Board Activity has no impact on firm performance. [35], attempted to show the role of corporate governance characteristics on the performance of Jordanian Banks expressed by return on equity ROE during the period from 2014 to 2017. The investigation employed statistics measurements and tools to state the relationships between ROE and different variables. The study indicates a significant effect of different corporate governance characteristics on the performance of banks. In other words, the study reports significant effects of the board size, board diligence, audit committee size and audit committee diligence separately on ROE by considering two controlling variables; namely, firm size and return on assets. [36], conducted a study to determine if credit policy affects the performance of Saudi Construction Companies. The study examines the relationship between the length of receivable conversion period as a measure of credit policy and operating profit margin as a measure of operational performance of construction firms listed at Saudi stock market (Tadawul). A sample of 230 firms was selected from the construction companies. Annual financial reports and audited financial statements of the years 2004-2013 were acquired from Saudi construction companies' websites. Dynamic panel data two-steps robust system estimation for the period 2004-2013 was used to examine the relationship. The analysis is applied at the levels of the full sample and divisions of the sample into crisis and non-crisis periods, by sector and by size. The results show negative and significant relationship between receivable conversion period as a measure of credit policy and profitability for the full sample. The result of the relationship between receivable conversion period and profitability for small firms is negative and significant. The results also show negative and significant relationship between receivable conversion period and profitability of real estate companies and negative and insignificant relation for building and construction companies. [38], conducted a study to ascertain the effect of credit policy on profitability and sales of manufacturing small and medium sized enterprises in Nairobi County, Kenya. The study adopted a descriptive research design [40]. The target population was all the manufacturing in Nairobi County from which 50 SMEs were sampled. The study used secondary data which was obtained from the SMEs financial statement for five years from 2009 to 2013. Multiple regression analysis was used to analyze data. The significance of the results was tested using using t-test, z tests and the ANOVA. The study found that credit policy is positively related to manufacturing SMEs profitability with a coefficient of correlation of 0.83 and coefficient of determination of 0.69. Credit policy was also found to have strong positive relationship with growth in sales as shown by coefficient of correlation of 0.896 and R square of 0.8 .The study recommended that SMEs should adopt liberal credit policy and carry out thorough credit appraisal to ensure reduced costs of bad debts and debt administration costs. The government and policy formulators should come up with ways of reducing cost of financing to ensure that manufacturing SMEs are able to finance receivables since the lower the cost of financing, the higher the credit sales hence increase in sales and profitability

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METHODOLOGY

Research Design

The study adopted *ex post facto* research design. This is because the study involved events which have taken place already as data used for the analysis were secondary data extracted from the audited annual reports and accounts of the sampled consumer goods firms.

Area of Study

The study was conducted in Nigeria within the consumer goods firms in Nigeria. These firms include: Guinness Nigeria Plc. the cooperate headquarter is located at Ikeja Lagos Nigeria it is a company that produce Malta Guinness, Origin, Zero and Dubic malt in pet format. Also acquired the right to manufacture locally successful mainstream sprit brand in Nigeria that are part of dry gin brands including Siminorf vodka and Gordon's gin. Nigeria breweries Plc. the cooperate headquarter is located at Surulere Lagos Nigeria. They make and sell beer, larger beer, malt and soft drinks. Unilever Nigeria Plc. cooperate headquarter is Apapa Lagos Nigeria. They provide profound care and food categories. They can sell product such as Omo washing powder, key soap, Lipton tea, Blue Band Margarine, Baby Pears Care goods. Cardbury Nigeria Plc. The Corporate headquarter is located at Ikeja Lagos. Cardbury Nigeria Plc is a food, sweet and drinks company, powder beverages and chewing gum in Nigeria. Nestle Nigeria Plc cooperate headquarter is located at Ilupeju Lagos Nigeria.They make and sell breakfast cereals, baby food seasoning such as infant cereals, and so on. Flour Mill Nigeria Plc cooperate headquarter is located at Apapa Lagos.They produce floor and other food items. Dangote Suger Nigeria plc located in wharf port lagos they produce suger. PZ cussson Nigeria Plc. cooperate headquarter is located at Illaeja lagos Nigeria they produce imperial leather soap, powdered milk, olive oil, detergent and health product. Honeywell Floor Mill have its headquarter in Apapa Lagos. They produce Flours, Pastas, and Wheat and other powdered grains.

Sources of Data

The study collect data for analysis from the audited annual reports and accounts of sampled quote consumer goods firms in the Nigerian Stock Exchange (NGSE). Basically, the nature and sources of data for the analysis of this work was secondary.

Population

The population for this study constitutes the 19 listed consumer goods firms on the Nigerian Stock Exchange as at 31 December 2020.

Sample Size Determination

The study was centered on quoted consumer goods firms in the Nigeria Stock Exchange. The study selected firms whose annual report and accounts were submitted to the Nigeria Stock Exchange, and are participating actively on the floor of the exchange. They are Guinness Nigeria Plc, Unilever Nigeria Plc, Nigerian Breweries Plc, Nestle Nigeria Plc, PZ Cussons Plc, Cadbury Nigeria Plc, Dangote Sugar Refinery Plc, Honeywell Flour Mills,and Flour Mills Nigeria Plc.

Model Specification

The multiple regression (panel least square) model was specified as follows:

$$\mathbf{PFYTTA} = \beta_0 + \beta_1\mathbf{ARTTR} + \beta_2\mathbf{INVTTR} + \beta_3\mathbf{PPETTR} + \mathbf{u} \quad \text{(Equation 1)}$$

Where;

PFYTR = Profit for the Year to Turnover ratio

ARTTR = Account Receivables to Turnover ratio

INVTTR= Inventory Turnover Ratio

PPETTR= Property, Plant and Equipment Turnover Ratio

Control variables include LnTR = Natural Logarithm of Turnover

Description of Variable

The variables were structured into dependent and independent variables. Profit for the Year to Turnover is the dependent variable while account receivables turnover, inventory turnover ratio, and Property, Plant and Equipment Turnover Ratio were the independent variable of the study.

Table 1: Variable Description

Acronyms	Full Meaning	Source of Data
PFYTR	Profit for the Year to Turnover	Annual Reports & Accounts
ARTTR	Account Receivables Turnover	Annual Reports & Accounts
INVTTR	Inventory Turnover Ratio	Annual Reports & Accounts
PPETTR	Property, Plant and Equipment Turnover Ratio	Annual Reports & Accounts

Source: Author's Arrangement

Return on Equity

Profit for the Year to Turnover is one of the all-time favourites and perhaps most widely used overall measure of corporate financial performance (Rappaport 1986). This was confirmed by Monteiro (2006) who stated that PFYTR is perhaps the most important ratio an investor should consider.

Account Receivable Turnover: Accounts receivable (ARTR) is the balance of money due to a firm for goods or services delivered or used but not yet paid for by customers. Receivable turnover is very important indicator to show the efficiency of the company in performing its financial activities.

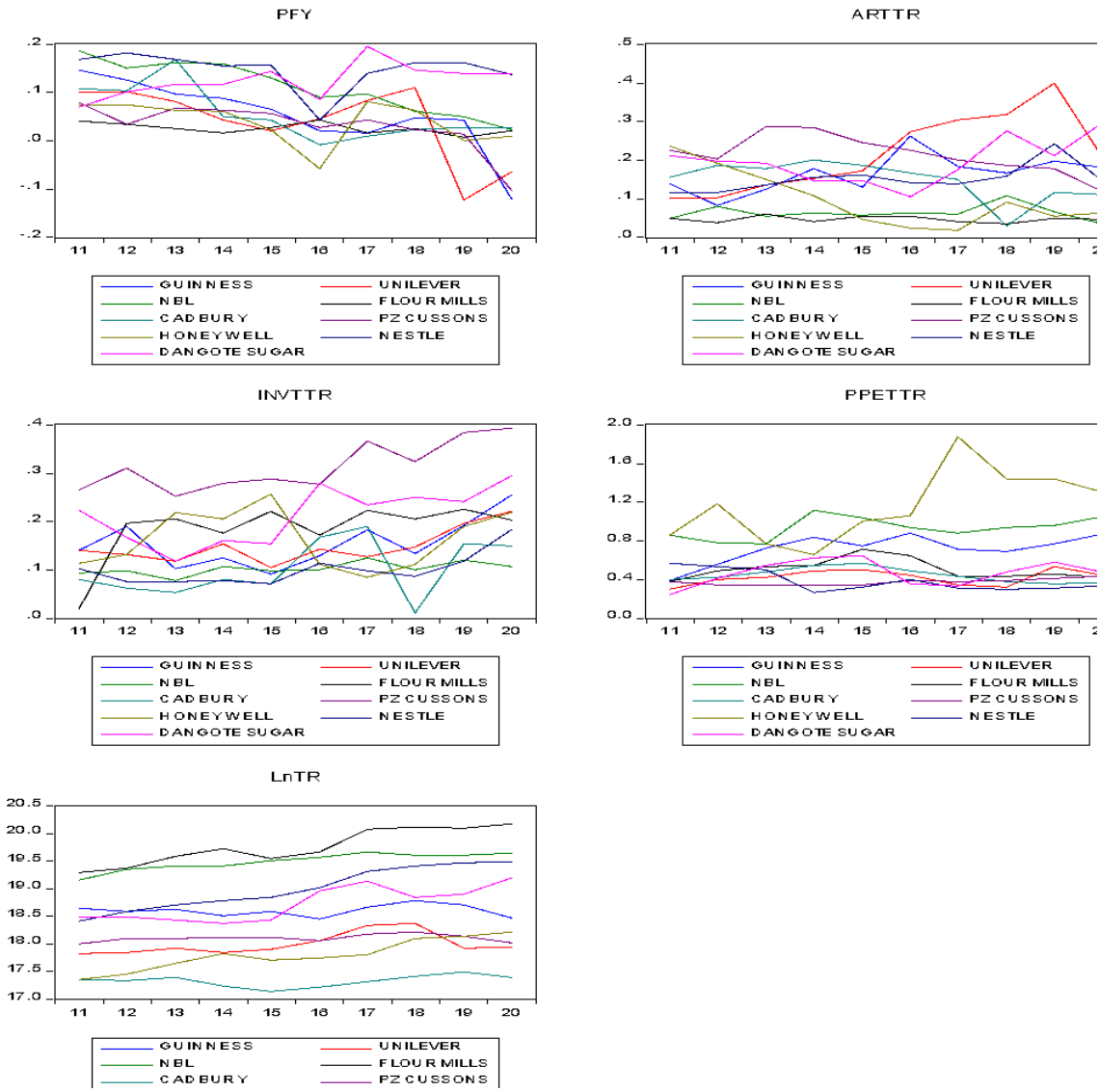
Inventory Turnover Ratio: Inventory turnover ratio which measures the average rate of speed at which inventories move through and out of a company. Inventory turnover ratio (ITR) is calculated as Average Inventory/Cost of Goods.

Property, Plant and Equipment Turnover Ratio: PPETTR ratio measures the efficiency with which a firm is utilizing its investment in non-current asset. It also indicates the adequacy of sale in relation to investment in non-current asset.

Methods of Data Analysis

For the analysis of the extracted data, multiple regression techniques was applied to a panel series of data to test all the hypotheses from one to three. The signs of the coefficients was relied upon in describing the direction and strength of linear relationship variables while the t-statistics and p-values were relied upon in determining the magnitude of the effect between the variables, x and y in the collection of our data series as in Ethel, Okwo and Oliver (2015). The explainatory variables of measurements were account receivables turnover, inventory turnover ratio, and property, plant and equipment turnover ratio the sampled consumer goods firms (x) and the regressand was Profit for the Year to Turnover (y).

DATA PRESENTATION AND ANALYSIS
DATA PRESENTATION
Panel Data Analysis for Industry Level Analysis
Figure 1: Panel Data Line Graph



Source: Computed by Researcher Using Eviews 10.0 Statistical Software

The graph in figure 1 revealed the pattern of movement of both the focal variable (Profit for the Year) and the explanatory variables (Account Receivables Turnover, Inventory Turnover Ratio, &PPETTR). The figure shows that profit for the year has similar pattern of movement with PPETTR. However, Account Receivables Turnover and Inventory Turnover Ratio have an inverse pattern of movement with Profit for the Year of consumer goods firms in Nigeria.

Table 2: Descriptive Statistic of the Focal & Explanatory Variables

	PFYTTA	ARTTR	INVTTR	PPETTR	LNTR
Mean	0.069121	0.143889	0.164141	0.598082	18.52905
Median	0.062593	0.145755	0.147175	0.486863	18.45186
Maximum	0.194615	0.398947	0.391964	1.880939	20.16775
Minimum	-0.122666	0.016377	0.010765	0.239723	17.14145
Std. Dev.	0.066356	0.080058	0.080187	0.304539	0.795856
Skewness	-0.418156	0.511165	0.713214	1.607077	0.197889
Kurtosis	3.437462	2.961992	3.161397	5.973841	2.075490
Jarque-Bera	3.340467	3.924763	7.727805	71.90442	3.792596
Probability	0.188203	0.140523	0.020986	0.000000	0.150123
Sum	6.220927	12.95003	14.77265	53.82734	1667.614
Sum Sq. Dev.	0.391881	0.570433	0.572259	8.254221	56.37135
Observations	90	90	90	90	90

Source: Computed by Researcher Using Eviews 10.0 Statistical Software

Table 2 above reveals the variable description of the 90 observations of the panel data collected from annual report and accounts of sampled consumer goods firms in Nigeria. The normality of the distribution of the data series is shown by the coefficients of Skewness, Kurtosis, and Jarque-Bera Probability. From the Table 2, the probability of the Jarque-Bera Statistics for Profit for the Year (0.188203), Account Receivables Turnover (0.140523), and the control variable (Turnover 0.150123) have an insignificant p-values. The insignificance of p-values depicts normal distribution for the variables. Inventory Turnover Ratio (0.020986) and Property, Plant, and Equipment (0.000000) have a significant p-values, which connotes abnormal distribution of the time series data. The skewness coefficients which operates around the figure one for all the variables except Property, Plant, and Equipment further confirmed that the distribution are normal. The kurtosis coefficient also provides a second level of confirmation that are normally distributed. The kurtosis of all the variables are not far from the figure 3 (three) except for Property, Plant, and Equipment. This is the case of the data extracted from annual reports and accounts of consumer goods firms in Nigeria.

Table 3: Panel Correlation Analysis Result

	PFYTTA	ARTTR	INVTTR	PPETTR	LNTR
PFYTTA	1.000000	0.005226	-0.39369	-0.11278	0.212502
ARTTR	0.005226	1.000000	0.259453	-0.40364	-0.37779
INVTTR	-0.39369	0.259453	1.000000	-0.21192	0.000434
PPETTR	-0.11278	-0.40364	-0.21192	1.000000	0.015088
LNTR	0.212502	-0.37779	0.000434	0.015088	1.000000

Source: Computed by Researcher Using Eviews 10.0 Statistical Software

Table 3 suggests that there is a weak (0.52% apprx) and positive relationship between Profit for the Year and Account Receivables Turnover. Profit for the Year and Inventory Turnover Ratio share a negative and weak relationship (39% apprx). However, Property, Plant and Equipment Turnover Ratio and Profit for the Year have negative and weak relationship at approximately (11%).

Table 4: Multiple Regression Result of Industry Level Panel Data

Dependent Variable: PFYTTA
Method: Panel Least Squares
Date: 09/26/21 Time: 08:55
Sample: 2011 2020
Periods included: 10
Cross-sections included: 9
Total panel (balanced) observations: 90

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ARTTR	-0.026855	0.094753	-0.283423	0.7776
INVTTR	-0.518761	0.115728	-4.482603	0.0000
PPETTR	-0.075517	0.033724	-2.239281	0.0280
LNTR	0.027329	0.023398	1.167991	0.2464
C	-0.303074	0.427306	-0.709267	0.4803

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.557830	Mean dependent var	0.069121
Adjusted R-squared	0.488920	S.D. dependent var	0.066356
S.E. of regression	0.047438	Akaike info criterion	-3.125902
Sum squared resid	0.173278	Schwarz criterion	-2.764819
Log likelihood	153.6656	Hannan-Quinn criter.	-2.980292
F-statistic	8.095096	Durbin-Watson stat	1.412389
Prob(F-statistic)	0.000000		

Source: Computed by Researcher Using Eviews 10.0 Statistical Software

Table 4 reveals that Account Receivables Turnover has a negative (Coefficient-0.026855) and insignificant (p-value0.7776) effect on Profit for the Year. Inventory Turnover Ratio was found to have a negative (Coefficient -0.518761) and significant effect (p-value 0.0000) on Profit for the Year of consumer goods firms in Nigeria. It was revealed that Property, Plant and Equipment Turnover Ratio has a negative (Coefficient -0.075517) and significant effect (p-value 0.0280) on Profit for the Year. The control variable (natural logarithm Turnover) have a positive and insignificant effect on Profit for the Year. The result also showed that a unit change in Account Receivables Turnover,Inventory Turnover, and Property, Plant, Equipment will result to a decrease of 0.026855, 0.518761, and 0.075517 in Profit for the Year. The adjusted R-squared (R^2) indicated that about 48% of the changes in Profit for the Year of consumer goods firms are accounted for by the explanatory variables (Account Receivables Turnover, Inventory Turnover Ratio, and Property, Plant and Equipment Turnover Ratio). The remaining 52% could be explained by other factors capable of influencing the Profit for the Year of consumer goods firms and other remote factors captured by the error term. The probability of the F-statistic (p-value 0.000000) is significant which shows the statistical fitness of the multiple regression model and the results, by extension. There is an absence of serial autocorrelation in the data extracted from annual reports and accounts of consumer goods firms as

suggested by Durbin-Watson stat which is approximately1.41.

Tests of Hypotheses

The three principal testable hypotheses formulated in chapter one in an attempt to evaluate the effect of asset management on financial performance of consumer goods firms in Nigeria, were tested using the following decision rule: Reject H_0 if the P-value is less than the 0.05 and accept the null hypotheses if reverse becomes the case. Also, reject the null hypothesis if the t-statistic result is greater than two, and accept the alternate hypothesis if reverse be the case.

Hypothesis One: Account receivables turnover does not significantly affect the profit for the year of consumer goods firms in Nigeria.

Decision: From the panel regression analysis in table 4.2.10c, the P-value of 0.7776is > 0.05 and the t-statistic of 1.642217 is < 2. Therefore, the null hypothesis is accepted and the alternative hypotheses rejected. This implies that account receivables turnover does not significantly affect profit for the year of consumer goods firms in Nigeria.

Hypothesis Two: Inventory turnover ratio does not significantly affect the profit for the year of consumer goods firms in Nigeria.

Decision: From the panel regression analysis, the P-value of 0.0000is < 0.05, and the t-statistic of 4.482603 is > 2. Therefore, the null hypothesis is rejected and the alternative hypotheses accepted. This implies that inventory turnover ratio have significant effect on profit for the year of consumer goods firms in Nigeria.

Hypothesis Three: Property, Plant and Equipment turnover ratio does not significantly affect the profit for the year of consumer goods firms in Nigeria.

Decision: From the panel regression analysis, the P-value of 0.0280is < 0.05 A-value and the 2.239281 t-statistic is > 2. Therefore, the null hypothesis is rejected and the alternate hypotheses accepted. This implies that Property, Plant and Equipment turnover ratio has a significant effect on profit for the year of consumer goods firms in Nigeria.

DISCUSSION OF RESULTS

Account Receivable Turnover and Profit for the Year

In the test of hypotheses one, the regression analysis result revealed that account receivables turnover has a negative and insignificant effect on profit for the year of consumer goods firms in Nigeria. This implies that as account receivables increases, the profit for the year of consumer goods firms decreases significantly. This is in tandem with the findings of [16,20,30,35] who found a negative and significant relationship between profit for the year and financial performance. However, [30,35,36,39] made a different observation.

Inventory Turnover and Profit for the Year

In the test of hypothesis two, the regression result revealed that inventory turnover ratio has a negative and significant effect on profit for the year of consumer goods firms in Nigeria. This implies that as inventory turnover ratio increases, profit for the year decreases [8]. The finding is consistent with the findings of [9],[10],[11] who made similar findings. However, [19], [20], [21] made dissimilar observation which can be attributed to the sector and geographical disparity between the two studies.

Property, Plant and Equipment Turnover and Profit for the Year

In the test of hypotheses three, the regression result revealed that Property, Plant and Equipment turnover ratio has a negative and significant effect on profit for the year of consumer goods firms in Nigeria [27]. This implies that as Property, Plant and Equipment turnover ratio increases profit for the year of these companies will reduce significantly. [40], made similar observations.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

SUMMARY OF FINDINGS

The summary of findings made for the study includes the following:

i. Account Receivables Turnover has a negative (Coefficient-0.026855)

and insignificant (p-value0.7776) effect on Profit for the Year of consumer goods firms in Nigeria.

ii. Inventory Turnover Ratio was found to have a negative (Coefficient -0.518761) and significant effect (p-value 0.0000) on Profit for the Year of consumer goods firms in Nigeria.

iii. Property, Plant and Equipment Turnover Ratio has a negative (Coefficient -0.075517) and significant effect (p-value 0.0280) on Profit for the Year of consumer goods firms in Nigeria.

CONCLUSION

The major function of business managers is to create wealth for the shareholders through increased profitability. In a bid to achieve these profitability goals, proper management of asset which is the lifeblood of a business becomes very pertinent. From the multiple regression analysis, it was revealed that account receivables turnover have a negative and insignificant effect on profit for the year of consumer goods firms in Nigeria. However, Inventory turnover ratio and Property, Plant and Equipment turnover ratio has a negative and significant effect on profit for the year of consumer goods firms in Nigeria. The adjusted R-squared suggest that 48% of changes in profit for the year of consumer goods firms could be explained by the explanatory variables. The remaining 52% could be explained by other factors capable influencing profit for the year in the industry. Hence, the study concludes that consumer goods firms in Nigeria are not efficient in making proper use of their asset.

RECOMMENDATIONS

The following recommendations are made for the study:

i. Consumer goods firms in Nigeria should strive to manage their account receivables efficiently so as to reduce its negative effect on financial performance. They should be more effectively manage the credit it extends to customers and how quickly that short-term debt is collected or is paid.

ii. These consumer goods firms should always strive to maintain a good inventory level. This will help them turnaround the negative effect inventory turnover has on financial performance.

iii. They should always strive to generate sufficient revenue so as to increase revenue generated per unit of Property, Plant and Equipment.

CONTRIBUTIONS TO KNOWLEDGE

The essence of every research is its contribution to knowledge. This study on the effect of asset management on financial performance of consumer goods firms in Nigeria has contributed to the existing reservoir of knowledge by being the first study to evaluate the effect of Property, Plant and Equipments turnover ratio on financial performance. The study revealed also that none of the studies that evaluated asset management and profitability was current enough to highlight the effects of asset management on profitability of consumer goods firms in this present economicsituation.

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