

Cost Management and Financial Performance of Consumer Goods Companies, Quoted in Nigeria

Fadare Temitayo. V *, Dr Adegbe, F.F **

* Post Graduate Student, Department of Accounting, Babcock University, Ilisan Remo, Ogun State , Nigeria

** Department of Accounting, Babcock University, Ilisan Remo, Ogun State , Nigeria

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Abstract- Financial performance measured the life blood of economic units, the key to determine the perpetuity of a company as cost remain its major determinant. An increase in cost and sales price would attract low returns on sales and foster liquidation in most companies. Unfortunately, This affect the financial growth of the country but most company failed to comprehend the vitality of cost profile and it effect on profitability. This study examined the effect of Cost Management on financial performance of quoted Consumer goods firms in Nigeria

The population of the study was 27 consumer goods companies listed on the Nigeria Stock Exchange. A sample frame of 10 companies was selected for a period of 10 years (2009 – 2018). The study adopted a purposive sampling technique. Data were obtained from the audited financial statement, and the accounts have already validated by regulatory authorities. The study took descriptive and inferential statistics.

The result revealed joint insignificant effect of cost management on, Net profit margin ($R^2=0.0185$, $F(4, 96)=0.55$, $p\text{-value}=0.698$). Moreso, the predictors was measured with four indicators Cost of Sales, Selling and distributing cost, Administrative cost and Finance Cost, out of this four some effect dependent variable (financial performance)positively while some exerted negative effect.

The study concluded that the insignificant effect of cost management might be as a result of inconsistency dividend pay, inadequate cost information and inefficient cost control and ascertainment. Therefore, adequate management and quality cost ascertainment and control is highly recommended by this findings.

Index Terms- Cost management, Financial Performance, Return on capital employed, Net profit margin, production cost.

I. INTRODUCTION

Well run profit making organisations will survive in a dynamic business environment. The ultimate goal of every firm is profit maximization and cost minimization through proper cost management, in order to maximize shareholder wealth (Christian, 2019). An uneven development had been marked in the manufacturing world for the past decades. This had brought an unexpected daunt to the industry in the globe. The crippling economy had brought an adverse effect on financial capability of most manufacturing firms, to achieve a sustainable financial performance, profit maximizers are to be engaged. Most Companies in the household products industry had ceased in

operation and more prominent companies had merged with other manufacturing companies because of the high cost of production. (Oyedokun, Tomomewo & Owolabi , 2019)

Siyanbola and Raji (2013) posited that cost and profit in business determines its financial position. An increase in turnover expands production capacity (cost), this demand effective cost management. Innes, John, Mitchell and Sinclair (2000) discovered product/service cost, quality and performance managements as surviving triplet for any company today. Customers continuously demand for high quality products/services and better performance, at a low price. Likewise, shareholders demanding for high return on their investment. Nevertheless, cost has become the determinant to performance and the challenge is being able to manufacture products or provide services within the acceptable cost framework.

Costs become a very important part of the company; more of the most important cost components is production costs, promotion costs and distribution costs. Cost occurs as a result of the project steering core of its activities, such as the salaries of managers, accountants, phone costs and rent, sales costs that occur as a result of the sale of products such as sales transfer, storage, distribution costs, sales commissions, and production costs. The greater the cost the higher the price of the product but decrease in the rate of turnover will negatively affect the financial performance of the companies especially on consumable goods industry. (Husein, Khalifa, & Elkarim, 2016)

The financial strength of an organization are measured in monetary terms and the results are reflected in firm's profitability ratio such as return on capital employed (ROCE), Net profit margin (NPM) and Earnings per shares (EPS) et.c. Okegbe, Ofurum and Darlington (2019) opined that financial performance measures are the life blood of economic units, since without it no decision can be made. Financial performance is one of the important performance measures for economic units as return on capital employed (ROCE) measures the ratio of net operating profit of a company to its capital employed. It shows the profitability of a company by expressing its operating profit as a percentage of its capital employed. (Irfanullah 2019)

There is no doubt that company's need strong and competitive human resource to succeed and increase in their financial performance, Consumer Packaged Goods companies must get better at shifting resources away from unpromising areas and toward areas of strength with the highest growth potential. The success of a firms whether large, medium or small, depends on the quality and value of resources they have and effective cost-

reduction programs. (Henrich, Little, Martinez, Shah, & Sichel, 2019)

Cost management is the control of actual or forecasted costs incurred by a business. It allows business to predict impending expenditures and prevent over budget. Profit is the resultant of two varying factors, sales and cost. The wider the gap between these two factors, the larger is the profit. Thus, profit can be maximised either by increasing sales or by reducing costs as ascertained by the management. (The Institute of Cost Accountants of India, 2016). However, most consumable goods companies increases in turnover yet most merged, ceased to operate while some break up as a result of their low or poor financial performance. Most of the studies on cost management and performance concentrates more on corporate sectors, leaving consumer goods sector with limited research. Hence, this study investigates what seems to be an effect of cost management on the financial performance of quoted consumer goods firms in Nigeria, specific objectives of the study examine the effect of cost management on profitability ratio (ROCE, NPM, EPS) for a period of Ten years between 2009 to 2018.

Research Questions

1. what is the effect of cost management on return on capital employed in consumer goods companies quoted in Nigeria?
2. to what extent does cost management affect net profit margin in consumer goods companies quoted in Nigeria?
3. what is the effect of cost management on earning per share in consumer goods companies quoted in Nigeria?

Research Hypotheses

The following **null hypotheses** were tested in the study:

H₀1: there is no significant effect of cost management on return on capital employed of consumer goods companies quoted in Nigeria

H₀2: cost management does not significantly affect net profit margin of consumer goods companies quoted in Nigeria.

H₀3: cost management does not have any significant effect on earnings per share of consumer goods companies quoted in Nigeria.

This study would enhance the knowledge of the stakeholders, investors, managers on how to create profits and values, how to efficiently and effectively transform input into output. Also influence the management of consumer goods, on how to identify, measure, interpret, planning and present costs as they relate to the industries economic flow of goods and service. It will update students, researchers, the public and the workers through its feedback on past performance, and motivate for future performance.

II. LITERATURE REVIEW

Financial Performance

The financial framework is the old paradigm for performance evaluation. performance evaluation systems have seen two new profitability measures: percentage of gross profit and the rate of return on investment. However, several authors (e.g., Fouad & Abouelela, 2016; Morgan, 2012) indicated that

although financial measures are important, they are not enough for a good performance evaluation system.

However, Al-Zararee and Al-Azzawi (2014) indicated that there is a lack of evidence of when and how non-financial measures improve managerial performance. Firm performance can be looked at from different directions and perspectives. This study decided to focus on the financial aspect of performance. Financial performance itself can be viewed and assessed differently, including liquidity and turnover which measures the ability of firms to catch up with expected financial obligations that are due and this must be done without interruption of day to day operations of the business (Etale & Bingilar, 2016). Financial performance can also be seen from the eye of profitability. This dimension of financial performance deals with the extent to which a firm generates profit from the factors of production such as labour, management and capital (Pius, 2013; Olabisi, 2012). Some useful measures of financial performance are as follows;

2.1.2 Returns on Capital Employed (ROCE)

Return on Capital Employed (ROCE) is a measuring tool that measures the efficiency and profitability of capital investments undertaken by a corporation. Return on Capital Employed ratio also indicates whether the company is earning sufficient revenues and profits in order to make the best use of its capital assets. (Singh & Yadav, 2013) Return on Capital Employed is generally calculated on the basis of two major calculations/ components which are operating profit and capital employed. Operating Profit is the profit that a company earns from its business operations before the deduction of taxes and interests and it is also known as earnings before interest and taxes (EBIT). It is calculated by deducting operating expenses and cost of goods sold from revenues while capital employed is the total amount of capital invested in the business operations by the shareholders and other sources to earn a profit. It is also known as fund employed. (calculated as the total assets less current liabilities) (EduPristine, 2017)

Companies with low returns are always suspecting because they are in danger of becoming loss-making if trading conditions deteriorate. Companies with exceptionally high returns may invite competition for their products or services, unless they are fully protected by patents or in some other way. (Singh & Yadav, 2013).

Earnings per Shares (EPSs)

The EPS of an entity whose shares are publicly traded is regarded as a very important measure of performance. It is therefore important that EPS should be reported on a standard basis for all relevant companies. Even today, EPS is considered to be the single most popular, widely used financial performance benchmark of all. Graham, Harvey and Rajgopal (2004) surveyed 400 financial executives in the USA and reported that the majority, by far, were of the opinion that earnings were the most important performance measure they report to outsiders. EPS is also the linchpin undergirding strategic decision making like share valuations, management performance incentive schemes and merger and acquisition negotiations. The formula for calculating EPS is Retained Earnings divided by Total number of ordinary shares. EPS is simple to calculate and easily understood and management is congratulated when there is positive EPS growth. It is no surprise that managers take a special interest in EPS when

their compensation is linked to the EPS performance of the company.

Net Profit Margin (NPM)

There are four stages of profit or profit margins in an income statement - gross profit, operating profit, profit before tax and net profit. The objective of margin analysis is to find reliability or positive/negative movements in an organization's earnings. Management has good control over managing costs than its cost of sales. An organization's most important goal is to generate income and keep it, which is determined by assets and performance. Because these features figure out an organization's ability to pay dividend, earnings is demonstrated in stock price. Organizations with great income have a larger support to secure themselves during the difficulty.

Cost and Cost management

Cost management involved planning, estimating, budgeting, and controlling costs so that the budget can be completed within the approved period of time (Buchner, 2015).

One major issue that most organizations have to deal with regularly is that of cost. This arises as a result of the need to rightly value company assets and liabilities as well as products and services in order to maximize profit. Cost is regarded as an important factor in the operational processes of every organization for several reasons. Mohd, Muammar and Ainatul (2014) observed that cost is essential not only to fix price but also to ascertain the margin of profit. According to Xu and Zia (2012), cost accounting is the process of determining and accumulating the cost of product or activity. It is a process of accounting for the incurrence and the control of cost. Sheikh (2018) added that it also covers classification, analysis, and interpretation of cost. As an internal aspect of the organization, cost accounting is accounting for cost aimed at providing cost data, statement and reports for the purpose of managerial decision making (Mohd, et al., 2014).

Theoretical framework

Resource Based View Theory- This research work adopted Resource Based View theory.

This theory was propounded by Edith Penrose in 1959 on the growth of the firm. Pearce and Robinson (2011) defined the resource-based view (RBV) as a method of analyzing and identifying a firm's strategic advantages based on examining its distinct combination of assets, skills, capabilities and intangibles as an organization. This theory views the firm-specific factors and their effect on performance. (Grant, 1991) views the firm as a bundle of resources which are combined to create organizational capabilities with which it can earn above average profitability.

Application of the theory

Firm performance has been central in strategy research for decades and encompasses most other questions that have been raised in the field, as for instance, why firms differ in performance or profitability, how they behave in terms of returns, how they choose strategies and how they are managed (Porter, 1991). In the 1990s, with the rise of the resource-based approach, strategy researchers' focus regarding the sources of sustainable competitive advantage shifted from industry to firm specific effects. The choice of this theory is because it portrays more on

input performance relating to influence of resources, competitive environment,. Strategy, competitive advantage and their performances in an organization.

III. RESEARCH METHODS

This study employed ex-post facto research design using panel data analyses of financial information extracted from published financial statements and accounts of consumer goods companies listed on the Nigerian Stock Exchange for a period of Ten (10) years (2009 -2018). Ten (10) consumable companies was purposively sampled out of 27 listed consumer goods companies in Nigerian Stock Exchange (NSE).(table 1). The Institute of Chartered Accountants of Nigeria (ICAN) 2006 defined population as being made-up of specific conceivable traits, events, people, subjects or observation. The sample frame for this study comprises of the ten listed consumer goods companies under the consumer's good category of the Nigeria Stock exchange. These goods are for direct consumption by the consumer in their respective target market.

This findings employed both descriptive and inferential statistical analysis. The data collected through secondary sources were tabulated in table 1 and findings from the report were presented in other tables, analyzed using both descriptive and inferential statistics. Generalized least square Regression analysis statistical tools was adopted. The regression analysis was applied to the regression models to measure, explain, and predict the effect and linkage between the variables. These methods were used to test the hypotheses, solve research questions determine the effects of cost management proxy on profitability of the consumer goods companies. Variables for the study include the dependent variable (financial performance; Return on capital employed, Net profit margin, Earnings per share) and cost management (independent variable). The regression analysis revealed R² and F-stat. and z-test. R² to determine the extent at which changes in the level of cost management were explained by financial performance and F-statistic often used to compare statistical models that have been fit to a data set and determine the significant strength of the joint parameter. Further panel diagnostic test were carried out (Hausman test, Breusch and Pagan Lagrangian multiplier test, and Breusch-Pagan / Cook-Weisberg test) to ensure the suitability of the variable for regression.

Model Specification

In trying to achieve the objective of this study, a regression model was used to evaluate the impact of cost management on the financial performance of quoted consumer goods companies in Nigeria.

Y = f(X)

FP = f(CM)

Where: FP = Financial performance

CM = Cost management

Y = Financial performance (Dependent Variable)

And X = Cost management (Independent variable)

X = (COScm₁, SDCcm₂, ADCcm₃, FCcm₄.)

Y = (ROCE_{fp1}, NPM_{fp2}, EPS_{fp3}.)

Functional Relationships

ROCE=f {COS,SDC,ADC,FC,}

.....1

$$NPM = f \{COS, SDC, ADC, FC, \}$$

.....2

$$EPS = f \{COS, SDC, ADC, FC, \}$$

.....3

The model is specified as:

$$ROCE_{it} = \alpha_1 + \beta_1 COS_{it} + \beta_2 SDC_{it} + \beta_3 ADC_{it} + \beta_4 FC_{it} + \mu_{it}$$

..... Model 1

$$EPS_{it} = \alpha_2 + \beta_1 COS_{it} + \beta_2 SDC_{it} + \beta_3 ADC_{it} + \beta_4 FC_{it} + \mu_{it}$$

..... Model 2

$$NPM_{it} = \alpha_3 + \beta_1 COS_{it} + \beta_2 SDC_{it} + \beta_3 ADC_{it} + \beta_4 FC_{it} + \mu_{it}$$

..... Model 3

Where:

$\alpha_1 - \alpha_3$ is the intercept for the models

$\beta_1 - \beta_3$ is the coefficients of the explanatory variables

μ is the error term of the proxies

i represents the 1- 10 firms

t represents the period of study(2009-2018)

COS- Cost of sales; SDC-Selling and distributing cost; ADC-Administrative and development cost ;FC-Finance cost; ROCE-Returns on capital employed; NPM-Net profit margin; EPS-Earning per share

Table 1 Lists of consumer goods Companies Listed on the Nigeria Stock Exchange

S/N	Consumer goods Companies	Activities
1	<i>P Z Cussons Nigeria Plc*</i>	Medicated Soap
2	<i>Unilever Nigeria Plc*</i>	Foam
3	<i>Vitafoam Nigeria*</i>	Foam
4	Nigerian Enamelware	Kitchen utensil
5	Nascon Allied Industries Plc	Food product
6	<i>Nigeria Flour Mills Plc*</i>	Flour
7	Multi- Trex Integrated Foods Plc	Food product
8	Mcnichols Plc	Food and beverages
9	<i>International Breweries Plc*</i>	Drinks
10	<i>Honeywell Flour Mill Plc*</i>	Flour
11	Golden Guinea Brew. Plc	Drinks
12	<i>Guinness Nig Plc*</i>	Drinks
13	<i>Cadbury Nigeria Plc*</i>	Beverages

14	Champion Brew. Plc	Drinks
15	Dangote Sugar Refinery Plc	Sugar
16	Dangote Flour Mills Plc	Flour
17	Dn Tyre & Rubber Plc	Rubber
18	<i>Flour Mills Nig Plc*</i>	Flour
19	<i>Nestle Nigeria Plc*</i>	Beverages
20	Union Dicon Salt Plc	Salt
21	Live stock feed plc	Feeds
22	Morison Industries	Food and drinks
23	Okomu oil palm industries	Palm oil
24	Presco plc	Agro product
25	National salt plc	Salt
26	FTN Cocoa processors plc	Beverage raw materials
27	Ellah lakes plc	Aquatic product

Source: The Nigerian Stock Exchange daily official list (2018)

Note: The selected companies were asterisk and italise ()**

IV. RESULT AND DISCUSSION

Table 2 indicates the descriptive analysis of each variable in this research. This study shows large dispersion between standard deviation 405.79101 and mean of ROCE 48.0107. Similarly, dispersion between standard deviation and the means of NPM (16.6655 and 53.45187) were high, compared to low dispersion between EPS (mean=5.1254 and standard deviation=9.733773. This establishes high volatility in ROCE and NPM while slim or low volatility exist in EPS.

However, much variation in the minimum and maximum values of ROCE, NPM, and EPS, of -3413.51,0.56, and 0.01, for their minimum values respectively, while their maximum values showed 1021.75, 527.65, and 54.26 respectively. This value implies that for the period under study, the cost management on performance measure of the sampled firms has not been stable. Relatively, slim dispersion exist between standard deviation and mean values of cost of sales (COS) and administrative and development cost compare to selling and distributing cost with high volatility within the period of study.

Table 2: Descriptive Statistics Result
Descriptive statistics result of the variable from 2009-2018

Variables	Obs	Mean	Standard deviation	Min	Max
ROCE	100	48.0107	405.79101	-3413.51	1021.75
NPM	100	16.6655	53.45187	0.56	527.65
EPS	100	5.1254	9.733773	.01	54.26
COS	100	67.0324	72.45696	1.1	337.82
SDC	100	32.6232	219.5528	0	2201
ADC	100	8.9149	13.26076	0	114.64
FC	100	4.3033	12.0545	0	112.73

Source: Researcher’s Computation, 2020

*Observations: 100

Positive minimum values of the cost management proxies implies that the firms did not decline in their cost management and the negative minimum value of ROCE (-3413) a proxy of financial performance showed that some firms had a low rate of performance during the accounting years review. The high rate of dispersion from the mean among the independent and dependent variables confirms a high rate of variations within the data set

4.2.1 Test of Hypotheses

Panel Diagnostic Test

The variables under study were subjected to the diagnostic test. Hausman test to determine whether we will run Random, Fixed, or Pooled. auto correlation, and heteroscedasticity test

4.2.1.1 Test of hypothesis One

Research Objective 1: evaluate the effect of cost management on return capital employed of consumer goods companies quoted in Nigeria.

Research Question 1: What is the effect of cost management on return on capital employed in consumer goods companies quoted in Nigeria?

Research Hypothesis 1 (H₀₁): There is no significant effect of cost management on return on capital employed of consumer goods companies quoted in Nigeria.

Table 3 shows the hausman specification test has its null hypothesis that the difference in coefficients of a model is not systematic and hence the random effect estimation technique is found most appropriate while fixed effect will not, for $p=0.3101 > 0.05$. The study went further to confirm the appropriateness of the random effect estimation technique by conducting the Breusch and Pagan Lagrangian multiplier test. This test has a null hypothesis that random effect is not needed and not appropriate for the model, the result showed that the study can accept the null hypothesis that random effect is not appropriate for this model, for $p=0.472 > 0.05$. Also, the Breusch-Pagan / Cook-Weisberg test for heteroskedasticity was carried out to determine if the variance of the residual are constant. This test has a null hypothesis of constant variance of the residual, this report suggest that the study accepts the null hypothesis of constant variance $p=0.342 > 0.05$, indicating that the variance of the residual is not constant. In testing for autocorrelation in the panel data, the Wooldridge test was conducted. This test has a null hypothesis of no first-order autocorrelation and its result in this model showed a probability value of $0.0000 < 0.05$ and this suggest the presence of autocorrelation in the model.

Table 3 Regression Analysis for Model 1

Effect of Cost management on Return on Capital employed				
R squared	0.060	Hausma specification test	4.78 (0.3101)	
Wald chiq²	0.52	Breusch and Pagan Lagrangian multiplier test for random effects	0.01 (0.472)	
Prob.	0.9914	Breusch-Pagan/Cook-Weisberg test for heteroskedasticity	0.90 (0.342)	
		Wooldridge test for autocorrelation in panel data	94.9 (0.000)*	
Variable	Coefficient	Std Error	z	z –Probability
Cost of sales (COS)	0.2404528	0.6446979	0.37	0.709
Selling and distributing cost(SDC)	-0.0086465	0.1885128	-0.05	0.963
Administration cost (ADC)	1.617181	3.305566	0.49	0.625
Finance Cost (FC)	-0.8578896	3.539889	0.24	0.809
Cons	22.3123	63.87522	0.35	0.727

Source: Researcher’s Study, 2020

dependent variable: ROCE

$$ROCE_{it} = \alpha_1 + \beta_1 COS_{it} + \beta_2 SDC_{it} + \beta_3 ADC_{it} + \beta_4 FC_{it} + \mu_{it} \dots \dots \dots \text{Model 1}$$

$$ROCE = 22.31 + 0.24045 - 0.008646 + 1.6171 - 0.8578896 + \mu$$

ROCE by 0.0857 to promote positive influence on returns on capital employed.

Test of hypotheiss Two

Research objective 2: determine the effect of cost management on net profit before margin of consumer goods companies quoted in Nigeria

Research Question 2: To what extent does cost management affect net profit margin in consumer goods companies quoted in Nigeria?

Research Hypothesis H02: Cost management does not significantly affect net profit margin of consumer goods companies quoted in Nigeria.

Hypothesis one tested the effect of Cost management (COS, SDC, ADC, and FC) on financial performance (ROCE) on the selected ten consumer goods companies. The result of the regression analysis on Table 3 shows that cost managements measured by four indicators out of the variable two FC and SDC (-0.85788. and -0.00864 respectively have negative effect (which shows that 1% reduction in FC will increase ROCE by 0.857 and 1% reduction in SDC will increase ROCE by 0.00864) while COS and ADC (0.2404 and 1.6171) have positive effect on return on capital employed (ROCE). (which shows that 1% increase in COS and ADC will reduce ROCE by 0.024 and 1.6171 respectively.

The R²=0.060 explains that only 6% of the total variation is explained by the independent variable while the balance of 94% is explained by factors outside this study.

At a level of significance 0.05, the Wald statistics is 0.52, while the p-value is 0.9914 greater than 0.05 adopted level of significance. This implies that non of the independent proxies was significant to effect returns on capital employed. The statistical insignificance of this model indicates that the study will not reject the Null Hypothesis which says that there is no significant effect of cost management proxies on returns on capital employed, hence the study will not accept the alternate hypothesis.

However, the positive effect of cost management proxies on ROCE may be as a result of ineffectiveness of cost management. This result is partially consistent with the study led by Oyerogba et al (2014) who found that the independent variables (cost management) ; Direct materials, Direct labour, Production overhead and Administrative overhead are positively significant in explaining capital employed as the performance of manufacturing organizations and conversely, with the findings of Famil, Ali and Yunus (2017) who shows a significant and negative relationship between ROCE and cost or Price-to-Earnings (PE) ratio. Therefore this study suggested an efficient cost management on finance cost as 1% reduction boost up

Table 4 indicates the diagnostic test carried out to determine the choice and appropriateness of the estimation technique employed. The hausman specification test has its null hypothesis that the difference in coefficients of a model is not systematic and hence the random effect estimation technique is not found appropriate while fixed effect is found appropriate for this study, for p=0.0014< 0.05. The study thus went further to test the appropriateness of the random effect estimation technique by conducting the Breusch and Pagan Lagrangian multiplier test. This test has a null hypothesis that random effect is not needed and not appropriate for the model, the result showed that the study can accept the null hypothesis that random effect is not appropriate for this model, for p=1.000>0.05. Also, the Breusch-Pagan / Cook-Weisberg test for heteroskedasticity was carried out to determine if the variance of the residual are constant. This test has a null hypothesis of constant variance of the residual, this report suggest that the study reject the null hypothesis of constant variance p=0.000<0.05, indicating that the variance of the residual is constant. In testing for autocorrelation in the panel data, the Wooldridge test was conducted. This test has a null hypothesis of no first-order autocorrelation and its result in this model showed a probability value of 0.0000<0.05 and this suggest the presence of autocorrelation in the model.

Table: 4. Regression Analysis for Model Two

Regression analysis on cost management and financial performance (NPM)				
R squared	0.0227	Hausman specification test	17.75(0.0014)	
Adj. R squared	-0.0185	Breusch and Pagan Lagrangian multiplier test for random effects	0.00(1.00)	
F (4, 95) statistics	-0.55	Breusch-Pagan/Cook-Weisberg test for heteroskedasticity	44.05(0.000)*	
Prob.(F statistics)	0.6986	Wooldridge test for autocorrelation in panel data	313322(0.000)*	
Variable	Coefficient	Std Error	t	Probability
COS	-0.914265	0.79656	-1.15	0.254
SDC	0.0017005	0.0247188	0.07	0.945
ADC	-0.2473144	0.4240655	-0.58	0.561
FC	0.0500912	0.4623934	0.11	0.914
Cons	24.72779	7.860546	3.15	0.002

Source: Researcher's Study, 2020 Dependent Variable: NPM; Obs: 100 p<0.05

$$NPM_{it} = \alpha_3 + \beta_1 COS_{it} + \beta_2 SDC_{it} + \beta_3 ADC_{it} + \beta_4 FC_{it} + \mu_{it} \dots \dots \dots \text{Model 2}$$

$$NPM = 24.727 - 0.914265 + 0.0017005 - 0.2473144 + 0.0500912\mu$$

Hypothesis two tested the effect of Cost management (COS, SDC, ADC, and FC) on financial performance Net profit margin (NPM). The result of the regression analysis on Table 4 Cost management measured by four indicators out of the variable two FC and SDC (0.0017005 and 0.0500912 respectively have a positive effect (which shows that 1% increase in FC will increase NPM by 0.0017 and 1% increase in SDC will increase NPM by 0.05009) while COS and ADC (-0.914 and -0.247) have negative effect on Net Profit margin (NPM). (which shows that 1% reduction in COS and ADC will increase NPM by 0.914 and 0.247 respectively .

The Adj R² of -0.0185 explains that only 1.85% of the total variation is explained by the independent variable while the balance of 98.2% is explained by factors outside this study.

At a level of significance 0.05, the F-statistics is 0.55, while the p-value of the F-statistics is 0.6986 which is greater than 0.05 adopted level of significance. The statistical significance of this model (p-value =0.6986 >0.05) indicates that the study will accept the Null Hypothesis of this model which says that there is no significant effect of cost management on Net profit margin.

This study showed that cost management has a positive effect but not significant on Net Profit margin . This however suggests, cost management had a positive impact on Net profit of a consuming goods companies. Our finding is consistent with the findings conducted by Hussien (2015) who found in his study that the greater control production activities results in better quality of procedure and lowers the unit cost of goods and cost variance. As 1% reduction in cost of sales increases net profit margin by 0.914. This implies that expected cost management implementation will increase firm performance (Net profit). Indifferently, Sunday and Peter (2016) examined cost information and business strategy as a synergistic approach of ensuring valid business decision and growth. The study was hinged on the premise that cost accounting information is one of the enduring tools of cost management and control. It concluded that inadequate cost management and information will negatively impacts organizational performance on profit.

Test of hypothesis Three

Research Objective: ascertain the effect of cost management on earning per share of consumer goods companies quoted in Nigeria

Research Question: What is the effect of cost management on earning per share in consumer goods companies quoted in Nigeria?

Research Hypothesis H₀₃: Cost management does not have any significant effect on earnings per share of consumer goods companies quoted in Nigeria.

The determination of the appropriate estimation technique for hypothesis three led to its initial regression analysis through the generalized least square (GLS), fixed effect and random effect estimation techniques, from table 5, Hausman specification test has its null hypothesis that the difference in coefficients of a model is not systematic and hence the random effect estimation technique is found appropriate while fixed effect will not, for p=0.9993> 0.05. The study thus went further to test the appropriateness of the random effect estimation technique by conducting the Breusch and Pagan Lagrangian multiplier test. This test has a null hypothesis that random effect is not needed and not appropriate for the model, the result showed that the study can reject the null hypothesis that random effect is appropriate for this model, for p=0.000<0.05. Also, the Breusch-Pagan / Cook-Weisberg test for heteroskedasticity was carried out to determine if the variance of the residual are constant. This test has a null hypothesis of constant variance of the residual, this report suggest that the study reject the null hypothesis of constant variance p=0.0018<0.05, indicating that the variance of the residual is constant. In testing for autocorrelation in the panel data, the Wooldridge test was conducted. This test has a null hypothesis of no first-order autocorrelation and its result in this model showed a probability value of 0.0000<0.05 and this suggest the presence of autocorrelation in the model. Moreso, cross-sectional independence test was carried out through Pesaran’s test which shows a probability value of 0.3543>0.05. This implies that the residuals are not correlated at 5% level of significance.

Table 5: Regression Analysis for Model Three

Effect of cost management on financial performance (Earnings Per Share)					
Variable		Coefficient	Std Error	z	Probability
COS		0.0332511	0.019150	1.74	0.083
SDC		0.0001514	0.0028848	0.05	0.958
ADC		-0.0136591	0.0576253	-0.24	0.813
FC		-0.0444088	0.0545835	-0.81	0.416
Cons		3.204431	3.559414	0.90	0.368
R square	0.0254	Hausma specification test			0.08(0.9993)
Wald chi ² .	3.19	Breusch and Pagan Lagrangian multiplier test for random effects			162.26(0.000)*
Wald chi ² (prob)	0.5266	Breusch-Pagan/Cook-Weisberg test for heteroskedasticity			9.78(0.0018)*
Pesaran’s test of cross sectional independence	0.926(0.3543)	Wooldridge test for autocorrelation in panel data			856.172(0.0000)*

Source: Researcher’s Study, 2020 **Dependent Variable: EPS; Obs: 100** **p<0.05**

$$EPS_{it} = \alpha_2 + \beta_1 COS_{it} + \beta_2 SDC_{it} + \beta_3 ADC_{it} + \beta_4 FC_{it} + \mu_{it} \dots \dots \dots \text{Model 3}$$

$$EPS = 3.204431 + 0.0332511 + 0.0001514 - 0.0136591 - 0.0444088\mu$$

Hypothesis three tested the effect of Cost management (COS, SDC, ADC, and FC) on Earnings per share (EPS). The result from table 5 shows that cost managements measured by four indicators out of the variable two COS and SDC (0.0332511 and 0.0001514 respectively have a positive effect (which shows that 1% increase in COS will increase EPS by 0.033 and 1% increase in SDC will increase EPS by 0.000151) while ADC and FC (-0.0136 and -0.0444) have negative effect on Net Profit Earning per shares (EPS). (which shows that 1% reduction in ADC and FC will increase EPS by 0.0136 and 0.044 respectively .

The $R^2 = 0.0254$ explains that only 2.5% of the total variation is explained by the independent variable while the balance of 94% is explained by factors outside this study the other 97.5% explained by factors outside the study

At a level of significance 0.05, the Wald statistics is 3.19, while the p-value of the Wald prob. is 0.5266 which is greater than 0.05 adopted level of significance. This implies that non of this proxies COGS, SDC, ADC, and FC had significant effect on Earnings per Share. The statistical insignificance of this model indicates that the study will not reject the Null Hypothesis which says that there is no significant effect of cost management on earning per share, hence the study will not accept the alternate hypothesis.

This study discovered a positive effect of cost management proxies on Earning Per Share but insignificant on decisions made by managers. This implies the importance of stakeholders in decision making as most shareholders, investors depends more on their returns from investment which is the product of cost as show in this findings that 1% reduction in finance cost would increase earnings per share by 4.4%. This result corroborate with the study led by Etale and Bingilar (2016) who found a positive effect between the price and the value of shares in the Nigeria manufacturing sector. It indicates the importance and necessity of shareholders' concentration on the cost value of shares before investing. More so, partially supported by Taani and Banykhaled (2011) who reviewed correlation between stock return and financial ratios. It discussed correlation using price to book value, cash flow from operating activities, and company size, each of them has significant correlation with stock (return earnings per share).

V. CONCLUSION AND RECOMMENDATION

This study examined cost management as a key for profitability in selected consumer goods companies in Nigeria. Three models were developed and all the model showed a positive effect of cost management on companies financial performance of consumer goods companies between 2009-2018. This result shows positive and negative effect of cost management proxies on Return on capital employed, Net profit margin and Earnings per share but were not significant, in the same vein no joint significant effect was established between cost management and financial performance (Net profit margin). The insignificant of COGS, SDC, ADC, and FC in this study might be as a result of inconsistency dividend pay, inadequate cost information, inefficient cost ascertainment and cost control in consumer goods companies.

Based on the result obtained from studying the effect of cost management on financial performance the following recommendations were made:

1. In order to maintain better performance of the firm and avoid negative minimum value as showed in table 2, managers and policing makers should consider cost ascertainment, control and information while trying to prioritize the growth and expansion of a business.
2. Consistent pay of dividend is paramount as most investors find it difficult to cope when is not forth coming, they tend to lose interest and sell off their investments. This could in turn have an adverse effect on the value of the firm.
3. This study revealed the positive and negative effect of each proxy of cost management thereby giving managers an insight on the factors that should be prioritized over others in order to increase profitability and ability to pay dividends

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AUTHORS

First Author – FADARE TEMITAYO. V, Post Graduate Student, Department of Accounting, Babcock University, Ilisan Remo, Ogun State , Nigeria

Second Author – DR ADEGBIE, F.F, Department of Accounting, Babcock University, Ilisan Remo, Ogun State , Nigeria