International Journal of Economics, Commerce and Management
United Kingdom ISSN 2348 0386 Vol. VIII, Issue 6, June 2020

http://ijecm.co.uk/

INVENTORY MANAGEMENT AND FINANCIAL PERFORMANCE OF NSE LISTED GLAXOSMITHKLINE CONSUMER NIGERIA PLC

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Abstract

This study examined the relationship between inventory management and financial performance of GlaxoSmithKline Nigeria PLC in a case study. The study adopted inventory to assets ratio and inflation as the predictive variables while return on assets representing financial performance was used as the response variable. Secondary data for the study was collected from the annual reports of GSK and CBN Statistical Bulletin for the period 2011 to 2018. The study employed descriptive statistics and multiple regression analysis based on the E-view 10 software to analyse data. The results showed that all the predictive variables had positive relationship with return on assets, but only inventory to assets ratio was significant at 5% level. The regression results also showed that the coefficient of determination (R-squared) value of approximately 0.89 indicating that 89% of changes in the response variable were accounted for by the combined effect of changes in the predictive variables. The combined effect of variations of the predictive variables significantly explained changes in the response variable with probability of F-statistic value of 0.004325 (at 5% level of significance). Furthermore, the adjusted R- squared value of 0.84 indicates that the model used for the analysis is a proper and

good fit. The study concluded that inventory management is significant and positively related to financial performance. Based on the findings the study recommended that management should maintain their current inventory management systems in order to sustain the long run growth and success of the company but take steps that would mitigate the effects of inflation.

Keywords: Assets, Financial, Inflation, Inventory, Management, Performance, Returns

INTRODUCTION

The topic of inventory management is important because for most manufacturing firms inventory constitutes a large proportion of the firms' productive or current assets. This is also true for merchandise or commercial outfits because the nature of the trade is built around their stock-in-trade (inventory). The performance and efficiency of any organization as well as its expansions depend on how effective and efficient its inventories otherwise known as stock are managed. In essence, inventory management is core to any business organization. In fact, inventory management is the reason why organizations survive its numerous competitors. Hence Pandey (2010) put it concisely that it is imperative to manage inventory efficiently and effectively to avoid unnecessary investment; and that to neglect the management of inventory is to jeopardize the long run profitability of the firm. Control of inventory includes all necessary action taken by management of an organization from procurement of resources through their transformation, and consequent disposal as finished goods or products.

Pandey (2010) stated that inventories are stock of the product a company is manufacturing for sale and the component that make up the product. Inventory for the manufacturing company consists of raw materials, goods-in-process and finished goods ready for final consumption. A manufacturing firm maintains raw materials inventory which are the basic inputs that can be converted later into finished goods ready for sale. When the production process is not completed, the raw materials undergoing the production process are counted as work-in-progress or goods-in-process. The inventories of finished goods are the raw materials that have finally gone through the production process or cycle; these are stored ready for sale to consumers. For merchandise or commercial business inventory is the stock in trade or the core activity that defines its existence is built around those items which constitutes its inventory. Inventories comprise assets that are in constant usage and replacement. It could be classified as a merchandise (trade goods), manufacturing raw materials, work-in-progress and finished goods) and miscellaneous inventories such as prepaid expenses until used (office supplies). Therefore, from the definition given above, one can deduce an inventory as asset represented

by goods owned by the company and those held for the purpose of future sale or for utilization in the manufacture of goods for sale. It equally includes those components that are in the production process.

A company should hold adequate inventory in store to meet customers' demand or to ensure uninterrupted production. It is not possible for a firm to receive supply of inventory whenever it is needed because suppliers may delay or run out of stock; and that could jeopardize the firms business. Firms hold inventory in store for three reasons: to ensure smooth business operations; to edge against changes in demand and supply forces which may not be predictable; and to take advantage of price changes. The recent economic depression which Nigeria experienced has made raw materials to be scarce and costly. As a result, many companies have abandoned the old rule of thumb approach of inventory control to a more reliable scientific approach. Managers and management of companies are consequently left with two basic inventory decisions how much to order, and when to order. Positive answers to these questions offer a sound and veritable solutions to efficient management of inventories. Managers and management of organizations have cost to incur for both over-inventories and under-inventories. The cost associated with over-inventories includes, pilferage, handling and storage cost, obsolescence; whereas under-inventory causes loss in sale as well as profit, customer dissatisfaction, idle labor as well as capital, etc. Management base their decision on those which strike balance on over-inventory and under-inventory. Therefore, effective and efficient management of inventory is expected to boost profit or organizational performance.

This topic of inventory management and performance is being revisited here in a case study of GlaxoSmithKline Consumer Nigeria PLC (GSK). GSK is an affiliate of a global healthcare company and listed on the Nigerian Stock Exchange. It is in the business of manufacturing, marketing and distribution of pharmaceutical and consumer healthcare products. Incorporated in Nigeria in 1971 and started business in 1972, the company has head offices at 1, Industrial Avenue at Ilupeju in Ikeja, Lagos. GKS was quoted on the Nigerian Stock Exchange in 1977 and presently produces Panadol, Andrew Liver Salt, Horlicks, Macleans, Sensodyne, Voltaren and Otrivin among others for health and wellbeing of its customers. As a manufacturing company GSK is required to maintain stock of raw materials for its wide range of products, hold inventory of goods-in-process for her different products, and keep finished goods inventory for her wide range of products to ensure smooth operations; and because of the company's wide product line, it is very likely to invest heavy sum of money on inventory.

The forgoing underpins the importance of this topic and ultimately this study would be useful to the management of GlaxoSmithKline and similar manufacturing companies. However, the recent economic lockdown in the whole world due to the corona virus disease

(COVID 19) pandemic would pose serious challenge to whatever inventory management system that a company may have put in place. The lockdown has no doubt made it difficult to receive supplies of raw materials and even block distribution outlets for finished products making it difficult to properly manage inventory of raw materials and finished goods. It would have been hard for a company to stock inventory to guide against stock-outs even if continuous production where possible because of the sudden nature of the pandemic and the resultant economic lockdown.

Besides, several studies have been carried out in the past to examine the relationship between inventory management and the financial performance of companies in both developed economies, less developed and emerging economies. However, the findings of these studies lack consistency pointing to the fact that further studies are needed to determine the actual direction of the relationship between inventory management and firm profitability. For instance, the research works on this topic by Ndubuisi, Ezechukwu, Egolum and Obi (2018), Etale and Bingilar (2016), Kung'u (2016) and Prempeh (2015) established a positive association between inventory management and profitability. But the studies of Muturi, Wachira and Lyria (2015) and Panigrahi (2013) showed that inventory management had negative effect on profitability. While Otuya and Eginiwin (2017) and Sekeroglu and Altan (2014) reported mixed findings; and Bawa, Asamoah and Kissi (2018) reported that inventory management had no effect on firm performance. The lack of consensus in the study findings of previous researchers on this topic motivated this current study to examine the relationship between inventory management and profitability using GSK as a case study. The study adopted return on assets (ROA) and inventory to assets ratio (IAR) to represent profitability and inventory management respectively; and inflation (INF) was introduced as a moderating variable.

The remainder of this paper is divided into four parts. Part two which follows the introduction above deals with the review of past empirical literature. The methodology of the study is covered in part three. The results of data analysis and discussion of findings are covered in part four; while the summary, conclusion and recommendations are presented in part five.

REVIEW OF EMPIRICAL LITERATURE

Studies in Turkey, India and Malaysia

Mohamad, Suraidi, Rahman and Suhaimi (2016) examined the relationship between inventory management and the performance of a textile chain store in Malaysia for the period 2008 to 2012 using both primary and secondary data. The study adopted return on assets as proxy for company performance and the dependent variable, while inventory days representing inventory

management was used as the independent variable. Secondary data was collected from the financial statements of the sampled company. The study employed descriptive statistics and simple regression techniques based on E-views 7.0 software as the tools for data analysis. The results revealed that there was a significant relationship between inventory management and ROA.

Sekeroglu and Altan (2014) investigated the relationship between inventory management and profitability of Borsa Istanbul (BIST) listed firms in Turkey for the period 2003 to 2012. The study sample included 41 firms comprising 16 firms in weaving, 14 in eatables and 11 in the wholesale and retail industries. In their study model, inventory turnover ratio used as proxy for inventory management was regressed against four measures of performance (profitability) namely; gross profit margin, net profit margin, return on assets and return on equity. Secondary data for the ten years period covered in the study were obtained from annual financial statements of the sampled firms. They employed simple regression and correlation techniques based on windows SPSS version 20 computer software for data analysis. The results indicated that there was a positive relationship between inventory management and profitability in the eatables industry, but no relationship was established between inventory management and profitability in the weaving and wholesale and retail industries.

Panigrahi (2013) examined the relationship between inventory conversion period and profitability of 5 cement companies listed on the Bombay Stock Exchange in India for the period 2001 to 2010. The model of the study adopted gross operating profit (proxy for profitability) as the response variable while inventory conversion period (proxy for inventory management) among three other control variables were used as the explanatory variables. Secondary data for the study was collected from annual reports of the selected companies. The researcher employed correlation and multiple regression techniques as methods of data analysis. The results indicated the existence of a significant negative relationship between inventory conversion period and profitability of listed cement companies in India.

Studies in the Rest of Africa

Atnafu and Balda (2018) examined the impact of inventory management practice on firm competitiveness and organizational performance of 188 micro and small enterprises operating in the manufacturing sector of Ethiopia. Primary data for the study were collected through the use of a questionnaire designed in 5 points Likert scale. They employed descriptive and inferential statistics using STRATA version 13 computer software for data analysis. The results indicated that high degree of inventory management practice could enhance firm competitiveness and organizational performance of micro and small enterprises in Ethiopia.

Bawa, Asamoah and Kissi (2018) investigated the impact of inventory management on the performance of firms listed on the Ghana Stock Exchange for the period 2007 to 2014. They adopted inventory conversion period and return on assets among others as proxies for inventory management (independent variable) and performance (dependent variable) respectively. Secondary data for the study variables was collected from annual reports of sampled 14 listed manufacturing companies. The study employed Pearson's correlation and multiple regression techniques based on windows SPSS software for data analysis. The results indicated that inventory management had no effect on firm performance.

Kung'u (2016) investigated the effect of inventory control practices on profitability of industrial and allied firms in Kenya for the period 2009 to 2014. The study sample involved 71 companies. The researcher used both primary and secondary data for the study. Primary data was collected through the use of a questionnaire, while secondary data was collected from the annual reports of sampled companies. The study employed descriptive statistics, Pearson's correlation, ANOVA and linear regression analysis based on windows SPSS software as the techniques for data analysis. The results provided evidence that inventory control practices had positive significant relationship with profitability. Muturi, Wachira and Lyria (2015) investigated the effect of inventory management on profitability of tea companies in Kenya for the period 2009 to 2013 with primary data collected through the use of a questionnaire. They adopted return on assets as proxy for profitability (the dependent variable), and inventory conversion period as the independent variable. The study employed descriptive statistics and simple regression techniques as the statistical tools for data analysis. Their findings revealed that inventory management had a significantly negative effect on profitability.

Prempeh (2015) evaluated the impact of inventory management on profitability of manufacturing firms listed on the Ghana Stock Exchange for the period 2004 to 2014. Secondary data for the study was collected from published financial statements of sampled 4 breweries for the period. The study regressed raw materials inventory (proxy for inventory management) against net profit (the response variable) using Pearson correlation and multiple regression analysis based on OLS. The findings revealed that raw materials inventory had a significantly strong positive impact on the profitability of manufacturing firms in Ghana.

Studies in Nigeria

Kolawole, Akomolafe and Olusipe (2019) evaluated the relationship between inventory management and profitability of manufacturing firms in Nigeria using International Breweries PLC as a case study. The study adopted gross profit as proxy for profitability (the dependent variable), while components of inventory management such as raw materials inventory, work-in-

progress, finished goods inventories among others were used as the explanatory variables representing inventory management. Secondary data for the study were collected from the annual reports of the company for the period 2002 to 2011. They employed simple linear regression technique as the statistical tool for data analysis. The results showed that inventory management had strong influence on profitability of International Breweries PLC in Nigeria. Ndubuisi et al (2018) examined the relationship between inventory management and financial performance of brewery firms in Nigeria for the period 2010 to 2016. The study adopted ROA, revenue growth and ROE to proxy financial performance (the dependent variable), while inventory conversion period was used as the independent variable. Secondary data for the study was collected from annual reports of 7 sampled breweries and NSE fact book. They employed OLS regression method based on STRATA version 13 software for data analysis. The results indicated a significant positive relationship between inventory conversion period, ROA and growth in revenue; but the relationship between inventory conversion period and ROE was positive though not significant.

Otuya and Eginiwin (2017) investigated the effect of inventory management on profitability of SMEs in Delta State involving a sample of 30 firms. The study adopted inventory turnover, inventory conversion period and inventory leanness to represent inventory management, while gross profit margin was used as proxy for profitability (the dependent variable). Primary data for the study was obtained through the use of a questionnaire. They employed descriptive statistics and multiple regression analysis to evaluate data. The results revealed mixed findings: inventory turnover had significant positive relationship with gross profit margin; inventory conversion period had significant negative relationship with profitability; and inventory leanness had positive but insignificant link with profitability. Agu, Obi-Anike and Eke (2016) examined the relationship between inventory management and profitability of manufacturing companies in Nigeria. The study made use of both primary and secondary data. Primary data for the study was collected through the use of a questionnaire which was administered on employees of sampled companies (Nigerian Breweries, PZ Industries and Innoson Nigeria Limited) with a response rate of 270 out of 285. Secondary data was obtained from annual reports of the sampled companies. They employed descriptive statistics, Pearson's correlation and regression techniques for the analysis of data. The results provided evidence that inventory control significantly affected the productivity of manufacturing firms.

Etale and Bingilar (2016) examined the effect of inventory cost management on the profitability of listed brewery firms in Nigeria for the period 2005 to 2014 using time series secondary data. The study adopted raw materials cost, working-in-progress cost and finished goods cost as proxies for inventory cost management, while gross profit margin was used as

proxy for profitability. They employed multiple regression technique based on windows SPSS version 20 software for data analysis. The results indicated that inventory cost management had positive effect on the profitability of brewery companies in Nigeria. Ahmed, Modibbo, Modu and Mohammad (2015) investigated the relationship between inventory management and financial performance of conglomerate companies quoted on the Nigerian Stock Exchange for the period 2010 to 2014. The study regressed annual absolute values of inventory (raw materials, work-in-progress and finished goods) against return on assets (proxy for financial performance). Secondary data for the study were collected from the annual reports of sampled companies. They employed descriptive statistics, Pearson's correlation and linear regression techniques for data analysis. Their findings indicated that inventory management was significantly related to financial performance.

METHODOLOGY

Research Design

This study adopted the export facto research design. The export facto research design was used because the study made use of already existing data, meaning that the study was conducted after the event had taken place. This also meant that the researchers had no powers to manipulate the data used in the study. Besides, the researchers adopted the case study approach as GSK was conveniently sampled for study.

Source of Data

This study examined the relationship between inventory management and profitability of GSK using return on assets (proxy for financial performance) as the response variable, inventory to assets ratio (representing inventory management) as the predictive variable, while inflation was used as a moderating variable. Secondary data for return on assets and inventory to assets ratio were collected from the annual financial statements of GSK for the period 2011 to 2018. The financial statements were downloaded from the company's website. Data on the moderating variable (inflation) was obtained from CBN Statistical Bulletin for the number of years. The particular time series date (2011 – 2018) was covered in the study because the period coincided with IFRS adoption, and only this period provided a uniform set of financial statements with the relevant data available and accessible on the company's website for this period.

The study variables

Return on assets: This was adopted as the measure of financial performance. It is the net profit after tax scaled by total assets, computed for each accounting year.

Inventory to assets ratio: This is the value of inventory stated in the statement of financial position scaled by total assets, computed for every year. It was used as the proxy for inventory management.

Inflation: This refers to overall changes in the consumer price index. It is used as a moderating variable as it would affect prices of manufacturing inputs and goods in trade.

Model Specification

To make easy the analysis of data, the study adopted a commonly used econometric model which has previously been used by Etale and Bingilar (2016) as stated below:

$ROA = f\ (IAR, INF)$

The above model was translated into a regression equation as follows;

$ROA = \alpha + \beta_1 IAR + \beta_2 INF + e$ Equation 1

Where,

ROA = Return on assets, proxy for financial performance, the response variable.

IAR = Inventory to assets ratio representing inventory management.

INF = Inflation used as a moderating variable.

α = is the intercept or constant

β_1 and β_2 = are the coefficients of the predictive variables to be determined, which defined the extent of the relationship between the response variable and the predictive variables.

e = is the error term of the equation.

Methods of Data Analysis

This study on the relationship between inventory management and financial performance of GSK employed descriptive statistics and multiple regression analysis based on the E-view 10 software as the methods for data analysis. The multiple regression technique is efficient and consistent; and it possesses the unique properties of best linear estimator compared to other estimation techniques.

RESULTS OF ANALYSIS AND DISCUSSION OF FINDINGS

Presentation of Data

Secondary data collected from the annual financial statements of GlaxoSmithKline Consumer Nigeria PLC (GSK) on the study variables for the 8 years period 2011 to 2018 are presented in Table 1. Return on assets (ROA), Inventory to assets ratio (IAR) and inflation (INF) are all indicated as a rate. Inflation is used as a moderating variable.

Table 1: Annual Figures of the Study Variables

	Dependent Variable	Independent Variables	
Year	ROA	IAR	INF
2011	15.10	27.10	11.80
2012	13.00	26.10	10.30
2013	12.80	25.10	12.00
2014	11.80	23.70	8.00
2015	11.10	21.40	8.00
2016	5.60	20.90	9.60
2017	3.90	15.80	15.70
2018	3.10	12.70	16.50

Source: GSK Annual Reports and CBN Bulletin

Descriptive Statistics

The summary of the descriptive statistics of the variables are shown in Table 2. Table 2 shows that ROA, IAR and INF have mean of 9.55, 21.60 and 11.49 respectively. The maximum values respectively for ROA, IAR and INF are 15.10, 27.10 and 16.50. While their respective minimum values are 3.10, 12.70 and 8.00. Table 2 further shows that the standard deviation of ROA, IAR and INF are 4.63, 5.08 and 3.22 respectively; indicating that IAR is the most dispersed variable, while INF is the least dispersed among the variables of the study. The Jarque-Bera statistics and the associated probability values also shows that ROA, IAR and INF are normally distributed with probabilities of 0.62, 0.65 and 0.69 (which are greater than 5 per cent), respectively.

Table 2: Descriptive Statistics

	ROA	IAR	INF
Mean	9.550000	21.60000	11.48750
Median	11.45000	22.55000	11.05000
Maximum	15.10000	27.10000	16.50000
Minimum	3.100000	12.70000	8.000000
Std. Dev.	4.626940	5.078526	3.218890
Skewness	-0.383694	-0.688846	0.492815
Kurtosis	1.505630	2.184589	1.911306
Jarque-Bera	0.940676	0.854311	0.718907
Probability	0.624791	0.652362	0.698058
Sum	76.40000	172.8000	91.90000
Sum Sq. Dev.	149.8600	180.5400	72.52875
Observations	8	8	8

Source: E-views 10 output

Regression Results

Table 3: Multiple Regression Results

Dependent Variable: ROA
Method: Least Squares
Date: 04/24/20 Time: 06:10
Sample: 2011 2018
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.33799	6.701329	-1.542678	0.1836
IAR	0.885376	0.183833	4.816205	0.0048
INF	0.066497	0.290038	0.229269	0.8277
R-squared	0.886655	Mean dependent var.		9.550000
Adjusted R-squared	0.841317	S.D. dependent var.		4.626940
S.E. of regression	1.843145	Akaike info criterion		4.340820
Sum squared resid	16.98591	Schwarz criterion		4.370611
F-statistic	19.55651	Hannan-Quinn criter.		4.139894
Prob.(F-statistic)	0.004325	Durbin-Watson stat		2.334906

Source: E-views 10 Output

Discussion of Findings

Table 3 shows the results of the multiple regression analysis based on the E-views 10 computer software. Therefore Equation 1 can re-casted as follows:

ROA = -10.34 + 0.89IAR + 0.07INF + 1.84 Equation 2

The results in Table 3 and more simply Equation 2 which would facilitate the testing of the study hypotheses provide answers to the research questions made obvious by the study variables. From the results of analysis, the independent variables combined significantly explained changes in the dependent variable with probability of F-statistic value of 0.004325 (at 5% level of significance). Secondly, the coefficient of determination (R-squared) value of 0.886655 indicates that 89% of changes in the dependent variable are accounted for by the combined effect of changes in the independent variables. Also, the adjusted R- squared value of 0.841317 indicates that the model used is a proper and good fit for testing the hypotheses of the study. This provides a high confidence level (at approximately 84% for acceptance of the goodness of the study model. The Durbin- Watson statistics value of 2.334906 which is approximately equal to the 2.0 benchmark indicates that there was no serial auto correlation among the independent variables.

Overall, the regression results used to verify the relationship between inventory management, (IAR) and return on assets (ROA) proxy for financial performance indicated a strong significant relationship between the predictive variable (IAR) with p-value of 0.0048 and

response variable (ROA). Also, the probability of F-statistic value (0.004325) of the regression model used implies that inventory management of GSK has a strong statistically significant positive relationship with return on assets (with beta value of IAR equal to 0.885376). The regression results have revealed that inventory management has a positive statistically significant link with return on assets. The findings of this study are in agreement with the study findings of Ndubuisi et al (2018), Etale and Bingilar (2016), Kung'u (2016) and Prempeh (2015). However, the findings of this study did not support the study findings of Bawa et al (2018), Muturi et al (2015) and Panigrahi (2013)

Testing the hypotheses

The calculated values of the co-efficient of the predictive variables (or beta values in Equation 2) in conjunction with p-values in Table 3 were used in testing the study hypotheses in the following sections.

i) Inventory to assets ratio (IAR) has no significant relationship with return on assets (ROA).

From Table 3, the coefficient of IAR is 0.885376 with a P-value of 0.0048. This means that inventory to assets ratio (IAR) proxy for inventory management has a positive significant relationship with return on assets (ROA) representing financial performance at 5% level of significance. Therefore, the null hypothesis 1 is rejected. The implication is that a unit change in IAR will lead to 0.89 unit change in ROA.

ii) There is no significant relationship between inflation (INF) and return on assets (ROA).

Again, from Table 3 the coefficient of INF is 0.066497 with P-value of 0.8277. This means inflation (INF) the moderating factor has a positive relationship with return on assets (ROA) proxy for financial performance, but the relationship is not significant at 5% level (as indicated by the p=value of 0.8277). The null hypothesis 2 is therefore accepted. The economic interpretation is that a unit change in INF will bring about 0.066 unit change in ROA, but the influence of inflation is weak.

This study has shown that inventory management represented by inventory to assets ratio has significant positive relationship with the financial performance (proxy by return on assets) of GlaxoSmithKline Consumer Nigeria PLC (GSK) a Nigerian Stock Exchange listed pharmaceutical and consumer healthcare products manufacturing company. This means that GSK has in place an effective and efficient inventory management system.

But the business implication of the economic lockdown in the world over due to the corona virus disease (COVID 19) pandemic would disrupt whatever good inventory management system the company has in place. Because the company like most others would

find it difficult to receive supplies of raw materials and even her distribution channels would be adversely affected making it hard-put to effectively manage inventory of raw materials and finished goods which may lead to complete stoppage of production for as long as the lockdown persists. The lockdown has even affected the annual audit of the accounts of most listed companies as a result of which the year 2019 financial statements of most companies are not accessible online even close to the end of the first half of the year 2020 for researchers. The company like most others should be prepared to think-outside-the-box to get back to her optimal operating capacity when normalcy returns.

CONCLUDING REMARKS

Summary

This study examined the relationship between inventory management and financial performance using GlaxoSmithKline Consumer Nigeria PLC (GSK) as a case study. Inventory to assets ratio (IAR) and inflation (INF), were used as the predictive variables; while return on assets (ROA) was used as proxy for financial performance (the response variable). The findings of the study are summarized as follows:

1. Inventory to assets ratio (IAR) had positive statistically significant relationship with return on assets (ROA) with p-value of 0.0048 and co-efficient of determination of about 0.89.
2. Inflation (INF) had positive relationship with return on assets (ROA), but the relationship is not significant (with a p-value of 0.8277).
3. This study has shown that inventory management has significant positive relationship with the financial performance of GSK, meaning that the company has an effective and efficient inventory management system in place.

Conclusion

This study examined the relationship between inventory management and financial performance of GlaxoSmithKline Consumer Nigeria PLC in a case study. The study adopted inventory to assets ratio (IAR) and inflation (INF) as the predictive variables while return on assets (ROA) representing financial performance was adopted as the response variable. Secondary data for the study was collected from the annual reports of GSK and CBN Statistical Bulletin for the period 2011 to 2018. The study employed descriptive statistics and multiple regression analysis based on the E-view 10 software as techniques for data analysis. The results showed that all the predictive variables had positive relationship with return on assets, but only inventory to assets ratio was significant at 5% level. The regression results also showed that the coefficient of determination (R-squared) value of approximately 0.89 indicating that 89% of changes in the

response variable were accounted for by the combined effect of changes in the predictive variables. The combined effect of variations of the predictive variables significantly explained changes in the response variable with probability of F-statistic value of 0.004325 (at 5% level of significance). Furthermore, the adjusted R- squared value of 0.84 indicates that the model used for the analysis is a proper and good fit. The study concluded that inventory management is significant and positively related to financial performance.

Recommendations

Based on the findings of the study the following recommendations are made:

1. The management of GSK should maintain their present inventory management policies in order to sustain the long run growth and success of the company, but be willing to maintain regular review of her policies to be able to re-invent and innovate;
2. Also, management of the company should put in place a mechanism to mitigate the effect of inflation on raw materials, spares and other production inputs, one way to do this may be by way of backward integration where the company may engage in mechanized production of raw materials and supplies, and train her staff to acquire new skills and knowledge; and
3. The company like most others should be prepared to think-outside-the-box to get back to their optimal operating capacity when normalcy returns to the economies of the world beyond the COVID 19 economic lockdown. The company could take control of her own distribution channels and review her processes to identify any excess capacity that can be deployed for more productive use.
4. It is suggested that a study in the future on this topic would address the whole healthcare sector and cover a longer time period to highlight the long term relationship between the variables.

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