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# **Current Assets Management and Operational Performance of Consumer Goods Firms in Nigeria**

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ABSTRACT: The study examined the effect of current assets management on the operational performance of firms in the consumer goods Industry in Nigeria. Specifically, the study ascertained the effect of inventory turnover, accounts receivable turnover, and cash conversion cycle on the turnover of consumer goods firms in Nigeria. The study adopted an ex-post-facto research design, covering a ten-year period (2013 to 2022). Secondary data were extracted from the annual reports and accounts of sampled FMCGs in Nigeria. Multiple regression techniques were used for test of hypotheses. The findings of the study reveal several important insights. Firstly, the analysis indicates a statistically significant negative relationship between inventory turnover and the turnover of FMCG firms in Nigeria. This is evident from the t-statistic of -2.269713 and a corresponding p-value of 0.0255. Secondly, in contrast, the study shows that accounts receivable turnover has a statistically non-significant negative impact on the turnover of FMCG firms in Nigeria. This is evidenced by a tstatistic of -0.406028 and a p-value of 0.6856. Lastly, the research demonstrates a statistically significant effect of the cash conversion cycle on the turnover of FMCG firms in Nigeria. This is supported by a t-statistic of -3.299741 and a p-value of 0.0014. The findings of the study lead to several recommendations for FMCG firms in Nigeria. Firstly, it is advised that firms enhance their demand forecasting techniques and adopt agile replenishment strategies to align with market trends and consumer preferences. Leveraging technology and data analytics can optimize inventory levels, mitigating overstocking and stockouts. Secondly, firms should tailor credit terms based on customer credit profiles, establish clear credit policies, and implement effective collections processes supported by technology. Lastly, it's recommended that firms conduct a comprehensive analysis of their operational cycle, collaborate closely with suppliers, and integrate technology to streamline processes.

**KEYWORDS:** Current Asset Management, inventory turnover, accounts receivable turnover, cash conversion cycle

# INTRODUCTION

The Nigerian fast-moving consumer goods (FMCG) industry emerges as a vibrant force in the African market, boasting more than 20 listed companies on the Nigerian stock exchange and over 100 unlisted

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firms (Punch Newspapers, June 6, 2023). This sector stands as a pivotal contributor to Nigeria's GDP, claiming the fourth-largest position within the economy, and generating employment for a substantial workforce of over three million individuals. Reinforcing its significance, FMCG companies' financial contributions are striking, with N33.9 billion income tax and N709.6 billion value-added tax (equivalent to 29.65% of vat collection) reported during the first quarter of 2023 (Udi, 2023).

The effective management of current assets, commonly referred to as liquid assets, takes on paramount importance for sustaining the Consumer Goods Industry's influential stance within the economy. Current assets encompass key components such as inventory, accounts receivable, and short-term investments, serving as crucial resources convertible to cash within a year. Skillful management of these assets necessitates achieving a delicate equilibrium between assets and liabilities. Finance managers frequently establish ratios or thresholds between current assets and liabilities to ensure that the organization consistently fulfills its obligations while simultaneously capitalizing on available assets. Noteworthy ratios employed for this purpose include liquidity ratio, inventory turnover ratio, and receivables days.

Elevating operational performance emerges as an imperative for consumer goods firms navigating the competitive landscape. This objective revolves around evaluating essential key performance indicators (KPIs) such as production efficiency, cost control, supply chain management, quality assurance, distribution efficacy, and market share. The strategic management of current assets occupies a pivotal position within operational success, exerting a potent influence on these KPIs. This influence opens avenues for augmenting financial growth, refining operational efficiency, and fortifying market competitiveness.

In spite of the evident significance of current assets and their potential ramifications on operational performance, a research gap persists, centering on understanding the intricate relationship between these factors within the context of Nigerian consumer goods firms. Prior research predominantly gravitates towards financial performance metrics, inadvertently sidelining the intricate dynamics between current assets and operational performance indicators, such as sales volume and net sales. In response to this research void, the current study seeks to comprehensively unearth how current assets management directly impacts the operational performance of Nigerian consumer goods firms, with sales performance serving as a relevant proxy. Through this comprehensive exploration, the research endeavors to offer practical insights for shaping strategic decisions, fine-tuning resource allocation practices, and optimizing cost management strategies within the industry. Ultimately, the study aims to foster growth and catalyze development within Nigerian consumer goods firms, nurturing enhanced operational effectiveness and heightened market competitiveness.

## **Statement of the Problem**

The FMCG industry in Nigeria is a pivotal contributor to employment, government revenue, and economic growth. In this competitive landscape, FMCG firms grapple with optimizing their operational performance for market sustainability and growth. Effective management of current assets has emerged as a critical influencer of operational performance. However, the connection between current assets management and operational performance in Nigerian FMCG firms remains unexplored.

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Despite the recognized importance of current assets management and its impact on operational performance, there's a lack of comprehensive research on Nigerian FMCG firms. Existing studies primarily focus on working capital management and financial metrics, neglecting the intricate link between current assets management and operational indicators like sales volume and value. This research gap poses a challenge. Without empirical evidence on how current assets management affects operational performance, FMCG firms may struggle with inventory, accounts receivable, and cash management, hindering their competitive edge and industry growth potential. Addressing this gap is essential for FMCG firms to enhance decision-making, resource allocation, and overall operational performance. By understanding the factors influencing operational performance and the dynamics between current assets management and key indicators, firms can devise strategies to optimize resources, streamline operations, and bolster market competitiveness.

Hence, this study aims to explore the relationship between current assets management and operational performance in Nigerian FMCG firms. It seeks to provide insights for informed decision-making, efficient resource allocation, and effective cost management within the industry.

# **Objectives of the study**

The main objective of the study is to examine the effect of current assets management on the operational performance of firms in the Consumer goods Industry in Nigeria. The specific objectives were to:

- i. Ascertain the effect of inventory turnover on the turnover of consumer goods firms in Nigeria.
- ii. Investigate the effect of accounts receivable turnover on the turnover of consumer goods firms in Nigeria.
- iii. Determine the effect of cash conversion cycle on the turnover of consumer goods firms in Nigeria.

## REVIEW OF RELATED LITERATURE

# **Conceptual Review**

## **Current Assets**

Current assets are assets capable of being converted into cash within an accounting year (Egbide, 2009). The significance of current assets is underscored by the assertion of Van Horne & Wachowicz (1998), who state that these assets typically constitute more than half of the total assets of a standard manufacturing firm. Comprising cash and cash equivalents, short-term investments, accounts receivables, inventory, and prepaid expenses, current assets are categorized into four key components by Van Horne & Wachowicz (1998): Cash, Marketable securities, receivables, and inventory. These assets are often referred to as "liquid" assets due to their swift conversion to cash. With three essential traits, current assets are tangible, physical, and anticipated to be sold or transformed into cash within a relatively short period, usually not exceeding a year. Additionally, they provide a safety net for businesses by facilitating the settlement of everyday expenses and obligations, either through cash use or conversion to bank balances.

Unlike depreciable assets, current assets are not subject to depreciation; however, ineffective management might prompt write-downs. This applies across all types of current assets, including

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inventory loss and obsolescence write-offs, provisions for slow-moving inventory, addressing cash shortages, and addressing bad debts.

The proficient management of current assets holds the key to achieving a delicate equilibrium that maximizes profitability while minimizing risk. Poor management can trigger detrimental consequences such as stockouts leading to sales loss, inability to meet creditor obligations, resulting in reputational harm, heightened operational costs, failure to meet payroll, and subsequent employee attrition.

## **Inventory Turnover**

Inventory turnover in the consumer goods sector refers to the rate at which companies within this industry sell and replenish their inventory over a specific period, usually a year. It's a key performance metric that provides insights into the efficiency of inventory management within consumer goods companies (Jenkins, 2022).

Given the diverse nature of the consumer goods sector, including fast-moving consumer goods (FMCG) like packaged foods, beverages, personal care products, and other non-durable items, the interpretation of inventory turnover can vary (Kenton, 2023). Generally, in the consumer goods sector, a high inventory turnover ratio is often desired. This suggests that products are selling rapidly and being replaced promptly, reducing the risk of obsolescence and capital tied up in inventory (Kenton, 2023). Gaur, et. Al. (2005) submit that inventory turnover can be particularly important in the consumer goods sector due to factors such as changing consumer preferences, short product lifecycles, and the need to quickly adapt to market trends. Companies in this sector often aim to minimize holding costs and avoid overstocking, which can lead to losses if products become outdated or perishable. However, Holmberg and Österlindit (2019) opine that the appropriate inventory turnover ratio can vary based on factors such as the type of consumer goods, supply chain dynamics, and market conditions. Some consumer goods, like seasonal items, might naturally have higher inventory turnover ratios during peak periods.

## **Accounts Receivable Turnover**

Accounts Receivable Turnover is a financial metric used to evaluate how effectively a company manages its credit and collection processes (Murphy, 2023). It measures the frequency with which a company collects payments from its customers and converts accounts receivable into cash within a specific period, often a year.

A higher Accounts Receivable Turnover ratio generally indicates that a company is efficiently collecting payments from its customers (Beaver, 2022). This can imply effective credit policies, timely collections, and a low risk of bad debts. Conversely, a lower ratio might suggest slower collections and potential issues with credit management.

Interpreting the ratio should consider factors such as industry norms, the nature of the business, and the company's credit terms (Beaver, 2022). Some industries might naturally have longer collection cycles due to the nature of their products or customer behavior.

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# **Cash Conversion Cycle (CCC)**

The Cash Conversion Cycle (CCC) is a financial metric that assesses the time it takes for a company to convert its investments in inventory and other resources into cash inflows from sales (Takon, 2013). It provides valuable insights into the efficiency of a company's cash flow management and its overall working capital cycle.

Owolabi and Obida (2012) state that a shorter cash conversion cycle suggests that a company is efficiently managing its working capital, quickly converting resources into cash. This can be advantageous as it allows the company to maintain liquidity and respond promptly to financial obligations. On the other hand, a longer cash conversion cycle might indicate inefficiencies in the cash flow process, potentially tying up capital and affecting the company's ability to meet its financial commitments.

Analyzing the cash conversion cycle in relation to industry benchmarks and historical data can provide insights into a company's performance. It helps identify areas where operational improvements can be made, such as streamlining inventory management, enhancing accounts receivable processes, and optimizing accounts payable practices. By reducing the cash conversion cycle, a company can enhance its overall financial health and operational efficiency.

#### **Operational Performance**

Operational performance pertains to how effectively and efficiently a company's day-to-day operations align with its goals (Wann, 2023). It gauges how well a firm utilizes its assets to generate revenue from regular business activities (Aliyu, et al., 2015). This evaluation offers a comprehensive overview of a company's financial health and serves as a basis for comparing similar firms through ratio analysis, either within the same industry or across industries (Batagi, 2015).

Assessing a firm's performance is crucial in determining its sustainability (Bessong, et al., 2012). Both financial and operational performance measures underline the contributions of employees and management to boosting future cash flows, accelerating receipt through effective credit management, and mitigating risk (Borici & Kruja, 2016). Various indicators, such as return on assets, return on equity, liquidity ratios, profitability ratios, and market value ratios, collectively offer insights into performance (Borici & Kruja, 2016). Moreover, earnings per share stand as a valuable metric for assessing management's operational effectiveness in a given year (Borici & Kruja, 2016).

This holistic evaluation of operational performance enables stakeholders to comprehend how effectively a company translates its resources into revenue, manages risks, and attains financial objectives. It plays an essential role in guiding strategic decisions and ensuring the long-term viability of the business.

## **Turnover (Net Sales)**

Turnover, also referred to as net sales, constitutes the pure income derived from a company's sales activities. According to the Corporate Finance Institute (CFI, 2020), net sales represent the total revenue generated by a company, excluding any sales returns, allowances, and discounts. Kenton (2022) further defines net sales as the sum of a company's gross sales subtracted by its returns, allowances, and discounts. This figure encompasses the total of sales achieved by a business within

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a specific period after accounting for sales returns, discounts, and allowances. It's also commonly reported as Sales revenue or Turnover. Turnover signifies the monetary value earned exclusively from the sales of an organization's products and services, omitting income from other sources like fixed asset sales or insurance claims.

Using sales as a measure of business performance is a common practice (Porter, 1985). Sales figures provide a clear indication of revenue generation, market share, and growth trends (Kaplan & Norton, 1992). Monitoring sales performance is crucial for assessing a company's ability to generate income and cover costs (Drucker, 1974). Notably, it serves as a vital indicator for investors and analysts, aiding in measuring a company's growth and comparing the sales performance of different entities. Over time, it also enables tracking a company's sales growth trajectory.

## **Theoretical Framework**

The study was anchored on Efficiency Theory. The Efficiency Theory, also known as the "Efficiency Perspective" or "Efficiency Hypothesis," is a fundamental concept in economics and business management. It asserts that organizations strive to utilize their resources in an optimal and efficient manner to achieve their objectives and maximize their performance outcomes. This theory suggests that companies seek to minimize waste, reduce inefficiencies, and make the most effective use of available resources, which ultimately contributes to improved operational performance and overall success.

The Efficiency Theory doesn't have a single originator, as it's a concept that has evolved over time through contributions from various economists, researchers, and scholars. It draws heavily from economic theories and principles that emphasize rational behavior, resource allocation, and the pursuit of utility or value maximization. The Efficiency Theory is well-suited to the study for several reasons:

- i. The Efficiency Theory focuses on optimizing the utilization of resources, which aligns with the study's emphasis on how effective management of current assets can impact operational performance.
- ii. Since the study is centered on operational performance, the Efficiency Theory directly relates to how businesses manage their operations, streamline processes, and minimize inefficiencies.
- iii. Current assets, including inventory and accounts receivable, play a significant role in a company's financial health. The Efficiency Theory's emphasis on maximizing resource utilization directly ties into the study's exploration of financial impact.
- iv. The Efficiency Theory is particularly relevant to the consumer goods industry, where companies need to balance inventory levels, manage receivables, and optimize cash flows efficiently to remain competitive.
- v. By anchoring the study on the Efficiency Theory, the study is not only exploring theoretical concepts but also offering practical insights into how consumer goods firms in Nigeria can enhance their operational performance by efficiently managing their current assets.

The Efficiency Theory provides a robust framework to understand how resource optimization, particularly in the context of current assets management, can influence the operational performance

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of firms. By aligning the study with this theory, the study addressing a fundamental principle that underpins business decision-making and performance enhancement.

# **Empirical Review**

Akparhuere, et al. (2019) ascertain the effect of asset management efficiency on corporate performance of building and construction companies in Nigeria. The study adopted the ex-post facto research design and secondary data were collected on the independent and dependent variables for ten (10) years, i.e. 2006-2017. The data were analyzed using the simple regression method and it was found that inventory turnover had a significant effect on the corporate performance of building and construction companies of Nigeria.

Nangi, et al. (2020), examined the influence of current assets on the performance of oil and gas companies in Nigeria. Using Earnings per share (EPS) as proxy for stock performance and trade receivables, inventory and cash/cash equivalents as components of currents assets, the researchers studied five quoted and gas companies and using data obtained from their published annual reports analysed using correlation and regression statistics, it was found that receivables and inventory significantly influenced share price of the listed firms whereas cash and cash equivalents did not.

Hanum and Masdupi (2023) determined the impact of working capital management on the company's financial performance through liquidity as a mediation in trading company on the IDX. The population in this study are trading companies listed on the Indonesia Stock Exchange for the period 2016 to 2020 using secondary data. The number of samples in this study were 215 samples. The data analysis method used is SEM, namely path analysis with the help of the SPSS AMOS 22 program. The results show that the cash conversion cycle has a significant and negative effect on financial performance, the inventory period has a significant and negative effect on financial performance, the receivable period has a significant and negative effect on financial performance.

Githiga and Koori (2023) examined the effect of working capital management on financial performance of agricultural firms listed on Nairobi Securities Exchange. This study's target population comprised seven agricultural firms listed on the NSE sampling seven agricultural firms' listed on the NSE between 2016 and 2022 using a census survey. Data was obtained from secondary sources for a period between 2016 and 2022. Panel regression, descriptive and correlation statistics were used for analysis. The study established a negative correlation between accounts receivable collection period and financial performance.

Olaoye, et al. (2019) examined the impact of working capital management on the profitability of selected quoted Nigeria manufacturing companies from 2006-2015. Secondary panel data was used for the study. The results showed that the Account collection period (ACP), Account payment period (APP), and Inventory Turnover in Days (ITID) have a negative effect on the Net Operating Profitability of quoted manufacturing companies in Nigeria.

Uguru, et al. (2018) 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

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inventory are held, and cash conversion cycle are significant factors in the accomplishment of the profitability objective of brewery firms in Nigeria.

Abbas and Isiaka (2021) examined the effect of working capital management on the financial performance of 71 Non-financial companies quoted on the Nigerian Exchange Group over the period 2014 – 2018. Data were retrieved from the Nigerian Exchange Group 2019 Factbook. The model estimation technique adopted was the Pooled Ordinary Least Squares, fixed effect, and random-effect methods. Results show that Account Receivables were negatively related to EPS.

Olubukola, et. al. (2021) examined the impact of working capital management on the profitability of selected quoted agricultural and agro-allied companies (from 2012 to 2016) in Nigeria. Secondary data were extracted from eighteen quoted agricultural and agro-allied companies in Nigeria, four of which are agricultural companies out of the twenty-three in Nigeria. Descriptive research design and regression analysis were used. The result shows the trade receivables collection period and profitability is negatively related. The result shows that the inventory turnover period and profitability are related, the cash conversion cycle and profitability are positively related.

Abdullah, et al. (2021) analyzed the effect of working capital management on the financial performance in banks. The study uses secondary data obtained from the published annual financial reports of 15 banks listed in the Iraq Stock Exchange during 2005-2018. Using regression techniques it was found that the cash conversion cycle has a significant impact on banking performance.

Ogunsola and Gbadebo (2022) examined the impact of working capital management on the financial performance of 9 listed manufacturing firms in Nigeria for the 10 years spanning 2011-2020. Descriptive statistics, correlation, and panel regression analysis methods were employed in data analysis. The result revealed that inventory turnover had a positive insignificant effect on return on asset. Trade receivable collection period had negative insignificant effect on return on asset. Cash conversion cycle had negative insignificant effect on return on asset.

## **Gap in Empirical Review**

The identified gap that this study aims to fill is the lack of comprehensive research on the relationship between current assets and operational performance proxied by Net Sales (Turnover) and sales volume (Sales Quantity) in Nigerian consumer goods firms. While the relevance of current assets and their potential influence on liquidity and performance of firms is widely acknowledged, the specific impact of components of current assets on turnover in the context of the Nigerian consumer goods sector of the manufacturing industry remain relatively unexplored and unknown.

Existing research primarily focuses on financial performance measures, such as return on assets, return on equity, profit for the year, and return on investment, overlooking the intricate relationship between current assets and other operational performance indicators including net sales, sales growth and decline which are key measures in assessing management performance in the manufacturing industry. This knowledge gap limits the understanding of how corporate overheads, including sales and marketing expenses, administrative expenses, and company income tax expenses, directly or indirectly affect the operational performance and financial health of brewing firms in Nigeria. By addressing this gap, the study aims to provide empirical evidence and insights into the relationship

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between current assets and operational performance in Nigerian consumer goods firms. It aims to explore how variations in current assets affects annual turnover and changes in sales trend.

## **METHODOLOGY**

The research employed an ex-post facto design, focusing on historical data to explore relationships and outcomes in the context of the Fast-Moving Consumer Goods (FMCG) sub-sector in Nigeria. Extracting secondary data from the annual reports and accounts of sixteen selected FMCG companies listed on the Nigerian Stock Exchange, the study aimed for a retrospective analysis of variables of interest. The population included all sixteen FMCG companies listed on the Nigerian Stock Exchange as of June 6, 2023, with a purposive sampling technique leading to the inclusion of ten companies from various subgroups within the FMCG sector. This methodology allowed for a comprehensive examination of the chosen companies' historical data, contributing to the understanding of the FMCG industry's dynamics within Nigeria's broader Manufacturing sector.

# **Model Specification**

As stated by Koutsoyiannis (2003), the process of model specification entails identifying the variables to be included in the model as dependent and explanatory variables, along with establishing theoretical expectations regarding the sign and magnitude of the function's parameters. In accordance with this guidance, the model for the present study was specified as follows:

TO = F (INVTO, ARTO, CCC) [Equation (1)]  $TO_{it} = \beta_0 + \beta_1 INVTO_{it} + \beta_2 ARTO_{it} + \beta_3 CCC_{it} + c_{it} + \epsilon_{it}$  [Equation (2)]

Where;

TO: Turnover

INVTO: Inventory Turnover

ARTO: Account Receivable Turnover

CCC: Cash Conversion Cycle

 $\beta_0$  is the constant term or intercept for firm *i* in the year t.  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  are linear regression coefficients to be estimated.

 $c_{it}$  is the non-observable individual effect while  $\varepsilon_{it}$  is the disturbance or error term for firm i in the year t.

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# **Data Analysis**

**Table 4.2.1: Descriptive Statistics** 

	TO	INVTO	ARTO	CCC
Mean	120309.5	87.07451	73.93565	-33.78162
Median	71409.50	80.12476	57.10171	-50.79636
Maximum	550478.0	206.2010	271.3160	189.3977
Minimum	12190.00	29.73346	5.249445	-263.7180
Std. Dev.	116548.7	32.56077	58.95060	111.9182
Skewness	1.506188	1.312543	1.487859	0.197568
Kurtosis	4.659046	5.232497	4.726522	2.139259
Jarque-Bera	49.27851	49.47966	49.31572	3.737529
Probability	0.000000	0.000000	0.000000	0.154314
Sum	12030948	8707.451	7393.565	-3378.162
Sum Sq. Dev.	1.34E+12	104960.2	344042.2	1240042.
Observations	100	100	100	100

Source: Eviews 10.0 Statistical Software (2023)

Table 4.2.1 presents the variable description of the panel data consisting of 100 observations for the sampled Fast Moving Consumer Goods (FMCG) firms. The coefficients of Skewness, Kurtosis, and Jarque-Bera Probability provide insights into the normality of the distribution of the data series.

Analyzing Table 4.2.1, it can be observed that the Jarque-Bera Probability indicates a non-normal distribution of turnover (0.000000), inventory turnover (0.000000), and account receivable turnover (0.000000), as their JB probabilities are less than 5%. However, the distribution of cash conversion cycle (0.154314) is normal, with a JB probability greater than 0.05.

The skewness coefficients further support the normal distribution of turnover (1.506188), inventory turnover (1.312543), and account receivable turnover (1.487859). In contrast, cash conversion cycle exhibits a skewness coefficient of 0.197568, indicating a normal distribution. Confirming the normal distribution, the kurtosis coefficients for turnover (4.659046), inventory turnover (5.232497), and account receivable turnover (4.726522) fall within the range of a non-normal distribution (less than 3). However, the kurtosis coefficient for cash conversion cycle is 2.139259, indicating a normal distribution.

The findings from Table 4.2.1 suggest that turnover, inventory turnover, and account receivable turnover exhibit a non-normal distribution, while cash conversion cycle demonstrates a normal distribution.

# **Regression Results (OLS)**

After the application of the ordinary least square (OLS) estimation method on the model earlier suggested in section three, the following results shown in the table below were obtained.

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## **Table 4.2.2: Regression Analysis Output**

Dependent Variable: LOG(TO) Method: Panel Least Squares Date: 08/17/23 Time: 11:23

Sample: 2013 2022 Periods included: 10 Cross-sections included: 10

Total panel (balanced) observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ITO ARTO CCC	-0.006048 -0.000811 -0.003595	0.002665 0.001998 0.001089	-2.269713 -0.406028 -3.299741	0.0255 0.6856 0.0014
C	11.72355	0.313399	37.40773	0.0000
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.308967 0.287373 0.813828 63.58233 -119.2521 14.30752 0.000000	Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion Hannan-Quinn criter. Durbin-Watson stat		11.25841 0.964054 2.465042 2.569249 2.507217 2.104202

Source: Eviews 10.0 Statistical Software (2023)

**Inventory Turnover:** The value of the t-statistics (-2.269713 > 2) and the probability of the t-Statistic (0.0255 < 0.05) shows that inventory turnover has a statistically significant effect on the turnover of FMCG firms in Nigeria.

**Account Receivables Turnover:** The value of the t-statistics (-0.406028 < 2) and the probability of the t-Statistic (0.6856 > 0.05) shows that account receivables turnover has a statistically non-significant effect on the turnover of FMCG firms in Nigeria.

Cash Conversion Cycle: The value of the t-statistics (-3.299741 > 2) and the probability of the t-Statistic (0.0014 < 0.05) shows that cash conversion cycle has a statistically significant effect on the turnover of FMCG firms in Nigeria.

# **Statistical Criteria (First Order Tests)**

The Adjusted R2 value of 0.287 indicates that approximately 29% of the variations in turnover in Nigerian FMCG firms can be explained by the independent variables considered in the model. The remaining 71% can be attributed to other factors that influence turnover within the industry, as well as factors captured within the error term.

The significance of the model as a whole is evaluated using the f-statistic. In this case, the p-value (0.000000) is less than the 5% critical value, indicating that the model is statistically significant and well-fitted. This implies that the independent variables collectively have a substantial impact on the turnover in the FMCG sector.

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The Durbin Watson Statistic, with a value of 1.94, provides insights into the presence of positive autocorrelation within the time series data. A value of 2.10 suggests that there is an absence of positive autocorrelation, indicating that the observations in the data are not significantly correlated with each other over time.

# **Test of Hypothesis**

The three formulated hypotheses in section one was subjected to empirical testing using the following decision criteria.

**Decision Rule:** Following the guidelines of Gujarati and Porter (2009), the null hypothesis (H0) should be rejected when the P-value is below 0.05 and the t-statistic exceeds 2. Conversely, if these conditions are not met, the null hypothesis should be accepted, leading to the rejection of the alternate hypothesis (H1).

#### **Presentation of Test Result**

Table 4.2.2 Regression Analysis result was used to test the stated hypotheses.

# **Test of Hypothesis One**

- H<sub>0</sub> Inventory turnover do not significantly affect turnover of fast moving consumer goods firms in Nigeria.
- H<sub>1</sub> Inventory turnover have a significant effect on turnover of fast moving consumer goods firms in Nigeria.

**Decision:** From the regression analysis result in Table 4.2.2, the p-value for inventory turnover is 0.0255 which is less than the alpha value of 0.05. Also the t-statistic of -2.269713 is greater than 2. It falls in the rejection region, hence, we reject the first null hypothesis  $(H_0)$ . The conclusion here is that inventory turnover has a statistically significant negative effect on turnover of FMCG firms in Nigeria.

# **Test of Hypothesis Two**

- H<sub>0</sub> Account receivables turnover do not significantly affect turnover of fast moving consumer goods firms in Nigeria.
- H<sub>1</sub> Account receivables turnover have a significant effect on turnover of fast moving consumer goods firms in Nigeria.

**Decision:** From the regression analysis result in Table 4.2.2, the p-value for account receivables turnover is 0.6856 which is greater than the alpha value of 0.05. Also the t-statistic of -0.406028 is less than 2. It falls in the acceptance region, hence, we accept the second null hypothesis ( $H_0$ ). The conclusion here is that account receivables turnover has a statistically non-significant negative effect on turnover of FMCG firms in Nigeria.

## **Test of Hypothesis Three**

- H<sub>0</sub> Cash conversion cycle do not significantly affect turnover of fast moving consumer goods firms in Nigeria.
- H<sub>1</sub> Cash conversion cycle have a significant effect on turnover of fast moving consumer goods firms in Nigeria.

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**Decision:** From the regression analysis result in Table 4.2.2, the p-value for cash conversion cycle is 0.0014 which is greater than the alpha value of 0.05. Also the t-statistic of -3.299741 is greater than 2. It falls in the rejection region, hence, we reject the third null hypothesis ( $H_0$ ). The conclusion here is that cash conversion cycle has a statistically significant negative effect on turnover of FMCG firms in Nigeria.

#### **DISCUSSION OF FINDINGS**

# **Effect of Inventory Turnover on Turnover of FMCG**

From the test of hypothesis one it was revealed that inventory turnover has a significant negative effect on turnover of FMCG firms in Nigeria. The finding contradicts the *a priori* expectations of the researcher because inventory turnover should typically have a positive effect on the turnover of a business. A higher inventory turnover indicates that a company is efficiently managing its inventory by selling products quickly and replenishing stock as needed. This can lead to improved cash flow, reduced carrying costs, and better utilization of resources. However, there are several strong reasons that could potentially explain this finding.

Firstly, FMCG firms deal with products that have a relatively short shelf life and high demand volatility. A significant negative effect of inventory turnover on turnover might suggest that these firms may be trying to minimize their inventory levels to reduce carrying costs and minimize waste. However, this strategy could potentially lead to stockouts during periods of high demand, resulting in missed sales opportunities and ultimately impacting overall turnover.

Furthermore, the FMCG industry relies heavily on supply chain efficiency. If the inventory turnover has a significant negative effect on turnover, it could be an indicator of supply chain disruptions, delayed deliveries, or difficulties in maintaining consistent product availability. This, in turn, might lead to decreased customer satisfaction and loyalty, negatively affecting turnover in the long run.

Another reason for the counterintuitive result was that the FMCG sector is often characterized by intense competition. Firms might be trying to stay competitive by adopting strategies that prioritize cost reduction and operational efficiency, which could contribute to a negative relationship between inventory turnover and turnover. Lower inventory turnover could be a result of firms trying to keep costs low, potentially compromising their ability to quickly meet market demand.

Also, the demand for FMCG products can vary significantly based on seasons, trends, and consumer preferences. Firms might adjust their inventory turnover strategies to align with these fluctuations. A significant negative effect could be an indication that firms are adapting their inventory management to these seasonal variations, potentially leading to lower overall turnover in certain periods. A broader economic factors such as inflation, currency fluctuations, and consumer purchasing power can impact FMCG turnover. A significant negative effect of inventory turnover on turnover might be reflective of economic challenges that are affecting consumer spending behavior and overall market demand.

### **Effect of Account Receivable Turnover on Turnover of FMCG**

From the test of hypothesis two it was revealed that account receivable turnover has a non-significant negative effect on turnover of FMCG firms in Nigeria. The finding contradicts the *a priori* 

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expectations of the researcher because accounts receivable turnover typically should have a positive effect on turnover for a business. A higher accounts receivable turnover ratio indicates that a company is collecting payments from its customers more efficiently, which in turn contributes to improved cash flow and turnover. Here are some strong reasons that could elucidate this outcome:

Firstly, the FMCG industry is competitive, and companies may offer more lenient credit terms to attract and retain customers. This could result in longer accounts receivable turnover cycles. However, the non-significant negative effect could imply that these extended credit terms are not having a substantial impact on the overall turnover, possibly because the increased sales volume from favorable credit terms is compensating for any delayed payments.

Secondly, the behavior of FMCG consumers could be impacting accounts receivable turnover. If customers typically take more time to make payments in this industry due to buying patterns or other factors, this might lead to a non-significant negative effect. The non-significant result could suggest that the observed slower turnover is in line with these natural payment tendencies.

Another reason for the counterintuitive result was that external factors such as economic conditions and market trends could be influencing payment behavior. If customers are facing financial challenges or uncertainties, they might take longer to settle invoices. The non-significant negative effect could indicate that the impact of these external factors on turnover is not substantial.

## Effect of Cash Conversion Cycle on Turnover of FMCG

From the test of hypothesis three it was revealed that cash conversion cycle has a significant negative effect on turnover of FMCG firms in Nigeria. The finding aligns with the *a priori* expectations of the researcher because a shorter CCC is likely to have a positive effect on turnover, while a longer CCC might have a negative effect. Here are some strong reasons that could elucidate this outcome:

Firstly, the significant negative effect found in the hypothesis test suggests that as the cash conversion cycle increases (meaning it takes longer for the company to convert its resources into cash and then back into the business), there is a corresponding decrease in turnover. This is in line with the expected relationship. A longer CCC can lead to delayed collection of cash from sales, sluggish inventory turnover, and potentially inefficient utilization of working capital. These factors collectively contribute to a reduced frequency of sales transactions and, consequently, a negative impact on turnover.

Another reason for the counterintuitiv significant negative effect of CCC on turnover could be an indicator that FMCG firms in Nigeria with longer CCC values might be facing challenges related to operational efficiency. It might suggest that these firms are not effectively managing their working capital components, leading to delays in converting their resources into cash and reinvesting in the business. This inefficiency could indeed hinder their ability to generate revenue from their operations.

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# SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

# **Summary of Findings**

The findings are summarized as follows:

- i. Inventory turnover has a statistically significant negative effect on turnover of FMCG firms in Nigeria with a t-statistic of -2.269713 and a p-value of 0.0255.
- ii. Accounts receivable turnover has a statistically non-significant negative effect on turnover of FMCG firms in Nigeria with a t-statistic of -0.406028 and a p-value of 0.6856.
- iii. Cash conversion cycle has a statistically significant effect on turnover of FMCG firms in Nigeria with a t-statistic of -3.299741 and a p-value of 0.0014.

#### **CONCLUSION**

The study delved into the effect of current assets management on the operational performance of firms in the consumer goods industry in Nigeria. The findings of the study provide valuable insights that contribute to a better understanding of the intricate relationship between inventory turnover, accounts receivable turnover, cash conversion cycle, and the turnover of FMCG firms. The statistically significant negative effect of inventory turnover on turnover suggests the importance of optimizing inventory management strategies to align with market demands. The non-significant effect of accounts receivable turnover on turnover indicates a need for a balanced approach to credit management, while the statistically significant effect of cash conversion cycle underscores the significance of efficient cash flow management. These findings offer practical implications for FMCG firms, highlighting the importance of effectively managing their current assets to enhance operational performance within the dynamic consumer goods industry landscape in Nigeria.

#### Recommendations

Based on the findings it was recommended that:

- i. The management of FMCG firms should embrace advanced demand forecasting techniques to accurately predict consumer preferences and market trends. They should employ agile replenishment strategies that allow for rapid adjustments to inventory levels based on real-time demand signals. These firms should leverage technology and data analytics to optimize inventory levels, reducing excess stock and minimizing stockouts. Regularly review and refine inventory management practices to align with changing market dynamics and consumer behaviors should be implemented.
- ii. The management of FMCG firms should analyze customer credit profiles to customize credit terms that balance cash flow needs with customer expectations. They should establish clear and consistent credit policies that outline terms, payment schedules, and consequences for late payments. The FMCG firms should implement robust collections processes that include timely invoicing, proactive reminders, and effective communication with customers. They should utilize technology solutions to automate invoicing and collections, improving efficiency and reducing the risk of delinquencies.
- iii. The management of FMCG firms should conduct a thorough analysis of the entire operational cycle to identify bottlenecks and areas for improvement. They should collaborate closely with suppliers to negotiate favorable credit terms without straining supplier relationships. These

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firms should leverage technology to automate processes such as order processing, inventory management, and accounts payable. They should implement efficient working capital management practices, focusing on reducing both DSO and DIO while extending DPO prudently.

#### **REFERENCES**

- Abbas, I. U., & Isiaka, A. (2021). Working capital management and financial performance of non-financial quoted companies in Nigeria. *International Journal of Research In Business and Social Science*, 10, 241-258.
- Abdullah, H., Awrahman, H.G., & Omer, H.A. (2021). Effect of working capital management on the financial performance of banks: An empirical analysis for banks listed on the Iraq Stock Exchange. Qalaai Zanist Scientific Journal, 6(1), 429-456. https://doi.org/10.25212/lfu.qzj.6.1.17.
- Akparhuere, G., O., Eze, N., T., & Unah, N., A. (2015). Effect of capital structure on retained earnings in the oil and gas sector: Evidence from Nigeria. *Issues in Business Management and Economics* 3(10), 120-132.
- Batagi, A. (2015). Assessing business performance using financial ratios: A comparative study of two companies. *International Journal of Economics, Commerce, and Management, 3(6), 57-68.*
- Beaver, S. (2022). Accounts receivable turnover ratio: Definition, formula & examples. https://www.netsuite.com/portal/resource/articles/accounting/accounts-receivable-turnover-ratio.shtml
- Bessong, P. K., Effiok, S. O., & Edet, P. M. (2012). Financial ratio analysis of firms: A tool for decision making. *Journal of Emerging Trends in Economics and Management Sciences*, 3(1), 1-6.
- Borici, I., & Kruja, E. (2016). Financial and operational performance measures for non-profit organizations. *European Journal of Multidisciplinary Studies*, 1(5), 111-119.
- Corporate Finance Institute (CFI). (2020). Net Sales. Retrieved from https://corporatefinanceinstitute.com/resources/knowledge/accounting/net-sales/
- Egbide B. C. & Enyi, P. E. (2008). Working capital management and profitability: A study of 25 listed companies in the Nigerian stock exchange. An Unpublished M.Sc. Dissertation Submitted in Partial Fulfillment of Requirement for the Award of the Degree of Master of Science in Accounting, CBSS, Covenant University, Ota Ogun State.
- Gaur, V., Fisher, M. L., & Raman, A. (2005). An econometric analysis of inventory turnover performance in retail services. *Production and Operations Management*, 14(3), 327-341.
- Githiga, L.., & Koori, J. M. (2023). Working capital management and financial performance of agricultural firms listed on Nairobi securities exchange, Kenya. *Journal of Finance and Accounting*, 7(1), 116–138. https://doi.org/10.53819/81018102t4127
- Hanum, L.A., & Masdupi, E. (2023). The effect of working capital management on financial performance companies with liquidity as mediation in trading companies on the Indonesia Stock Exchange (IDX).
- Holmberg, S., & Österlind, M. (2019). Inventory turnover ratios in a retail setting: An empirical study on how consumer goods' characteristics affect inventory turnover ratios. *International Journal of Retail & Distribution Management*, 47(2), 143-158.

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- Jenkins, R. (2022). Inventory management techniques: A comprehensive guide. Springer.
- Kenton, W. (2022). Net Sales. Investopedia. Retrieved from https://www.investopedia.com/terms/n/net-sales.asp
- Kenton, W. (2023). Inventory turnover. Investopedia.
- Murphy, T. F. (2023). Financial reporting, financial statement analysis, and valuation: A strategic perspective. Cengage Learning.
- Nangih, E., Obuah, C. A., & Kumah, L. J., Current Assets Management and Stock Performance of Quoted Oil and Gas Firms in Nigeria. European Journal of Accounting, Finance and Investment vol. 6, No. 5, May 2020. https://www.researchgate.net/publication/343627296\_Current\_Assets\_Management\_and\_Stock\_Performance\_of\_Quoted\_Oil\_and\_Gas\_Companies\_in\_Nigeria
- National Bureau of Statistics (NBS). (2021)
- Ogunsola A., & Gbadebo A.O. (2022). Impact of working capital management on financial performance of quoted consumer goods sector in Nigeria. *British Journal of Management and Marketing Studies*, 13(2), 54-66.
- Olaoye, C. O., Sulaimon, A. A., & Iyiola, O. O. (2019). Working capital management and firms' profitability in Nigeria quoted firms. *Nigerian Journal of Management Research*, 14(1), 81-97.
- Olaoye, F., Adekanbi, J. & Oluwadare, O. (2019). Working capital management and firms' profitability: evidence from quoted firms on the Nigerian Exchange Group. *Intelligent Information Management*, 11, 43-60.
- Olaoye, S. A., Abolade, A. F. & Ogundipe, A. S. (2019). Effect of working capital management on profitability: a case of listed manufacturing firms in Nigeria. *International Journal of Research and Innovation in Social Science*, *3*(11), 230-238.
- Owolabi, S. A., & Obida, S. A. (2012). Working capital management and corporate performance: Evidence from panel data analysis of selected quoted companies in Nigeria. *International Journal of Economics and Finance*, 4(2), 235-249.
- Takon, N. J. (2013). Working capital management and corporate profitability: Evidence from panel data analysis of selected quoted companies in Nigeria. *Research Journal of Finance and Accounting*, 4(5), 156-163.
- Uguru, I. C., Chukwu, U. C., & Elom, J. O. (2018). Effect of working capital management on the profitability of brewery firms in Nigeria. *Journal of Economics and Finance*, 9(2), 9-20.
- Van Horne, J. C., & Wachowicz, J. M. (1998). *Fundamentals of financial management*. Prentice Hall. Wann, J. (2023). Operational performance: Definition, importance, and key metrics. Retrieved from [source not provided]
- Otekunrin, A. O., Nwanji, T. I., Fagboro, G. D., Olowookere, J. K. & Adenike, O. (2021). Does working capital management impact an enterprise's profitability? Evidence from selected Nigerian firms. *Problems and Perspectives in Management*, 19(1), 477-486. doi:10.21511/ppm.19(1).2021.40