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WORKING CAPITAL MANAGEMENT AND FINANCIAL PERFORMANCE OF LISTED FOOD AND BEVERAGES COMPANIES IN NIGERIA

[1]Hakeem Olayinka Onifade
hakeemonifade@gmail.com
Crescent University, Abeokuta

[2]Adedoyin Olubukola Ojegoke
ojegokedoyin09@gmail.com
Crescent University, Abeokuta
Corresponding Author

[3]Sodiq Olayemi Ajani
sodiq.ajani@cuab.edu.ng
Crescent University, Abeokuta

[4]Oladele Deborah Bukola
oladelebukola91@gmail.com
Crescent University, Abeokuta

Abstract

The persistent challenges of liquidity constraints, delayed receivable collections, rising operational costs, and inefficient working capital practices among listed food and beverages companies in Nigeria have continued to threaten profitability and overall financial performance. Despite the strategic importance of working capital management in sustaining business operations, many firms in the sector still experience declining returns due to weak management of short-term assets and liabilities. This study therefore examined the effect of working capital management on the financial performance of listed food and beverages companies in Nigeria. Specifically, the study investigated the effect of current ratio, accounts receivable days, and accounts payable days on Return on Assets (ROA). The study adopted an ex-post facto research design and employed secondary data obtained from the annual reports of 10 listed food and beverages companies covering the period 2015–2024. Panel regression analysis was used for estimation. The findings revealed that Current Ratio has a positive and significant effect on Return on Assets (β = 0.031842; p = 0.0122), while Accounts Receivable Days has a negative and significant effect on Return on Assets (β = -0.000418; p = 0.0316). However, Accounts Payable Days shows a negative but insignificant effect on Return on Assets (β = -0.000184; p = 0.1264). The study concludes that efficient working capital management enhances the financial performance of listed food and beverages companies in Nigeria, particularly through effective liquidity maintenance and receivable management. The study recommends that firms maintain optimal liquidity levels, strengthen receivable collection policies, and adopt balanced payable management strategies to improve profitability and operational efficiency.

Keywords: Accounts Receivable Days, Accounts Payable Days, Current Ratio, Financial Performance, Working Capital Management.

1.0 INTRODUCTION

1.1 Background to the Study

Financial performance remains one of the most important indicators used to assess the efficiency, sustainability, and value creation capacity of firms across the world. Measures such as Return on Assets (ROA), Return on Equity (ROE), and Earnings per Share (EPS) are commonly used to evaluate how effectively organizations utilize their resources, satisfy shareholders, and maintain long-term profitability. In developed economies such as the United States, the United Kingdom, Germany, and Japan, food and beverages companies often record strong financial performance due to effective corporate governance systems, technological advancement, efficient production structures, and sound financial management practices (Harris, 2021). These firms leverage sophisticated inventory systems, advanced cash-flow forecasting tools, and automated receivables management systems to improve operational efficiency and profitability (Smith & Walker, 2020). Consequently, firms operating in these economies are able to sustain stable earnings, maintain investor confidence, and enhance market competitiveness.

In developing economies such as Brazil, India, Malaysia, and South Africa, financial performance among food and beverages companies is often influenced by inflationary pressures, exchange rate volatility, infrastructural deficiencies, and unstable regulatory environments. Although firms in these economies have experienced improvements in profitability and operational efficiency, many still struggle with rising production costs, inconsistent supply chains, and liquidity challenges that negatively affect financial performance indicators such as ROA, ROE, and EPS (Kumar & Rao, 2022). Similarly, in less-developed economies, particularly within Sub-Saharan Africa, food and beverages companies continue to face structural weaknesses, inadequate industrial infrastructure, weak institutional frameworks, and limited access to affordable financing, all of which constrain profitability and operational sustainability (Ngugi, 2021). These conditions often lead to prolonged receivable collection periods, unstable cash flows, weak liquidity management, and declining shareholder value (Thulsile et al., 2022). In Nigeria, listed food and beverages companies operate within a highly volatile business environment characterized by inflation, exchange rate instability, rising production costs, energy shortages, regulatory pressures, and supply-chain disruptions. These macroeconomic challenges have significantly affected the financial performance of firms within the sector, resulting in fluctuating returns on assets, unstable returns on equity, and inconsistent earnings per share (Wuave & Yua, 2020). Although some firms maintain relatively stable profitability, many continue to experience declining margins and liquidity constraints arising from inefficient cost structures and weak financial management practices (Gbadebo, 2025). One of the major internal financial management practices that significantly influences corporate profitability and operational sustainability is Working Capital Management (WCM). Working Capital Management refers to the management of current assets and current liabilities in order to maintain an optimal balance between liquidity and profitability. It involves the management of cash, inventories, accounts receivable, and accounts payable to ensure smooth day-to-day business operations and financial stability. Effective working capital management enables firms to reduce financing costs, improve liquidity, and enhance profitability, while poor working capital practices may result in liquidity shortages, increased operational risks, and declining financial performance (Russell, 2020). In developed economies, firms adopt sophisticated working capital strategies supported by technological innovation and integrated supply-chain systems. These firms maintain efficient inventory turnover, shorter receivable collection periods, and optimized payable cycles, thereby improving operational efficiency and profitability. However, in developing and less-developed economies, working capital management is often constrained by weak credit systems, poor customer payment behavior, unstable cash flows, and limited access to short-term financing (Kafeel et al., 2020). As a result, many firms experience prolonged receivable periods, liquidity shortages, and increasing financing costs, which weaken financial performance (Awodiran, 2019).

For Nigerian food and beverages companies, working capital management has become increasingly important due to the sector's dependence on efficient inventory turnover and steady cash inflows. Key working capital indicators such as the current ratio, accounts receivable days, and accounts payable days significantly influence firms' liquidity positions, operational efficiency, and profitability.

Despite the importance of working capital management, empirical findings regarding its effect on financial performance remain inconclusive. Some studies reported positive relationships between working capital components and profitability, while others documented negative or statistically insignificant relationships (Ashok, 2024; Gbadebo, 2025; Kafeel et al., 2020). These inconsistencies suggest the existence of unresolved empirical gaps concerning how working capital management influences financial performance

within Nigerian food and beverages companies. Therefore, this study seeks to examine the effect of working capital management measured by current ratio, accounts receivable days, and accounts payable days on the financial performance of listed food and beverages companies in Nigeria.

1.2 Statement of the Problem

Financial performance remains a critical measure of organizational efficiency, profitability, and sustainability, particularly within the food and beverages sector where operational activities heavily depend on effective liquidity management and efficient working capital utilization. In Nigeria, however, many listed food and beverages companies continue to experience fluctuating financial performance as reflected in unstable Return on Assets (ROA), declining Return on Equity (ROE), and inconsistent Earnings per Share (EPS) (Gbadebo, 2025). These fluctuations have raised concerns regarding the ability of firms within the sector to effectively manage their short-term assets and liabilities in a manner that supports profitability and operational sustainability.

One of the major challenges confronting food and beverages companies in Nigeria is inefficient liquidity management, commonly measured through the current ratio. While some firms maintain excessively high current ratios, indicating idle or underutilized current assets, others experience low liquidity positions that expose them to operational disruptions and insolvency risks. Poor liquidity management often constrains profitability because excess current assets reduce investment efficiency, whereas inadequate liquidity affects firms' ability to finance day-to-day operations (Ikpefan et al., 2021; Russell, 2020). Consequently, many firms within the sector struggle to maintain an optimal balance between liquidity and profitability.

Another critical issue relates to prolonged accounts receivable collection periods. Nigerian food and beverages companies frequently encounter delays in recovering debts from distributors and customers due to weak credit control policies, poor debt collection mechanisms, and unstable economic conditions. Extended receivable periods reduce cash availability, weaken liquidity positions, and increase reliance on costly short-term financing, thereby negatively affecting profitability and shareholder returns (Awodiran, 2019; Isibor & Osagie, 2024). Inefficient receivable management also increases credit risk exposure and weakens firms' operational efficiency. Similarly, the management of accounts payable days presents additional working capital challenges. Although extending payment periods may temporarily improve liquidity, excessive delays in settling supplier obligations can damage supplier relationships, disrupt supply chains, and increase transaction costs (Akilahyel et al., 2024). Conversely, very short payment periods may place unnecessary pressure on cash flows and reduce funds available for operational and expansion activities. These conflicting pressures make it difficult for firms to maintain effective working capital structures capable of enhancing financial performance (Dharma et al., 2021). Furthermore, existing empirical evidence on the relationship between working capital management and financial performance remains mixed and inconclusive. While some studies reported positive and significant relationships between working capital components and profitability, others documented negative or insignificant effects, particularly regarding accounts receivable days and accounts payable days (Ashok, 2024; Kafeel et al., 2020; Thulsile et al., 2022). These inconsistencies may be attributed to differences in study periods, methodologies, industry characteristics, and macroeconomic conditions. Despite improvements in financial reporting standards and corporate governance practices, listed food and beverages companies in Nigeria continue to experience liquidity imbalances, prolonged receivable cycles, inconsistent payable structures, and fluctuating profitability (Gbadebo, 2025). Consequently, there remains insufficient sector-specific empirical evidence explaining how working capital management affects the financial performance of listed food and beverages companies in Nigeria. It is against this backdrop that this study investigates the effect of working capital management measured through current ratio, accounts receivable days, and accounts payable days on the financial performance of listed food and beverages companies in Nigeria.

1.3 Objective of the Study

The main objective of this study is to examine the effect of working capital management on the financial performance of listed food and beverages companies in Nigeria.

The specific objectives are to:

i. determine the effect of current ratio on the Return on Asset of listed food and beverages companies in Nigeria;
ii. evaluate the effect of accounts receivable days on the Return on Asset of listed food and beverages companies in Nigeria; and
iii. assess the effect of accounts payable days on the Return on Asset of listed food and beverages companies in Nigeria.

1.4 Research Questions

The study seeks to provide answers to the following research questions:

i. What effect does current ratio have on the Return on Asset of listed food and beverages companies in Nigeria?
ii. How do accounts receivable days affect the Return on Asset of listed food and beverages companies in Nigeria?
iii. What effect do accounts payable days have on the Return on Asset of listed food and beverages companies in Nigeria?

1.5 Research Hypotheses

The following null hypotheses guide the study:

$H_0$1: Current ratio has no significant effect on the Return on Asset of listed food and beverages companies in Nigeria.

$H_0$2: Accounts receivable days have no significant effect on the Return on Asset of listed food and beverages companies in Nigeria.

$H_0$3: Accounts payable days have no significant effect on the Return on Asset of listed food and beverages companies in Nigeria.

1.6 Scope of the Study

This study examines the effect of working capital management on the financial performance of listed food and beverages companies in Nigeria. The study specifically focuses on three major components of working capital management namely current ratio, accounts receivable days, and accounts payable days. These variables are selected because they represent important indicators of liquidity management, credit collection efficiency, and payment management practices within firms. Financial performance is measured using Return on Assets (ROA) which reflect profitability, operational efficiency, and shareholder value creation.

The study is restricted to food and beverages companies listed on the Nigerian Exchange Group (NGX) because these firms provide audited and publicly accessible financial statements suitable for empirical analysis. The study covers a ten-year period from 2015 to 2024 in order to capture recent economic fluctuations, liquidity pressures, and operational changes affecting the sector.

The study relies solely on secondary data obtained from the audited annual reports and financial statements of the selected companies. The scope is limited to firm-specific variables associated with working capital management, while broader macroeconomic factors and firms outside the food and beverages sector are excluded to maintain focus and analytical consistency.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Financial Performance

Financial performance refers to the ability of a company to efficiently utilize its resources to generate profits, improve shareholders' wealth, and sustain operational activities over time. It reflects the overall financial health and profitability position of a firm and is commonly measured using indicators such as Return on Assets (ROA), Return on Equity (ROE), and Earnings per Share (EPS) (Gbadebo, 2025; Isibor & Osagie, 2024).

In food and beverages companies, financial performance is strongly influenced by effective management of current assets and liabilities due to the sector's dependence on inventory, continuous production, and stable cash flows. Studies have shown that efficient working capital management improves profitability, liquidity, and operational efficiency (Wuave & Yua, 2020; Akilahyel et al., 2024).

2.1.2 Return on Assets (ROA)

Return on Assets (ROA) measures the efficiency with which a company utilizes its total assets to generate profit. It is calculated as net income divided by total assets and serves as a key profitability indicator (Wuave & Yua, 2020).

For food and beverages companies, ROA reflects how efficiently firms manage inventories, receivables, and operational assets to enhance profitability. Empirical evidence indicates that effective working capital management positively affects ROA through improved liquidity and efficient resource allocation (Yashim et al., 2020; Gbadebo, 2025).

2.1.3 Working Capital Management

Working capital management refers to the management of current assets and current liabilities to ensure liquidity, operational efficiency, and profitability (Dimitris et al., 2024). It involves efficient management of cash, inventory, receivables, and payables.

Effective working capital management helps firms maintain adequate liquidity while minimizing financing costs. Studies indicate that poor working capital management adversely affects profitability and operational sustainability (Ashok, 2024; Muhammad et al., 2023). In Nigeria, evidence shows that efficient working capital practices significantly enhance financial performance in food and beverages companies (Gbadebo, 2025; Isibor & Osagie, 2024).

2.1.4 Current Ratio

The current ratio is a liquidity measure that evaluates a company's ability to meet short-term obligations using current assets. It is calculated as current assets divided by current liabilities (Yashim et al., 2020).

A balanced current ratio supports smooth operations, enhances investor confidence, and strengthens profitability. However, excessively high liquidity may indicate inefficient resource utilization (Ashok, 2024).

2.1.5 Accounts Receivable Days

Accounts Receivable Days measure the average number of days a company takes to collect payment from customers. Shorter collection periods improve liquidity and reduce dependence on external financing (Gbadebo, 2025).

Studies show that efficient receivables management positively affects profitability indicators such as ROA, ROE, and EPS in food and beverages companies (Isibor & Osagie, 2024; Olaoye et al., 2019).

2.1.6 Accounts Payable Days

Accounts Payable Days represent the average number of days a company takes to settle obligations with suppliers. Strategic management of payables allows firms to maintain liquidity and reduce financing costs (Akilahyel et al., 2024).

Empirical evidence indicates that effective payable management positively influences financial performance when properly balanced with supplier relationships (Yashim et al., 2020; Gbadebo, 2025).

2.2 Theoretical Review and Theoretical Framework

2.2.1 Working Capital Management Theory

The Working Capital Management Theory was propounded by Weston and Brigham (1992). The theory emphasizes the efficient management of short-term assets and liabilities to maintain liquidity while maximizing profitability. It assumes that firms must balance liquidity and profitability because excessive current assets reduce returns while inadequate liquidity increases financial risk.

Gitman (2009) supported the theory by arguing that effective management of cash, receivables, and inventory improves operational efficiency and profitability. Despite criticisms regarding its limited applicability across sectors, the theory remains relevant in explaining working capital practices in manufacturing firms such as food and beverages companies.

2.2.2 Trade-Off Theory

The Trade-Off Theory was developed by Deloof (2003). The theory argues that firms face a trade-off between liquidity and profitability. Maintaining high liquidity improves solvency but may reduce profitability due to idle resources, while low liquidity may increase profitability but expose firms to financial distress.

Lazaridis and Tryfonidis (2006) found that firms that optimally manage receivables, inventories, and payables achieve improved profitability. Although critics argue that the theory overlooks external economic conditions, it remains useful in explaining liquidity-profitability decisions in working capital management.

2.2.3 Cash Conversion Cycle Theory

The Cash Conversion Cycle (CCC) Theory was propounded by Richards and Laughlin (1980). The theory explains how firms can improve profitability by minimizing the time taken to convert inventory and receivables into cash while efficiently managing payables.

The theory assumes that shorter cash conversion cycles improve liquidity and profitability, whereas longer cycles tie down resources and reduce returns. Hill, Kelly, and Highfield (2010) and Deloof (2003) confirmed that efficient cash conversion cycle management enhances financial performance.

Despite criticisms relating to sectoral differences and external economic factors, the theory is highly relevant because it provides measurable indicators for evaluating working capital efficiency in food and beverages companies.

2.2.4 Theoretical Framework

This study adopts the Cash Conversion Cycle Theory as its theoretical framework because it directly explains the relationship between working capital management and financial performance. The theory focuses on the efficiency of receivables, inventories, and payables management in improving liquidity and profitability.

The Cash Conversion Cycle Theory is most appropriate for this study because it provides measurable indicators such as current ratio, accounts receivable days, and accounts payable days, which are used to evaluate working capital management and its effect on Return on Assets (ROA).

2.3 Empirical Review

Gbadebo (2025) investigated the effect of working capital management on the financial performance of food and beverages companies in Nigeria. The study aimed to examine how liquidity management influences profitability. The findings revealed that effective management of current assets and liabilities significantly improves Return on Assets (ROA). The study concluded that maintaining optimal liquidity enhances profitability and operational sustainability.

Wuave and Yua (2020) examined the relationship between liquidity ratios and financial performance of consumer goods firms in Nigeria. The study found a positive and significant relationship between current ratio and ROA. The study concluded that firms with stronger liquidity positions are better able to generate profits from assets.

Ashok (2024) analyzed liquidity management and profitability in Indian manufacturing firms. The findings indicated that excessive liquidity may negatively affect ROA due to inefficient utilization of assets. The study concluded that firms should maintain optimal rather than excessive liquidity levels.

Isibor and Osagie (2024) examined the effect of accounts receivable management on financial

performance of listed food and beverages companies in Nigeria. The study aimed to assess how receivables collection periods affect profitability. The findings revealed that shorter receivable periods significantly improve Return on Equity (ROE). The study concluded that efficient receivables management enhances shareholder value.

Yashim et al. (2020) investigated working capital management practices among Nigerian food and beverages firms. The findings showed that firms with efficient receivable collection periods recorded higher ROE. The study concluded that timely cash inflows improve operational and investment efficiency.

Utami and Asri (2023) studied receivables management and profitability. The study found that overly aggressive collection policies may negatively affect customer relationships despite improving liquidity. The study concluded that firms should balance profitability objectives with customer retention strategies.

Kajola et al. (2018) investigated the relationship between accounts payable management and financial performance. The study found that extending payables periods strategically improves liquidity and profitability, thereby enhancing Earnings per Share (EPS). The study concluded that efficient payable management contributes positively to shareholder wealth.

Gbadebo (2025) examined working capital management and earnings performance in Nigerian food and beverages companies. The findings revealed that strategic management of payables and receivables significantly improves EPS. The study concluded that efficient working capital policies strengthen profitability and investor confidence.

Wadesango et al. (2022) analyzed the impact of delayed payables on firm performance. The findings indicated that excessive delays in supplier payments may negatively affect profitability due to strained supplier relationships. The study concluded that firms should maintain optimal payable periods to sustain operational efficiency.

2.4 Conceptual Model

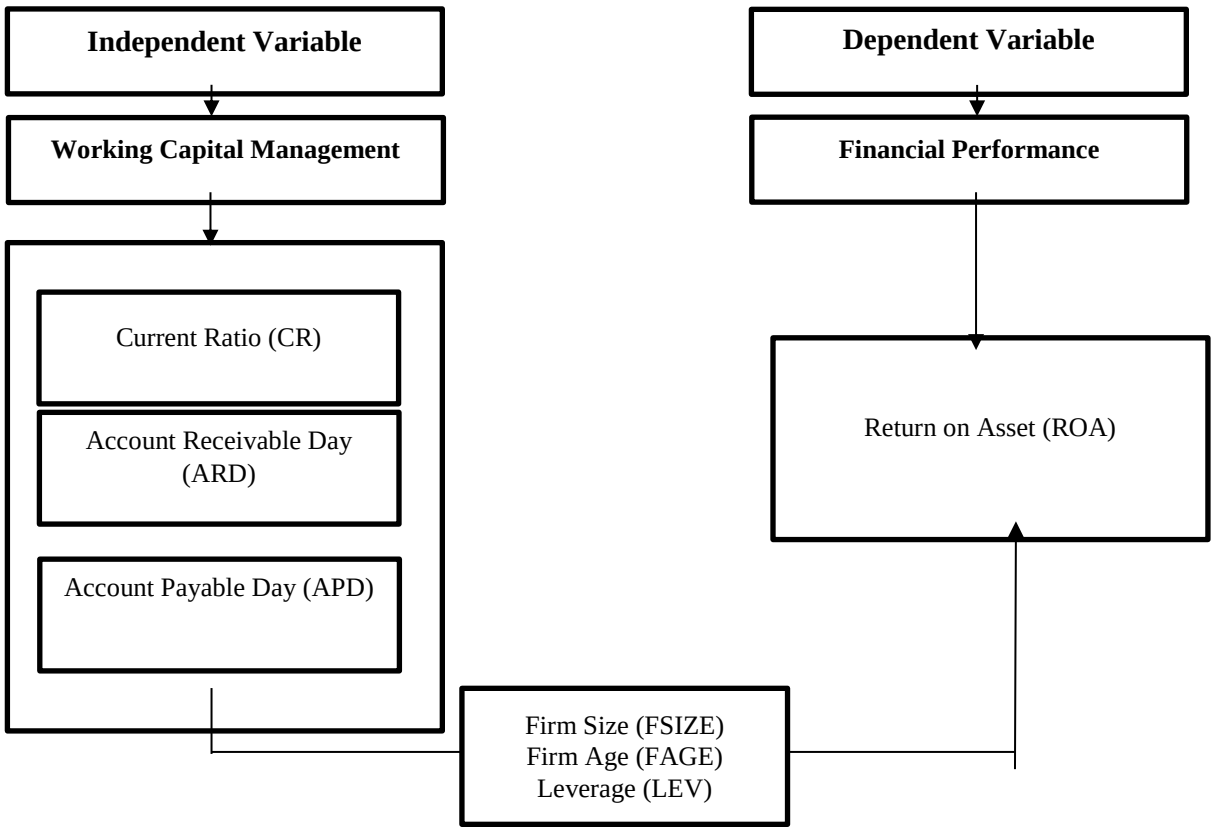

Figure 1: Researcher's conceptual Model (2026)

3.0 METHODOLOGY

This study adopted an ex-post facto research design to examine the effect of working capital management on the financial performance of listed food and beverages companies in Nigeria. The ex-post facto design was considered appropriate because the study relied on

historical financial data obtained from audited annual reports of selected firms, and the researcher had no control over or manipulation of the variables under investigation. The study utilized panel data analysis, which combines both cross-sectional and time-series dimensions, thereby enabling the assessment of firm-specific and time-specific effects over the study period spanning from 2015 to 2024. Secondary data were sourced from the annual reports and financial statements of the selected companies listed on the Nigerian Exchange Group (NGX).

The population of the study comprised all food and beverages companies listed on the Nigerian Exchange Group (NGX). Based on the NGX classification, twenty-one (21) companies operate within the food and beverages sector and constituted the population for the study. These firms were selected as the population because they operate under similar regulatory and reporting frameworks and regularly publish audited financial statements suitable for empirical investigation.

The study employed a purposive sampling technique in selecting ten (10) listed food and beverages companies in Nigeria. The purposive sampling method was adopted to ensure the inclusion of only firms with complete and accessible annual financial reports throughout the period of study. The selected companies were BUA Foods Plc, Nigerian Breweries Plc, International Breweries Plc, Guinness Nigeria Plc, Champion Breweries Plc, Golden Guinea Breweries Plc, Dangote Sugar Refinery Plc, Honeywell Flour Mills Plc, Nestlé Nigeria Plc, and NASCON Allied Industries Plc. The selection was guided by the availability and consistency of data required to assess the influence of working capital management variables on financial performance indicators.

Data analysis was carried out using descriptive statistics, correlation analysis, and panel regression techniques. Descriptive statistics, including mean, minimum value, maximum value, and standard deviation, were employed to summarize and describe the characteristics of the variables used in the study. Correlation analysis was conducted to examine the nature and degree of association among the explanatory variables and to detect possible multicollinearity issues. To achieve the objectives of the study, panel regression models comprising the Fixed Effects Model (FEM) and Random Effects Model (REM) were estimated. The Hausman specification test was subsequently applied to determine the most appropriate model for interpretation. Furthermore, unit root tests were conducted to ascertain the stationarity properties of the variables. All analyses were performed using appropriate econometric software at a 5 percent level of significance.

In measuring the study variables, working capital management was proxied using Current Ratio (CR), Accounts Receivable Days (ARD), and Accounts Payable Days (APD), while financial performance was represented by Return on Assets (ROA). Firm Size (FSIZE), Firm Age (FAGE), and Leverage (LEV) were incorporated as control variables. Current Ratio was measured as Current Assets divided by Current Liabilities; Accounts Receivable Days were measured as Accounts Receivable divided by Revenue multiplied by 365 days; Accounts Payable Days were measured as Accounts Payable divided by Cost of Sales multiplied by 365 days; Return on Assets was measured as Profit After Tax divided by Total Assets; Firm Size was measured as the natural logarithm of Total Assets; Firm Age was measured as the number of years since incorporation; while Leverage was measured as Total Debt divided by Total Assets.

To establish the relationship between working capital management and financial performance, the study specified the functional model as:

$FP_{it} = f(CR_{it}, ARD_{it}, APD_{it}, FSIZE_{it}, FAGE_{it}, LEV_{it})$

where FP represents Financial Performance, CR denotes Current Ratio, ARD represents Accounts Receivable Days, APD denotes Accounts Payable Days, FSIZE represents Firm Size, FAGE denotes Firm Age, LEV represents Leverage, i represents the individual firm, and t denotes the time period.

The econometric model estimated in the study is expressed as:

$ROA_{it} = \beta_0 + \beta_1 CR_{it} + \beta_2 ARD_{it} + \beta_3 APDit + \beta_4 FSIZE_it + \beta_5 FAGE_{it} + \beta_6 LEV_{it} + \mu_{it}$

where β_0 represents the intercept, β_1 to β_6 denote the coefficients of the explanatory variables, and μ_{it} represents the stochastic error term capturing the effects of other variables not explicitly included in the model.

4.0 DATA ANALYSIS AND PRESENTATION

4.1 Descriptive Analysis

Table 4.1: Descriptive Statistics of Variables

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
ROA	0.0542	0.0481	0.2163	-0.1524	0.0714	0.4218	3.8142
CR	1.2874	1.1236	2.8745	0.3812	0.5236	0.9714	3.7856

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
ARD	52.3641	45.7820	128.4600	8.6200	28.4157	0.6832	2.8143
APD	78.5123	71.2400	195.3200	15.4800	39.6284	0.5247	2.5672
FSIZE	10.8437	10.6215	13.5842	8.2137	1.3625	0.2186	2.4812
FAGE	38.4000	37.0000	62.0000	15.0000	12.8400	-0.0340	2.1860
LEV	0.5623	0.5418	0.8934	0.1847	0.1738	0.1253	2.3418

Source: Author's Computation, 2026 (E-Views 12 Output)

Table 4.1 presents the descriptive statistics of the variables used in examining the effect of working capital management on the financial performance of listed food and beverages companies in Nigeria using 100 firm-year observations from 2015–2024.

Return on Assets (ROA), which measures financial performance, recorded a mean value of 0.0542, indicating that firms generated approximately 5.42 kobo profit for every naira invested in total assets. The standard deviation of 0.0714 suggests moderate variations in profitability among the sampled firms. The maximum and minimum values of 0.2163 and -0.1524 respectively indicate that while some firms achieved high profitability, others experienced losses during the study period.

Current Ratio (CR), which measures liquidity management, recorded a mean value of 1.2874, implying that firms maintained ₦1.29 of current assets for every ₦1 of current liabilities. This suggests a relatively adequate liquidity position within the sector. The standard deviation of 0.5236 reflects moderate variability in liquidity management practices across the firms.

Accounts Receivable Days (ARD) had an average of 52.36 days, indicating that firms took approximately 52 days on average to collect payments from customers. The relatively high standard deviation of 28.42 days suggests considerable differences in receivable collection efficiency among firms. The maximum value of 128.46 days further indicates that some firms experienced prolonged collection periods.

Accounts Payable Days (APD) recorded a mean value of 78.51 days, implying that firms took an average of about 79 days to settle obligations with suppliers. The large standard deviation of 39.63 days shows substantial variation in payment policies among the firms.

The control variables reveal that Firm Size (FSIZE) averaged 10.8437, indicating moderate differences in total asset base among firms, while Firm Age (FAGE) averaged 38 years, suggesting that most firms in the industry are relatively mature. Leverage (LEV) recorded a mean of 0.5623, indicating that approximately 56.23% of firms' assets were financed through debt.

Overall, the descriptive statistics show substantial variations in working capital management practices and financial performance among listed food and beverages companies in Nigeria.

4.2 Inferential Statistics

Table 4.2: Panel Regression Results

Variables	ROA Coefficient	Probability
C	0.082437	0.0486
CR	0.031842	0.0122
ARD	-0.000418	0.0316
APD	-0.000184	0.1264
FSIZE	0.018624	0.0258
FAGE	0.000318	0.4553
LEV	-0.084718	0.0093

Model Statistics	Value
R-squared	0.584218
Adjusted R-squared	0.531842
F-statistic	4.621842
Prob(F-statistic)	0.000318
Durbin-Watson Stat	1.842718

Source: Author's Computation, 2026 (E-Views 12 Output)

Table 4.2 presents the panel regression results on the effect of working capital management on the Return on Assets (ROA) of listed food and beverages companies in Nigeria.

The result shows that Current Ratio (CR) has a positive and significant effect on ROA with a coefficient of 0.031842 and probability value of 0.0122. This implies that an improvement in liquidity position significantly enhances the profitability of firms. The finding suggests that firms with better working capital positions are more capable of meeting short-term obligations and sustaining operational efficiency.

Accounts Receivable Days (ARD) has a negative and statistically significant coefficient of -0.000418 with a p-value of 0.0316. This indicates that prolonged receivable collection periods reduce profitability. The implication is that delayed collection of customer debts constrains cash flow availability and negatively affects operational efficiency.

Accounts Payable Days (APD) recorded a negative but insignificant coefficient of -0.000184 with a probability value of 0.1264. This suggests that extending supplier payment periods does not significantly influence the profitability of listed food and beverages companies in Nigeria.

Among the control variables, Firm Size (FSIZE) exerts a positive and significant effect on ROA, implying that larger firms tend to perform better financially due to economies of scale and better resource utilization. Leverage (LEV) shows a negative and significant effect, indicating that excessive debt financing adversely affects profitability. However, Firm Age (FAGE) has no significant effect on ROA.

The R-squared value of 0.584218 indicates that approximately 58.4% of the variations in ROA are jointly explained by working capital management variables and the control variables included in the model. The F-statistic probability value of 0.000318 confirms that the overall regression model is statistically significant. The Durbin-Watson statistic of 1.842718 further indicates the absence of serious autocorrelation problems in the model.

4.3 Hypotheses Testing

Table 4.3: Summary of Hypotheses Testing

Hypotheses	Variables	Coefficient	P-value	Decision
H_{01}	CR - ROA	0.031842	0.0122	Reject H_0
H_{02}	ARD - ROA	-0.000418	0.0316	Reject H_0
H_{03}	APD - ROA	-0.000184	0.1264	Accept H_0

Source: Author's Computation, 2026

The result of hypothesis one reveals that Current Ratio (CR) has a positive and statistically significant effect on Return on Assets (ROA) with a probability value of 0.0122, which is less than the 5% significance level. Therefore, the null hypothesis is rejected, and the study concludes that current ratio significantly affects the financial performance of listed food and beverages companies in Nigeria.

Hypothesis two result shows that Accounts Receivable Days (ARD) has a negative and significant effect on ROA with a p-value of 0.0316. Since the probability value is below 0.05, the null hypothesis is rejected. The study therefore concludes that prolonged receivable collection periods significantly reduce the financial performance of listed food and beverages companies in Nigeria.

Hypothesis three result indicates that Accounts Payable Days (APD) has a negative but insignificant effect on ROA with a p-value of 0.1264, which exceeds the 5% significance level. Consequently, the null hypothesis is accepted. This implies that accounts payable days do not significantly influence the financial performance of listed food and beverages companies in Nigeria.

4.4 Discussion of Findings

The findings of this study revealed that working capital management significantly influences the financial performance of listed food and beverages companies in Nigeria, although the effects differ across the components of working capital management.

The study found that Current Ratio (CR) has a positive and significant effect on Return on Assets (ROA). This finding indicates that firms with stronger liquidity positions are more capable of meeting short-term obligations and sustaining profitable operations. The result is consistent with the findings of Gbadebo, who reported that effective liquidity management significantly enhances firm profitability and operational efficiency. The finding also agrees with Wuave and Yua, who found that firms maintaining adequate liquidity levels achieve superior financial performance. Similarly, Yashim et al. established that optimal working capital management improves firms' profitability and shareholder value.

The positive effect of current ratio further supports the Cash Conversion Cycle Theory, which emphasizes that efficient management of current assets and liabilities enhances profitability by improving liquidity and operational stability. In the Nigerian food and beverages

sector, where firms face persistent inflation, foreign exchange volatility, and increasing production costs, maintaining adequate liquidity becomes essential for sustaining business operations and profitability.

The study also found that Accounts Receivable Days (ARD) has a negative and significant effect on Return on Assets. This implies that prolonged receivable collection periods reduce firms' profitability by delaying cash inflows and constraining operational efficiency. The finding aligns with the study of Isibor and Osagie, who reported that shorter receivable collection periods significantly improve corporate financial performance. The result is also consistent with Olaoye, Adekanbi, and Oluwadare, who emphasized that efficient receivable management improves cash flow and enhances profitability.

However, the finding contradicts the study of Muhammad et al., who reported a positive relationship between accounts receivable periods and firm performance. It also differs from Kafeel et al., who found that flexible credit policies may stimulate sales growth and profitability. The divergence in findings may be attributed to differences in industry structure, economic environment, and firms' credit management policies. In Nigeria's food and beverages industry, prolonged customer payment periods may worsen liquidity pressure due to inflationary trends and high financing costs.

The result further revealed that Accounts Payable Days (APD) has a negative but insignificant effect on financial performance. This suggests that delaying supplier payments does not significantly improve profitability among listed food and beverages companies in Nigeria. The finding supports the work of Ashok, who reported insignificant relationships between some working capital components and profitability indicators. However, the result contradicts the findings of Akilahyel et al. (2021) and Kithinji et al. (2023), who reported significant relationships between payable management and financial performance.

The insignificant effect of APD may be explained by the operational realities of the Nigerian manufacturing sector, where delayed payments to suppliers may lead to strained supplier relationships, disruption in raw material supply, and loss of trade discounts. Consequently, the potential liquidity benefits of delayed payments may be offset by increased operational inefficiencies.

Furthermore, the control variables revealed that firm size positively influences financial performance, while leverage negatively affects profitability. This finding is consistent with Aduwo and Aduwo (2019) and Ifurueze et al. (2024), who established that firm-specific characteristics significantly shape the relationship between working capital management and firm performance.

The findings demonstrate that efficient working capital management remains critical for improving the financial performance of listed food and beverages companies in Nigeria. Specifically, firms should prioritize adequate liquidity maintenance and efficient receivable collection policies while adopting balanced payable management strategies capable of sustaining operational efficiency and long-term profitability.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study examined the effect of working capital management on the financial performance of listed food and beverages companies in Nigeria. Specifically, the study evaluated the effects of Current Ratio (CR), Accounts Receivable Days (ARD), and Accounts Payable Days (APD) on Return on Assets (ROA).

Based on the empirical findings, the study concludes that working capital management significantly influences the financial performance of listed food and beverages companies in Nigeria. The study established that maintaining an adequate current ratio enhances profitability by improving firms' liquidity position and operational efficiency. This suggests that effective liquidity management enables firms to meet short-term obligations and sustain profitable business operations.

The study further concludes that prolonged accounts receivable collection periods negatively affect profitability. Delayed collection of customer debts weakens cash flow availability, limits operational flexibility, and ultimately reduces firms' ability to generate returns from their assets.

In contrast, accounts payable days were found to have no significant effect on financial performance. This implies that extending payment periods to suppliers does not necessarily improve profitability within the Nigerian food and beverages sector.

The study concludes that efficient working capital management remains an important determinant of financial performance among listed food and beverages companies in Nigeria. Firms that maintain adequate liquidity and adopt effective receivable management practices are more likely to achieve sustainable profitability and improved operational performance.

5.2 Recommendations

Based on the findings of this study and the conclusions drawn, the following recommendations are made:

i. Management of listed food and beverages companies in Nigeria should maintain an optimal current ratio by ensuring adequate levels of current assets relative to current liabilities.

This will enhance liquidity, improve operational efficiency, and strengthen profitability.

ii. Firms should strengthen their credit management policies and receivable collection procedures in order to reduce accounts receivable days. Efficient debt collection mechanisms, customer credit assessments, and stricter payment monitoring systems should be implemented to improve cash flow and profitability.

iii. Companies should adopt balanced accounts payable management strategies by avoiding excessive delays in settling supplier obligations. Maintaining good supplier relationships and benefiting from trade discounts can enhance operational efficiency and supply chain stability.

iv. Management should reduce excessive dependence on debt financing, as higher leverage was found to negatively affect profitability. Firms should therefore adopt a balanced capital structure capable of minimizing financial risk and financing costs.

v. Larger firms should leverage their economies of scale and operational capacity to improve efficiency and profitability, while smaller firms should strengthen internal working capital policies to remain competitive within the industry.

vi. Researchers should examine the effect of working capital management on alternative measures of financial performance such as Return on Equity (ROE), Net Profit Margin (NPM), and Earnings Per Share (EPS) to provide a broader understanding of firm performance.

vii. Future studies should extend the scope of investigation beyond the food and beverages sector to include other manufacturing subsectors and non-manufacturing firms in Nigeria. Such comparative analyses would enhance the generalizability of findings across industries.

viii. Subsequent research should incorporate additional working capital management indicators, including inventory conversion period, cash conversion cycle, and cash holding ratio, to provide more comprehensive empirical evidence on working capital efficiency and firm performance.

ix. Researchers are encouraged to employ longer study periods and larger sample sizes in order to improve the robustness, reliability, and generalizability of empirical findings.

x. Future studies should investigate the moderating influence of macroeconomic variables such as inflation rate, exchange rate volatility, and interest rates on the relationship between working capital management and financial performance in Nigeria, as these factors may significantly affect business outcomes.

xi.

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APPENDIX
TABLES AND FIGURE

Table 3.1: Measurement of Variables

Variable	Proxy	Measurement
Current Ratio	CR	Current Assets ÷ Current Liabilities
Accounts Receivable Days	ARD	(Accounts Receivable ÷ Revenue) × 365
Accounts Payable Days	APD	(Accounts Payable ÷ Cost of Sales) × 365
Return on Assets	ROA	Profit After Tax ÷ Total Assets
Firm Size	FSIZE	Natural Log of Total Assets
Firm Age	FAGE	Number of Years Since Incorporation
Leverage	LEV	Total Debt ÷ Total Assets

Table 4.1: Descriptive Statistics of Variables

Variable	Mean	Median	Max	Min	Std. Dev.	Skewness	Kurtosis
ROA	0.0542	0.0481	0.2163	-0.1524	0.0714	0.4218	3.8142
CR	1.2874	1.1236	2.8745	0.3812	0.5236	0.9714	3.7856
ARD	52.3641	45.7820	128.4600	8.6200	28.4157	0.6832	2.8143
APD	78.5123	71.2400	195.3200	15.4800	39.6284	0.5247	2.5672
FSIZE	10.8437	10.6215	13.5842	8.2137	1.3625	0.2186	2.4812
FAGE	38.4000	37.0000	62.0000	15.0000	12.8400	-0.0340	2.1860
LEV	0.5623	0.5418	0.8934	0.1847	0.1738	0.1253	2.3418

Table 4.2: Panel Regression Results

Variables	Coefficient	P-value
C	0.082437	0.0486
CR	0.031842	0.0122
ARD	-0.000418	0.0316
APD	-0.000184	0.1264
FSIZE	0.018624	0.0258
FAGE	0.000318	0.4553
LEV	-0.084718	0.0093

Model Statistics

Statistic	Value
R-squared	0.584218

Adjusted R-squared	0.531842
F-statistic	4.621842
Prob (F-statistic)	0.000318
Durbin-Watson	1.842718

Table 4.3: Summary of Hypotheses Testing

Hypothesis	Variables	Coefficient	P-value	Decision
H01	CR → ROA	0.031842	0.0122	Reject H_0
H02	ARD → ROA	-0.000418	0.0316	Reject H_0
H03	APD → ROA	-0.000184	0.1264	Accept H_0

FIGURE 1: Conceptual Model

