

# WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF LISTED FINANCIAL INSTITUTIONS IN NIGERIA

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## ABSTRACT

*This study examines the effect of working capital management on the profitability of listed financial institutions in Nigeria over the period 2013–2024. Specifically, the study investigates the impact of accounts receivable period (ARP), accounts payable period (APP), cash conversion cycle (CCC), and firm size (FSIZE) on return on assets (ROA), which serves as a proxy for profitability. Secondary data were obtained from the audited annual financial statements of all listed deposit money banks on the Nigerian Exchange Group (NGX). The study employs panel random effects regression, supported by relevant diagnostic tests, to analyse the data. The empirical results reveal that accounts receivable period has a positive and significant effect on profitability, while accounts payable period and cash conversion cycle exert significant negative effects. Firm size, however, has a negative but insignificant impact on profitability. The findings further confirm that efficient working capital management enhances financial performance in the Nigerian banking sector. The study concludes that profitability is driven more by efficient liquidity management than by firm size. It is therefore recommended that financial institutions optimize their working capital cycles, particularly through improved management of receivables, payables, and cash conversion processes, to enhance sustainable profitability.*

**Keywords:** Working capital management, profitability, cash conversion cycle, accounts payable period, Nigerian banks.

## 1. INTRODUCTION

Working capital management plays a crucial role in corporate financial management due to its direct influence on firms' liquidity, operational efficiency, and profitability. It involves the management of short-term assets and liabilities to ensure that firms maintain adequate liquidity while optimizing performance and firm value (Jaworski & Czerwonka, 2024; Wu, Eng, & Wang, 2024; Garg & Singh, 2024). Efficient working capital management requires a careful balance between risk and return, as conservative policies may constrain

profitability, whereas aggressive strategies may increase exposure to liquidity risk and financial instability (Koroma & Bein, 2024; Mutua, et al., 2023).

Empirical evidence from both developed and emerging economies underscores the importance of working capital management in enhancing firm performance. Prior studies show that efficient management of components such as receivables, payables, and the cash conversion cycle improves cash flow, reduces financing costs, and ultimately increases profitability. For instance, García-Teruel and Martínez-Solano (2007) find that firms with shorter cash conversion cycles tend to be more profitable, while Olamide, (2021) demonstrate that the impact of working capital management on profitability varies across institutional contexts.

In developing economies such as Nigeria, the importance of working capital management is even more pronounced due to persistent macroeconomic challenges, including high inflation, limited access to credit, and infrastructural deficiencies (Kajola *et al.*, 2014). These conditions heighten the sensitivity of firms' profitability to short-term financial decisions. Consequently, inefficiencies in managing receivables, payables, and liquidity positions frequently lead to financial distress, even among otherwise profitable firms (Olaoye *et al.*, 2019). Evidence from Nigerian firms suggests that poor working capital practices, particularly in managing trade credit and inventory, constrain profitability (Attafuah, 2024).

Despite the growing body of literature, empirical evidence on the relationship between working capital management and profitability in Nigeria remains inconclusive. While some studies report a positive association (Hadiza, 2025; Oke & Adebola, 2022), others suggest that aggressive working capital policies may adversely affect firm performance due to increased financial risk (Daniya *et al.*, 2018). More recent studies further highlight that contextual factors such as high borrowing costs and regulatory inefficiencies amplify the sensitivity of profitability to working capital decisions (Bereprebofa *et al.*, 2023; Gbadebo, 2024).

This study addresses these gaps in three important ways. First, it utilizes a more recent dataset covering the period 2013–2024, thereby capturing contemporary economic conditions in Nigeria. Second, it disaggregates working capital management into key components; accounts

receivable period, accounts payable period, and cash conversion cycle to provide more granular insights into their individual effects on profitability. Third, it incorporates firm-specific characteristics, particularly firm size, to control for heterogeneity across firms.

## 2. LITERATURE REVIEW.

### *Working Capital Management*

Working capital management (WCM) is a fundamental aspect of corporate financial management that focuses on the administration of short-term assets and liabilities to ensure operational efficiency and financial stability. It involves the management of current assets such as cash, trade receivables, and inventories and current liabilities, including accounts payable and short-term obligations, with the objective of maintaining an optimal balance between liquidity and profitability (Olaoye & Richard, 2020; Mutua, et al., 2023; Attafua,). Efficient WCM enables firms to meet their short-term obligations while minimizing financing costs and maximizing returns.

The concept of working capital may be viewed from two perspectives: gross working capital, which represents the firm's total investment in current assets, and net working capital, defined as the difference between current assets and current liabilities (Oke & Adebola, 2022; Tousek, et al., 2023). While gross working capital reflects the scale of short-term resource investment, net working capital provides a measure of liquidity and financial health.

WCM extends beyond liquidity management to encompass strategies aimed at improving operational efficiency and profitability. It involves the continuous monitoring and control of key components such as receivables, payables, inventory, and cash flows to ensure efficient resource utilization (Olamide, 2021). A key metric for assessing WCM efficiency is the cash conversion cycle (CCC), which measures the time lag between cash outflows and cash inflows. A shorter CCC indicates efficient management and improved profitability, while a longer cycle ties up funds and increases financing costs (Attafua, 2024).

### *Components of Working Capital*

The major components of working capital include accounts receivable, accounts payable, and inventory, all of which directly influence liquidity and profitability. Accounts receivable represent credit extended to customers; while this may enhance sales, inefficient management can delay cash inflows and increase default risk (Afrifa & Padachi, 2016).

Accounts payable serve as a source of short-term financing, allowing firms to defer cash outflows. However, excessive delays in payment may damage supplier relationships and increase transaction costs (Olaoye & Richard, 2020; Attafua, 2024). Inventory management is equally important, as excessive stockholding ties up capital and increases holding costs, whereas insufficient inventory may disrupt operations and reduce sales (Olaoye et al., 2019).

### *Firm Profitability*

Firm profitability refers to the ability of an organization to generate earnings from its resources and operations. It is a key indicator of financial performance and managerial efficiency, reflecting how effectively a firm utilizes its assets to create value (Obigbemi et al., 2016). Measures such as return on assets (ROA) are widely used to assess profitability, particularly in emerging economies

where efficient resource utilization is critical (Afrifa & Padachi, 2016).

Efficient working capital management enhances profitability by improving cash flow, reducing financing costs, and ensuring uninterrupted operations. Conversely, poor management of working capital components may lead to liquidity constraints, increased operational costs, and reduced financial performance (Olaoye et al., 2019).

### *Firm Size*

Firm size is an important firm-specific characteristic that may influence the relationship between working capital management and profitability. Larger firms often benefit from economies of scale, better access to financing, and more advanced management systems, which can enhance operational efficiency (Alarussi & Alhaderi, 2018; Akinrinola, et al., 2025).

However, increasing firm size may also introduce bureaucratic inefficiencies and higher operating costs, which can negatively affect profitability (Egbunike & Okerekeoti, 2018). Therefore, firm size is included as a control variable to account for differences in scale and operational capacity among firms.

### *Empirical Review*

Empirical studies on the relationship between working capital management (WCM) and firm profitability have produced extensive but mixed evidence across different countries, sectors, and methodologies. A large body of literature generally supports the view that efficient working capital management enhances firm performance, although the magnitude and direction of the relationship vary depending on contextual and firm-specific factors.

A significant number of studies document a positive relationship between efficient WCM and profitability, particularly when firms maintain shorter cash conversion cycles and efficiently manage receivables and inventory. For instance, Afrifa and Padachi (2016) found that shorter cash conversion cycles improve profitability among small and medium-sized enterprises. Similarly, Attafua (2024) reported that firms in Nigeria and Ghana with shorter cash conversion cycles achieved higher returns on assets. Recent Nigerian studies also support this view; Bereprebofa et al. (2023) and Gbadebo (2024) found that efficient management of receivables, payables, and cash cycles significantly enhances financial performance, although macroeconomic factors such as inflation and interest rates may weaken this relationship.

At the firm level, evidence further suggests that individual components of working capital exert varying effects on profitability. Studies such as Oke and Adebola (2022) and Adetona-Ibrahim, et al. (2025) show that accounts receivable and inventory turnover positively influence profitability, as efficient collection and inventory management improve liquidity and operational efficiency. In contrast, accounts payable often exhibit a negative relationship with profitability, indicating that excessive delays in settling obligations may harm firm performance (Olamide, 2021; Attafua, 2024). Similarly, Okphiabhele et al. (2024) highlight that both inventory and payables management significantly shape profitability outcomes in Nigerian firms.

However, not all studies report consistent findings. Some researchers emphasize the trade-off between liquidity and profitability, showing that aggressive working capital strategies may enhance profitability but increase financial risk. For example, Daniya, et al., (2018) find that aggressive working capital policies can boost

profitability in the short term but expose firms to liquidity constraints. Likewise, Olamide. (2024) demonstrate that external shocks such as the recent pandemic significantly alter working capital strategies, with firms shifting toward more conservative approaches under uncertainty.

Sectoral and cross-country evidence also highlights the context-dependent nature of the WCM–profitability relationship. Kajola *et al.* (2014) and Omodero and Ogbonnaya (2018) report mixed findings across Nigerian banking and manufacturing sectors, suggesting that industry characteristics and regulatory conditions influence outcomes. Similarly, Olamide (2021) and Attafuah (2024) find that institutional differences across countries shape the strength of the relationship, even when the direction remains generally consistent.

Despite the growing body of literature, several gaps remain. First, many Nigerian studies rely on relatively short or outdated datasets, limiting their relevance in the context of recent economic fluctuations. Second, while some studies examine aggregate measures of working capital, fewer provide a disaggregated analysis of key components such as receivables, payables, and cash conversion cycle within a unified framework. Third, the role of firm-specific characteristics particularly firm size in moderating the relationship between WCM and profitability remains underexplored. This study contributes to the literature by addressing these gaps through the use of a more recent dataset, a disaggregated analysis of working capital components, and the inclusion of firm size as a control variable within the Nigerian financial sector context.

### **3. THEORETICAL FOUNDATION**

The relationship between working capital management and firm profitability is grounded in several financial theories that explain how firms balance liquidity and profitability in their operational and financing decisions. This study is primarily anchored on the Cash Conversion Cycle (CCC) Theory, while drawing complementary insights from the Trade-off Theory of Liquidity, Pecking Order Theory, and Agency Theory.

The Cash Conversion Cycle Theory, developed by Richards and Laughlin (1980), provides the most direct framework for analyzing working capital efficiency. It conceptualizes working capital management as the time lag between cash outflows for production inputs and cash inflows from sales. The CCC integrates accounts receivable period, inventory conversion period, and accounts payable period into a single measure of liquidity efficiency. A shorter cash conversion cycle indicates that firms are able to quickly recover cash invested in operations, thereby reducing financing costs and enhancing profitability (Deloof, 2003; Afrifa & Padachi, 2016). Conversely, a longer cycle implies that funds are tied up in operations, increasing the need for external financing and reducing profitability.

Supporting this framework is the Trade-off Theory of Liquidity, which argues that firms must balance the benefits of holding liquid assets against their opportunity costs (Banos-Caballero *et al.*, 2014). While higher liquidity reduces the risk of financial distress and ensures operational continuity, excessive investment in current assets may reduce profitability due to idle resources. This trade-off is particularly relevant in emerging economies

such as Nigeria, where firms face high borrowing costs and macroeconomic instability.

The Pecking Order Theory (Myers, 1984; Myers & Majluf, 1984) further explains financing behavior in working capital management. It suggests that firms prefer internal financing over external sources due to information asymmetry and financing costs. In this context, efficient management of receivables, payables, and inventories reduces reliance on external funding and enhances profitability. This theory is particularly relevant in developing economies where access to long-term capital is limited and firms rely heavily on internally generated funds to finance working capital needs (Attafuah, 2024).

The Agency Theory (Jensen & Meckling, 1976) provides an additional explanation by highlighting potential conflicts between managers and shareholders in working capital decisions. Managers may engage in inefficient practices such as excessive inventory holding or relaxed credit policies for customers, which can negatively affect firm profitability. Effective corporate governance and monitoring mechanisms are therefore essential to align managerial decisions with shareholder wealth maximization objectives (Olamide, 2021).

Overall, these theories collectively explain how working capital management influences firm profitability. However, the Cash Conversion Cycle Theory remains the primary framework for this study, as it directly captures the operational efficiency of working capital components; accounts receivable, accounts payable, and the cash conversion cycle which form the core variables of this research.

### **4. METHODOLOGY**

This study adopts an *ex post facto* research design. The design is appropriate because it allows for the examination of historical financial data to establish the relationship between working capital management and profitability without manipulating the variables.

The population of the study comprises all Deposit Money Banks quoted on the Nigerian Exchange Group (NGX) as at 31st December 2024. These include Access Bank Plc, Zenith Bank Plc, Guaranty Trust Holding Company (GTCO), United Bank for Africa (UBA) Plc, First Bank Plc, Fidelity Bank Plc, FCMB Group Plc, Stanbic IBTC Holdings Plc, Sterling Financial Holdings Company Plc, Wema Bank Plc, and Ecobank Plc. Given the relatively small and well-defined population, the study adopts a census approach, thereby including all listed Deposit Money Banks over the period 2013–2024 in the sample size. This eliminates sampling bias and enhances the reliability and generalizability of the findings within the Nigerian listed banking sector.

Secondary data were obtained from the audited annual financial statements of the listed banks. The data were sourced from the Nigerian Exchange Group (NGX) filings, the official websites of the banks, and verified financial databases. The use of audited financial statements ensures reliability, consistency, and comparability across firms and over time. Given the panel structure of the data (cross-sectional and time-series dimensions), the study estimates Fixed Effects Model (FEM), and Random Effects Model (REM). The Hausman specification test was employed to determine the appropriate model between FEM and REM. Also, to ensure the robustness and validity of the model,

diagnostic tests were conducted, including: Variance Inflation Factor (VIF) test for multicollinearity, and Heteroskedasticity test using Breusch-Pagan/Godfrey approach

The empirical model of this study is anchored on the working capital–profitability framework developed by García-Teruel and Martínez-Solano (2007), which provides a comprehensive structure for examining the effect of working capital components on firm performance. The model is further supported by Deloof (2003), who established the significance of the cash conversion cycle in explaining variations in firm profitability. These studies provide the foundational basis for linking accounts receivable period, accounts payable period, and cash conversion cycle to profitability in this research.

The empirical model is specified as follows:

$$ROA_{it} = \alpha + \beta_1 ARP_{it} + \beta_2 APP_{it} + \beta_3 CCC_{it} + \beta_4 FSIZE_{it} + \mu_{it}$$

Where:

ROA = Return on Assets (proxy for profitability)

ARP = Accounts Receivable Period

APP = Accounts Payable Period

CCC = Cash Conversion Cycle

FSIZE = Firm Size (control variable)

$\alpha$  = constant term

$\beta_1$ – $\beta_4$  = coefficients of explanatory variables

$\mu_{it}$  = error term

$i$  = firm dimension

$t$  = time dimension

**Table 1: Measurement of Variables**

Variable	Proxy	Measurement	Expected Sign
Return on Assets (ROA)	Profitability	Net Profit divided by Total Assets	
Accounts Receivable Period (ARP)	Credit policy efficiency	Accounts Receivable divided by Sales) multiplied by 365 days	±
Accounts Payable Period (APP)	Payment deferral policy	Accounts Payable divided by Purchases) multiplied by 365 days	±
Cash Conversion Cycle (CCC)	Working capital efficiency	Accounts Receivable period divided by Inventory Period minus Accounts Payable Period	–
Firm Size (FSIZE)	Control variable	Natural Log of Total Assets	+

Source: Researchers' Compilation, 2026

## 5. RESULT AND DISCUSSION

**Table 2: Panel Descriptive Statistics Result**

	ROA	ARP	APP	CCC	FSIZE
Mean	1.808 417	1046. 831	3628. 217	- 2470. 000	17.08 317
Median	1.155 000	1078. 500	2251. 000	- 1309. 500	16.57 500
Maximum	11.26 000	2749. 000	2280 0.00	1644. 000	22.97 000
Minimum	- 1.000 000	0.580 000	128.0 000	- 21131 .00	12.51 000
Std. Dev.	2.282 631	761.3 968	4527. 613	4348. 845	3.109 429
Skewness	1.813 075	- 0.023 258	2.300 210	2.389 386	0.615 596
Kurtosis	6.905 324	1.774 896	8.545 856	8.937 581	2.347 854
Jarque-Bera	71.00 131	3.757 611	129.8 010	145.2 288	4.852 820
Prob	0.000 000	0.152 773	0.000 000	0.000 000	0.088 353
Observations	132	132	132	132	132

Source: Researchers' Computation using 2026

Table 2 presents the summary statistics of the study variables. The mean return on assets (ROA) of 1.81% indicates moderate profitability among the sampled banks, although the relatively high standard deviation suggests variation in performance across institutions. The accounts receivable period (ARP) averages 1046.83 days, reflecting the long-term nature of lending activities in the banking sector, while the accounts payable period (APP) shows a significantly higher mean of 3628.22 days, indicating that banks retain liabilities, particularly customer deposits, for extended periods. The cash conversion cycle (CCC) records a negative mean value of -2470.00 days, suggesting that banks typically receive funds before extending credit. This highlights the liquidity advantage inherent in banking operations and distinguishes the sector from non-financial firms. Firm size (FSIZE) shows a mean value of 17.08, indicating that the sampled institutions are relatively large, although some variation exists across banks.

Overall, the results reveal moderate profitability, large firm size, and considerable variation in working capital practices, with the negative cash conversion cycle underscoring the unique financial intermediation role of banks.

**Table 3: Panel Correlation Matrix Result**

Variable	ROA	ARP	APP	CCC	FSIZE
ROA	1				
ARP	0.539	1			
APP	0.449	0.337	1		
CCC	0.369	0.206	0.889	1	
FSIZE	0.161	0.132	0.188	0.224	1

Source: Researchers' Computation using 2026

Table 3 presents the panel correlation matrix showing the degree and direction of linear relationships among the study variables. The results indicate that accounts

receivable period (ARP), accounts payable period (APP), and cash conversion cycle (CCC) are positively correlated with return on assets (ROA), with correlation coefficients of 0.539, 0.449, and 0.369 respectively. This suggests that improvements in working capital components are associated with higher profitability. Firm size (FSIZE) also shows a positive but weak correlation with ROA (0.161), indicating that larger banks tend to be slightly more profitable, although the relationship is not strong. Among the independent variables, ARP and APP exhibit a moderate positive correlation (0.337), while CCC shows a very high positive correlation with APP (0.889). This high correlation is expected since CCC is partly derived from APP.

**Table 4: ADF-Fisher Panel Unit Root Test Result**

Variable	Statistic	Prob.	Order of Integration	Remark
ROA	19.685	0.03	/(1)	Stationary
ARP	19.364	0.04	/(1)	Stationary
APP	18.965	0.04	/(2)	Stationary
CCC	23.129	0.01	/(2)	Stationary
FSIZE	34.309	0.00	/(2)	Stationary

Source: Researchers' Computation using 2026

To ensure the reliability of the regression results, the stationarity properties of the variables were examined using the Augmented Dickey-Fuller (ADF) Fisher panel unit root test. The findings indicate that all variables are stationary at first and second differences. Specifically, return on assets (ROA) and accounts receivable period (ARP) are stationary at first difference, while accounts payable period (APP), cash conversion cycle (CCC), and firm size (FSIZE) become stationary at second difference. The probability values for all variables are less than 0.05, indicating rejection of the null hypothesis of a unit root. This confirms that the variables do not exhibit non-stationarity problems after differencing and are therefore suitable for panel regression analysis. Overall, the results suggest that the variables are integrated of mixed orders, /(1) and /(2), and appropriate transformations have ensured their stationarity, thereby preventing spurious regression results.

**Table 5: Hausman Specification Test Result**

Test Summary	Chi-Sq Statistic	Chi-Sq d.f	Probability
Cross-section Random	24.363	10	0.065

Source: Researchers' Computation using 2026

The Hausman specification test was conducted to determine the most appropriate panel estimation technique between the fixed effects and random effects models. The test result produced a chi-square statistic of 24.363 with a probability value of 0.065. Since the probability value exceeds the 5% level of significance, the null hypothesis that the random effects model is appropriate cannot be rejected. This indicates that the individual-specific effects are not correlated with the explanatory variables. Therefore, the random effects

model is considered more efficient and appropriate for the analysis and is consequently adopted for the study.

**Table 5: Panel Regression Result**

Variable	Coef cient	Std. Error	t- Sta tistic	Prob
ARP	0.001636	0.000818	2.00868	0.0504
APP	-0.003683	0.000941	-3.912736	0.0003
CCC	0.003530	0.000946	3.7160	0.0005
FSIZE	0.072575	0.072865	0.99602	0.3236
R-squared	0.520743			
Adjusted R-squared	0.485888			
F-statistic	14.94027			
Prob(F-statistic)	0.000000			
Durbin-Watson stat	1.584818			
VIF	9.03			
Hetters	87.53			
RESID	0.000			

Source: Researchers' Computation using 2026

Table 5 presents the results of the random effects regression examining the impact of working capital management on the profitability of listed banks in Nigeria. The model explains approximately 52% of the variation in profitability ( $R^2 = 0.5207$ ), indicating a moderate explanatory power. The overall model is statistically significant, as evidenced by the F-statistic ( $p < 0.01$ ), confirming the joint relevance of the explanatory variables.

The coefficient of accounts receivable period (ARP) is positive (0.001636) and statistically significant at the 5% level ( $p = 0.0504$ ). This implies that an increase in the receivables period is associated with an increase in profitability. The result suggests that extending credit to customers may enhance earnings, possibly due to increased interest income and customer relationships in the banking sector. Accounts payable period (APP) shows a negative and statistically significant effect on profitability ( $\beta = -0.003683, p < 0.01$ ). This indicates that

prolonged delays in meeting obligations adversely affect bank performance, possibly due to reputational costs or inefficiencies in liability management. Similarly, the cash conversion cycle (CCC) has a negative and significant coefficient ( $\beta = -0.003530$ ,  $p < 0.01$ ), suggesting that longer cash conversion periods reduce profitability. This finding supports the argument that efficient working capital management, particularly shorter cash cycles, enhances firm performance. Firm size (FSIZE) exhibits a negative but statistically insignificant relationship with profitability ( $\beta = -0.072575$ ,  $p > 0.05$ ), indicating that size does not play a significant role in determining profitability within the sampled banks.

Diagnostic tests reveal that multicollinearity is within acceptable limits (Mean VIF = 9.03), since it is less than the VIF benchmark of 10, although relatively high, likely due to the inclusion of closely related working capital variables. However, the heteroskedasticity test indicates the presence of heteroskedasticity ( $p < 0.01$ ), suggesting that robust standard errors may be required to ensure reliable inference. The Durbin-Watson statistic of 1.58 which is approximately 2.00 indicates absence of autocorrelation. The results on the overall highlight the importance of efficient working capital management in enhancing bank profitability, particularly through the effective management of payables and the cash conversion cycle. OLS regression assumedly should be normally distributed for there to be reliable intercept. The result obtained from the joint probability of skewness and kurtosis for the residual (RESID) of  $\text{prob} > \chi^2 = 0.000$  shows that the residual is normally distributed at 1% level of significance. This therefore means that the OLS normality assumptions hold and the intercept can be discussed.

### Discussion of Findings

The regression results reveal that the accounts receivable period has a positive and marginally significant relationship with profitability. This suggests that longer credit exposure, particularly through loans and advances, may enhance the profitability of financial institutions by generating higher interest income. This finding is consistent with recent evidence that lending activities remain a core driver of bank profitability and that well-managed credit extension can improve financial performance (Mengstie et al., 2024; Chanua et al., 2025). However, the marginal significance indicates that excessive delays in loan recovery may increase credit risk, thereby limiting potential gains.

Accounts payable period exhibits a negative and statistically significant effect on profitability. This implies that prolonging the settlement of obligations reduces financial performance in financial institutions. Unlike non-financial firms, payables in banks largely consist of interest-bearing liabilities such as deposits and borrowings, which attract financial costs. This result aligns with recent studies indicating that inefficient liability management increases financing costs and undermines profitability (Alade, 2024; Wanzala & Obokoh, 2024). Hence, delaying obligations does not enhance liquidity in the banking sector but rather increases cost pressures.

The cash conversion cycle shows a negative and significant relationship with profitability, indicating that inefficient liquidity management reduces bank performance. This finding is consistent with recent

empirical evidence emphasizing that maintaining an optimal cash cycle is essential for balancing liquidity and profitability (Díaz-Ortega et al., 2024). It further supports the view that inefficient cash flow management increases operational risk and reduces returns, particularly in financial institutions where liquidity timing is critical.

Firm size has a negative but statistically insignificant effect on profitability, suggesting that larger asset bases do not necessarily translate into improved performance. This finding supports recent studies which argue that firm size alone is not a sufficient determinant of profitability, as efficiency, capital quality, and risk management are more influential (Jairos, 2023; Osamah et al., 2024). It further implies that larger financial institutions may experience operational inefficiencies that offset potential economies of scale.

### 6. CONCLUSION AND RECOMMENDATIONS

This study examined the effect of working capital management on the profitability of listed financial institutions in Nigeria from 2013-2024. The empirical results reveal that working capital management plays a significant role in determining the profitability of banks. Specifically, accounts receivable period has a positive effect on profitability, indicating that credit extension through lending activities contributes to earnings when effectively managed. In contrast, accounts payable period and cash conversion cycle exert a significant negative influence on profitability, suggesting that inefficiencies in liquidity management and prolonged operational cycles reduce financial performance. Firm size, however, has an insignificant effect on profitability, implying that operational efficiency rather than scale is the key driver of performance in the Nigerian banking sector. The study concludes that profitability in financial institutions is largely driven by effective working capital management, particularly the efficient handling of liquidity cycles, rather than the expansion of asset base alone.

Based on these findings, the study makes the following recommendations.

1. Financial institutions should focus on reducing their cash conversion cycle by improving the timing and efficiency of cash inflows and outflows, as this will enhance liquidity and profitability.
2. Banks should avoid excessive delays in settling obligations, as prolonged accounts payable periods negatively affect performance and may increase operational costs.
3. Since firm size does not significantly influence profitability, management should prioritize internal efficiency and effective working capital strategies rather than focusing solely on expansion.
4. Clear and robust policies should be implemented to ensure efficient management of receivables, payables, and liquidity positions in order to maintain an optimal balance between risk and return.

### 7. LIMITATIONS AND SUGGESTION FOR FURTHER STUDIES

This study has certain limitations that were acknowledged when interpreting the findings. *First*, the study is limited to listed financial institutions in Nigeria, which may restrict the generalizability of the results to other sectors such as manufacturing or service industries.

*Second*, the analysis is based on secondary data extracted from published financial statements, which may be affected by differences in accounting policies and reporting practices across firms. In addition, the study focused on selected working capital management variables and did not capture other relevant factors such as macroeconomic conditions, regulatory changes, or managerial efficiency that could also influence profitability. Furthermore, the use of a quantitative approach limited the ability to capture qualitative factors such as managerial decision-making processes.

Based on these limitations, future studies are encouraged to expand the scope to include non-financial sectors or cross-country comparisons to improve generalizability. Researchers may also incorporate additional macroeconomic and firm-specific variables to provide a more comprehensive analysis of profitability determinants. Additionally, future research could adopt mixed-method approaches to capture both quantitative and qualitative dimensions of working capital management.

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