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CASH MANAGEMENT PRACTICES AND FINANCIAL SUSTAINABILITY OF LISTED TRANSPORTATION COMPANIES IN NIGERIA

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ABSTRACT
This study investigated the effect of cash management practices on financial sustainability of listed transportation companies in Nigeria. The specific objectives of the study was to investigate the effect of cash conversion cycle, creditors payment period, cash and cash equivalent on financial assets growth rate of listed transportation companies in Nigeria. The study used causal-comparative research design. Target population comprises of all the six listed transportation companies in Nigeria which was sampled to the same six transportation companies in Nigeria using Census sampling technique. Secondary data was used and it was source from annual reports and statement of accounts of the selected firms between 2015 and 2024. The study adopted Descriptive statistics, Augmented Dickey Fuller (ADF), Unit Roots Tests, VAR Lag Order Selection Criteria, Co-Integration, Autoregressive Distributed Lag (ARDL) model, Residual Diagnostic Tests, Wald Test. The findings showed that cash conversion cycle has significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run but in term of short run cash conversion cycle has no significant effect on financial assets growth rate of listed transportation companies in Nigeria, creditor payment period has significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run but in term of short run creditor payment period has no significant effect on financial assets growth rate of listed transportation companies in Nigeria, and cash and cash equivalent has no significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run and short run. It was concluded that there is significant effect of cash management practices on financial sustainability of listed transportation companies in Nigeria from 2015 to 2024 in the long run while there is an insignificant effect of cash management practices on financial sustainability of listed transportation companies in Nigeria from 2015 to 2024 in the short run. The study recommended amongst others that Management of listed transportation companies should optimize their cash conversion cycle to improve long-term equity growth.

Keyword: Cash Management Practices, Financial Sustainability and Financial Assets Growth Rate

INTRODUCTION
Awareness about the protection of the future has increased day by day throughout the world. If businesses remain insensitive to these demands, it would negatively affect their sustainable growth and increases competitor race. This awareness has brought along the concept of sustainability. Sustainability is a set of vital processes that provide the means of life for various companies; this helps them maintain their reputation and achieve their long-term goals, as well as develop the means for their growth over time. Sustainability is considered a dimension of providing a competitive advantage among bu**s**inesses (Akpokerere & Aninoritse, 2024). Scholars defined sustainability in various ways,

sustainability is defined fundamentally built on three elements: economic, environmental, and social. Expressed as the reflection of the concept of sustainability on businesses, the concept of corporate financial sustainability is generally explained as the integration of sustainability elements into businesses. But in this study sustainability is considered as sustainable equity growth and Sustainable assets growth. It is defined as a sustainable performance that provides a deductive measure of how well companies can grow its assets and equity holders (Sustainable equity growth; Sustainable equity growth) to maintain a steady and stable rate of growth over time. In other hand, financial sustainable assets growth (Assets growth-ATG) from business operations, generate revenue and ensure economic value added (EVA) to the corporation (Arojo et al.; Laghari et al. (2023) opined that financial sustainability largely depend on the ability of companies' operating in whatever industry to have an adequate and working mechanism to ensure cost reduction across board, at all levels of the operations of the company and equally put and maintain a sustainable machinery in place, meeting its profitability requirements and corporate objective set by the company. Effective cash management allows the company to control its cash and manage its business economically efficiently and effectively. In this way the company can reduce business disruptions operate in a smooth and efficient manner and provide for its ongoing growth and financial performance. Cash is the money which a firm can disburse immediately without any transportation ion. The term cash includes coins currency and cheques held by the firm and balances in its bank accounts. Sometimes near- cash items such as marketable securities or bank time deposits are also included in cash. The basic characteristic of near-cash assets is that they can readily be converted into cash.

Statement of the Problem

All over the world, especially among the developing nations, corporate sustainability has been the major challenges faced by companies leading into avoidable strategic tragedy of sudden collapse. The operational capacity of transportation companies is quite huge and quite challenging, they are capital intensive and operational risks, no wonder most of the transportation companies suspend their operations in some locations. Other challenges includes; social inequality: Addressing social inequality, poverty, and human rights issues. Economic instability: Managing economic instability, volatility, and uncertainty. Short-termism: Prioritizing short-term gains over long-term sustainability. Lack of awareness: Limited awareness and understanding of sustainable growth principles. Insufficient resources: Limited resources and investment in sustainable growth initiatives. Competing priorities: Balancing competing priorities and stakeholder expectations. Measuring and reporting: Challenges in measuring and reporting sustainable growth performance. Due to the above problems, prior evidence has produced mixed results about effect or the relationship between cash management practices and financial performance of firms. There has been a lack of agreement among authors because it is clear that a number of authors who have conducted studies in this area have differing views and opinions regarding the effect of cash management practices on sustainability. For instance, Major and Azali (2022) result showed that there is a positive and significant relationship between cash management practices and financial performance of listed deposit money banks in Nigeria. Ayimaje et al. (2026) findings indicate that proper financial management practices are vital in improving liquidity, decision making as well as sustainable growth of SMEs. Attayi et al (2022) findings indicated that cash management strategies affects sustainable growth of SMEs in Nigeria. The study also concludes that cash budgeting as a cash management strategy is a strong determinate to the productivity of SMEs in FCT-Abuja. Abdullahi et al. (2020) study result shows that account receivables management has

significant negative effect on the financial performance and account payables management has significant and positive effect on the financial performance proxied by return on equity (ROE). Globally, nearly all of the studies have generally focused on different sectors. Kithinji et al. (2022) study found that cash management affects financial performance of public universities in Kenya. The study revealed that student enrolment moderates the relationship between cash management and financial performance of public universities in Kenya. Chibuike and Celestine (2022) study revealed a positive and insignificant effect of operating activities on liquidity. Also, it revealed a positive and insignificant effect of investing activities on liquidity. Odo and Udodi (2022) study revealed a significant negative effect of cash management on returns on assets and Tobin's Q. Returns on equity was negative and non-significant. Hido and Koori (2025) result showed that periodic cash plan had positive statistically significant effect on financial performance. Bank credit line had positive effect on financial performance even though the change was not significant. Moneke and Ezeagba (2024) study revealed that there is a significant effect between cash and cash equivalent and return on assets of industrial goods firms in Nigeria. Also there is a significant effect between cash turnover and return on assets of industrial goods firms in Nigeria. Dodi and Rudi (2025) findings show that cash Management exerts a positive and statistically significant influence on liquidity. The interaction variable of cash management with product type was also shown to have a significant effect, thus strengthening the relationship between Cash management and liquidity. Nieves et al. (2025) finding indicated that there is a strong correlation between sales generation and investing activities can be a powerful driver of growth, but it's important to manage this relationship carefully. Nurchayati, (2025) finding reveal that structured financial planning, digital financial adoption, and improved access to funding are essential in mitigating liquidity risks. Additionally, the study identifies a strong correlation between effective cash management and business performance, emphasizing the need for SMEs to adopt sound financial practices. Omotunwase (2024) examined the effect of cash management on the financial performance of listed deposit money banks in Nigeria for 2013-2022. Mirza (2026) result indicated a statistically significant relationship cannot be found between ICF and FCF and the Financial Performance metrics. Based on the results, the study concluded that cash management significantly affects the financial performance of listed deposit money banks in Nigeria. The study recommended that deposit money bank management should implement advanced cash flow forecasting models and liquidity management techniques to optimize the allocation of cash reserves and maximize investment returns while ensuring liquidity adequacy. To the best of our knowledge, none of the previous studies has conducted research on cash management practices using financial sustainability as dependents variable in listed transportation companies in Nigeria. Furthermore, none of cash management practices using financial assets growth rate sustainability in measuring. It is against the background and mix results that this study intended to bridge the knowledge gap by investigating the effect of cash management practices on financial sustainability of listed transportation companies in Nigeria.

Aim and Objectives of the study

The aim of this study was to investigate the effect of cash management practices on financial sustainability of listed transportation companies in Nigeria. The specific objectives were to;

i. determine the effect of cash conversion cycle on financial assets growth rate of listed transportation companies in Nigeria;
ii. evaluate the effect of creditors payment period on financial assets growth rate of listed transportation companies in Nigeria;

iii. investigate the effect of cash and cash equivalent on financial assets growth rate of listed transportation companies in Nigeria;

Research Question

This study was guided by the following research questions:

i. How does cash conversion cycle affect financial assets growth rate of listed transportation companies in Nigeria?
ii. What is the effect of creditors payment period on financial assets growth rate of listed transportation companies in Nigeria?
iiii. What is the extent to which cash and cash equivalent affect financial assets growth rate of listed transportation companies in Nigeria?

Research Hypotheses

The study was guided by the following research hypotheses.

H_{O1}: Cash conversion cycle has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.

H_{O2}: Creditors payment period has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.

H_{O3}: Cash and cash equivalent has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.

Review of Related Literature

Conceptual Review

1. Cash Management Practices

Dodi and Rudi (2025) defined cash management as a fiscal discipline that adopts the same principles, anyhow of the type of business, size or age of an enterprise. Cash operation would concentrate on erecting a sustainable cash inflow by soothsaying bills and payments in order to establish the lines to backing with banks and therefore managing day- to- day operations of business to minimize the quantum of cash needed to achieve sustainable business growth. Cash management is necessary to avoid mismatches between the timing of payments and vacuity of cash. Numerous business enterprises have maintained large cash reserves and liquidity positions within their investment portfolios in an trouble to incompletely accommodate unlooked-for expenditures (Oranefo & Bennee, 2023). Shubhangi and Atul (2025) observed that both individualities and business possessors are generally brazened with delicate fiscal opinions in numerous aspects of life, be it in their particular finances or as business possessors.

2. Financial Sustainability

The concept of financial sustainability could also viewed from the general performance that improves economic, protect and restore ecological systems and continuous enhancement of wellbeing of the people and resources management efficiency (Swarnapali, 2017). The concept of financial sustainability

was originally launched as an ecological idea, which focused on the conservation of resources and the environment. However, financial sustainability has been developed into economic viability, environmental responsibility and social equity responsibility communities (Srivalli, 2024). Financial sustainability refers to the ability of a system, process, or practice to maintain itself over time, without depleting natural resources or causing harm to the environment, society, or economy. Three Pillars of Sustainability. Environmental Sustainability: Conserving natural resources, reducing pollution, and protecting ecosystems. Social Sustainability: Promoting social justice, human rights, and community development. Economic Sustainability: Ensuring economic growth, stability, and prosperity while minimizing negative impacts.

3. The link between Cash Conversion Cycle and Financial Sustainability Measure

Empirical studies have shown the relationship between cash conversion cycle and sustainability. Businesses like transportation companies in Nigeria are exposed to a series of conversion period during their services rendering. This conversion period either directly decrease the cost of the related services or add an additional burden to the operating budget in order to eliminate the negative effects of the enterprise. Nevertheless, Dodi and Rudi (2025) the findings show that cash management exerts a positive and statistically significant influence on Liquidity. Debie (2022) findings revealed that cash conversion cycle has a positive and significant impact on financial performance. Major and Azali (2022) study confirmed that there is a significant relationship between cash conversion cycle and return on equity. Etim et al. (2022) results showed that OCFM, OCFR, ICFR and NCFR had positive and significant influence on Financial Performance (ROA). Mmaduka et al. (2022) results showed that inventory turnover period, average collection period and average payment period have a significant but negative effect on debt-to-equity ratio at 5% level of significance respectively. Wanjuki et al. (2021) study confirmed that cash conversion cycle and cash budgeting had a positive and significant effect on financial performance of private hospitals. Obalemo et al. (2020) study confirmed that the cash conversion cycle has a significant negative relationship with profitability (measured by ROA). Ubesie and Duru (2016) results reveal that accounts receivable and accounts payable have significant positive effect on profitability, while inventory has significant negative effect on profitability.

Negative and Insignificant Result

Dibua et al. (2024) ascertained the extent to which cash control affect financial performance of agricultural firms in Nigeria. Findings revealed that cash conversion cycle has no significant effect on return on asset of quoted agricultural firms in Nigeria. Rejaul et al (2023) findings indicated that cash conversion cycle has a negative connection with profitability in term of ROA and EPS. Ambe (2022) study confirmed that there exists a negative relationship between cash conversion cycle and financial performance of healthcare companies listed on the Nigerian Stock Exchange. Peter et al. (2018) result showed that Cash Conversion Cycle had no significant relationship with financial performance, indicating that Cash Conversion Cycle (CCC) did not affect financial performance of firms' in the commercial segment of the NSE. Ahmed and Kabiru (2022) results showed that inventory turnover period had a negative significant effect; secondly, average collection period had a non-significant negative effect. Asamu et al. (2019) study found that cash conversion cycle has no significant effect on profitability of listed manufacturing companies in Nigeria. Odo and Udodi (2022) study revealed a significant negative effect of cash management on returns on assets and Tobin's Q. Returns on equity was negative and non-significant.

4. The link between creditors payment period and Financial Sustainability Measure

Empirical studies have shown the relationship between creditors payment period and sustainability. Businesses like transportation companies in Nigeria are exposed to a series of creditor and this has led to bad debt. These creditors either directly increase the cost of the related bad debt or add an additional burden to the operating budget in order to eliminate the negative effects of the enterprise. Nevertheless, Debie (2022) study confirmed that creditors' payment period (CPP) has a positive impact on the firm financial performance of quoted manufacturing firms in Nigeria. Joshua and Nurudeen (2022) findings revealed that creditor's collection period had positive and significant effect on the return on assets of the selected firms. Micheal et al (2017) study revealed a positive relationship between CCP and performance, although the relationship was not significant.

Negative and Insignificant Result

Jonah et al (2023) study confirmed that that creditor's payment period had a negative significant relationship with net profit margin and no relationship with return on capital employed. Mandipa and Sibindi (2022) discovered that a negative relationship exist between average collection period and financial performance. Urhoghide and Korolo (2022) study showed that Average Collection Period (ACP) has insignificant negative relationship with corporate performance, measured by profit after tax.

5. The link between cash and cash equivalents and Financial Sustainability Measure

Empirical studies have shown the relationship between cash and cash equivalents and sustainability. Businesses like transportation companies in Nigeria are exposed to a series of mismanagement of cash during their services rendering. These management practices either directly increase the cost of the related services or add an additional burden to the operating budget in order to eliminate the negative effects of the enterprise. Nevertheless, Hido and Koori (2025) studied the effect of cash management practices on the performance of livestock marketing cooperative societies in Marsabit County. The regression results showed that periodic cash plan had positive statistically significant effect on financial performance. Moneke and Ezeagba (2024) ascertained the effect of cash management on the financial performance of industrial goods firms in Nigeria. The study revealed that there is a significant effect between cash and cash equivalent and return on assets of industrial goods firms in Nigeria. Also there is a significant effect between cash turnover and return on assets of industrial goods firms in Nigeria. Omotunwase (2024) examined the effect of cash management on the financial performance of listed deposit money banks in Nigeria for 2013-2022. the result of the study showed that cash management has a significant effect on return on assets and return on equity. Laghari et al (2023) study confirmed that cash and cash equivalents bring significant positive improvements in the financial performance of firms. The empirical evidence suggests that performance improvement levers (i.e. cash flow measures and metrics) are more pronounced in low leverage firms, suggesting that changes in cash flow measures and metrics bring more positive changes in low leverage firms' financial performance relatively to high leveraged firms. Onyango and Muchira (2023) results established that cash budgeting, cash control and cash forecasting are positively related to financial performance. Timothy et al (2023) study disclosed that operating costs and the profitability of consumer goods service companies in Nigeria have a strong link and are potentially correlated. The outcome also showed that the profitability of listed consumer goods service firms in Nigeria is significantly positively impacted by cash flow from financing activities.

Major and Azali (2022) study found that, there is a positive and significant relationship between cash equivalents and financial performance.

Negative and Insignificant Result

Korolo and Korolo (2025) investigated the impact of cash flow management on the financial performance of the industrial goods sector in Nigeria. The study found that cash flow from financing activities does not show a statistically significant relationship with financial performance in this sector. Idehen et al. (2025) examined cash flow management effect on asset growth among listed industrial goods firms in Nigeria. The results indicated that cash flow per share does not significantly influence asset growth. The results from the panel least square regression and Hausman Test indicated that the average payment period of the selected firms negatively correlate with ROA. Oranefo and Bennee (2023) result revealed that that cash and cash equivalent has not significantly affects return on equity of banks in Nigeria. Wokeh and Nmehielle (2023) study confirmed that there is no significant effect of cash turnover on return on assets, there is no significant effect of cash and cash equivalent on return on equity and there is no significant effect of cash turnover on return on equity of listed agricultural firms in Nigeria. Chibuike and Celestine (2022) study revealed an insignificant effect of operating activities on liquidity. Also, it revealed insignificant effect of investing activities on liquidity. Amini et al. (2021) regression analysis shows a non-significant relationship between cash management practices and Gross Profit Margin (GPM). Dhruba (2019) study found that Cash management has an insignificant but positive effect on profitability. Soet et al. (2018) study found out that operating cash flow management had insignificant and positive effect on return on equity.

Theoretical Review

Action and Reaction Theory

The theory has been developed by Paul Mokrzecki in 2006. The theory indicates that predictions of the future are based on what happens in the past. The observation guarantees a relevant action that everything is built up (adjusted) from something which has been there before and that nothing is a new creation (Onyango & Muchira, 2023). Past events are critical in forecasting future events. The decisions in an organization for an anticipated action in the future are based on the existing information or the past (De Montbrial, 2013). Making future decisions without regard for the past cannot achieve the expected results. The past data is a powerful tool that enables leaders to understand the company's past better and to help shape its future. The theory's weaknesses are that, in some cases, the future cannot only be determined by past experiences/ happening (Mathiesen, 2012). In some instances, some happening cannot be predicted, such as pandemics that may influence the operations of a business. The theory did not examine the role of government interventions in the business by regulating the industry on the financing options. Another weakness of the theory, according to Herbane (2010), is that some past information may contain errors and this implies those errors will be carried forward in the future.

The relevance of the theory is that cash foresting to the firms can be based on previous information or experience. The foresting such as estimating future sales and expenses, can influence the determination of the funding source, which can be grounded on the information available. Past events are critical in forecasting future events. The past data is a powerful tool enabling business owners to understand the past better and help shape its future. Making the future decision without regard for the past can result

in not achieving the expected results. Hence, the theory was regarded relevant to inform variable cash forecasting.

Empirical Review

Several studies have carried out to determined cash management practices and financial performance. Their result differs due to researcher's method of data analysis, scope of the studies, time-frame used etc.

Ayimaje et al. (2026) analyzed the impact of cash management methods on performance of small and medium enterprises (SMEs) in Nigeria. The research used a quantitative design study and regression analysis on the data that was gathered on 396 SME owners and managers in Nigeria. The SPSS 23 was used to analyze the data to establish the correlation between the financial management practices and the operational performance. Study findings indicate that cash forecasting, cash budgeting, and receivables management variables are all found to possess a statistically significant positive influence on operational performance of the SMEs. Precisely, cash forecasting, cash budgeting, and receivables management were all discovered to play a significant role in enhancing the operational results. The findings indicate that proper financial management practices are vital in improving liquidity, decision making as well as sustainable growth of SMEs. The study suggests using the following recommendations based on the results: the SMEs in Nigeria ought to focus on the implementation of their effective cash forecasting, and reinforce their cash budgeting exercises to new heights and improve their strategies in managing their receivables. The practices will enhance financial stability, decrease uncertainty, and lead to the operational success in the long term.

Hido and Koori (2025) studied the effect of cash management practices on the performance of livestock marketing cooperative societies in Marsabit County. The current study adopted quantitative research design. The target population was twelve livestock marketing cooperative societies in Marsabit County that have been operational in the period 2019-2023. The unit of observation was the 110 employees in the finance departments. The study used stratified random sampling technique to arrive at a sample size of 86. The study utilized both primary and secondary data where primary data was obtained from questionnaires that were presented to respondents and secondary data collection tool was used to obtain secondary data from audited financial reports accessible from society's offices and ministry of cooperatives and micro-small and medium enterprises development. Diagnostic tests including multicollinearity test, normality test and reliability were conducted to confirm the model fitness. Data was analyzed using descriptive and regression analysis. Data was analyzed using descriptive and regression analysis. The regression results showed that periodic cash plan had positive statistically significant effect on financial performance. Bank credit line had positive effect on financial performance even though the change was not significant. The study therefore recommends that managers of Marsabit county livestock marketing cooperative societies should enhance effective use and preparation of cash budgets and consistent investment of surplus cash. Further, there should be more decentralization of receipts and application of accounting packages. For policy, the study recommends that policy makers and regulators should concentrate on creating regulations that will allow marketing societies to thrive through provision of appropriate infrastructure for wider market.

Dodi and Rudi (2025) examined the impact of cash management on liquidity in Micro, Small, and Medium Enterprises (MSMEs) operating in the Food and Beverage (F&B) sector in Bandung City, while investigating the moderating effect of Product Type. The investigation employed a quantitative

methodology, using simple linear regression analysis techniques for Model 1, and multiple linear regression for Model 2, which incorporates interaction variables. The findings show that Cash Management exerts a positive and statistically significant influence on Liquidity. The interaction variable of cash management with product type was also shown to have a significant effect, thus strengthening the relationship between Cash management and liquidity. Based on these findings, it can be concluded that proficient cash management is critical to improving the liquidity of F&B MSMEs. Moreover, the nature of the products sold serves to moderate this relationship; consequently, it is important for cash management strategies to be tailored to the specific attributes of the products. This research provides practical contributions to MSMEs by facilitating the optimization of their financial management practices.

Moneke and Ezeagba (2024) ascertained the effect of cash management on the financial performance of industrial goods firms in Nigeria. The specific objectives of the study are to: determine the effect of cash and cash equivalent on the return on assets of industrial goods firms in Nigeria; and evaluate the extent to which cash turnover affects the return on assets of industrial goods firms in Nigeria. Research questions and hypotheses are formulated in line with the objectives of the study. Ex-Post Facto research design was adopted. The population of the study was consisting of twelve (12) industrial goods in Nigeria. Data were extracted from the companies of the study annual reports and accounts from 2013 to 2022. Analysis was carried out with descriptive statistics and regression analysis. The study revealed that there is a significant effect between cash and cash equivalent and return on assets of industrial goods firms in Nigeria. Also there is a significant effect between cash turnover and return on assets of industrial goods firms in Nigeria. The study therefore recommended among others that since the study found that cash and cash equivalent has a significant effect, therefore, management should endeavour to maintain the optimum balance between too much cash and too little cash in an organization to ensure its smooth operation and performance.

Methodology

The study employed causal-comparative research design. Causal-comparative research design, also known as ex post facto research, is a non-experimental research methodology that aims to identify potential cause-and-effect between variables. The population of the study consisted of six (6) transportation companies listed on the floor of the Nigerian Exchange Group and the same was used as sample size using Census sampling techniques. The data were obtained from the annual reports and accounts of the sampled listed transportation companies in Nigerian Exchange Group Fact Book from 2015 to 2024

Model Specification

The model used for this study was adapted from Umar et al, (2019) where it was written as:

Model: Sustainable Assets Growth Rate (FAGR)

FAGR = f (CCC, CCE, CPP, Fize) ……i

This can be written in Panel form as:

$$FAGR_{it} = a_o + a_1CCC_{it} + a_2CCE_{it} + a_3CPP_{it} + a_4Fize_{it} + U_{it} \quad \text{..... ii}$$

$$a_1>0;\ a_2>0;\ a_3>0;\ a_4>0$$

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Method of Data Analysis
The statistical tools used for the study includes; Descriptive statistics, Augmented Dickey Fuller (ADF), Unit Roots Tests, VAR Lag Order Selection Criteria, Co-Integration, Autoregressive Distributed Lag (ARDL) model, Residual Diagnostic Tests, Wald Test

Data Analysis and Discussion of Findings
Data Analysis
This section presents the ten years summary of the compressed data set of the six (60) sampled transportation companies listed in the Nigeria Exchange Group. It also focuses on the data presentation, analysis of estimated results derived from the various estimation techniques employed such as Descriptive Statistic, Unit Root Test, VAR Lag Order Selection Criteria, Autoregressive Distributed Lag Model (ARDL), Diagnostic Test.

Table 1 Descriptive Statistics of the Variables

	CCC	CCE	CPP	FAGR	FS
Mean	-302.5192	6.033909	0.006006	0.548421	7.335635
Median	-78.39770	6.203067	0.002079	0.525462	6.864973
Maximum	2374.781	8.763906	0.092700	0.954814	9.465337
Minimum	-11069.40	0.000000	0.000000	0.133128	5.722022
Std. Dev.	1541.121	1.380081	0.013683	0.224005	1.184056
Skewness	-5.795265	-1.061303	4.746946	0.025931	0.471079
Kurtosis	41.34193	7.770092	28.71651	2.055008	1.772823
Jarque-Bera	4011.110	68.14809	1878.682	4.105294	5.984057
Probability	0.000000	0.000000	0.000000	0.128395	0.050186
Sum	-18151.15	362.0346	0.360380	60.32629	440.1381
Sum Sq. Dev.	1.40E+08	112.3728	0.011047	5.469445	82.71729
Observations	60	60	60	60	60

Source: ***Researcher computation (2026) using E-views 10***

The results in Table 1 proved the descriptive statistics results of cash management practices variables represented as cash conversion cycle (CCC), cash and cash equivalent (CCE) and creditors payment period (CPP). The dependent variable financial sustainability indicators financial equity growth (FEGR), financial assets growth rate (FAGR) as well as firm size (FS) representing controlling variable for the period 2015 to 2024 under investigation. The independent variables cash conversion cycle (CCC), cash and cash equivalent (CCE) and creditors payment period (CPP) proved a Mean values -302.5192, 6.033909, and 0.006006 with a Minimum to Maximum values of 11069.40Mini to 2374.781Max, 0.000000Mini to 8.763906Max, and 0.000000Mini to 0.092700Max respectively for the time period investigated. Furthermore, the Mean and standard deviation values for all the variables are clear indications that the variables are not constant over time. The skewness statistics indicated that cash conversion cycle (CCC), cash and cash equivalent (CCE) variables that represented are positively skewed which shown the variables has a long right tail while creditors payment period (CPP) is

negatively skewed which shown the variable has a short right tail. The results proved that dependent variable financial assets growth rate (FAGR) discovered a 0.548421 with a Minimum to Maximum values of 0.133128Mini to 0.954814Max. The Jarque-Bera test statistic is used to ascertain the difference of the skewness and kurtosis of the series with those from the normal distribution. The null hypotheses of the Jarque-Bera test statistics proved that the variables cash conversion cycle (CCC), cash and cash equivalent (CCE) and creditors payment period (CPP) are not normally distributed. This implied that their corresponding probability value was less than 5% significant level and it is clearly leptokurtic while financial assets growth rate (FAGR) as well as firm size (FS) are normally distributed. This implied that their corresponding probability value was greater than 5% significant level and it is clearly mesokurtic.

Unit Root Test

Table 2 Summary of Unit Roots Test Result

		ADF FISHER				
Order of integration	Variable	ADF - Fisher Chi-square Statistics	ADF - Fisher Chi-square Prob	ADF - Choi Z-stat Statistics	ADF - Choi Z-stat Pro	Remark
Level	CCC	31.9243	0.0014	-2.67882	0.0037	Stationary
1 st difference	-	-	-	-	-	1(0)
Level	CCE	24.5685	0.0170	-0.66828	0.2520	
1st difference	D(CCE)	38.9225	0.0001	-3.40140	0.0003	Stationary 1(1)
Level	CPP	30.6776	0.0022	-0.91603	0.1798	
1 st difference	D(CPP)	34.1399	0.0006	-2.86448	0.0021	Stationary 1(1)
Level	FAGR	4.74661	0.9659	2.86715	0.9979	
1 st difference	D(FAGR)	23.7631	0.0219	-1.02302	0.0131	Stationary 1(1)
Level	FS	17.6021	0.1283	-0.71284	0.2380	
1 st difference	D(FS)	33.1984	0.0009	-3.61965	0.0001	Stationary 1(1)

Source: ***Researcher computation (2026) using E-views 10***

Results for the ADF test are presented in Table 2. At level form, CCC is stationary as shown by the p-value 0.0014 and 0.0037 which is less than 0.05 leading to the rejection of the null hypothesis that there is a unit root in the series while all the remaining variables CCE, CPP, FEGR, FAGR and FS were stationary at 1st difference. This makes the ARDL method applicable to estimate the financial distress and firm characteristic model since the variables are integrated of orders zero and one.

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Table 3 VAR Lag Order Selection Criteria (FAGR) Model

VAR Lag Order Selection Criteria
Endogenous variables: FAGR CCC CPP CCE FS
Exogenous variables: C
Date: 09/19/26 Time: 10:12
Sample: 2015 2024
Included observations: 54

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-875.6919	NA	1.01e+08	32.61822	32.80238	32.68924
1	-752.4182	219.1533*	2659560.*	28.97845*	30.08344*	29.40460*

Source: ***Researcher computation (2026) using E-views 10***

From the result presented in table 3, the appropriate lag length for this model is one, since all the criteria for selecting optimum lag length choose one as the lag length. Thus, Akaike information criterion was used in this study in FAGR Model.

Table 4: Pedroni Co-Integration Test Results (FAGR) Model

Pedroni Residual Cointegration Test
Series: FAGR CCC CPP CCE FS
Date: 09/19/26 Time: 10:23
Sample: 2015 2024
Included observations: 60
Cross-sections included: 6
Null Hypothesis: No cointegration
Trend assumption: No deterministic trend
Automatic lag length selection based on SIC with a max lag of 0
Newey-West automatic bandwidth selection and Bartlett kernel

Alternative hypothesis: common AR coefs. (within-dimension)

	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	-1.620685	0.9475	-1.984919	0.9764
Panel rho-Statistic	2.086588	0.9815	3.275951	0.9995
Panel PP-Statistic	-4.780751	0.0000	-2.324875	0.0100
Panel ADF-Statistic	-4.802102	0.0000	-1.777814	0.0377

Alternative hypothesis: individual AR coefs. (between-dimension)

	Statistic	Prob.
Group rho-Statistic	4.647269	1.0000
Group PP-Statistic	-3.461558	0.0003
Group ADF-Statistic	-1.818439	0.0345

Source: ***Researcher computation (2026) using E-views 10***

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According to the results in Table 4, the co-integration test for the financial assets growth rate (FAGR) model indicates that the null hypothesis of no co-integration in the model was rejected. This is due to the fact that the two of the probability values for both the panel and group PP, Rho, and ADF Statistics are below the 5% level of significance. Therefore, it can be concluded that there is evidence of co-integration in the financial assets growth rate (FAGR) model. Since co-integration is present, a Panel ARDL long run and short run analysis is appropriate for the financial assets growth rate (FAGR) model.

Table 5 PMG/ARDL Estimates: Dep. Variable: FAGR Model

Dependent Variable: D(FAGR)
Method: ARDL
Date: 09/19/26 Time: 11:02
Sample: 2015 2024
Included observations: 60
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (1 lag, automatic): CCC CPP CCE
Fixed regressors: C
Number of models evalulated: 1
Selected Model: ARDL(1, 1, 1, 1)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Equation				
CCC	0.000890	0.000155	5.740445	0.0000
CPP	-63.08397	9.151909	-6.892985	0.0000
CCE	-0.067555	0.054934	-1.229735	0.2294
FS	-2.938849	1.415822	-2.075719	0.0476
Short Run Equation				
COINTEQ01	-1516.355	1515.061	-1.000854	0.3258
D(CCC)	-1.685222	1.683222	-1.001188	0.3256
D(CPP)	-293847.9	293755.9	-1.000313	0.3260
D(CCE)	-531.5034	531.1994	-1.000572	0.3259
D(FS)	-58.25408	58.86509	-0.989620	0.3311
C	867.1501	866.3913	1.000876	0.3258

Mean dependent var	128.8989	S.D. dependent var	947.4619
S.E. of regression	790.4197	Akaike info criterion	2.830993
Sum squared resid	16868611	Schwarz criterion	3.982883
Log likelihood	-51.92979	Hannan-Quinn criter.	3.281560

*Note: p-values and any subsequent tests do not account for mode selection.

Statement of Hypotheses Under FAGR Model

H_{O1}: Cash conversion cycle has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.

H_{O2}: Creditors payment period has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.

H_{O3}: Cash and cash equivalent has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.

Decision Rule 1: Accept Ho if P > 0.05. Otherwise reject

In Table 5, the estimated financial equity growth rate model results are presented. According to the long-term outcome, the cash conversion cycle (CCC) has a positive and statistically significant effect on the financial assets growth rate in the long run of listed transportation companies in Nigeria (Coefficient = 0.000890, t-Statistic = 5.740445, p = 0.0000). This indicates that if all other variables remain constant, a 1% increase in cash conversion cycle (CCC) will result in a 5.74% increase in financial assets growth rate in the long run of listed transportation companies in Nigeria. However, according to the short-term outcome, the cash conversion cycle (CCC) has a negative and statistically insignificant effect on the financial assets growth rate in the short run of listed transportation companies in Nigeria (Coefficient = -1.685222, t-Statistic = -1.001188, p = 0.3256). This indicates that if all other variables remain constant, a 1% increase in cash conversion cycle (CCC) will result in a 98% decrease in financial assets growth rate in the short run of listed transportation companies in Nigeria.

Based on the long run and short run result as estimated in table 4.8, the study reject the null hypothesis and accept the alternative in the long run while in the short run, we accept the null hypothesis and reject the alternative. Thus, the study concludes that cash conversion cycle has significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run but in term of short run cash conversion cycle has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.

Decision Rule 2: Accept Ho if P > 0.05. Otherwise reject

In Table 5, the estimated financial equity growth rate model results are presented. According to the long-term outcome, the creditors payment period (CPP) has a negative but statistically significant effect on the financial assets growth rate in the long run of listed transportation companies in Nigeria (Coefficient = -63.08397, t-Statistic = -6.892985, P = 0.0000). This indicates that if all other variables remain constant, a 1% increase in creditor payment period (CPP) will result in a -6.89% decrease in financial assets growth rate in the long run of listed transportation companies in Nigeria. However, according to the short-term outcome, the creditors payment period (CPP) has a negative and statistically insignificant effect on the financial assets growth rate in the short run of listed transportation companies in Nigeria (Coefficient = -1.685222, t-Statistic = -1.000313, p = 0.3260). This indicates that if all other variables remain constant, a 1% increase in creditor payment period (CPP) will result in a 1.00% decrease in financial assets growth rate in the short run of listed transportation companies in Nigeria.

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Based on the long run and short run result as estimated in table 4.8, the study reject the null hypothesis and accept the alternative in the long run while in the short run, we accept the null hypothesis and reject the alternative. Thus, the study concludes that creditor payment period has significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run but in term of short run creditor payment period has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.

Decision Rule 3: Accept Ho if P > 0.05. Otherwise reject
In Table 5, the estimated financial equity growth rate model results are presented. According to the long-term outcome, the cash and cash equivalent (CCE) has a negative and statistically insignificant effect on the financial assets growth rate in the long run of listed transportation companies in Nigeria (Coefficient = -0.067555, t-Statistic = -1.229735, p = 0.2294). This indicates that if all other variables remain constant, a 1% increase in cash and cash equivalent (CCE) will result in a 22% decrease in financial assets growth rate in the long run of listed transportation companies in Nigeria. Also, according to the short-term outcome, the cash and cash equivalent (CCE) has a negative and statistically insignificant effect on the financial assets growth rate in the short run of listed transportation companies in Nigeria (Coefficient = -531.5034, t-Statistic = -1.000572, p = 0.3259). This indicates that if all other variables remain constant, a 1% increase in cash and cash equivalent (CCE) will result in a 1,00% decrease in financial assets growth rate in the short run of listed transportation companies in Nigeria.

Based on the long run and short run result as estimated in table 4.8, the study reject the null hypothesis and accept the alternative in the long run while in the short run, we accept the null hypothesis and reject the alternative. Thus, the study concludes that cash and cash equivalent has no significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run and short run.

Table 6 Wald Test (FAGR) Model
Equation: Untitled

Test Statistic	Value	df	Probability
t-statistic	393.9397	40	0.0000
F-statistic	155188.5	(1, 40)	0.0000
Chi-square	155188.5	1	0.0000

Null Hypothesis: C(1)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	3.177451	0.008066

Restrictions are linear in coefficients.
Source: ***Researcher computation (2026) using E-views 10***

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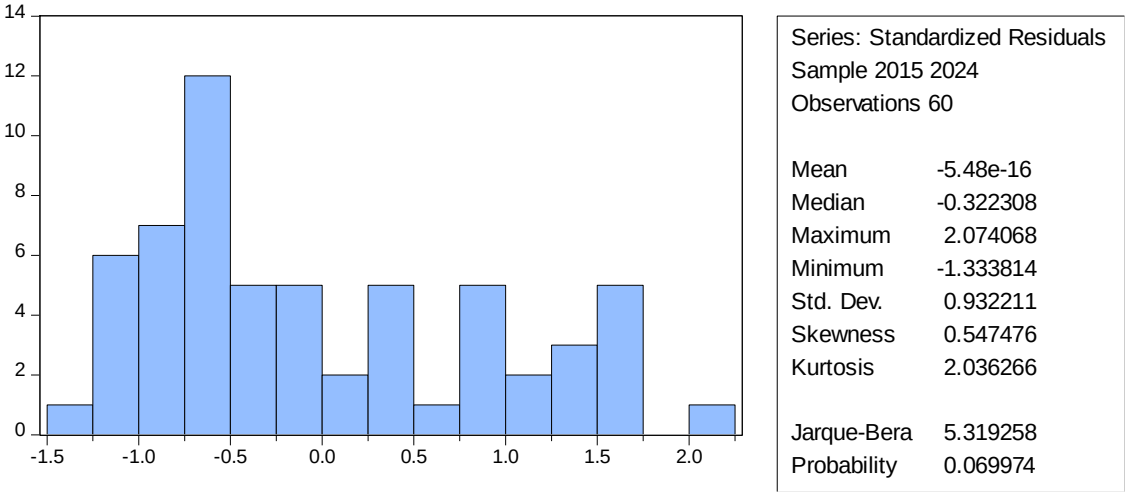
The results of the Wald Test presented in Table 6, showed that both the F-distribution (with a Test Statistic of 155188.5 and a P-value of 0.0000) and the Chi-Square distribution (with a Test Statistic of 155188.5 and a P-value of 0.0000) indicate that the independent variables have a significant joint effect on the dependent variable. As the corresponding P-values are less than 5%, the null hypothesis is rejected, and it can be concluded that cash management practices affect financial sustainability of listed transportation companies in Nigeria

Figure 1 Residual Normality Tests for the model (FAGR)



Source: ***Researcher computation (2026) using E-views 10***

The figure 4.2 above disclosed diagnostic test using normality test of residuals histograms as criteria for decision. The result indicates that Jarque-Beta probability value is greater than 0.05 (0.069 > 0.05) and this means that that the residuals are normally distributed hence Auto Regressive Distributive Lag model II was appropriate estimated.

Table 7 Result Summary of Hypotheses Analyzed

S/N	Statement of Hypotheses	Long Run Result	Short run Result	Remark
Ho_1	Cash conversion cycle has no significant effect on financial assets growth rate of listed transportation companies in Nigeria	- P = 0.0599	+ P = 0.2908	Insignificant for both long and short run
Ho_2	Creditors payment period has no significant effect on financial assets growth rate of listed transportation companies in Nigeria	+ P = 0.0000	- P = 0.3256	Significant for long run Insignificant for short run
Ho_3	Cash and cash equivalent has no significant effect on financial assets growth rate of listed transportation companies in Nigeria	+ P = 0.2294	- P = 0.3259	Insignificant for both long run and short run

Source: Compiled by Researcher (2026)

CONCLUSIONS

This study investigated the effect of cash management practices on financial sustainability of listed transportation companies in Nigeria from 2015 to 2024. Based on the data analysis, and discussion of findings, and summary of findings; the following conclusions are drawn: The study generally concluded that there is significant effect of cash management practices on financial sustainability of listed transportation companies in Nigeria from 2015 to 2024 in the long run while there is an insignificant effect of cash management practices on financial sustainability of listed transportation companies in Nigeria from 2015 to 2024 in the short run. Other inclusions are;

1. The study concludes that cash conversion cycle has significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run but in term of short run cash conversion cycle has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.
2. The study concludes that creditor payment period has significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run but in term of short run creditor payment period has no significant effect on financial assets growth rate of listed transportation companies in Nigeria.
3. The study concludes that cash and cash equivalent has no significant effect on financial assets growth rate of listed transportation companies in Nigeria in the long run and short run.

RECOMMENDATIONS

In line with the objectives of this study, findings and conclusions which facilitate for the following recommendations:

1. Management of listed transportation companies should optimize their cash conversion cycle to improve long-term equity growth.
2. Companies should strategically manage creditors' payment periods to leverage supplier financing without damaging relationships.
3. Excess cash holdings should be minimized and redirected into profitable investment opportunities to enhance equity returns.

Contribution to Knowledge

1. Theoretical Contribution

This study advances corporate finance and working capital management theory by providing empirical evidence on the differential long-run and short-run effects of cash management practices on firm growth within Nigeria's transportation sector. Specifically, the findings demonstrate that cash conversion cycle, creditors' payment period, and cash & cash equivalents significantly influence financial equity growth in the long run but not in the short run, thereby extending the dynamic working capital theory which argues that cash management impacts firm value over time rather than immediately.

2. Policy Maker Contribution

The findings provide valuable insights for regulatory authorities such as the Securities and Exchange Commission (SEC), Nigerian Exchange Group (NGX), and transportation sector regulators. Evidence that cash management variables significantly affect financial equity and asset growth only in the long run implies that policy frameworks should encourage long-term financial planning and sustainable liquidity management, rather than short-term performance pressures.

3. Sustainable Development Goals (SDGs)

SDG 8: Decent Work and Economic Growth

This study contributes significantly to SDG 8 by providing empirical evidence on how effective cash management practices influence the financial growth of listed transportation companies in Nigeria. The finding that creditors' payment period has a positive and significant long-run effect on both financial equity growth rate and financial assets growth rate suggests that efficient management of trade credit can improve corporate liquidity, operational sustainability, and long-term business growth. This supports sustainable economic growth, organizational productivity, and employment generation within the transportation sector.

SDG 9: Industry, Innovation and Infrastructure

The transportation sector is a critical component of industrialization and infrastructural development. By examining the effect of cash management practices on the financial performance of transportation companies, this study contributes directly to SDG 9. The findings imply that efficient cash management enhances the financial stability of transportation firms, thereby enabling them to invest in infrastructure expansion, operational innovation, and improved service delivery.

SDG 11: Sustainable Cities and Communities

Efficient transportation systems are essential for sustainable urban and community development. This study contributes to SDG 11 by demonstrating that sound cash management practices can strengthen the financial sustainability of transportation companies, thereby improving transportation services, mobility, and accessibility within cities and communities.

The study highlights that transportation companies with effective liquidity management are better positioned to maintain operations, expand service coverage, and contribute to safer and more sustainable urban transportation systems.

REFERENCES

Abdullahi, A., Garba, A. & Abubakar, A. (2020). Working capital management and financial performance of listed oil and gas firms in Nigeria. *Journal of Management Sciences, 1*(1), 444-460.

Ahmed, M. D. & Kabiru, J. (2022). Cash conversion cycle and profitability of listed consumer goods companies in Nigeria. *International Journal of Intellectual Discourse (IJID, 5*(1), 89-103.

Akpokerere, O. E. & Aninoritse, L. E. (2024). Cash management and its effect on financial performance of deposit money banks in Nigeria. Journal of Accounting and Financial Management, 10(5), 1-16.

Ambe, A. N. (2022). Cash conversion cycle and performance of cash conversion cycle and performance of listed healthcare companies listed healthcare companies on the Nigerian Stock Exchange. *International Journal of Management Studies, Business & Entrepreneurship Research, 7*(3), 1-24.

Arojo, A. C.Cabug-OS, L. C., Cumba, R. L. Eligen, H. S.& Genesis, B. N. (2024). A correlational study on the cash flow management utilization and financial performance of specialty beverage businesses. *International Journal of Research Publication and Reviews, 5*(2), 2382-2390.

Asamu, J. K., Abiodun , S. W. & Mohammed Akande, A. M. (2019). Cash management on financial performance of listed manufacturing companies in Nigeria. *Journal of Management, Applied Sciences and Technology (JOMAT), 1*(1), 183-189.

Attayi, I. F., Emmanuel, I. E., & Oluwayemisi, L. (2022). Cash management strategies and SMES sustainable growth in Nigeria. *Fuw-International Journal of Management and Social Sciences, 7*(2), 200- 214.

Ayimaje, S., Inyada, S. J., & Iyodo, B. (2026). Effect of cash management techniques on performance of small and medium enterprises (SMES) in Nigeria. *Journal of Accounting and Financial Management, 12*(1), 139- 159.

Chibuike C. U. &Anayo, E. C. (2022). Effect of cashflow management on financial performance: Evidence from the Pharmaceutical industry in Nigeria. *African Journal of Accounting and Financial Research, 5*(1), 1-13.

Chibuike C. U. &Anayo, E. C. (2022). Effect of cashflow management on financial performance: Evidence from the Pharmaceutical industry in Nigeria. *African Journal of Accounting and Financial Research, 5*(1), 1-13.

Debie, R. (2022). Cash management and financial performance of listed manufacturing firms in Nigeria. *Accounting and Taxation Review, 6*(2): 12-23.

Dhruba, L. P. (2019). Impact of cash management on profitability in small manufacturing organization. *Silver Jubilee Issue Pravaha, 25*(1), 53-58.

Dodi, T. A., & Rudi, S. A. (2025). Analysis of the influence of cash management on liquidity in the f&b sector of Msmes in Bandung city. *International Scientific Journals of Social, Education, Humanities, 4*(1), 165-171.

Etim. O. E., Emmanuel, E., Daferighe, E. R. E. & Mary, B. N. (2022). Cash flow management and financial performance of selected listed companies in Nigeria. *Indo-Asian Journal of Finance and Accounting, 3*(1), 27-46.

Hido, D., & Koori, J., (2025). Cash management practices and financial performance of livestock marketing cooperative societies in Marsabit County, Kenya. *International Journal of International Journal of Business Management, Entrepreneurship and Innovation, 7*(1), 49-66.

Jonah, N. M., Aaron, C. C. & Jack, O., T. (2023). Cash management practices and financial performance of listed brewery companies in Nigeria. *Nigerian Journal of Management Sciences, 24*(2), 73-80.

Kithinji, M. M., Wephukulu, J. M., Gekara, M., & Mwanzia, M. (2023). Cash management and financial performance of public universities in Kenya. *Reviewed Journal International of Business Management, 4*(1), 41–59.

Laghari, F., Ahmed, F., & Lopez, G. M. (2023). Cash flow management and its effect on firm performance: Empirical evidence on nonfinancial firms of China. *PLoS ONE 18*(6), 1-26.

Laghari, F., Ahmed, F., & Lopez, G. M. (2023). Cash flow management and its effect on firm performance: Empirical evidence on nonfinancial firms of China. *PLoS ONE 18*(6), 1-26.

Major, H. I. & Major, N. C. (2020). *Essentials of business finance*. Akanso Authentic Tech. (AKATECH)

Major, I. H. & Azali, S. (2022). Cash management practices and financial performance of listed deposit money banks in Nigeria. *Management, Marketing and Accounting Research Journal, 9*(2), 1-19.

Mandipa, G. & Sibindi, A . B. (2022). Financial performance and working capital management practices in the retail sector: Empirical evidence from South Africa. *Risk, 10*(63), 1-17.

Mathiesen, T. (2012). The *defences of the weak (Routledge Revivals): A sociological study of a Norwegian Correctional Institution*. Routledge.

Micheal A. A., Segun, A. & Taiwo, H. O. (2017). Impact of working capital management on financial performance of quoted consumer goods manufacturing firms in Nigeria, *Covenant Journal of Business & Social Sciences, 8*(2), 1-22.

Mirza, F. A. (2026). Cash flow management and financial performance: Evidence from an emerging economy. *New Applied Studies in Management, Economics & Accounting, 9*(2), 125- 140

Mmaduka, R. U. Francis, N. U., Nestor, N. A. & Obi, J. C. (2022). Effect of cash conversion cycle on capital structure of quoted manufacturing firms in Nigeria. *International Journal of Management Studies and Social Science Research, 2*(3), 30-43

Moneke, G. N. & Ezeagba, C.E. (2024). Cash management and financial performance of industrial goods firms in Nigeria, *Journal of Global Accounting, 10*(2), 238 - 257.

Nieves, S., Crillanes, S. G., Cullat, L., Belgado, G., Templado, A., & Benegas, M. (2025). Impact of cash flow management on the financial performance of micro and small pharmaceutical businesses in Naga City. *GPH-International Journal of Business Management, 8*(01), 167-196

Obalemo, A. O., Opusunju, M. I., & Jiya, N. S., (2020). Effect of cash conversion cycle (CCC) period on the profitability of selected food and beverage companies in Nigeria. *International Journal of Management Studies and Social Science Research, 1*(1), 108-116.

Odo, J. O., & Udodi, J. N. (2022). Influence of cash management on financial performance of selected manufacturing companies in Nigeria. *Contemporary Journal of Banking and Finance, 3*(6), 26-41

Omotunwase, O. M. (2024). Effect of cash management on financial performance of listed deposit money banks in Nigeria. *Malete Journal of Accounting and Finance, 5*(1), 77-90.

Onyango, F. (2018). Effects of cash management practices on financial performance of small-scale businesses. a case study of Kampala central division. *Journal of Finance and Accounting, 5*(3), 61-78.

Oranefo, P. C. & Bennee, E. (2023). Cash management: an empirical study on financial performance of selected banks in Nigeria. *Advance Journal of Management, Accounting and Finance, 8*(04), 118- 127.

Oranefo, P. C. & Bennee, E. (2023). Cash management: an empirical study on financial performance of selected banks in Nigeria. *Advance Journal of Management, Accounting and Finance, 8*(04), 118- 127.

Peter, I. A., Njoku, N. O., Ugoani, N. N. J., Nwaorgu, O. C. & Ukeje, S. O. (2020). Cash management and bank's financial performance: Evidence from selected deposit money banks in Nigeria. *AFRE Accounting and Financial Review, 3*(2), 180-189

Rejaul, K., Abdullah, A. M., & Abu, S. (2023). Cash conversion cycle and financial performance: Evidence from manufacturing firms of Bangladesh. *Asian Journal of Economics and Banking Emerald Publishing Limited, 3*(4), 10-15.

Shubhangi, G. H., & Atul, T., (2025). Enrichment of honey with flavour of ginger. *Journal of Neonatal Surgery, 14*(23s), 273-279.

Srivalli P D. (2024). A study on cash flow statement analysis. *International Journal of Progressive Research in Engineering Management and Science (IJPREMS), 4*(7), 194-198.

Timothy, A. O., Abdullahi, S. R., & Olanisebe, M. B. (2023). Impact of cash management on firm profitability of listed consumer goods in Nigeria. *Fuoye Journal of Accounting and Management 6*(1), 13-29.

Urhoghide, O. R., & Korolo, S. A. (2022). Working capital management and corporate performance of quoted Nigerian companies. *Jetmase, 4*(1), 48-54.

Wanjuki, E.N, Githui, T. & Omurwa, J. (2021), Relationship between cash management and financial performance of private hospitals in Nairobi County, Kenya, *Journal of Finance and Accounting. 5*(2), 128-146.