



FINANCING CASH FLOW MANAGEMENT AND FIRM PERFORMANCE: EVIDENCE FROM NIGERIAN LISTED COMPANIES

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Abstract

This research investigated how financing cash flow management strategies impact the financial performance of listed Nigerian companies, specifically focusing on the roles of external financing, financial policies, and cash sources on key indicators such as Return on Assets (ROA), Return on Equity (ROE), Expense Ratio (ER), and Total Asset Turnover Ratio (TAR). Using a longitudinal research design, data was collected from the financial statements of 50 listed Nigerian firms (25 manufacturing and 25 service companies) over a ten-year period (2012-2021), selected through stratified random sampling. The analysis revealed significant relationships between financing cash flow management and firm performance: a lower reliance on cash from financing activities (lower cash source component percentage ratio) correlated with higher ROA and ROE, while a higher external financing index ratio (indicating greater reliance on internal funds) positively influenced ROA, ROE, and TAR. These findings underscore the importance of a balanced approach to internal and external funding for effective financing cash flow management and improved corporate performance in Nigeria, offering valuable insights for managers, investors, and policymakers within the Nigerian stock market.

Keywords: Performance, Financing Cash Flow Management, Cash Sources Component Percentage Ratio, investment policy ratio.

1. Introduction

Effectiveness is essential for business survival and a key global objective (Asubiojo et al., 2023). Performance is widely understood to involve improving the achievement of financial and non-financial indicators which provides organizations with a competitive advantage, helping them to thrive amid competition and economic challenges (Dagunduro et al., 2024). In simple terms, enhancing factors like market share, profitability, efficiency, turnover, and customer satisfaction often represents a firm's success (Lawal et al., 2024). This, in turn, can increase stakeholder attraction and satisfaction, motivating their continued support and ultimately boosting the firm's performance (Dada et al., 2023). Companies strive to achieve higher performance levels and recognize the importance of consistency in their operations (Awotomilusi et al., 2023). It's worth noting that most stakeholders contribute to a firm's performance primarily through their financial investments (Oluwagbade et al., 2023).



Since cash determines a firm's solvency and survival areas of primary concern for most stakeholders, the importance of effective cash flow management cannot be overstated. According to Akinadewo et al. (2023), proper cash management is crucial as it ensures a positive cash flow, enabling smooth business operations. Cash, being the most liquid asset, is essential for sustaining daily activities, making cash management fundamental to financial management. The selection of funding sources for business operations depends on the firm's ability to manage its cash flow efficiently (Aluko et al., 2022). For financial prosperity, sound cash management is vital, encompassing the control of liquid assets, the efficient use of capital, and the reduction of risks associated with cash flow (Aluko et al., 2022).

Particularly in emerging economies like Nigeria, where firms often face resource scarcity and economic instability (Adeoye & Elegbede, 2021), effective cash flow management is a critical factor in corporate performance. Financing cash flow, representing a company's capability to generate or deploy funds through debt, equity, and dividends, is a key aspect of this (Owoeye et al., 2024). Strategic management of financing cash flows is essential for operational sustainability, liquidity management, and enhanced overall performance (Nimer&Munther, 2017). The Nigerian business context, characterized by economic volatility, limited capital access, and diverse regulations, presents specific challenges for managing financing cash flows (Akinadewo et al., 2023). Recent oil price volatility and foreign exchange risks, which have significantly influenced Nigerian firms' capital structure and financial decisions (Abugheniem et al., 2020), It is crucial to examine how financing cash flow management influences key firm performance metrics, including return on equity (ROE), return on assets (ROA), the turnover-to-asset ratio (TAR), and the efficiency ratio (ER, which is the inverse of the operating expenses-income ratio).

While prior research has examined different facets of cash flow management, such as the link between its components and profitability in developing economies (Nwaorgu&Iormbagah, 2017) and the difficulties of managing financing cash flow amid high interest rates and inflation (Akwor& Beatrice, 2021), there is a notable lack of studies specifically investigating the immediate impact of financing cash flows on companies performance within the Nigerian context. This gap is particularly important considering the role of financial decisions in achieving corporate sustainability and competitiveness. Moreover, with increasing globalization influencing financial markets, Nigerian firms face growing exposure to international capital flows and investment possibilities. This evolving landscape underscores the need for a more profound understanding of how managing financing cash flow can optimize firm performance in response to changing market dynamics. Although recent advancements in financial analytics and technology offer potential for enhancing financing cash flow strategies, their implementation remains limited in many Nigerian companies (Okonkwo et al., 2022).

Therefore, The research explored the influence of financing cash flow management on the performance of Nigerian companies listed on the stock exchange. By analysing the relationships between financing cash flows and key performance indicators, this research aims to provide insights that can inform corporate finance strategies and enhance decision-making. The findings are anticipated to contribute to the broader academic insights into cash flow management and offer practical recommendations to firms aiming to strengthen their financial sustainability. Through this analysis, we aim to expand what is currently known regarding financial



management practices within emerging markets and offer actionable advice for enhancing cash flow management to improve firm performance.

2. Literature Review

The current section encompassed a conceptual overview, the study's theoretical underpinnings, a survey of existing empirical literature, and the proposed conceptual framework.

2.1 Conceptual Review

This section provides clear definitions of the study's key variables for reader clarity.

2.1.1 Performance

Asubiojo et al. (2023) define performance as the capacity to achieve specific goals, objectives, or standards over time, typically evaluated through metrics like financial outcomes, operational efficiency, effectiveness, and strategic goal attainment. In business, performance often assesses a company's success in meeting financial targets, customer satisfaction, market position, and organizational objectives (Dagunduro et al., 2023). Measured both quantitatively and qualitatively, it reflects an entity's overall success and productivity. Financially, performance refers to a firm's profitability, revenue generation, cost management, and financial health, often assessed using ratios like ROA, ROE, and profit margins (Kolawole et al., 2023), indicating its ability to create stakeholder value and maintain financial stability (Raji&Dagunduro, 2024).

Organizational performance reflects an organization's efficiency and effectiveness in reaching its strategic objectives, encompassing financial outcomes, customer satisfaction, employee engagement, innovation, and regulatory compliance. Strong organizational performance signals a company's potential for long-term growth and sustainability (Dada et al., 2023). Operational performance focuses on the internal processes driving a firm's efficiency, such as resource optimization, production efficiency, quality control, and supply chain management, aiming to deliver customer-satisfying products and services while minimizing costs and time (Slack et al., 2010). Market performance describes a company's market position and competitiveness, often measured by market share, sales growth, and brand equity, indicating its success in capturing and retaining customers and differentiating itself from competitors (Dagunduro et al., 2024).

From a management viewpoint, performance is the contribution of individual employees to the organization's overall success, including their ability to meet or exceed job expectations in areas like productivity, skills, teamwork, and innovation. High employee performance is a critical driver of organizational success, leading to operational efficiency and customer satisfaction (Awodiran et al., 2024). From a sustainability standpoint, performance assesses an organization's capacity to operate profitably while being environmentally and socially responsible. This includes considering energy consumption, waste reduction, corporate social responsibility (CSR), and the long-term environmental and societal effects of its operations. A firm with strong sustainability performance not only aims for financial success but also contributes to global environmental goals (Dagunduro et al., 2022). From a strategic point of view, performance refers to the effectiveness with which an organization executes its long-term strategy. It involves aligning the organization's resources, capabilities, and efforts with its strategic goals, ensuring that the firm remains competitive and achieves its vision. Strategic performance metrics may include successful market expansion, innovation, competitive positioning, and overall growth



in alignment with strategic objectives (Raji&Dagunduro, 2024). Each of these definitions offers a different dimension of performance, from the financial to the strategic, underscoring the multifaceted nature of evaluating success in organizations.

2.1.2 Financing Cash Flow Management

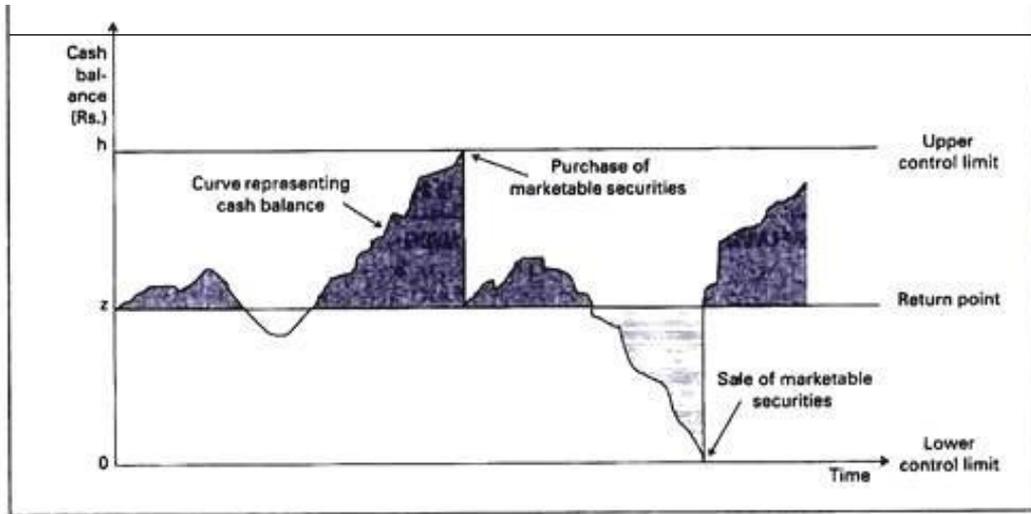
The term financing cash flow management underscores the ability to manage net cash generated or utilized by a firm from activities related to obtaining or repaying capital, including issuing equity, borrowing, or repaying debt, and paying dividends. Brigham & Houston (2019) highlight that this reflects a firm's financial strategy and its ability to manage external funding for operations. Financing cash flow, the component tracking fund inflows and outflows from capital structure changes, includes transactions with owners and creditors, revealing a firm's leverage and financial sustainability (Gitman&Zutter, 2021). This cash flow represents movements tied to financing activities like equity or debt issuance and fulfilling obligations such as interest and dividends, serving as a key indicator of a firm's liquidity and long-term financial health (Ross et al., 2022).

Financing cash flow documents how a company funds its investments and operations through debt, equity, or other financing (Pandey, 2020), serving as a strategic approach to financial management that influences growth and stakeholder confidence. Defined as the net cash effect of financing decisions, including capital raising and obligation fulfillment, it reflects investment and debt policies' impact on financial flexibility and cost of capital (Megginson& Smart, 2021). This cash flow captures monetary exchanges between a firm and its investors or creditors, such as dividend payouts, share buybacks, new equity issuance, and debt repayment. It indicates how effectively a firm engages with its financial stakeholders to optimize performance and value creation (Brealey et al., 2020).

2.2 Theoretical Framework

This research is based on the Miller-Orr Cash Management Theory, which Miller and Orr developed in 1966. This theory explains how to manage cash when financial flows are unpredictable. It states that daily cash coming in and going out changes randomly (Soet, 2020). The theory suggests that overall cash flow doesn't change much on average and isn't very volatile, and that a company's cash balance tends to follow a normal pattern (Premachandra, 2004). Because it's hard to predict exactly when cash will move, the theory also says that these movements appear to be random and without a clear direction. Orr (1966) proposed a model with upper and lower bounds for cash balances, within which cash management should operate to handle fluctuations. The theory sets these limits to control deviations from the quantum of the cash balance and a description of the movement of cash within these defined thresholds. It means that people tend to buy or sell profitable securities when their cash balance reaches either the upper or lower limit. According to the model (Michalski, 2016), when an organization's cash balance reaches the upper limit, it should purchase and employ marketable securities to realign the balance with the desired level. Conversely, when the level of cash balance falls to the lower bound (Soet, 2020), the firm should sell marketable securities to return to its desired or optimal cash balance. The model visually presents these upper and lower limits, incorporating the target cash balance, as detailed below:

Figure 1: Miller-Orr Cash Management Theory Source: Miller and Orr (1966)



Source: Miller and Orr (1966)

The Miller-Orr model is generally applied across firms, demanding that managers set cash holding targets (Agwu&Igwe, 2021), analyze interest rates and cash flow variability, and predict security trading prices (Chukwumike et al., 2018). A key limitation is its reduced effectiveness with non-stationary cash flows and low transaction costs, potentially favouring larger organizations with greater cash volume. The Miller-Orr theory is relevant because it directly addresses the independent variables of this study: investing and financing cash flow. It explains that firms strategically use surplus cash to invest in shares and bonds to maintain optimal cash levels and sell these assets to cover cash shortfalls. Fundamentally, the theory highlights the necessity of managing cash flow within defined limits to ensure effective and efficient firm operations.

2.3 Financing Cash Flow Management and Performance of Quoted Firms

Qandhari et al. (2016) examined the link between cash flow and capital expenditure within Pakistan's sugar industry. They analyzed data from 2000 to 2011 using ordinary least squares regression. Their findings showed a significant positive link, leading to the conclusion that free cash flow funds capital expenditure. The study recommended government support for research and development in education to better leverage free cash flow for industry growth via the deployment of capital investments.

Amah et al. (2016) investigated how cash flow ratios relate to the financial performance of banks listed in emerging economies. Specifically Nigerian money deposit banks. Utilizing data from 2005 to 2013 and employing correlation analysis, they modelled profit after tax as the outcome variable, with operating, investing, and financing cash flows as its determinants. Findings showed a negative correlation between investing and financing cash flows and profit after tax, and a positive correlation was observed for operating cash flow. This led to their recommendation that regulatory authorities ensure external auditors utilize cash flow ratio analysis in their report preparation process.



Ubesie (2016) employed regression analysis to study the impact of financing cash flow (the explanatory variable) on the return on assets (the dependent variable) pertaining to six food and beverage firms during the period of 2007 to 2011. The study found a significant effect of financing cash flow on ROA. Therefore, the study recommended that accounting and financial regulators urge external auditors to incorporate cash flow ratios when evaluating firm performance before finalizing audit reports. Supporting this line of inquiry, Nimer and Munther (2017) analysed 23 Jordanian insurance companies over five years using longitudinal data and multiple regression. Their results indicated that return on assets was negatively related to net financing cash flow leading them to conclude that mismanagement of financing cash flows could negatively impact a firm's performance.

Momanyi et al. (2017) investigated the impact of cash flows on the financial performance of Nairobi Securities Exchange-listed companies. Their regression analysis of fifty companies' financial data (2010-2014) revealed that financing and investing cash flows significantly affected return on equity, with financing cash flow highlighted among the cash flow categories (explanatory variables) predicting return on equity (dependent variable). The authors concluded that cash flow significantly influences these firms' financial performance. In a separate study, Ogbeide et al. (2017) explored the relationship between cash flow and financial performance in listed insurance companies. They modelled financing cash flow and firm size as predictors of return on equity, using panel generalized least squares analysis on data from twenty-seven firms between 2009 and 2014. The findings indicated a positive effect of operating, financing, and investing cash flows on financial performance, with investing and operating cash flows having a significant influence. Consequently, the authors suggested that insurance firms should carefully manage cash outflows to mitigate potential negative impacts on their financial performance.

Nwaiwu and Oluka's (2017) studied the link between cash flow accounting, with a focus on financing and investing flows, and the financial performance of quoted Nigerian firms. Utilizing multiple regression analysis on a dataset of twenty-four companies (covering the period 2004-2008), they observed a positive yet delayed effect of cash flow accounting on firm performance in Nigeria, resulting in a suggestion for a broader reassessment of this effect.

Imhanzenobe and Adeyemi's (2020) study assessed the impact of financial decisions (debt-equity ratio, dividend pay-out, asset turnover, and free cash flow yield) on sustainable cash flow within seventeen Nigerian manufacturing firms from 2008 to 2016. The application of fully modified ordinary least squares analysis indicated a significant positive effect of asset turnover on free cash flow yield, and significant negative effects from dividend pay-out and debt-equity ratio. Consequently, the researchers confirmed the significant role of financial decisions in cash flow sustainability and suggested that managers should develop investment policies to improve the firm's net cash flow.

Nangih et al.'s (2020) assessed the link between cash flow management (especially financing cash flow) and the profit margin of Nigerian oil and gas firms. The analysis of financial statements from five companies (2013-2018) using correlation and panel multiple regression showed a positive and significant impact of financing cash flow on profit margin, resulting in a recommendation for these firms to re-examine their cash flow management systems to secure profitability.



Soet (2020) employed Granger causality tests and panel regression analysis to determine the impact of operating, investing, and financing cash flows on the financial performance of twenty-two mutual funds between 2011 and 2016. The analysis revealed a significant positive relationship between operating cash flow and return on assets, but a non-significant positive effect on return on equity. Investing cash flow significantly and positively influenced both return on assets and return on equity, while financing cash flow had a significant negative influence on both. These findings led to a recommendation for managers to develop cash income policies.

3. Research Methods

Employing a longitudinal research design, this study analysed data from multiple time periods for various firms to assess cross-sectional units. The population comprised all 177 companies listed on the Nigeria Exchange Group as of December 31, 2021, spanning both production and service sectors, including consumer and industrial goods manufacturers. A two-stage sampling process was used. First, stratified sampling categorized firms into production and service sectors based on Nigeria Exchange Group classifications. Second, 25 firms were randomly selected from each stratum, resulting in a total sample of 50 quoted companies.

3.1 Model Specifications

The model for this study is an adaptation of Ogbeide&Akanji's (2017) model (Equation 3.1: $R_{oe\ it} = \delta_0 + \delta_1 Cshfop\ it + \delta_2 Cshffin\ it + \delta_3 Cshfin\ it + \delta_4 Fsize\ it + \mu_1$). This study updated equation 3.1 by replacing the combined cash flow variables with cash flow management ratios, following the approach used by Rujoub et al. (1995) and Giacomino&Mielke (1988). Here, operating cash flow management is measured using three ratios: the operating cash index ratio (OCIDR), operating cash inflow ratio (OCIFR), and operating cash outflow ratio (OCOFR). Likewise, financial cash flow management is represented by three ratios: the external financing index ratio (EFIR), financial policies ratio (FPR), and cash source component percentage ratio (CSCPR).

Investing cash flow management is measured using three ratios: the investment policy ratio (IPR), the reinvestment ratio (RIR), and the discretionary cash index ratio (DCIR). Additionally, leverage ratio (DER) and firm size (FZ) are included as control variables in the respective models. Consequently, the model for Financing Cash Flow Management and performance of quoted firms is specified as: $Y\ it = \delta_0 + \delta_1 EFIR\ it + \delta_2 FPR\ it + \delta_3 CSCPR\ it + \delta_4 FZ\ it + \delta_5 DER\ it + \mu_2$ (3.2). Here, Y represents performance measures: return on asset (ROA), return on equity (ROE), reciprocal of operating expenses-income ratio (OPEIR) as Efficiency Ratio (ER), and Turnover Asset ratio (TAR).

EFIR=External Financing Index Ratio

FPR= Financing Policies Ratio

CSCPR= Cash Sources Component Percentage Ratio

FZ= Firm's Size

DER= Debt-equity ratio

μ_1, μ_2 =Stochastic error terms of the model $\delta_0, \delta_1, \delta_2, \delta_3, \delta_4$ are parameter estimates



3.2 Source of Data and Measurement of Variables

The study collected secondary data by reviewing the financial statements and annual reports of 50 Nigerian companies listed on the stock exchange. These companies were chosen randomly and represent both manufacturing and service industries. The data spans a decade, specifically from 2012 to 2021.

3.3 Methods of Data Analysis

To meet the study’s goals and answer the research questions, both descriptive and inferential statistics were used. The descriptive analysis involved calculating averages, standard deviations, minimums, and maximums. For the inferential part, the study started with correlation analysis, then applied panel data techniques including pooled OLS, fixed effects, and random effects models. After estimating each model, several tests were performed to check their validity, such as the restricted F-test, Hausman test, Wald heterogeneity test, Wooldridge autocorrelation test, Pesaran cross-sectional dependence test, Hansen test, and Sargan test.

3.4 A-Priori Expectation

Dependent Variable	Independent Variables	Proxies for Explanatory Variables	A-priori Expectation
Performance proxied by return on assets (ROA), return on equity (ROE), efficiency ratio (ER) and turnover asset ratio (TAR)	Financing Cash Flow Management	Operating Cash Flow Index ratio (OCIDR)	Positive
		External Financing Index Ratio (EFIR)	Negative
		Financing Policies Ratio (FPR)	Negative
		Cash Sources components percentage ratio (CSCPR)	Positive

Source: Author’s computation(2025)

4. Results and Discussion

This chapter presents the results of the analysis carried out in the study to explore the relationship between cash management and the performance of listed companies in Nigeria. It includes descriptive statistics, correlation analysis, and panel regression analysis linked to each research question, followed by an interpretation and discussion of the findings:



4.1 Descriptive Analysis

Table 4.1: *Descriptive Statistics*

Variables	Obs	Mean	Std. Dev	Min	Max
ROA	500	4.55633	10.3483	-44.94482	77.88211
ROE	500	11.82994	18.72224	-68.52457	94.88229
ER	500	.0198163	.0341812	.0010609	.5972131
TAR	500	65.63797	44.45612	0	179.6759
EFIR	500	34.36007	32.97936	0	126.4555
FPR	500	8.847089	14.29437	0	97.22304
CSCPR	500	20.15926	28.04348	0	204.971
FZ	500	10.33317	2.539228	5.428275	15.416
DER	500	36.74682	35.10196	0	155.8764

Source: Authors' Computation (2025)

Note:ROA=Return on Asset (% of total asset), ROE=Return on Equity (% of total equity), ER=Efficiency ratio (ratio (reciprocal of OPEIR)), TAR= Turnover asset ratio (% of total asset), EFIR= External Financing Index Ratio (% of total debt), FPR= Financing Policies Ratio (% of total asset), CSCPR= Cash Sources Component Percentage Ratio (% of total cash sources), IPR= Investment Policy Ratio (% of total asset), FZ= Firm's Size (natural log), DER= Debt-Equity Ratio (% of equity),

Table 4.1 presents the descriptive statistics for the study's variables. The average return on asset was 4.55% (SD = 10.34%, Min = -44.94%, Max = 77.88%), return on equity averaged 11.82% (SD = 18.72%, Min = -68.52%, Max = 94.88%), the efficiency ratio averaged 0.019 (SD = 0.034, Min = 0.001, Max = 0.597), and turnover asset ratio averaged 65.63% (SD = 44.45%, Min = 0%, Max = 179.67%). The standard deviations indicate a wide spread from the mean for all performance variables except turnover asset ratio. Regarding the explanatory variables, the average external financing index ratio was 74.44% of net income (SD = 36.19% of total net asset), financing policies ratio averaged 71.21% of total cash sources (SD = 27.78% of total cash source), cash sources components percentage ratio averaged 45.6% of total cash sources (SD = 30.85% of total cash source), firm's size averaged 10.33 (SD = 2.53), and debt-equity ratio averaged 36.74% of equity (SD = 35.10% of equity). These standard deviations suggest that external financing index ratio, firm's size, and debt-equity ratio are more clustered around their means compared to financing policies ratio and cash sources components percentage ratio.

4.2 Correlation Analysis



Table 4.2: *Correlation Matrix*

	<i>ROA</i>	<i>ROE</i>	<i>ER</i>	<i>TAR</i>	<i>EFIR</i>	<i>FPR</i>	<i>CSCPR</i>	<i>FZ</i>	<i>DER</i>
<i>ROA</i>	1								
<i>ROE</i>	0.4660	1							
<i>ER</i>	0.1032	0.0678	1						
<i>TAR</i>	0.1874	0.2175	-0.1104	1					
<i>EFIR</i>	0.0261	0.1935	0.0048	-0.1120	1				
<i>FPR</i>	0.1253	-0.0046	0.0760	0.0584	-0.0185	1			
<i>CSCPR</i>	0.0311	-0.0653	-0.0216	0.0540	-0.0596	0.6980	1		
<i>FZ</i>	0.0693	0.1365	0.1787	-0.5099	0.3541	0.1040	0.0878	1	
<i>DER</i>	-0.0578	0.0482	-0.0263	-0.1107	0.2954	0.2326	0.2077	0.1955	1

Source: *Authors' Computation, (2025)*

Table 4.2 presents the correlation coefficients among the different variables examined in this research. Notably, return on assets showed an inverse relationship with the debt-equity ratio. This chapter shares the findings from the study's analysis of how cash management affects the performance of listed companies in Nigeria. It covers descriptive statistics, correlation analysis, and panel regression results for each research question, along with a clear interpretation and discussion of what the results mean. The efficiency ratio was negatively correlated with cash sources component percentage ratio and debt-equity ratio, but positively correlated with external financing index ratio, financing policies ratio, and firm size. Turnover asset ratio showed negative correlations with external financing index ratio, firm size, and debt-equity ratio, but positive correlations with financing policies ratio and cash sources component percentage ratio. Notably, the correlations among the explanatory variables were generally weak, suggesting a low likelihood of multicollinearity in the study's model.



4.3 Analysis of the Effect of Financing Cash Flow Management on Performance of Quoted Firms in Nigeria

4.3.1: Effect of Financing Cash Flow Management on Return on Asset of Quoted Firms in Nigeria

Table 4.3: Panel Estimation Result (Model 1)

Coefficient	Pooled	Std.Error	T. Statistics	Prob.	Fixed	Std.Error	T.Statistics	Prob.	Random	Std.Error	Prob.	
C		.2306	4.69	0.000	3.242	0.00	0.00	0.000	1.752*	.463	3.78	0.000
	1.0819											
lnEFIR		.0397	2.19	0.029	.0782	.040	1.94	0.053	.0780*	.038		0.044
	.08688										2.09	
lnFPR	.1927	.0716	2.69	0.007	-.0960	.064	1.50	0.134	.1219**	.062	1.96	0.050
lnCSCPR	-	.0614	-2.39	0.017	-.088	.055	-1.58	0.116	-.11042*	.054	-	0.042
	.14694										2.04	
		.0234	0.46	0.644	-.1940	.067	-2.89	0.004	-.0774	.044	-	0.080
FZ	.01084										1.75	
	-	.0377	-3.86	0.000	.0022	.046	0.05	0.961	-.0326	.042	-	0.442
lnDER	.14566										0.77	
	R-square= 0.5416						R-square= 0.6054				R-square= 0.5874	
	Adj R-square= 0.5319						Adj R-square= 0.5575				Wald chi2(5)= 11.69	
	F-statistics= 4.29						F-statistics= 12.64				Prob> chi2 = 0.0392	
	Prob(F-stat)= 0.0008						Prob(F-stat)= 0.0000					
	Restricted F-test= 12.98 (p < 0.05)											

Hauman Test = 9.11 (P= 0.1048 > 0.05)

Wald test= 1.1737 (*p*=0.5489); *Pesaran test*= 0.473 (*p*= 0.7835); *Wooldridge test*= 1.7270 (*p*= 0.4552)

NOTE: * & ** connote significance at 5% and 10% level of significance respectively.

Source: Author's Computation (2023)

Table 4.3 details the regression analysis for the second objective, presenting results from pooled OLS, fixed effects, and random effects models, alongside the restricted F-test and Hausman test outcomes. The significant F-statistic reported in Table 4.3 signals considerable differences across the companies, suggesting that the pooled OLS findings are not dependable and supporting the use of the fixed effects model. However, since the Hausman chi-square test was not statistically significant, it suggests there's no meaningful difference between the fixed and random effects models. This means the random effects model is the more reliable and efficient choice for estimation. The random effects estimation in Table 4.3 reveals that the external financing index ratio (coefficient = 0.078008, $p = 0.044 < 0.05$) and the financing policies ratio (coefficient = 0.121943, $p = 0.050$) both have a positive and significant impact on return on asset. More precisely, a 1% rise in these ratios corresponds to an approximate increase of 0.07% and 0.12% in return on asset, respectively. In contrast, the cash source component percentage ratio exhibits a negative and significant effect on return on asset (coefficient = -0.1104202, $p = 0.042 < 0.05$), meaning that a 1% decrease in this ratio leads to about a 0.11% increase in return on asset. The R-squared value suggests that roughly 58.74% of the changes in return on asset are accounted for by the independent and control variables, after considering the unique characteristics of each firm within the error term.

4.3.2: Effect of Financing Cash Flow Management on Return on Equity of Quoted Firms in Nigeria.



Table 4.3.2: Panel Estimation Result (Model 2)

Coefficient	Pooled	Prob	Std. Error	T.Statistics	Fixed	Std.Error	T.Statistics	Prob.	Rand om	Std.Error	T.Statistics	Prob.
C	.5561	0.023	.244	2.28	1.778	0.00	0.00	0.057	.715	.462	1.55	0.122
lnEFIR	.1478	0.000	.042	3.51		.050	2.2	0.024	.121*	.046	2.62	0.009
					.1151							
lnFPR	.1498	0.049	.075	1.97		.080	1.3	0.165	.127**	.075	1.68	0.093
					.1118							
lnCSCPR	-.1622	0.013	.065	-2.4	-	.070	-1.8	0.070	-.144*	.065	-2.1	0.029
					.1277							
	.1122	0.000	.024	4.52		.084	0.2	0.837	.083	.044	1.86	0.063
FZ					.0174							
	-.0471	0.239	.040	-1.18		.058	1.4	0.159	.032	.049	0.65	0.514
lnDER					.0818							
	R-square= 0.5876				R-square= 0.7721				R-square= 0.6778			
	Adj R-square= 0.5784				Adj R-square= 0.7080				Wald chi2(5)= 21.29			
	F-statistics= 9.49				F-statistics= 7.37				Prob> chi2 = 0.0007			
	Prob(F-stat)= 0.0000				Prob(F-stat)= 0.0000							
	Restricted F-test= 6.61 (p < 0.05)											

Hauman Test = 3.34 (P= 0.6485 > 0.05)

Wald test=1.1570(p=0.4553);Pesaran test=0.786 (p= 0.4556);Wooldridge test= 1.8548 (p=0.4551)

NOTE: * & ** connote significance at 5% and 10% level of significance respectively

Source: Author's Computation (2025)

Table 4.3.2 presents the estimation results from pooled OLS, fixed effects, and random effects models for the second objective's second model, along with the restricted F-test and Hausman test outcomes. The significant F-statistic (reported in Table 8, though likely a typo and should refer to Table 4.3.2) indicated significant cross-sectional heterogeneity, thus favoring the fixed effects model over pooled OLS. However, the non-significant Hausman chi-square statistic suggested no significant difference between the fixed and random effects coefficients, making random effects the more consistent and efficient estimator. The random effects estimation in Table 4.3.2 revealed a positive significant effect of external financing index ratio on return on equity (coefficient = .1219537, $p = 0.009 < 0.05$), indicating a 0.12% increase in return on equity for every 1% increase in the ratio. Financing policies ratio showed a positive insignificant effect (coefficient = .17294, $p = 0.093 > 0.05$). Conversely, cash source component percentage ratio had a negative significant effect (coefficient = -.1441299, $p = 0.029 < 0.05$), implying a 0.14% decrease in return on equity for every 1% increase in the ratio. The R-squared statistic indicated that approximately 67.78% of the variation in return on equity was explained by the independent and control variables when firm heterogeneity was accounted for in the error term.

Table 4.3.3 presents the estimation results for pooled OLS, fixed effects, and random effects models for the second objective's third model, along with the restricted F-test and Hausman test outcomes. The significant F-statistic in Table 4.3.3 indicated significant cross-sectional heterogeneity, favouring fixed effects over pooled OLS. However, the non-significant Hausman chi-square statistic suggested no significant difference between the fixed and random effects coefficients, making random effects the more consistent and efficient estimator. The random effects estimation in Table 4.3.3 revealed a positive insignificant effect of external financing index ratio (coefficient = .0113874, $p = 0.583 > 0.05$) and financing policies ratio (coefficient = .0449173, $p = 0.190 > 0.05$) on efficiency ratio. This suggests that a 1% increase in these ratios leads to approximately a 0.01% and 0.04% increase in efficiency ratio, respectively, though these effects are not statistically significant. Similarly, cash source component percentage ratio had a negative insignificant effect on efficiency ratio (coefficient = -.0034044, $p = 0.909 > 0.05$), indicating about a 0.003% decline in efficiency ratio for a 1% increase in the ratio, which is also not statistically significant. The R-squared statistic indicated that approximately 62.11% of the variation in efficiency ratio was explained by the independent and control variables when accounting for firm heterogeneity in the error term.

4.3.4: Effect of Financing Cash Flow Management on Turnover Asset Ratio of Quoted Firms in Nigeria



Table 4.3.4 presents the pooled OLS, fixed effects, and random effects estimation results for the second objective's fourth model, along with the restricted F-test and Hausman test outcomes. The significant F-statistic in Table 4.3.4 indicated significant cross-sectional heterogeneity, favoring fixed effects over pooled OLS. The significant Hausman chi-square statistic revealed significant differences between the fixed and random effects coefficients, thus identifying fixed effects as the most consistent and efficient estimator. The fixed effects estimation in Table 4.3.4 showed that external financing index ratio (coefficient = .0504388, $p = 0.004 < 0.05$) had a positive significant effect on turnover asset ratio, indicating a 0.05% increase in turnover asset ratio for every 1% increase in the ratio. Cash source component index ratio showed a positive insignificant effect (coefficient = .0035207, $p = 0.883 > 0.05$). Financing policies ratio had a negative insignificant effect (coefficient = -.0138507, $p = 0.613 > 0.05$), suggesting a 0.013% decrease in turnover asset ratio for every 1% increase in the ratio, though not statistically significant. The R-squared statistic indicated that approximately 90.72% of the variation in turnover asset ratio was explained by the independent and control variables when accounting for firm heterogeneity through the constant term.

4.4 Discussion of Findings

This study looked into how managing financing cash flows impacts the performance of companies listed in Nigeria. Specifically, it examined how the external financial index ratio, financial policies ratio, and cash source component percentage ratio affect key performance measures like return on assets (ROA), return on equity (ROE), the Efficiency Ratio (the inverse of the operating expenses to income ratio), and the Turnover-Asset Ratio (TAR). The findings showed that these financing cash flow management variables significantly influence company performance. Notably, the cash source component percentage ratio had a significant negative effect on both ROA and ROE, meaning that as this ratio decreases, the companies' returns improve. This suggests that managing financing activities by decreasing cash from financing relative to total cash sources is beneficial for firm performance (measured by return on asset), as it reflects a stronger financial position and reduces potential disruptions from debt and equity holders, supporting performance-enhancing activities.

This aligns with Duru et al. (2015), Ubesie et al. (2016), and Ogbeide and Akanji (2017), but contradicts Momanyi et al. (2017) and Muraya (2018). The study also found that the external financing index ratio had a significant positive effect on all performance measures except the efficiency ratio. This implies that increasing cash from operations relative to external financing improves firm performance. This may be because it enhances the firm's ability to repay external finance, attract investors, and improve liquidity, thereby facilitating smoother operations and profitable activities. This result is consistent with Ogbeide and Akanji (2013) and Duru et al. (2015), but differs from Nimer and Munther (2017), Momanyi et al. (2017), and Nangih et al. (2020).

5. Conclusion and Recommendations

This study evaluated the impact of financing cash flow management (external financial index ratio, financial policies ratio, and cash source component percentage ratio) on the performance (ROA, ROE, ER, TAR) of listed Nigerian firms. The findings revealed significant links: a higher cash source component percentage ratio negatively affected ROA and ROE, suggesting better performance with less reliance on financing. Conversely, a higher external financing index ratio positively influenced most performance measures. The study concludes that

managing financing cash flows effectively has a significant positive impact on a company's performance. Lower reliance on financing activities boosts ROA and ROE, indicating greater efficiency, while increased operational cash flow relative to external financing enhances overall performance.

The study recommends that firms reduce reliance on financing activities to improve ROA and ROE and increase operational cash flow relative to external financing to strengthen performance and liquidity. Adopting strong financial policies favouring internal cash flow and transparent stakeholder communication are also crucial. Regular evaluation of financing cash flow management is essential for aligning strategies with performance goals. This research empirically demonstrates the negative impact of cash source component percentage ratio on ROA and ROE, and the positive influence of a higher external financing index ratio, highlighting the strategic value of reduced reliance on external financing in Nigeria and contributing to the understanding in developing economies. Future research should explore industry-specific moderating effects, cross-country comparisons, the influence of macroeconomic variables, long-term implications for growth and valuation, and the link to non-financial performance indicators.

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