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**Cash Flow Management Practices and Financial Performance of
Non-Financial Firms Listed in the Nairobi Securities Exchange**



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Cash Flow Management Practices and Financial Performance of Non-Financial Firms Listed in the Nairobi Securities Exchange

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ABSTRACT

Purpose: This study seeks to assess the relationship between cash flow management practices and Financial Performance of non-financial Companies Listed at Nairobi Security Exchange. The study mainly focused on assessing the effect of investing cash flows, effect of operating cash flows and to evaluate the effect of financing cash flows, and the effect of cash flow analysis on Financial Performance of non-financial Companies Listed at Nairobi Security Exchange. The study was guided by free cash flow theory, agency cost theory and Keynesian theory of money.

Methodology: Cross sectional research design was adopted and all 44 companies listed at NSE in the year 2017 to 2023 were used to form a sample size. Annual financial reports and other financial statements between the periods 2017-2023 were used to provide secondary data. Data was analyzed by the help of STATA software. Descriptive and inferential statistics were used in data analysis.

Findings: The findings revealed that operating cash flows positively influence financial performance, while investing and financing cash flows have negative effects, indicating inefficiencies in investment decisions and excessive reliance on external financing. The study concludes that effective management of operating cash flows enhances firm performance, whereas poor investment and financing decisions may hinder financial stability.

Unique Contribution to Theory, Practice and Policy: The findings may be significant to various companies' management, financial policy makers, government in determining tax performance of the companies and lastly this may provide literature for researchers and scholars. It is recommended that firms adopt sound working capital policies, optimize capital investment strategies, and maintain an optimal financing structure to enhance liquidity and profitability. Further research could explore industry-specific cash flow dynamics and the role of financial technology in cash flow management.

Keywords: *Cash Flow Management Practices, Operating Cash Flow, Investing Cash Flows, Financing Cash Flows, Financial Performance*

INTRODUCTION

Background of the Study

Cash flow management practices determine the welfare for financial survival of the, as it directly impacts their ability to meet short-term obligations and invest in long-term growth. Effective cash flow management ensures that a firm can maintain pay its debts, liquidity, and avoid the risk of liquidation. According to Benincasa, Betz, and Gattini, (2024), the firms monitor and manage their cash flows closely are better positioned to withstand financial challenges and economic fluctuation. Liquidity crisis normally arises from poor cash flow management, forcing the firms to face liquidation of its assets to meet their financial commitments (Laghari, Ahmed, & López García, (2023). The ability to manage cash flow is therefore a key determinant of a firm's financial performance.

Additionally, literature shows the relationship between cash flow management practices, studies highlighting the significant impact that cash flow management has on asset utilization, profitability, cash flow analysis and overall financial wellbeing. For instance, Nangih, Ofor, and Ven (2020) found that firms with vigorous cash flow management practices reports higher returns on equity (ROE), returns on assets (ROA) and as they allocate resources properly and invest in profitable opportunities they register higher profit margin. Equally, firms that struggle with cash flow management often experience declining financial performance, lead to higher debt levels and hence reducing profitability and (Makau, 2021). In the context of non-financial firms, cash flow management is particularly important because these firms often have lower margins and higher operational costs, making efficient cash flow practices essential for maintaining competitiveness and financial stability (Musembi & Sporta, 2023).

Globally, cash flow management plays a crucial role in evaluating an organization's financial health by offering insights into its ability to generate and utilize cash and cash equivalents. Scholars like Pornupatham et al. (2023) and Olunja (2022) affirm that financial statements are incomplete without cash flow data, as it offers a clearer picture of firm performance. Particularly, operating, investing, and financing cash flows are essential indicators for stakeholders assessing profitability, resource allocation, and risk. The COVID-19 pandemic disrupted global non-financial institutions, especially in emerging economies, where the economic shock was more severe (IMF, 2023). However, some firms adapted through digital transformation and cost restructuring (Pfister & Lehmann, 2023).

Regionally, financial performance is assessed through indicators such as profitability, liquidity, and asset use. Comparative and trend analyses enhance understanding of firm health (Nangih et al., 2020). While operating cash flow often shows a positive relationship with performance, the influence of investing cash flow remains mixed and sometimes statistically insignificant (Ugo &

Egbuhuzor, 2022). Studies also note that excessive free cash flows may lead to value-reducing investments.

In Kenya, non-financial institutions have experienced volatile performance, primarily due to the COVID-19 pandemic, which caused liquidity issues and market downturns (Mwangi, 2022; Kiptoo et al., 2022). Despite these challenges, some firms showed resilience through diversification. Research by Mutende et al. (2017) and Kipngetich et al. (2021) underscores the significance of operating cash flow on stock returns, while Koech and Kagiri (2021) highlight the negative impact of cash flow volatility on firm value, advocating for active cost monitoring and risk management.

Statement of the Problem

Companies listed on the Nairobi Securities Exchange (NSE) play a critical role in Kenya's economic development, contributing approximately 10% to the country's Gross Domestic Product (GDP). These firms have also significantly contributed to employment creation, thereby improving the livelihoods of many Kenyans. However, the outbreak of the COVID-19 pandemic severely disrupted business operations, forcing many firms to prioritize cost-cutting measures while striving to retain their workforce.

According to the Capital Markets Authority (CMA), 42% of listed companies are currently operating at less than half of their capacity, and 79% are facing significant cash flow constraints. These challenges have hindered their ability to meet essential financial obligations, including the timely payment of salaries and operational expenses. Similarly, the Nairobi Securities Exchange (2019) reported that most listed companies recorded negative returns on equity (ROE) and returns on assets (ROA), indicating deteriorating financial performance. For instance, profit after tax declined from Ksh. 13.6 million in 2016 to Ksh. 12.2 million in 2019, further signaling financial distress among NSE-listed firms.

The Kenya Economic Survey (2021) attributed financial instability in many firms to poor cash flow management, which often results in delayed debt repayments and, in extreme cases, insolvency. Despite the growing importance of effective cash flow management, empirical studies conducted across different sectors have yielded inconsistent and sometimes contradictory findings on its relationship with financial performance. Furthermore, there exists a significant knowledge gap, particularly regarding the impact of specific cash flow components—operating, investing, and financing cash flows—on the financial performance of non-financial firms listed on the NSE. Additionally, limited studies have focused on the post-2016 period, which includes the turbulent years of the COVID-19 pandemic and beyond.

In light of these gaps, this study seeks to evaluate the effect of cash flow management practices specifically, operating, investing, and financing cash flows on the financial performance of non-financial firms listed on the Nairobi Securities Exchange between 2017 and 2023.

General Objective of the Study

The main objective of this study was to investigate the effect of cash flow management practices on the financial performance of non-financial firms listed in the Nairobi Securities Exchange

Specific Objectives

The study was guided by the following objectives

- i. To examine the effect of operating cash flows on the financial performance of non-financial firms listed in the Nairobi Securities Exchange
- ii. To assess the effect of investing cash flows on the financial performance of non-financial firms listed in the Nairobi Securities Exchange
- iii. To evaluate the effect of financing cash flows on the financial performance of non-financial firms listed in the Nairobi Securities Exchange
- iv. To examine the effect of cash flow analysis on the financial performance of non-financial firms listed in the Nairobi Securities Exchange

LITERATURE REVIEW

Theoretical Literature Review

The study was anchored on free cash flow theory, agency cost theory and Keynesian theory of money.

Free cash flow theory

The theory was first developed in 1986 by Jensen. The theory focuses on cash surplus, which is available after financing profitable organizations. It is stated that net income obtained from capital expenditure impacts the Company's financial performance. According to Qaisi (2020), high free cash flows are net income plus amortization and depreciation, subtracting capital expenditures and change in non-cash flow plus borrowings.

The free cash flow theory assumes that the management of a firm with high free cash flow is most likely to undertake projects that are likely to decrease the firm's value. Cash flow that exceeds a company's capital expenditure requirements for projects can positively impact its net present value, also known as free cash flows. Companies can eliminate unnecessary costs and improve their financial performance by adopting cash management practices. However, prioritizing income maximization over cash control may lead to a decrease in cash flow, which can hinder a company's growth. Implementing cash flow models that increase prices can result in positive growth for the company (Al-Najjar & Belghitar, 2015).

The theory has been criticized because shareholders' wealth is not the only element that the organization's management seeks to improve and expand the firm size. In other words, cash flow

expansion does not lead to an increase in the organization's resources under the watch of the managers; it may still contribute to the rise in pay associated with the positive growth of a firm. Cash flow tendency shows how the firm needs to invest rather than having limited cash receipts generated from the market, which requires costs (Klonowski, 2012).

The theory of cash flow is crucial to the current study because it helps reduce conflicts of interest between stakeholders and managers, ensuring effective and efficient cash flow statements. This, in turn, maximizes wealth and identifies how managers of the companies listed at the NSE should manage cash flow to ensure stakeholders gain value for their investments. The theory focuses on maintaining cash flow for investing activities and shows whether the cash budget is in surplus or deficit.

Agency Cost Theory

The proponents of this theory were Jensen and Meckling in 1976. According to Jensen and Meckling (1976), as cited by Oded (2020), the managers' intentions are not aligned with those of the shareholders. For instance, when managers have a lot of cash at their disposal, they use the cash for their personal gains instead of using it to improve the firm's performance. The theory emphasizes that managers plan to accumulate assets in sequence to gain discretionary power over a company's investment decision. For managers to pursue their interests, cash becomes the most important form of financing and raises some external finances; it usually requires the firm to provide the lender with insight into how the finances are to be used.

According to Cunha (2013), the theory predicts that firms with high free cash flows end up having an increase in their holdings. It is suggested that companies that hold excessive funds attempt to acquire other firms through acquisition. The acquisition is most likely diversifying, leading to a decline in operational performance and the destruction of depositor value. Firms with surplus money may result in wasteful investment (Thuong, 2020).

This theory was a valuable addition to the current study as it suggests that using companies' leverage is more beneficial for stakeholders. Monitoring the managers' debt levels can reduce agency costs, resulting in low inefficiency and better financial performance of the companies listed at NSE. This theory also helped to support the study of operational activities.

Keynesian Theory of Money

Keynesian theory was introduced by John Maynard Keynes in 1936. This theory proposes three reasons why it is essential to hold money in cash: for transaction purposes, maintaining liquidity, and speculative and precautionary motives. According to Bonizzi and Kaltenbrunner (2020), transaction motives refer to the need to have cash on hand for daily expenses; precautionary motives are for paying for unexpected events, while speculative motives involve holding cash to improve performance when there is a need for purchasing or favorable exchanges.

The Keynesian theory of money is limited in scope as it only provides a reason for why firms hold cash. However, firms cannot rely on this theory to improve their financial performance. An effective and efficient cash flow management system does not necessarily result in a firm's financial improvement. Therefore, firms must maintain a cash flow statement to analyze their profitability. However, this analysis may negatively affect their cash flow. According to Spahn (2021), the Keynesian theory of money suggests that firms with a cash surplus are more likely to be profitable. Thus, cash flow management depends on the resources available to the manager.

This theory was useful for assessing how companies use their cash flows to invest in available resources. It suggests that companies rely more on cash flow to finance their projects than their performance. Therefore, the theory supported financing activities that involve giving and receiving cash. It explains the importance of having cash available for financing investments.

Stewardship theory

Stewardship theory was developed by Thompson, Donaldson and Davis in the late 20th century (Wang, 2021). The developers of the theory argued that managers, as stewards, have a natural inclination to act in the best interests of shareholders due to their intrinsic motivations and desire for reputation and career advancement. Stewardship theory was developed as a counterpoint to agency theory. It posits that managers are motivated by intrinsic factors such as loyalty, responsibility, and a sense of duty to act in the best interests of shareholders.

According to Schillemans and Bjurstrøm (2020) stewardship theory is built on several key principles that distinguish it from agency theory. Firstly, it emphasizes the alignment of interests between managers and shareholders, with managers viewed as loyal stewards rather than self-interested agents. Secondly, it emphasizes the importance of trust, transparency, and long-term relationships between managers and shareholders, fostering cooperation and mutual benefits. Thirdly, it highlights the role of corporate culture, values, and leadership in shaping managerial behavior and decision-making, promoting ethical conduct and responsible governance.

In the context of the Nairobi Securities Exchange, Stewardship theory represents a significant framework for corporate governance, emphasizing the role of managers as stewards entrusted with the responsibility of managing resources and maximizing shareholder wealth. Stewardship theory suggests that managers who prioritize shareholder interests are more likely to adopt prudent cash flow management practices that enhance shareholder value and mitigate agency costs. Conversely, managers who prioritize self-interest or short-term gains may engage in aggressive cash flow management practices that sacrifice long-term value creation for personal gain.

Empirical Review

A study by Qaisi (2020) targeted publicly owned industrial companies in Jordan. State-owned enterprises are highly regulated and thus operate within a specific framework; in addition, these firms could be bailed out in case of financial distress, and therefore, it is impossible to generalize

the findings from this study to all non-financial companies listed in the NSE. The study also used net income, operating cash flow to sales ratio, and changes in working capital as the measures of operating cash flow and share price change as the dependent variable. However, the current study used amortization and net income as measures of operating cash flow, while ROA was used to measure financial performance.

A study by Suranta et al. (2023) established that investment cash flow did not affect financial distress and adopted a descriptive research design that only describes the relationship between the study variables but cannot be used to test a research hypothesis. This gap was filled by the current study, which adopted a correlational research design. In addition, the study used financial distress as the dependent variable. The current research sought to assess the effect of investment cash flow on the financial performance of listed companies.

The study on the effect of investing cash flow activities on the financial performance of pharmaceutical companies listed in the Nigeria Exchange Group revealed a positive and insignificant effect of investing cash flow activities on financial performance. However, the study was carried out in listed pharmaceutical companies in Nigeria. It can be noted that the pharmaceutical industry has standard regulations, while non-financial companies that the current study targeted were selected from different sectors with different regulations.

The study focused on all the listed companies at the NSE, while the current study focused on the non-financial listed companies. In addition, the study adopted a descriptive cross-sectional research design. However, the current study adopted a correlational research design which enabled the researcher to examine and quantify the relationship between the study variables and test the research hypotheses.

Ofoegbn and Okoro (2020) carried out their study in listed deposit money banks in Nigeria, establishing that operating, financing, and investing cash flows do not have a statistically significant effect on the financial performance of the banks. However, this study focused on banks that credit creating function because it is so unique in bank operations. Therefore, the current research was carried out on listed non-financial banks.

A study by Kuria, Memba, and Oluoch (2024) examined the relationship between operating cash flow volatility and the stock market value of firms listed at the NSE. However, this study used firm capitalization and capitalization ratio to measure firm stock market value, which was the dependent variable of the study. This research used return on assets to measure the financial performance of the listed companies at the NSE. In addition, this study adopted a quantitative causal descriptive research design. Similarly, a study by Kipngetich, Tenai, and Kimwolo (2021) adopted an explanatory research design to assess operating cash flow's effect on the stock returns of firms listed in the NSE. However, this study used a correlational research design.

Research Gaps

According to the literature reviewed on investing cash flow management on financial performance, the findings posted mixed results. Some studies reviewed indicated that investing in cash flows had a negative effect on financial performance. At the same time, other findings showed that investing in cash flow management had a positive and significant effect on financial performance. Therefore, it was not clear whether investing in cash flow management contributes positively or negatively to financial performance. This called for a further research study to ascertain the effect of investing cash flow on financial performance.

Studies on operating cash flows and financial performance indicated a consensus on the findings. Some studies on operational cash flows revealed a positive and significant effect on a firm's financial performance. However, most studies adopted a descriptive research design, ex-post facto research design, descriptive survey, and explanatory research design. However, this study adopted a cross-sectional and correlational research design. Further, studies have been conducted on quoted companies in the different stock exchanges, but the current study focused on listed companies on the Nairobi Security Exchange.

The studies conducted on financing cash flow have generated contradictory results. Some studies indicate that there is a positive correlation between financing cash flow and the profitability of Small and Medium Enterprises (SMEs) in California. In addition, some studies suggest a significant positive association between the income of an organization and its overall performance. However, other studies reveal that financing cash flows could have a negative impact on an organization's financial performance. Therefore, it is still uncertain whether financing cash flow positively or negatively affects organizational financial performance, highlighting the need for further research.

Conceptual Framework

Cash Flow Management

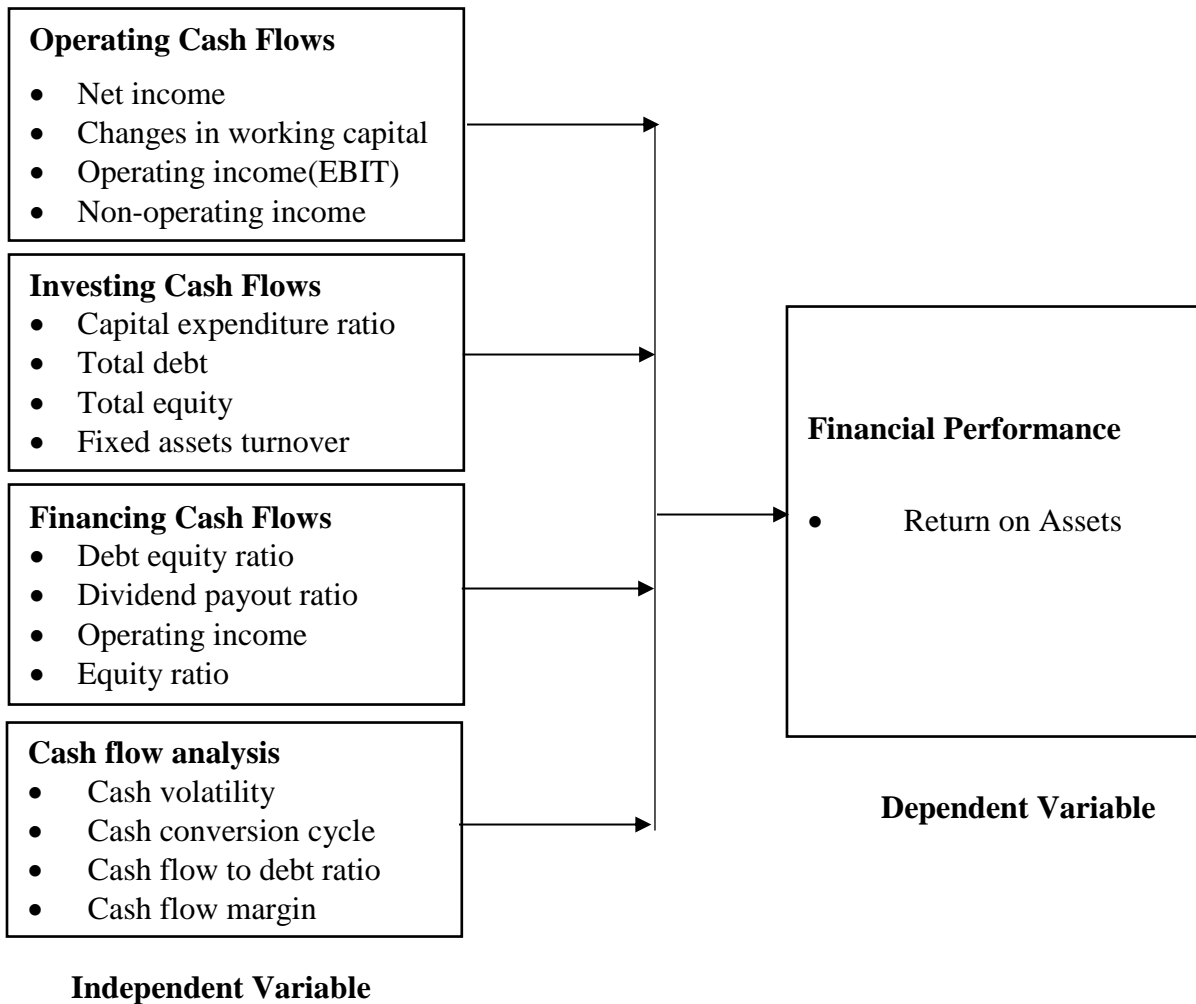


Figure 1: Conceptual Framework

Source: Author (2024)

RESEARCH METHODOLOGY

In this study, a cross-sectional research design was used. This study was carried out at NSE, Kenya targeting 44 non-financial companies listed in the Nairobi Securities Exchange. Panel data was obtained from the firms' published annual financial reports between the periods 2017 to 2023. The cash flow statement provided information on cash flow components that cash flow from Financial Act., cash flow from the past, and cash flow from activities. Statement of financial position and

income statement provided information for computing return on assets. Data was obtained using a data extraction document. The obtained was coded to excel the exported to STATA version 11 for further analysis. Descriptive Statistics involves analysis of the use of Frequencies, Percentages, Mean and Standard deviation in all variables. Inferential Statistics by use of correlation and panel regression was used to explain the causal relationship between the research variables.

RESEARCH FINDINGS AND DISCUSSION

Response Rate

The study focused on 44 non-financial listed firms at the NSE. Data was obtained from 35 firms, resulting in a response rate of 79.5%. This sample size was considered adequate for conducting thorough statistical analyses and drawing valid conclusions about the interaction between cash flow management practices and the financial performance of non-financial firms listed in the Nairobi Securities Exchange. According to Mugenda and Mugenda (2013), a response rate above 50% is generally considered satisfactory in social science research.

Descriptive Statistics analysis

This section summarizes the frequencies of cash flow management practices under study, including operating cash flow, financing cash flow, investing cash flow and cash flow analysis. The findings are summarized in Table 1.

Table 1: Descriptive Results

	Obs	Mean	Std Dev	Min	Max
Firm performance	210	0.644	0.298	-1.508	1.516
Operating cash flow	210	0.755	0.821	-4.167	1.897
Investment cash flow	210	-0.003	0.762	-1.160	4.332
Financing cash flow	210	0.749	3.515	-17.916	21.150
Cash flow cycle	210	-0.849	7.196	-60.946	1.099

The findings showed that firm performance is positive as it had a mean of 0.644 with a standard deviation of 0.298. The lowest firm performance was -1.508 while the highest was 1.516. Operating cash flow had a mean positive mean of 0.755 with standard deviation of 0.821. The operating cash flows of the firms range from -4.167 to 1.897.

The findings also showed that investment cash flow of the firms had a mean of -0.003 and standard deviation of 0.762. Investment cash flow of the firms ranged from -1.160 to 4.332. The firms had a positive financing cash flow but significantly varied as indicated by a mean of 0.749 and standard deviation of 3.515. The minimum financing cash flow was -17.916 and the maximum was 21.150.

Cash flow cycle of the firms indicated a mean of 0.845 with standard deviation of 7.196. The minimum cash flow cycle of the firms was -60.946 and the maximum was 1.099 showing that some of the firms had extremely negative cash flow cycles.

Correlation Analysis

Pearson correlation analysis was employed to determine the correlation between the variables in the study.

Table 2: Pearson correlations between firm performance and cash flow indicators

		1	2	3	4	5
Firm performance (1)	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	210				
Operating cash flow (2)	Pearson Correlation	0.005**	1			
	Sig. (2-tailed)	0.000				
	N	210	210			
Investing cash flow (3)	Pearson Correlation	-0.125**	0.355**	1		
	Sig. (2-tailed)	0.000	0.000			
	N	210	210	210		
Financing cash flow(4)	Pearson Correlation	-0.472**	0.296**	0.038**	1	
	Sig. (2-tailed)	0.000	0.000	0.000		
	N	210	210	210	210	
Cash flow cycle (5)	Pearson Correlation	0.142**	-0.088**	-0.128**	0.010**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	210	210	210	210	210

** . Correlation is significant at the 0.01 level (2-tailed).

Operating cash flow has a very weak positive correlation with firm performance ($r = 0.005$), indicating that there is a negligible relationship between the two variables. The result suggests that changes in operating cash flow have minimal direct impact on the financial performance of these firms in terms of return on assets. Investing cash flow shows a negative correlation with firm performance ($r = -0.125$), implying that higher levels of investing cash flows tend to be associated with lower firm performance.

Financing cash flow exhibits a strong negative correlation with firm performance ($r = -0.472$). This suggests that an increase in financing cash flows (which often involves taking on more debt or

equity) may negatively affect the firm's return on assets. The cash flow cycle shows a weak positive correlation with firm performance ($r = 0.142$), which implies that the time taken for cash to move through the firm's operations has a minor positive effect on performance. However, its low correlation suggests that other factors beyond the cash flow cycle are likely to play a more significant role in determining financial performance.

Trend Analysis

The trend analysis for cash flow management practices including operating cash flow, financing cash flow, investing cash flow and cash flow analysis were carried out the findings presented in Figure 2 to 6.

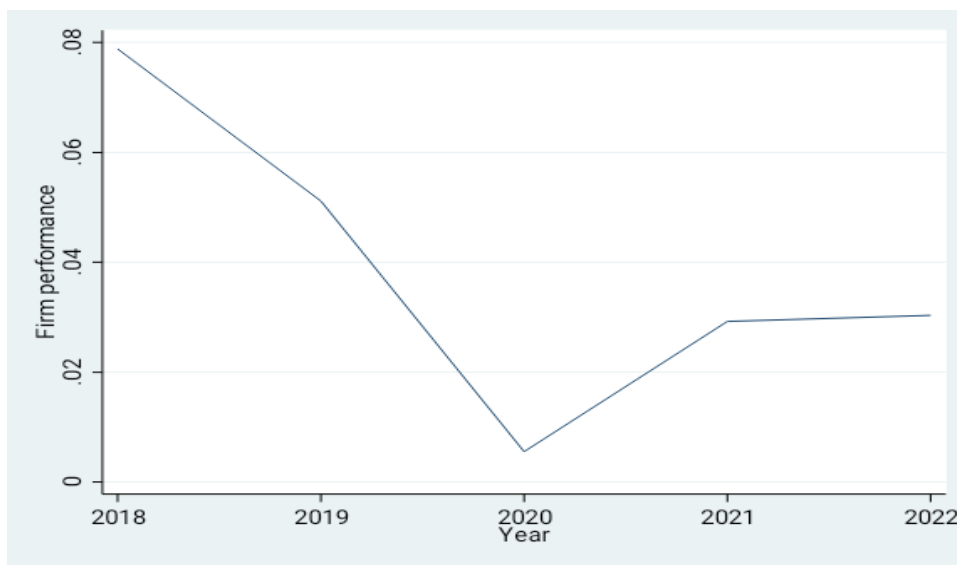


Figure 2: Trend Analysis for Firm Performance (ROA)

Figure 2 shows the trend of financial performance measured by ROA of non-financial firms listed on the Nairobi Securities Exchange (NSE) from 2018 to 2022. This trend demonstrates a clear decline in the firm's ROA from 2018, reaching its lowest point in 2020, followed by a gradual recovery through 2021 and 2022. The sharp decline, particularly from 2019 to 2020, can be largely attributed to the global economic challenges posed by the COVID-19 pandemic, which led to reduced demand, supply chain disruptions, and liquidity issues for many firms. However, as the global and Kenyan economies began to stabilize with the easing of restrictions and the introduction of recovery measures in 2021, the financial performance of the firms showed signs of recovery, though the pace remained slow. The steady trend by 2022 suggests that while some recovery was underway, non-financial firms were still in the process of navigating the lingering effects of the pandemic on their operational capacities and market conditions.

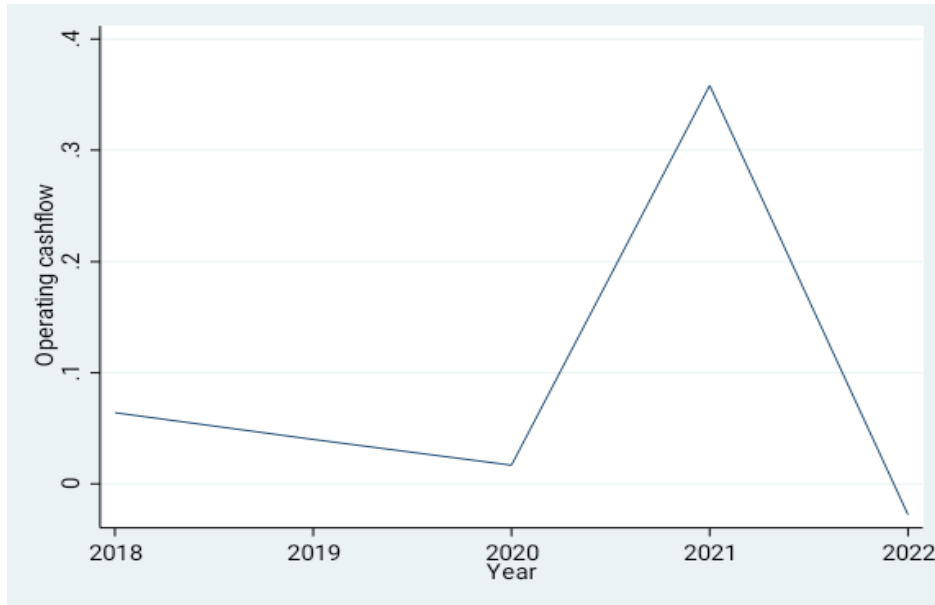


Figure 3: Trend Analysis for Operating cash flow

Figure 3 shows the relationship between operating cash flow and financial performance for non-financial firms listed on the Nairobi Securities Exchange (NSE) from 2018 to 2022. Generally, the figure shows a decline in operating cash flow from 2018 to 2020. This could imply that the firms were having challenges with operating efficiency and liquidity which likely suppressed ROA. However, in 2021, the firms reported a sharp rise in operating cash flow, potentially indicating better operational performance, improved revenue streams, or cost efficiencies. This spike in financial performance suggests that the firms may have optimized their cash flow management during this period, leading to improved ROA. However, in 2022, the firms operating cash flow plunges dramatically, suggesting a possible economic downturn, poor cash management, or heightened operational costs, likely resulting in a negative impact on ROA.

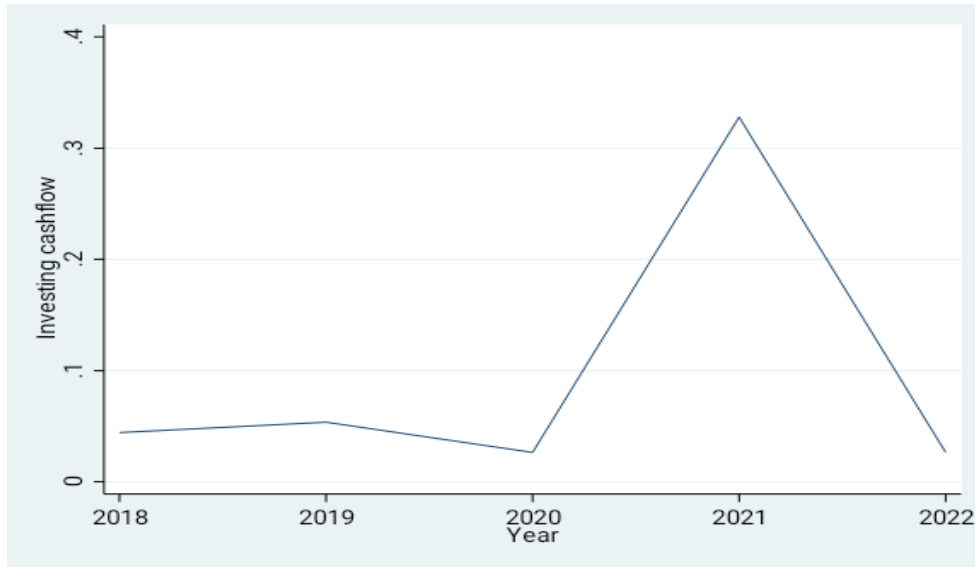


Figure 4: Trend Analysis for Investing cash flow

The trend analysis for investing cash flow indicates that the non-financial firms listed at the NSE had a relative stability with minor fluctuations in investing cash flows from 2018 to 2020. However, a sharp increase was observed in 2021, likely indicating substantial investments made by firms during this period. This spike could have resulted from firms seeking growth opportunities or restructuring their portfolios following economic disruptions. In 2022, the firms reported a significant decline in the cash flows which could be an indication of reduced investment activities possibly due to uncertainties in the market or a shift towards maintaining liquidity.

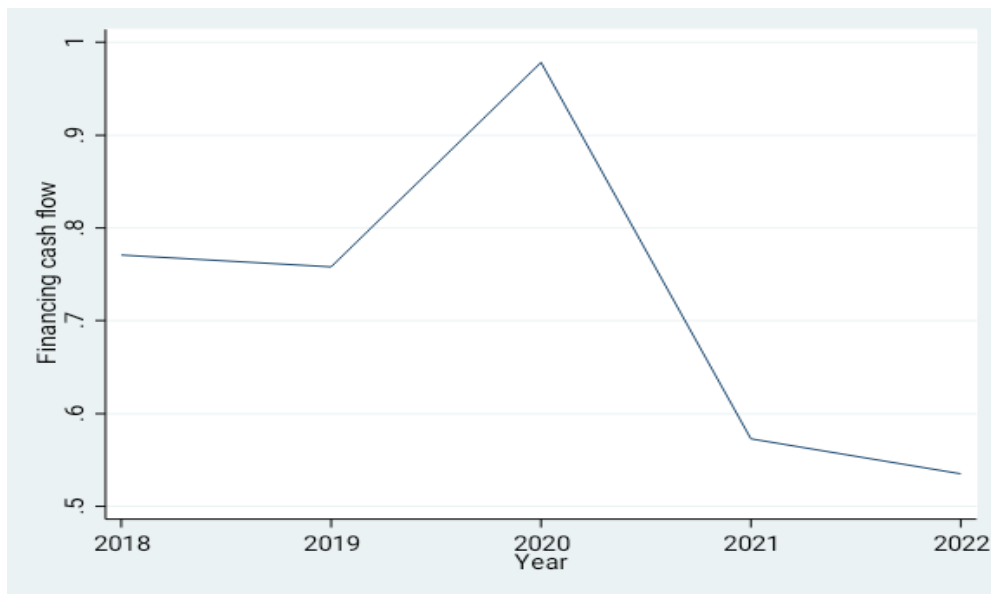


Figure 5: Trend Analysis for Financing cash flow

The trend analysis for financing activities presented in Figure 5 indicated a notable fluctuation in financing cash flows, indicating varying levels of external financing activities such as issuing debt or equity. A significant increase in financing cash flow was observed in 2021 which could be an indication that firms could have sought additional capital to navigate economic challenges, invest in growth, or address liquidity concerns. However, the data shows a subsequent decrease in 2022, which could imply a reduction in reliance on external financing, possibly due to improved financial stability or a strategic shift towards debt repayment. The fluctuations in financing cash flow and their impact on ROA highlight the complex relationship between external financing strategies and financial performance, emphasizing the need for firms to balance financing activities with their overall financial health and strategic objectives.

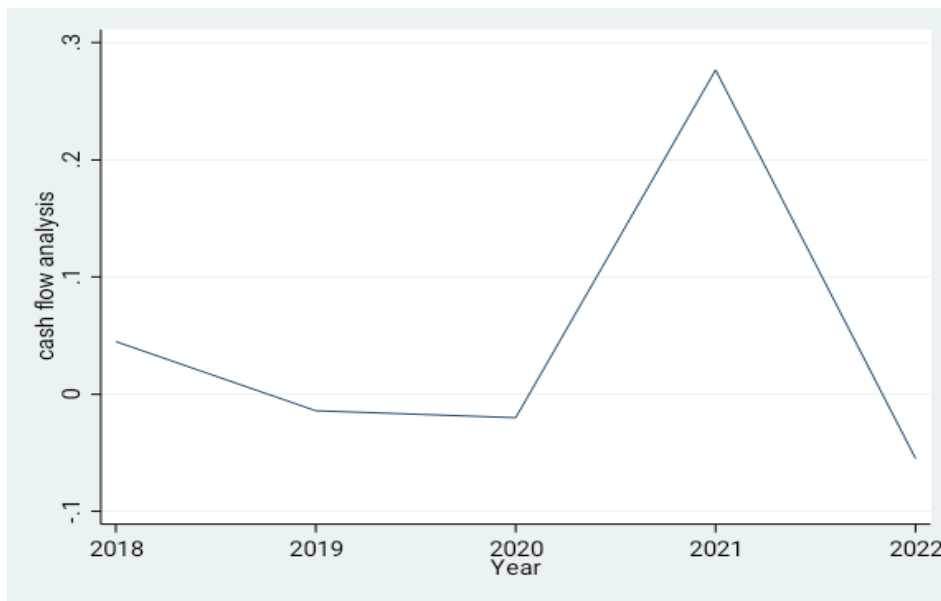


Figure 6 Trend Analysis for cash flow analysis

The trend for cash flow analysis indicated a decline in cash flows from 2018 to 2019 followed by a slight decline and a spike in cash flows from 2020 to 2021 then a sharp decline in cash flows between 2021 and 2022.

Test for Model Specification

This test intended to establish whether the assumptions of the proposed model were fulfilled and whether it suitably depicted the link between the variables in the dataset. The Hausman test was adopted in the diagnostic test to ascertain whether a fixed-effects or random-effects model should be utilized for the investigation.

Table 3: Results for Model Specification

	(b)	(B)	(b-B)	$\sqrt{\text{diag}(V_{b-V_B})}$
	Fixed effect	Random effect	Difference	Std. Error
Operating cash flow	.0466328	.0451063	.0015264	.0005974
Financing cash flow	-.085343	-.0927269	.0073839	.0039474
Investing cash flow	-.3516791	-.3485437	-.0031354	.0052027
Cash flow analysis	.5132172	.5569044	-.0436872	.0240582
Model Summary				
$\chi^2(4) = (b-B)'[(V_{b-V_B})^{-1}](b-B) = 2.99$				
Prob>chi2 = 0.5595				
a Dependent Variable: Net Profit Margin				

The Hausman Test results presented in Table 4.6 reveal a χ^2 value of 2.99 and a probability value of 0.5595 which is greater than 0.05 ($p=0.5595>0.05$). Therefore, random effect model was adopted.

Regression Analysis

Panel regression was carried out to assess the influence of cash flow management of the financial performance of the non-financial firms listed at the NSE between 2017 and 2022. The following null hypotheses were tested.

- H₀₁** Operating cash flows have no statistically significant effect on the financial performance of non-financial firms listed in the Nairobi Securities Exchange
- H₀₂** Investing cash flows has no statistically significant effect on the financial performance of non-financial firms listed in the Nairobi Securities Exchange
- H₀₃** Financing cash flows has no statistically significant effect on the financial performance of non-financial firms listed in the Nairobi Securities Exchange
- H₀₄** Cash flow analysis has no statistically significant effect on the financial performance of non-financial firms listed in the Nairobi Securities Exchange

Table 4: Panel regression analysis for Return on Assets

Return on Assets	Coef.	Std. Err.	Z	P> Z 	[95% Conf. Interval]	
Operating cash flow	0.0451063	.0044524	10.13	0.000	.0363798	.0538328
Financing cash flow	-0.0927269	.0128152	-7.24	0.000	-.1178442	-.0676097
Investing cash flow	-0.3485437	.0207808	-16.77	0.000	-.3892734	-.307814
Cash flow analysis	0.5569044	.1836806	3.03	0.002	.196897	.9169118
_cons	0.1044964	.0655239	1.59	0.111	.2329209	.023928
R Square (Within) = 0.9297						
R Square (Between) = 0.8058						
R Square (Overall) = 0.8944						
corr(u _i , X) = 0 (assumed)						
Wald chi2(4) = 765.21						
Prob > chi2 = 0.0000.						
sigma_u = .1936679						
sigma_e = .26048277						
rho = .35599637						

The regression results in Table 4 reveal a coefficient of determination (R²) of 0.8058 on the influence of cash flow management practices and financial performance of non-financial firms listed at the NSE. These results imply that cash management practices that were considered by this study, operating, investing, financing, and cash flow analysis, could explain 80.5% variation in the firm's financial performance. Furthermore, the study revealed that a unit increase in operating cash flow led to a 0.0044524 increase in the financial performance of the firms. A unit increase in financing cash flow led to a unit decrease of -.0927269 in the financial performance of the firms. A unit increase in investing cash flow led leads to a -.3485437 reduction in financial performance, and finally, a unit increase in cash flow analysis led to a .5569044 increase in financial performance. The constant term of 0.1044964 indicates the part of the financial performance of the non-financial firms listed at NSE that was not affected by the cash flow management practices that were considered by the study.

The findings relate to those of Rahman and Sharma (2020) whose findings indicated a positive and significant relationship between operating cash activities and financial performance and also Ndungu and Oluoch (2016) whose findings showed that financing cash flow had a negative impact on the performance of construction companies listed at NSE between 2008 and 2015.

Operating cash flow and financial performance of the non-financial firms

The study's first hypothesis was that operating cash flows have no statistically significant effect on the financial performance of non-financial firms listed in the Nairobi Securities Exchange. When the hypothesis was tested at the confidence level of 95%, the study revealed a beta coefficient of 0.0451063, $p=0.000<0.05$, and a t-value of 10.13, which is greater than 1.96. The positive significant statistical coefficient indicates that operating cash flow practices had a

significant influence on the financial performance of the firms. These results suggest that factors such as net income, changes in working capital, operating income (EBIT), and non-operating income contribute to improved financial performance. This indicates that operating cash flow practices have a statistically significant positive impact on financial performance, leading to the rejection of the null hypothesis.

The study's findings align with those of Ofoegbu and Okoro (2020), who also reported a significant positive relationship between operating cash flows and financial performance. Likewise, Kipngetch, Tenai, and Kimwolo (2021) found that operating cash flow was significantly and positively associated with the stock returns of listed companies.

4.7.2 Financing cash flow and financial performance of the non-financial firms

The second hypothesis proposed that investing cash flows have no significant impact on the financial performance of non-financial firms listed on the Nairobi Securities Exchange. However, regression analysis showed a beta coefficient of -0.0927 with a p-value of 0.000 and a t-value of -7.24, indicating a statistically significant negative relationship. This suggests that an increase in financing activities—such as dividend payouts, operating income, and debt financing—leads to a 9.2% decline in financial performance. Consequently, the null hypothesis was rejected. These results are consistent with findings by Itan and Riana (2021), who also reported a significant negative impact of financing and investing activities on firm value.

Investing cash flow and financial performance of the non-financial firms

The third hypothesis stated that Financing cash flows have no statistically significant effect on the financial performance of non-financial firms listed in the Nairobi Securities Exchange. However, findings from the regression analysis reveal that investment cash flow had a beta coefficient of -0.3485437, a p-value of 0.000, and a t-value of -16.77, which was less than 1.96. This means that there was an inverse relationship between investing cash flow and the financial performance of the firms because a unit increase in investing cash flow practices led to a decrease in the financial performance of the firms by 34.8%. This implies that investing cash flows had a negative but statistically significant influence on financial performance, and thus, the null hypothesis was rejected. These findings confirm those of Itan and Riana (2021), who found financing and investing activities had a significant negative effect on a firm's value.

Cash flow analysis and financial performance of the non-financial firms

The fourth and last hypothesis of the study was that cash flow analysis has no statistically significant effect on the financial performance of non-financial firms listed in the Nairobi Securities Exchange. The results from the panel regression model revealed that cash flow analysis had a beta coefficient of 0.5569044, a p-value of 0.002, and a t-value of 3.03, which was greater than 1.96. These findings suggest that an increase in cash flow analysis caused an increase in the financial performance of the firms by 55.6%. This implies that cash flow analysis had a positive

statistically significant influence on financial performance, and thus, the null hypothesis was rejected.

These findings were supported by those of Odo, and Ohazuluike (2021), whose results revealed that cash from operating activities, financing activities and investment activities significantly influenced the company profit of these companies.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concludes that operating cash flows have a significant and positive effect on the financial performance of non-financial firms listed on the Nairobi Securities Exchange (NSE). This indicates that firms with strong and consistent cash inflows from core business operations tend to achieve superior financial outcomes.

The study concludes that investing cash flows have a negative effect on the financial performance of non-financial firms listed on the Nairobi Securities Exchange (NSE). This suggests that increased cash outflows related to investment activities, such as the acquisition of property, plant, and equipment or long-term investments, may initially strain a firm's financial position.

The study concludes that financing cash flows have a negative effect on the financial performance of non-financial firms listed on the Nairobi Securities Exchange (NSE). This implies that an increase in financing activities, such as obtaining loans, issuing new equity, or repurchasing shares, may adversely impact profitability. High reliance on external financing, particularly debt, can lead to increased financial costs, such as interest expenses, which may erode net earnings and overall financial stability.

The study concludes that cash flow analysis has a significant positive effect on the financial performance of non-financial firms listed on the Nairobi Securities Exchange (NSE). Effective cash flow analysis enables firms to monitor liquidity, assess operational efficiency, and make informed financial decisions that enhance profitability.

Recommendations

This study offers policy and managerial recommendations based on the four objectives examining the relationship between different components of cash flows and the financial performance of non-financial firms. Firstly, regarding operating cash flows, regulatory bodies like the Capital Markets Authority (CMA) and Nairobi Securities Exchange (NSE) should enforce standardized reporting guidelines to enhance transparency and comparability. Fiscal incentives such as tax rebates for timely payments could further encourage strong operational efficiency.

Secondly, to improve investment cash flows, investment policies should promote sustainable and high-yield projects. Government support through grants, tax reliefs, or matching funds, alongside

CMA's guidelines on long-term investment planning, can help firms make strategic capital allocation decisions.

Thirdly, concerning financing cash flows, regulatory frameworks should discourage over-reliance on debt by setting acceptable debt-to-equity ratios. Promotion of equity financing, retained earnings, and a national credit rating system would foster financial discipline and capital sustainability.

Fourthly, cash flow analysis should be mandated as part of statutory disclosures. ICPAK, in collaboration with CMA and NSE, should spearhead training programs on advanced cash flow analytics for financial professionals.

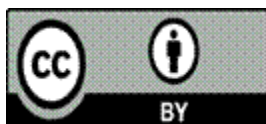
From a managerial standpoint, firms should adopt real-time digital financial systems to monitor operating cash flows, improve working capital management, and enhance forecasting. For investing cash flows, tools such as NPV and IRR should guide decisions, while underperforming assets should be divested. Managers should also evaluate their capital structure regularly to avoid excessive debt. Lastly, firms should institutionalize continuous cash flow analysis within strategic planning, supported by internal training programs to enhance decision-making capacity.

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