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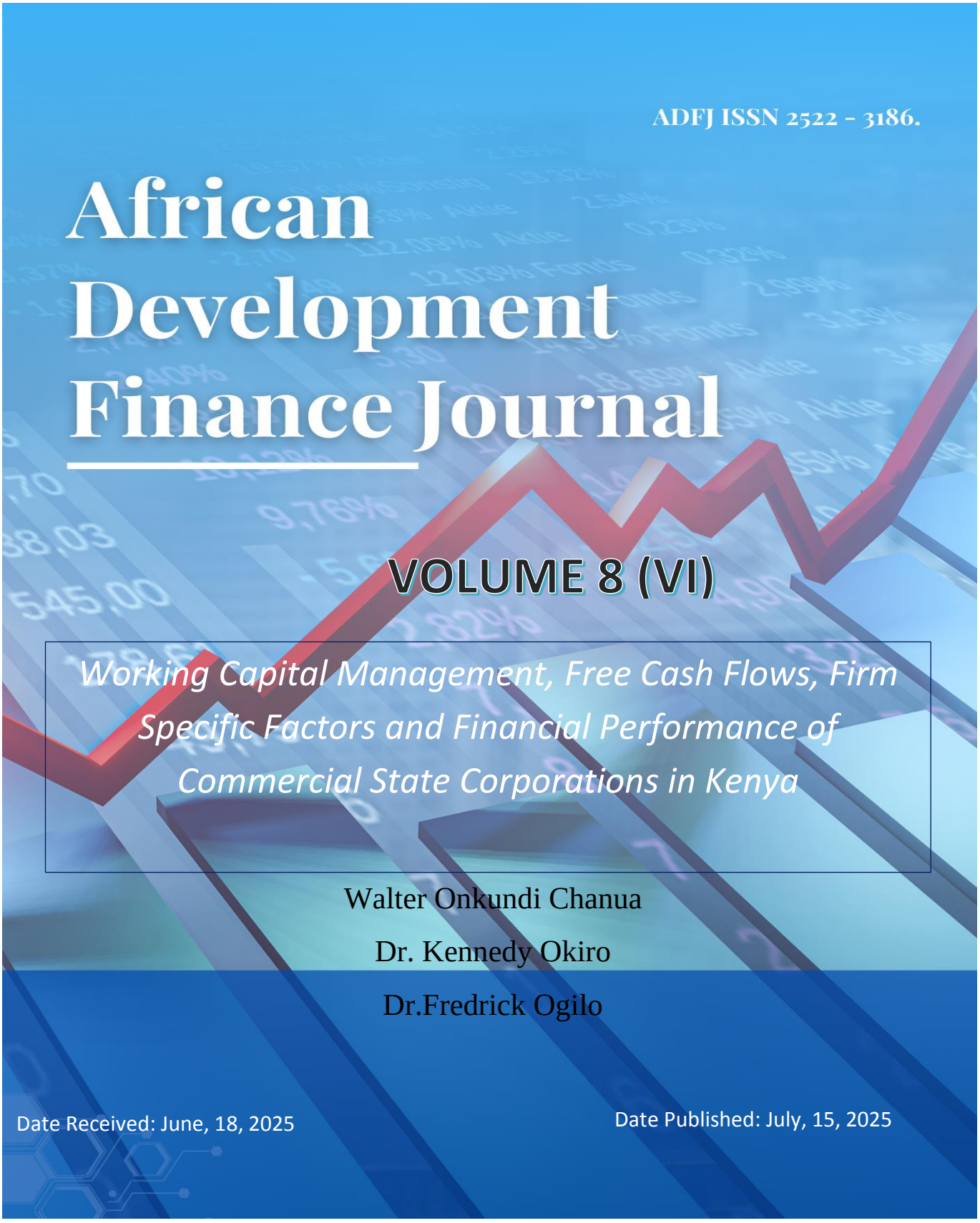

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Working Capital Management, Free Cash Flows, Firm Specific Factors and Financial Performance of Commercial State Corporations in Kenya

By: Walter Onkundi Chanua [1], Dr. Kennedy Okiro [2] and Dr.Fredrick Ogilo [3]

Abstract

This study examines the joint effect of working capital management (WCM), free cash flows (FCF) and firm-specific factors on financial performance of commercial state corporations in Kenya. Given that these entities play a vital role in Kenya's economic development, understanding the nexus of the relationship among these variables is crucial for enhancing their financial sustainability and operational efficiency. The study adopted a positivism research philosophy and utilized a descriptive panel research design, collecting secondary data from annual financial reports of 28 commercial state corporations operating in Kenya from 2014 to 2023. The data was analysed using regression models to test the joint effect of WCM, FCF, and firm-specific factors on financial performance, measured by return on assets (ROA). The findings reveal that all three variables; working capital management, free cash flows and firm-specific factors have a significant joint impact on the financial performance of commercial state corporations. Efficient WCM, indicated by the cash conversion cycle (CCC), was positively correlated with financial performance, while free cash flows further enhanced this relationship. Firm-specific factors, including business risk, technological innovations, and managerial efficiency, also significantly influenced the effectiveness of WCM in improving financial performance. The study highlights the importance of integrating WCM practices with strong free cash flows and firm-specific characteristics to achieve sustainable financial outcomes.

Keywords: *Working capital management, financial performance, days inventory outstanding, days sales outstanding, days payables outstanding, free cash flows, firm specific factors, business risk, managerial efficiency, and technological innovations.*

1. Introduction

The financial health of state-owned enterprises (SOEs) is crucial not only to their operations but also to the broader national economy (Riany, 2021). Working capital management, which involves the management of short-term assets and liabilities, has long been recognized for its role in maintaining liquidity and operational efficiency, both of which are essential for financial performance (Gallegos, 2022). However, despite its acknowledged importance, there remains limited research on how WCM interacts with free cash flows and firm-specific factors, such as business risk, technological innovations and managerial efficiency, to collectively influence financial performance in the context of commercial state corporations. The current study

[1] *PhD Student, Faculty of Business and Management Sciences, University of Nairobi, E-mail: walterchanua@gmail.com*
[2]*Senior Lecturer, Faculty of Business and Management Sciences, University of Nairobi*
[3]*Senior Lecturer, Faculty of Business and Management Sciences, University of Nairobi*

operationalized WCM by utilizing the CCC, through its components DIO, DSO and DPO. This choice was justified because it provided a comprehensive and integrated metric, encompassing the efficiency of cash flows through the entire working capital process, offering insights into the effectiveness of the organization's liquidity management. Firms that manage their working capital effectively are more likely to generate sustainable profits and maintain operational flexibility, which contributes to their long-term viability (Habib & Dalwai, 2023).

Financial performance has become a key measure of organizational success, especially for commercial state corporations that are expected to operate efficiently while contributing to the national economy (Goode, 2020). Financial performance is measured as a return on assets, which is calculated as net income divided by total assets of a corporation. Moreover, free cash flow, defined as the cash available after covering operational and capital expenses. Free Cash flows are measured as below

FCF= OI + Dep. –IE – IT – Dividends– Loan repayment

Free cash flow serves as an important indicator of financial health and flexibility. Firms with greater free cash flows can more effectively pursue growth opportunities, pay dividends, or reinvest in strategic projects that enhance profitability (Jensen, 1986; Laghari, Ahmed, & López, 2023).

The role of firm-specific factors in shaping financial performance is equally critical, as these factors often determine a company's ability to adapt to changing market conditions. Business risk, technological innovations, and managerial efficiency significantly impact how firms manage working capital and generate free cash flows, which in turn affects their overall financial performance (Saeidi et al., 2021). The incorporation of firm-specific factors into the analysis allows for a more nuanced understanding of how internal capabilities, external risks, and technological advancements influence the effectiveness of working capital management and, consequently, the financial performance of firms (Tekin & Polat, 2020). Business risk is measured by assessing the standard deviation of either the operating revenues or of the sales revenues (Saeidi et al., 2021), Technological innovation measured by the ratio of expenditure on research and technological development to total expenditure (Callander and Kaunert, 2022) while managerial efficiency is measured by the ratio of operating revenues to operating expenditure (Shahwan et al., 2022).

In the case of commercial state corporations in Kenya, effective management of working capital, free cash flows, and firm-specific factors is of particular importance. These entities often operate in industries such as energy, transportation, and telecommunications, which require large capital investments and efficient management of both short-term and long-term assets (Riany, 2021). Commercial state corporations are expected to perform well financially while fulfilling their socio-economic responsibilities, such as providing essential public services and driving economic development (Onsongo, 2023). Given their role in economic growth, any inefficiencies in their financial performance can have far-reaching implications for the wider economy.

1.2 Research Problem

While previous research has examined the individual effects of working capital management, free cash flows, and firm-specific factors on financial performance, few studies have focused on the combined effect of these variables. Lack of the mediating effect of free cash flow and the moderating effect of firm specific factors on the relationship between working capital management and Financial performance in previous studies poses a methodological gap. Research by Agyei et al. (2020) and Kadhim et al. (2021) has established that each of these factors plays a significant role in determining a firm's profitability. However, the interaction between these variables in the context of commercial state corporations remains underexplored. This gap is particularly relevant to Kenya, where the financial performance of state corporations is pivotal to achieving the country's development goals (Mutinda, 2021).

Moreover, research on the relationship between working capital management and financial performance in Kenya has been limited, with existing studies often focusing on private sector companies or small and medium enterprises (SMEs) (Waweru & Atheru, 2022). This study aims to fill this gap by investigating how working capital management, free cash flows, and firm-specific factors collectively impact the financial performance of commercial state corporations in Kenya. By doing so, it contributes to the growing body of literature on state-owned enterprise management and offers insights that can inform policy decisions and managerial practices. This research provides valuable insights for decision-makers seeking to optimize financial management practices within the public sector, particularly in resource-constrained environments (Nyansimora & Deya, 2022).

1.3 Objective of the Study

To examine the joint effect of working capital management, free cash flows, and firm specific factors on financial performance of commercial state corporations in Kenya

2. Literature Review

2.1Theoretical Foundation

The theoretical framework for this objective draws from several established theories that help explain the relationships between working capital management, free cash flows, firm-specific factors, and financial performance. The study is anchored on four primary theories: Trade-off Theory, Free Cash Flow Theory, Agency Theory, and Transaction Cost Economics Theory.

The Trade-off Theory, proposed by Myers (1984), is central to understanding the balance firms must strike between maintaining liquidity and maximizing profitability. According to this theory, firms face a trade-off when managing their working capital—holding too much cash leads to missed investment opportunities, while holding too little can result in liquidity problems.

This theory is particularly relevant to the current study as it helps explain how efficient working capital management can optimize liquidity, which directly influences financial performance. The theory suggests that an optimal level of working capital should be maintained to balance the costs and benefits of liquidity management, contributing to improved financial outcomes for commercial state corporations in Kenya (Agyei, Sun & Abrokwah, 2020).

Developed by Jensen (1986), the Free Cash Flow (FCF) Theory emphasizes the importance of surplus cash generated after covering operating and capital expenses. According to this theory, firms with higher free cash flows can reinvest in business growth opportunities, pay dividends, or reduce debt, thus increasing shareholder value and financial performance. Efficient working capital management can lead to higher free cash flows by optimizing cash flow cycles and reducing the time between cash inflows and outflows.

The free cash flow theory helps explain how the management of working capital, such as reducing the cash conversion cycle, can enhance liquidity and generate surplus funds, ultimately improving the financial performance of firms (Saeed & Qazi, 2022).

Agency Theory, proposed by Jensen and Meckling (1976), explains the conflicts that arise between principals (shareholders) and agents (managers) due to differing interests. In the context of working capital management, agency problems may arise when managers prioritize their own interests over those of the shareholders. For example, managers may prefer to maintain higher levels of working capital for their own security, rather than optimize it for the benefit of the firm's financial performance.

Agency Theory provides insights into how managerial decisions regarding working capital management and the allocation of free cash flows can impact financial performance, particularly when managers' self-interests are at odds with shareholder goals (Solomon et al., 2021).

Transaction Cost Economics (TCE) theory by Williamson's (1993) is another key theory that explains how firms minimize transaction costs by managing their internal processes more efficiently. In the context of working capital management, TCE helps to explain how firms reduce transaction costs related to inventory management, supplier relationships, and financing by optimizing their working capital.

Technological innovations, as discussed in the study, can help minimize these transaction costs by improving efficiency and reducing the need for excessive working capital. TCE supports the argument that firms' decisions regarding working capital and free cash flow management are influenced by both internal and external transaction costs, and these decisions ultimately affect financial performance (Park & Ungson, 2021).

2.2 Empirical Review

Numerous studies have established a strong link between efficient working capital management and financial performance. Sawarni et al. (2022) found that a shorter cash conversion cycle (CCC) positively correlated with improved financial performance in Indian SMEs. Similarly, Waweru

and Atheru (2022) demonstrated that efficient management of quick ratios and inventory turnover improved the financial performance of supermarkets in Nairobi, Kenya. However, these studies often overlook the interaction of working capital management with other variables, such as free cash flows and firm-specific factors. In contrast, Kadhim et al. (2021) showed that firms with effective working capital management practices, especially in managing receivables and inventory, had better profitability in the UAE. These studies support the notion that effective working capital management is essential for improving financial performance, but they also highlight the need for a deeper investigation into the joint effects of WCM, FCF, and firm-specific factors (Mahmood et al., 2022).

Free cash flows (FCF) have been identified as a critical factor in determining financial performance. According to the Free Cash Flow Theory (Jensen, 1986), companies that generate excess cash flow can reinvest in growth opportunities or return value to shareholders, leading to improved financial outcomes. Ahmad et al. (2022) explored the role of FCF in mediating the relationship between working capital management and financial performance. Their study found that companies with higher free cash flows exhibited better profitability, supporting the importance of FCF in enhancing financial performance. Similarly, Lai et al. (2020) found that FCF played a significant role in determining the profitability of Malaysian firms, providing further evidence that higher free cash flows contribute to improved financial performance (Saeed & Qazi, 2022).

Firm-specific factors, such as business risk, technological innovations, and managerial efficiency, are crucial in shaping financial performance. Studies by Ibrahim and Isiaka (2021) and Zhang et al. (2021) have shown that larger firms with higher profitability are better able to manage their working capital, leading to improved financial performance. However, these studies did not consider how other firm-specific factors, such as technological innovations, may influence the relationship between WCM and financial performance. Technological innovations can streamline working capital management by optimizing inventory management and reducing the need for large amounts of working capital, thus enhancing financial performance (Callander & Kaunert, 2022). Managerial efficiency also plays a vital role, as skilled managers can make more informed decisions regarding working capital, free cash flows, and financial performance (Shahwan et al., 2022).

Recent research by Alqatan and Alshammari (2021) and Sahoo and Bhunia (2020) has highlighted the joint effect of working capital management and free cash flows on financial performance. These studies found that efficient working capital management and higher free cash flows together contributed significantly to improved profitability. Additionally, firm-specific factors, such as firm size and profitability, were found to moderate the relationship between WCM and financial performance, with larger firms showing a stronger positive relationship. These studies align with the theoretical frameworks that emphasize the importance of both internal capabilities (such as managerial efficiency) and external factors (such as business risk) in determining how working capital management and free cash flows contribute to financial performance (Faruqi et al., 2019). While much of the empirical literature on working capital management and financial performance focuses on private firms and SMEs, few studies have addressed the unique challenges faced by commercial state corporations, particularly in developing economies like Kenya. Research by Othuon et al. (2021) and Atheru (2023) has highlighted the role of working capital management in improving the financial performance of firms in Kenya. However, these studies have not investigated the joint effect of working capital management, free cash flows, and firm-specific factors on the financial performance of commercial state corporations. This research aims to fill this gap by exploring how these variables interact and influence the financial performance of state-owned enterprises in Kenya.

2.3 Conceptual Framework

The following conceptual model portrays anticipated correlation between the research variables. The predictor variable for the study is working capital management while the response variable is the financial performance. Effective working capital management influences the availability of cash for operational activities, which, in turn, affects free cash flows. This research hypothesizes that free cash flows mediate the relationship between the predictor and the response variable. Firm specific factors like business risk, technological innovations, and managerial efficiency strengthen or weaken the correlation between working capital management and financial performance. The conceptual framework for this study has been developed after meticulous literature and empirical reviews. Figure 2.1 depicts the study's conceptual model.

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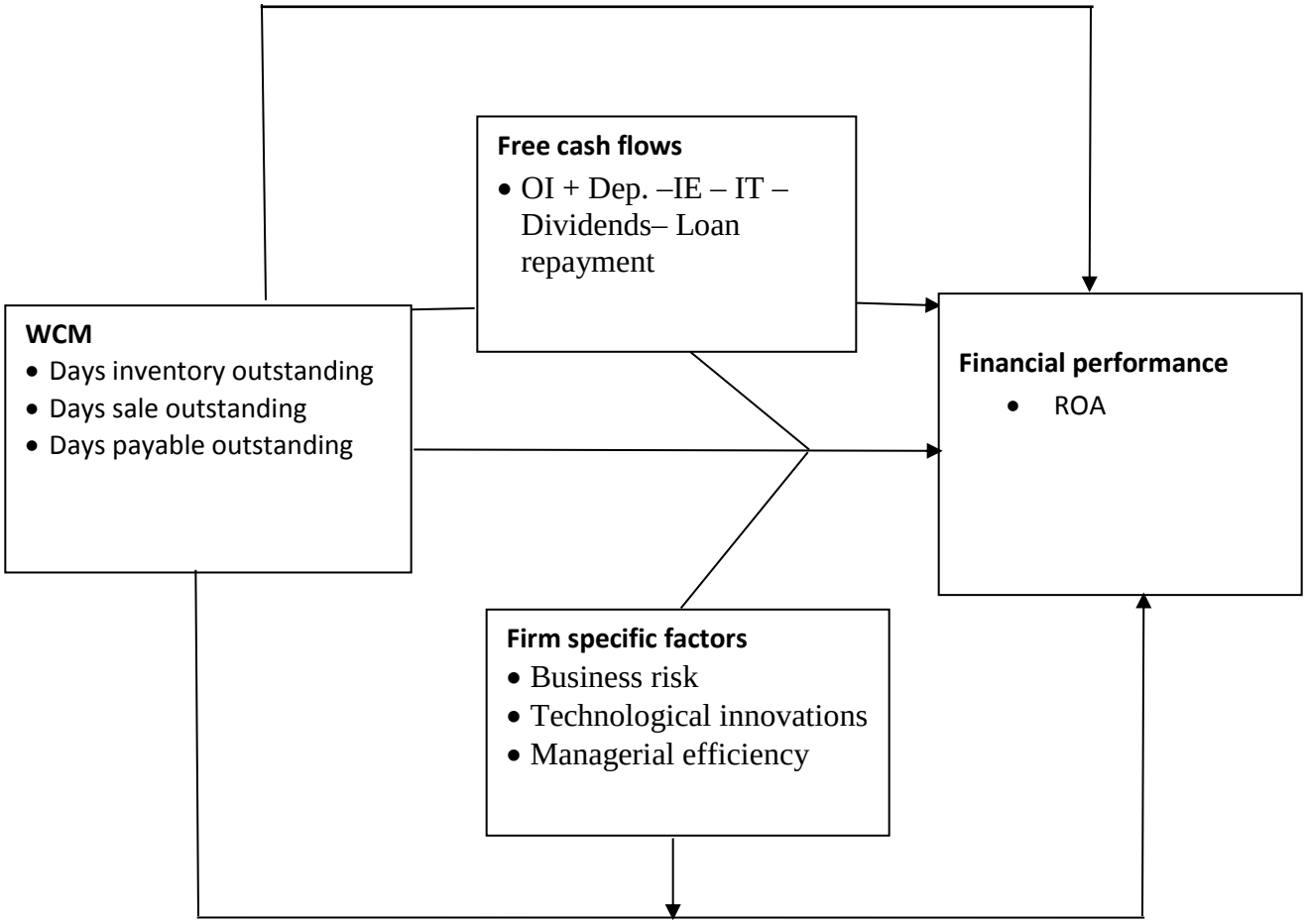

Figure 2.1: Conceptual Model

3. Research Methodology

This study adopted a positivist research philosophy, which is grounded in the belief that empirical observation and scientific methods provide the most reliable means of acquiring knowledge (Khan, 2018). To achieve the objective of examining the joint effect of working capital management, free cash flows and firm-specific factors on financial performance, the study employed a descriptive panel research design. The panel design was chosen to enable the analysis of data across multiple organizations over a ten- year period (2014-2023), capturing both cross-sectional and time-series variations. The study population consisted of 28 commercial state corporations operating in Kenya as of December 31, 2023, and a census approach was employed to include all entities in the

analysis. Secondary data was collected from annual reports sourced from the Office of the Auditor General and the individual state corporations, ensuring the data's reliability and consistency.

To analyse the data, the study utilized both descriptive and inferential statistics. Descriptive statistics, including mean, standard deviation, and variance, were used to summarize the data and provide a clear overview of the characteristics of the variables. Inferential statistics, such as random-effects generalized least squares regression, were employed to test the hypotheses and estimate the relationships between WCM, FCF, firm-specific factors, and financial performance. The regression models included working capital management components as independent variables, with Return on Assets (ROA) as the dependent variable, representing financial performance. The analysis was supported by diagnostic tests, including multicollinearity, heteroscedasticity, and autocorrelation tests, to ensure the validity and reliability of the results. This regression model was followed:

$$ROA_{it}=\beta_0+\beta_1 DIO_{it}+\beta_2 DSO_{it}+\beta_3 DPO_{it}+\beta_4 FCF_{it}+\beta_5 BR_{it}+\beta_6 TI_{it}+\beta_7 ME_{it}+\beta_{10} FR_{it}+\varepsilon$$

Where: Where: ROA = Financial performance of firm (i) at time (t)

DIO_{it}= Days inventory outstanding

DSO_{it}= Days sales outstanding

DPO_{it}= Days payable outstanding

FCF_{it} = Free cash flows

BR_{it}= Business risk

TI_{it}= Technological innovations

ME_{it}= Managerial efficiency

B_s =Regression coefficients

β_0= intercept

t=time period

ε= Error term

4 Findings and Discussions

The study explored the joint effect of working capital management, free cash flows, and firm specific factors on financial performance of commercial state corporations in Kenya. This section presents the correlation and regression results.

Table 1 presents the correlation analysis results, showing the relationships between financial performance (measured by ROA) and other variables in the study.

Table 1: Correlation Results

	ROA
ROA	1
DIO	-0.1394 0.0196 280
DSO	-0.5027 0.000 280
DPO	-0.6059 0.000 280
FCF	0.2876 0.000 280
Business risk	-0.034 0.5714 280
Technological innovations	0.3378 0.000 280
Managerial efficiency	0.1225 0.0405 280

DIO exhibits a weak, negative, and significant relationship with ROA, as indicated by a correlation coefficient of -0.1394 and a p-value of 0.0196. This suggests that as inventory holding periods increase, financial performance tends to decrease, though the effect is relatively small.

DSO has a moderate, negative, and highly significant relationship with ROA, with a correlation coefficient of -0.5027 and a p-value of 0.000. This indicates that longer receivables collection periods are associated with poorer financial performance, emphasizing the importance of efficient receivables management in enhancing profitability.

DPO demonstrates a strong, negative, and highly significant relationship with ROA, with a correlation coefficient of -0.6059 and a p-value of 0.000. This suggests that delays in settling payables are associated with lower financial performance, potentially reflecting strained supplier relationships or inefficiencies in working capital management.

FCF shows a weak, positive, and significant relationship with ROA, as evidenced by a correlation coefficient of 0.2876 and a p-value of 0.000. This indicates that higher free cash flows are associated with improved financial performance, highlighting the value of liquidity and financial flexibility in enhancing profitability.

Business Risk has a very weak, negative, and insignificant relationship with ROA, as indicated by a correlation coefficient of -0.034 and a p-value of 0.5714. This implies that variations in revenue volatility do not have a significant impact on financial performance.

Technological Innovations exhibit a moderate, positive, and highly significant relationship with ROA, with a correlation coefficient of 0.3378 and a p-value of 0.000. This suggests that higher investments in technological innovations are linked to better financial performance, underlining the importance of innovation in driving profitability.

Managerial Efficiency has a weak, positive, and significant relationship with ROA, as shown by a correlation coefficient of 0.1225 and a p-value of 0.0405. This indicates that greater operational efficiency contributes to improved financial performance, though the effect is relatively small.
The following null hypothesis (H_{01}) was developed and tested to investigate the joint effect.

$H_0$1: Working capital management, free cash flows and firm specific factors have no significant joint effect on financial performance of commercial state corporations in Kenya.

The study examined the joint effect of working capital management, free cash flows, and firm-specific factors on the financial performance of commercial state corporations in Kenya. A detailed interpretation of each variable is provided in Table 1.

Table 2 presents the results of the joint panel regression model, with an overall R-squared value of 0.4065, indicating that 40.65% of the changes in financial performance, as measured by Return on Assets (ROA), is explained by the independent variables in the model. The Wald chi-square value of 229.79 ($p < 0.000$) demonstrates that the overall model is statistically significant, suggesting a meaningful joint effect of WCM, FCF, and firm-specific factors on financial performance.

The resulting regression model based on the results from Table 2 is:

$$ROA = -2.33605 + 0.040398DIO - 0.07273DSO + 0.253293DPO + 0.395245FCF - 0.09433BR - 0.0372TI - 0.03746ME$$

Table 2: Joint Panel Regression Model

Random-effects GLS regression			Number of obs	=		280
Group variable: CompanyID			Number of groups	=		28
R-sq:			Obs per group:			
within = 0.5293			min	=		10
between = 0.4203			avg	=		10
overall = 0.4065			max	=		10
			Wald $chi^2(7)$	=		229.79
corr(u_i, X) = 0 (assumed)			Prob > chi^2	=		0.000
ROA	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
DIO	0.040398	0.035044	1.15	0.249	-0.02829	0.109083
DSO	-0.07273	0.032698	-2.22	0.026	-0.13682	-0.00864
DPO	0.253293	0.027982	9.05	0.000	0.198449	0.308137
FCF	0.395245	0.036956	10.7	0.000	0.322813	0.467677
BR	-0.09433	0.025328	-3.72	0.000	-0.14397	-0.04468
TI	-0.0372	0.032724	-1.14	0.256	-0.10134	0.026939
ME	-0.03746	0.018119	-2.07	0.036	-0.07886	-0.00093
_cons	-2.33605	0.606719	-3.85	0.000	-3.5252	-1.1469

Days Inventory Outstanding has a positive but insignificant effect on financial performance, with a coefficient of 0.040398 ($p = 0.249$). This indicates that while longer inventory holding periods might slightly improve ROA, the effect is not statistically significant in the joint model. This

finding aligns with earlier analyses where DIO's influence on financial performance was weak, suggesting that inventory management alone is not a strong determinant of financial performance in these corporations.

Days Sales Outstanding has a significant negative effect on financial performance, with a coefficient of -0.07273 ($p = 0.026$). This indicates that longer receivables collection periods are associated with a reduction in ROA. The finding underscores the importance of efficient receivables management practices in enhancing liquidity and profitability. It also suggests that delays in customer payments impose financial burdens that negatively affect the overall performance of commercial state corporations.

Days Payable Outstanding exhibits a significant positive effect on financial performance, with a coefficient of 0.253293 ($p = 0.000$). This implies that longer payment periods to suppliers contribute to higher ROA, possibly by allowing corporations to utilize supplier credit as a cost-effective financing option. However, while leveraging longer payables may boost financial performance, excessive reliance on this strategy could risk straining supplier relationships.

Free Cash Flows have a significant positive effect on financial performance, with a coefficient of 0.395245 ($p = 0.000$). This finding highlights the critical role of liquidity in driving profitability. Higher free cash flows enable corporations to invest in productive activities, meet operational demands, and reduce financial constraints, all of which positively influence financial outcomes.

Business Risk has a significant negative effect on financial performance, with a coefficient of -0.09433 ($p = 0.000$). This indicates that greater revenue volatility adversely impacts ROA. The finding underscores the need for robust risk management strategies to stabilize income streams and minimize the adverse effects of business uncertainty on financial performance.

Technological Innovations show a negative but insignificant effect on financial performance, with a coefficient of -0.0372 ($p = 0.256$). While earlier analyses showed positive contributions of TI to financial performance, its lack of significance in the joint model suggests that the interaction of TI

with other variables may dilute its direct impact. This finding calls for a deeper exploration of the contextual factors influencing the effectiveness of technological innovations.

Managerial Efficiency has a significant negative effect on financial performance, with a coefficient of -0.03746 ($p = 0.036$). This indicates that operational inefficiencies negatively affect ROA, reflecting the importance of effective management in optimizing resource utilization and improving financial outcomes. The significance of ME in the joint model emphasizes its role as a critical driver of organizational performance.

In summary, the joint model demonstrates that working capital management, free cash flows, and firm-specific factors collectively influence financial performance. The null hypothesis $H_0 1$, which posits that WCM, FCF, and firm-specific factors have no significant joint effect on financial performance, is rejected. The findings highlight the complex interplay of operational and strategic factors in shaping the financial outcomes of commercial state corporations in Kenya.

These findings resonate with those of Mufti, Awan, and Islam (2023), who demonstrated the significant influence of firm-specific factors on the relationship between WCM and financial performance in Singaporean manufacturing firms. However, while their study did not include mediating variables like FCF, this research enriches the discourse by demonstrating how FCF integrates with firm-specific factors to enhance or constrain the effectiveness of WCM practices. The results extend the practical applicability of Mufti et al.'s findings to the public-sector context, showing that similar principles can enhance financial sustainability in state corporations.

The findings partially align with Lin and Wang (2021), who observed that firm-specific factors moderated the relationship between WCM components and financial performance in Chinese firms. Specifically, Lin and Wang found that accounts receivable turnover positively influenced ROA, which is consistent with the negative joint effect of DSO on ROA in this study, as both measures reflect receivables efficiency. However, the insignificant effect of inventory management practices in Lin and Wang's study contrasts with the findings here, which showed that DIO had no significant joint effect. The introduction of FCF as a mediating factor in this study

addresses a conceptual gap in Lin and Wang's research, providing a more holistic perspective on the interaction between WCM, firm-specific factors, and financial performance.

The study also corroborates the findings of Anton and Afloarei (2020), who demonstrated that firm-specific factors, such as firm size and age, significantly influence the strength of the WCM-financial performance relationship. Like Anton and Afloarei, this study highlighted the importance of firm-specific factors in moderating the impact of WCM components. However, by incorporating additional factors like business risk, technological innovations, and managerial efficiency, this study addressed the conceptual gaps in their research and extended the theoretical framework to the public sector.

The findings of this study are consistent with Ochieng, Jagongo, and Ndede (2020), who found a positive association between WCM and financial performance in manufacturing firms listed at the NSE. Both studies emphasize the importance of integrating firm-specific factors into financial strategies to optimize outcomes. However, while Ochieng et al. (2020) focused on firm size as a moderator, this study introduced a more nuanced approach by examining multiple firm-specific factors and incorporating FCF as a mediator. This advancement addresses a critical conceptual gap in Ochieng et al. (2020) research and provides actionable insights for public-sector organizations.

5. Conclusions

The study concluded that working capital management significantly impacts the financial performance of commercial state corporations in Kenya, with varying effects across its components, DIO, DSO and DPO. Efficient receivables and payables management are critical to improving profitability, as evidenced by the significant negative effect of DSO and the significant positive effect of DPO on ROA. However, inventory management, as measured by DIO, demonstrated a limited influence on financial performance. These findings emphasize the need for corporations to prioritize strategies that reduce receivables collection periods and optimize payables cycles to improve financial outcomes.

The mediating role of free cash flows in the relationship between WCM and financial performance was evident in the study. FCF partially mediated the effects of DSO and DPO on financial

performance, highlighting its role as a bridge between operational practices and profitability. The findings underscored the importance of liquidity management in translating working capital practices into financial performance improvements. Organizations with higher free cash flows were better positioned to address operational challenges, invest in growth opportunities, and enhance overall profitability.

Firm-specific factors were found to play a moderating role in the relationship between WCM and financial performance. Business risk significantly moderated the relationship between DIO and financial performance, while technological innovations enhanced the positive impact of DPO on financial performance. Managerial efficiency emerged as a critical moderator, significantly influencing the effects of all WCM components on financial performance. These results demonstrate that organizational characteristics such as risk management capabilities, technological advancements, and operational efficiency significantly shape the effectiveness of working capital practices in driving financial performance.

The joint effect of WCM, FCF, and firm-specific factors on financial performance was significant, underscoring the interdependence of these variables. The study concluded that integrating working capital strategies with robust liquidity management and addressing firm-specific challenges collectively enhance financial performance. These conclusions provide a roadmap for optimizing financial outcomes through strategic integration of operational and financial practices.

6. Recommendations and Areas for Further Research

The study underscores the need for an integrated approach that combines working capital management, free cash flow optimization, and firm-specific factors to improve financial performance. Practitioners should adopt holistic financial management strategies that align operational practices with strategic objectives, ensuring cross-functional collaboration. Policymakers can facilitate this by encouraging state corporations to develop comprehensive financial management policies that incorporate liquidity planning, risk mitigation, and innovation. This integrated approach will not only enhance financial performance but also contribute to the long-term sustainability and competitiveness of commercial state corporations in Kenya.

Future research could adopt dynamic panel data analysis techniques, such as the Generalized Method of Moments (GMM), to account for potential endogeneity and capture dynamic relationships over time. This approach would provide a more nuanced understanding of how changes in WCM, FCF, and firm-specific factors influence financial performance. By analyzing short-term and long-term effects, researchers could offer more precise recommendations for managing working capital and liquidity in rapidly changing environments.

While this study focused on financial performance, future research could explore the impact of WCM, FCF, and firm-specific factors on non-financial outcomes such as organizational sustainability, employee satisfaction and retention levels, and stakeholder trust. Investigating how these operational and financial practices contribute to broader organizational goals could provide a more comprehensive understanding of their value. For instance, studies could examine how WCM practices align with sustainability initiatives or corporate social responsibility, offering insights into their role in achieving long-term organizational success.

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