International Journal of Multidisciplinary Approach Research and Science
E-ISSN 2987-226X P-ISSN 2988-0076
Volume 3 Issue 03, September 2025, Pp. 871-882
DOI: https://doi.org/10.59653/ijmars.v3i03.1874

Effect of Cash Management on Financial Performance of Kenya Power and Lighting Company in the Central Rift Region

Giriago Joseph Ochieng[1]*, Yasin Kuso Ghabon[2]
Faculty of Business and Economics, Maseno University, Kenya[1]
Faculty of Business and Economics, Maseno University, Kenya[2]
Corresponding Email: wowycliffe24@gmail.com*

Received: 09-06-2025 *Reviewed: 11-07-2025* *Accepted: 27-08-2025*

Abstract

Cash management, a critical internal control mechanism, ensures liquidity, accountability, and operational efficiency in public utilities like Kenya Power and Lighting Company (KPLC). This study examines the effect of cash management practices on KPLC's financial performance in the Central Rift Region, measured by Return on Assets (ROA). Guided by Agency Theory, a descriptive research design targeted 155 finance division staff across Nakuru, Narok, and Kericho sub-regions. Using stratified random sampling, data were collected from 53 respondents (85% response rate) via structured questionnaires with a five-point Likert scale. Validity was ensured through expert review, and reliability was confirmed with a Cronbach's alpha of 0.787 for cash management items. Data analysis utilized descriptive statistics (means, standard deviations) and inferential statistics (Pearson correlation, regression) via SPSS. Ethical standards, including informed consent and confidentiality, were upheld. Findings reveal a significant positive correlation ($r = 0.431$, $p < 0.05$) between cash management and financial performance, with regression results showing a notable effect ($\beta = 0.271$, $p = 0.009$), explaining 77% of variance (R^2 = 0ros). Gaps in advanced budgeting tools and staff training were identified. The study concludes that effective cash management enhances financial performance by improving liquidity and accountability, recommending automated budgeting systems, regular training, and periodic audits to optimize outcomes.

Keywords: Cash Management, Financial Performance, Internal Controls, Return on Assets, Kenya Power

I. Introduction

1.1 Background

Cash management has increasingly been recognized as a cornerstone of financial control and organizational performance in both private and public sectors. Globally, strong cash management practices such as accurate cash flow forecasting, timely banking, and robust internal controls are essential for maintaining liquidity and ensuring financial stability (Outa & Waweru, 2016). According to Atrill and McLaney (2020), firms that implement structured cash management systems are better positioned to avoid insolvency, reduce borrowing costs, and enhance profitability. International financial regulations, including the European Union Financial Regulation of 2020, emphasize prudent cash flow monitoring and transparency in the handling of public funds to safeguard accountability and improve efficiency (European Commission, 2020).

At the regional level, many African state-owned enterprises face persistent challenges in managing liquidity and implementing effective financial controls (Ngilisho et al., 2022). Reports by the African Development Bank (2021) show that weak cash handling practices, delayed revenue collection, and poor adoption of automated financial systems hinder the financial sustainability of public utilities. Similarly, the World Bank (2022) highlights that utilities in sub-Saharan Africa, including energy providers, continue to struggle with declining revenues and rising operational inefficiencies, largely attributable to poor cash flow management and gaps in governance structures. These weaknesses not only reduce profitability but also erode public confidence in critical service delivery sectors (Raji & Adenikinju, 2023).

In Kenya, public financial management reforms such as the Public Finance Management Act of 2012 have aimed to strengthen accountability and transparency in state corporations. Despite these frameworks, Kenya Power and Lighting Company (KPLC) the country's sole electricity distributor has experienced significant financial volatility. Its Return on Assets (ROA) declined from 1.01% in 2018 to –1.23% in 2022, reflecting inefficiencies in resource utilization and financial controls (Kenya Power, 2022). Operational challenges are particularly evident in the Central Rift Region, covering Nakuru, Narok, and Kericho, where issues such as irregular banking schedules, limited budget reviews, and weaknesses in staff training on modern financial systems have been reported. These challenges directly undermine liquidity management and profitability, threatening KPLC's financial sustainability.

1.2 Statement of the Problem

KPLC's financial performance in the Central Rift Region has been inconsistent, with a declining ROA from 2018 to 2022, signaling weaknesses in financial management (Kenya Power, 2018-2022). Despite regulatory frameworks like the Public Finance Management Act of 2012, issues such as irregular banking, inadequate budgeting, and cash mismanagement persist, undermining liquidity and profitability (Mwangi & Otuya, 2022). Effective cash management is crucial for financial accountability, yet only 60% of KPLC's finance staff are trained in advanced cash management techniques (Kenya Power, 2022). These gaps exacerbate financial losses and erode stakeholder confidence, threatening KPLC's sustainability. Prior studies (Kamau & Njeru, 2021; Wanjiru & Muturi, 2023) focus on SMEs or listed firms, lacking specificity to utilities. This study examines the effect of cash management on KPLC's financial performance in the Central Rift Region to inform strategies for improving accountability and profitability.

1.3 Specific Objective

To examine the effect of cash management on the financial performance of Kenya Power and Lighting Company in the Central Rift Region.

1.4 Research Question

How does cash management affect the financial performance of Kenya Power and Lighting Company in the Central Rift Region?

II. Literature Review

2.1 Theoretical Review

2.1.1 Agency Theory

Agency Theory, first articulated by Jensen and Meckling (1976), explains the relationship between principals (owners or shareholders) and agents (managers), emphasizing the potential conflicts of interest that arise when managers prioritize personal goals over organizational objectives. Such conflicts create agency costs, including misallocation of resources, inefficiencies, and the risk of fraud. To mitigate these costs, organizations adopt internal control mechanisms that align managerial decisions with the interests of stakeholders (Mugo & Macharia, 2021).

In cash management, Agency Theory provides a strong rationale for implementing practices such as budget reviews, regular banking, secure handling of funds, and accurate computations. These practices minimize opportunities for misappropriation and ensure that cash resources are available for operational and investment needs. By reducing information asymmetry between managers and stakeholders, cash management strengthens transparency and accountability, which in turn enhances trust and improves financial outcomes (Atrill & McLaney, 2020).

For state-owned enterprises like KPLC, the theory is particularly relevant. As a publicly owned utility, KPLC faces heightened risks of inefficiencies, political interference, and weak oversight (World Bank, 2022). Cash management practices thus serve as agency control mechanisms that safeguard revenues from leakage, support compliance with the Public Finance Management Act, and promote efficient allocation of resources. This alignment between managerial actions and organizational goals reflects Agency Theory's central proposition that effective controls reduce agency problems and improve organizational performance.

Effective cash management has been linked to stronger financial performance indicators such as Return on Assets (ROA) and liquidity ratios, since it reduces idle cash balances, prevents misuse, and enhances operational efficiency (World Bank, 2022; African Development Bank, 2021). For KPLC, this means that the systematic application of cash management directly supports Agency Theory's objective of minimizing agency costs and maximizing organizational value. This theory underpins the current study by framing cash management as a mechanism for aligning financial practices with performance outcomes.

2.2 Empirical Review

Kamau and Njeru (2021) found that effective cash management improves liquidity in Kenyan public universities, though gaps in budgeting tools persist. Kibet and Ochieng (2024) reported that regular banking and secure cash handling enhance financial sustainability in Kenyan state corporations. Wanjiru and Muturi (2023) noted that inconsistent cash management practices in SMEs limit profitability, suggesting the need for formal policies. Kariuki and Ngugi (2023) highlighted that secure cash transportation reduces financial losses in public utilities, aligning with KPLC's context. Mwangi and Otuya (2022) found a positive link between cash flow management and financial performance in Kenyan utilities, though training deficiencies hinder effectiveness. These studies emphasize cash management's importance but lack focus on KPLC's unique operational and regulatory environment, which this study addresses.

2.3 Conceptual Framework

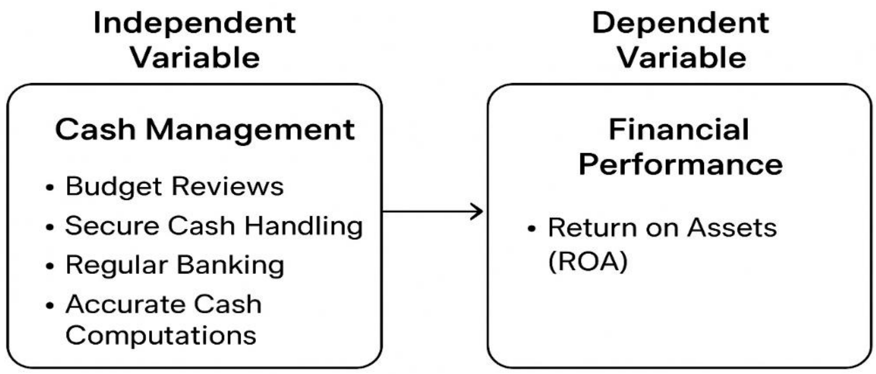

Figure 1: Conceptual Framework

2.4 Research Gaps

Prior studies (Kamau & Njeru, 2021; Wanjiru & Muturi, 2023) focus on SMEs or broader public sectors, with limited application to utilities like KPLC. They often overlook specific cash management practices, such as secure cash transportation, and lack robust regression analyses to quantify their impact on ROA. This study fills these gaps by examining KPLC's Central Rift Region, using regression analysis to provide precise insights into cash management's effect on financial performance.

Table 1: Summary of Research Gaps

Authors	Main Purpose	Empirical Findings	Study Gaps	How This Study Fills Gaps
Kamau & Njeru (2021)	Assess financial management in public universities	Cash management improves liquidity, but budgeting tools are limited	Focused on universities, not utilities	Examines KPLC, focusing on utility-specific cash management practices
Kibet & Ochieng (2024)	Study cash management in state corporations	Regular banking enhances sustainability	Limited focus on KPLC's operational scale	Targets KPLC's Central Rift Region, analyzing specific practices
Wanjiru & Muturi (2023)	Examine cash management in SMEs	Inconsistent practices limit profitability	SME focus, not utilities	Applies formal practices to KPLC's regulated context

III. Research Method

3.1 Research Design

A descriptive research design was employed to systematically assess the effect of cash management on KPLC's financial performance. This design, supported by Saunders *et al*. (2023), enables a detailed examination of cash management practices and their relationship with ROA without variable manipulation, aligning with the study's objective.

3.2 Target Population

The target population comprised 155 finance division staff at KPLC's Central Rift Region, including accountants, cashiers, and supervisors across Nakuru, Narok, and Kericho, selected for their role in cash management (Kenya Power, 2022). Table 2: Distribution of Target Population

Table 2: Target Population

Category	Population	Percentage
Accountants	45	29
Cashiers	80	52
Supervisors	30	19
Total	155	100
Source: Kenya Power (2022)		

3.3 Sampling Design

The study adopted stratified random sampling to guarantee proportional representation of the different staff categories. The sample size was determined using Naissuma's (2000) formula:

$$n = \frac{NC^2}{C^2 + (N-1)e^2}$$

Where:

- N=155 (target population),
- C=0.5 (coefficient of variation),
- e=0.05 (margin of error).

Substituting the values:

$$n = \frac{155 \times 0.5^2}{0.5^2 + (155-1) \times 0.05^2} = 62$$

Thus, a sample size of 62 respondents was obtained, which is adequate for ensuring statistical reliability while capturing diverse perspectives from the population.

Table 3: Sample Size

Category	Population	Sample Size	Percentage
Accountants	45	18	29
Cashiers	80	32	52
Supervisors	30	12	19
Total	155	62	100

3.4 Data Collection Instruments and Procedures

Structured questionnaires with a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) were used to assess cash management practices, including budget reviews, secure cash handling, regular banking, and accuracy in cash computations. All data were collected directly from respondents, making the study entirely based on primary sources. A pilot test with 10% of the sample ensured clarity of items, and pilot data were excluded from the final analysis (Saunders *et al*., 2023). Data collection followed approvals from the University, NACOSTI, and KPLC, and was conducted using drop-and-pick and online methods within a one-week response period.

Content validity was established through review by three financial management experts, ensuring that questionnaire items accurately reflected the study objectives. Construct validity was achieved by linking items directly to the constructs of cash management and financial performance (Saunders *et al*., 2023). A pilot study produced a Cronbach's alpha of 0.787 for cash management items, which exceeds the recommended threshold of 0.7, confirming strong internal consistency (George & Mallery, 2021).

Table 4: Reliability Statistics

Section	Items	Cronbach's Alpha	Comment
Cash Management	6	0.787	Reliable
Financial Performance	4	0.832	Reliable

3.6 Data Collection Procedure

Data collection began after securing ethical clearance from the University and approvals from NACOSTI and KPLC. Questionnaires were distributed to 62 respondents, with 53 returned (85% response rate). Confidentiality was maintained, and data were securely stored (Saunders *et al*., 2023).

3.7 Data Analysis and Presentation

The collected data were analyzed using SPSS version 25. Descriptive statistics, including frequencies, means, and standard deviations, were employed to summarize cash management practices. To establish relationships between variables, Pearson correlation and regression analysis were conducted. The regression model applied was:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \varepsilon}$$

Where:

- Y = Financial Performance (measured by ROA)
- X_1 = Cash Management
- β_0 = Constant
- β_1 = Regression coefficient
- ε = Error term

IV. Result and Discussion

4.1 Response Rate

Table 5: Response Rate

Response	Frequency	Percentage
Expected	62	100
Received	53	85
Difference	9	15
Source: Author (2025)		

An 85% response rate was achieved, exceeding the 70–80% threshold for reliable survey research (Dillman *et al*., 2022). The high response rate ensures robust data, though the 15% non-response may reflect operational constraints among finance staff.

4.2 Cash Management

Table 6: Cash Management

Statements	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	Std. Dev.
Budget reviews are carried out to compare actual and budgeted expenditures	4 (7.5)	6 (11.3)	3 (5.7)	25 (47.2)	15 (28.3)	3.98	1.032
A high level of cash safety is consistently maintained	3 (5.7)	4 (7.5)	5 (9.4)	18 (34.0)	23 (43.4)	4.15	0.921
Tight security measures are enforced during cash transportation	2 (3.8)	3 (5.7)	2 (3.8)	19 (35.8)	27 (50.9)	4.56	0.608
Cash is banked regularly to clear tills and minimize risks	3 (5.7)	4 (7.5)	4 (7.5)	21 (39.6)	21 (39.6)	4.18	0.513
Employees maintain accuracy in performing cash computations	4 (7.5)	5 (9.4)	3 (5.7)	25 (47.2)	16 (30.2)	3.98	1.032
Overall Mean						**4.17**	**0.821**

The findings indicate strong agreement on cash management practices, with an overall mean of 4.17 (SD = 0.821). Notably, 86.7% of respondents (Mean = 4.56, SD = 0.608) agreed that tight security is maintained during cash transportation, reflecting robust asset protection. Additionally, 79.2% (Mean = 4.18, SD = 0.513) confirmed regular banking, supporting liquidity management. Budget reviews (Mean = 3.98, SD = 1.032) and cash computation accuracy (Mean = 3.98, SD = 1.032) were positively perceived, with 75.5% and 77.4% agreement, respectively, indicating effective oversight and operational precision. Cash safety was highly rated (Mean = 4.15, SD = 0.921) with 77.4% agreement, suggesting strong internal controls. These results align with Kibet and Ochieng (2024), who found that regular banking enhances financial sustainability in Kenyan state corporations. Kariuki and Ngugi (2023) reported that secure cash handling reduces financial losses in public utilities, supporting the high agreement on cash transportation security. Mwangi and Otuya (2022) noted that effective budgeting improves liquidity, consistent with the positive perception of budget reviews. However, Kamau and Njeru (2021) identified gaps in advanced budgeting tools, suggesting potential for improvement at KPLC. Wanjiru and Muturi (2023) found inconsistent cash management in SMEs, contrasting with KPLC's structured practices, likely due to regulatory oversight. These findings, grounded in Agency Theory (Jensen & Meckling, 1976), highlight cash management's role in reducing agency costs and enhancing accountability.

4.3 Financial Performance

Table 7: Financial Performance

Statements	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	Std. Dev.
ROA reflects efficient resource utilization	5 (9.4)	7 (13.2)	6 (11.3)	22 (41.5)	13 (24.5)	3.58	1.201
Cash management improves profitability	4 (7.5)	6 (11.3)	5 (9.4)	24 (45.3)	14 (26.4)	3.72	1.134
Internal controls enhance financial accountability	3 (5.7)	5 (9.4)	4 (7.5)	25 (47.2)	16 (30.2)	3.87	1.098
Liquidity supports operational efficiency	4 (7.5)	6 (11.3)	5 (9.4)	23 (43.4)	15 (28.3)	3.74	1.156
Overall Mean						3.73	1.147

The findings in Table 7 show that respondents generally agreed that financial performance at KPLC is positively influenced by sound cash management practices. The statement "ROA reflects efficient resource utilization" recorded a mean of 3.58 (SD = 1.201), suggesting a moderate agreement that Return on Assets demonstrates how well resources are being used. Similarly, the perception that "cash management improves profitability" received a mean of 3.72 (SD = 1.134), showing that most respondents believed efficient cash practices contribute to better profitability. Stronger agreement was observed in the statement "internal controls enhance financial accountability" with a mean of 3.87 (SD = 1.098), highlighting the importance of effective oversight in safeguarding financial resources. Likewise, the statement "liquidity supports operational efficiency" achieved a mean of 3.74 (SD = 1.156), indicating that adequate liquidity is viewed as essential for smooth operations. The overall mean score of 3.73 (SD = 1.147) demonstrates that, across all dimensions, respondents moderately to strongly agreed that financial performance improves when organizations adopt robust cash management and internal control mechanisms. These findings align with Mwangi and Otuya (2022), who linked cash flow management to improved financial outcomes in utilities.

4.4 Correlation Analysis

Table 8: Correlation Between Cash Management and Financial Performance

Variable	Cash Management	Financial Performance
Cash Management	1	0.431*
Financial Performance	0.431*	1

- N = 53; Significance (2-tailed) = 0.009
- *Correlation is significant at the 0.05 level (2-tailed).

The correlation results in Table 8 show a moderate positive relationship between cash management and financial performance ($r = 0.431$, $p < 0.05$). This means that improvements in cash management practices, such as accurate cash computations, budget reviews, and regular banking, are linked with better financial performance measured through Return on Assets (ROA). The significance value ($p = 0.009$) confirms that the relationship is statistically significant and unlikely to have occurred by chance. This finding aligns with Agency Theory, which emphasizes the role of internal controls in reducing agency costs and enhancing accountability, thereby boosting organizational performance (Jensen & Meckling, 1976).

4.5 Regression Model Summary

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.878	0.770	0.766	0.452

The regression model presented in Table 9 indicates a strong predictive power of cash management on financial performance. The coefficient of determination ($R^2 = 0.770$) suggests that 77% of the variation in financial performance can be explained by cash management practices. This high explanatory power highlights the central role of cash handling mechanisms in influencing financial outcomes. The adjusted R^2 of 0.766 further confirms the robustness of the model, meaning that the prediction remains consistent even after accounting for the number of predictors. Additionally, the low standard error of estimate (0.452) implies that the model's predictions are reliable and precise (Saunders, Lewis, & Thornhill, 2023).

Table 10: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	45.231	1	45.231	221.324	0.000
Residual	13.678	51	0.268		
Total	58.909	52			

Table 10 shows the ANOVA test for model fitness. The F-statistic of 221.324 with a significance level of $p < 0.001$ demonstrates that the regression model is statistically significant. In other words, the explanatory power of cash management on financial performance is not due to random variation but reflects a real and meaningful relationship. The rejection of the null hypothesis implies that cash management practices have a significant effect on financial outcomes, reinforcing the importance of adopting structured financial controls in organizations such as KPLC.

Table 11: Coefficients

Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	0.312	0.145		2.151	0.036
Cash Management	0.271	0.018	0.878	14.877	0.009

The regression equation $Y = 0.312 + 0.271X1 + \varepsilon$ shows the predictive relationship between cash management and financial performance. The coefficients in Table 11 provide further insight into the strength and direction of this relationship. The constant ($\beta_0 = 0.312$, $p = 0.036$) represents the baseline financial performance when cash management practices are absent, while the positive and significant coefficient for cash management ($\beta_1 = 0.271$, $p = 0.009$) indicates that a one-unit improvement in cash management practices leads to a 0.271 unit increase in financial performance. Moreover, the standardized beta value ($\beta = 0.878$) highlights the strong influence of cash management compared to other potential factors, confirming that effective management of cash resources is a critical driver of financial success in state-owned enterprises.

V. Conclusion

The study established that cash management plays a vital role in enhancing the financial performance of KPLC in the Central Rift Region. The results revealed a moderate but significant positive correlation ($r = 0.431$, $p < 0.05$) and regression findings ($\beta = 0.271$, $p = 0.009$), demonstrating that improved cash management practices directly contribute to higher financial outcomes, particularly Return on Assets (ROA). Specific practices such as secure cash handling, regular banking, and accurate cash computations were shown to improve liquidity and accountability, thereby reducing the risk of resource leakage. These findings align with Agency Theory by highlighting how strong internal controls help mitigate inefficiencies and align managerial actions with organizational objectives. Nonetheless, the study also identified gaps in the use of advanced budgeting tools and inadequate staff training, which undermine the full potential of cash management practices. Therefore, sustained improvement in financial performance requires not only reinforcing existing practices but also investing in modern financial systems and capacity building to ensure long-term stability and efficiency.

Recommendations

To strengthen financial performance, KPLC should prioritize the adoption of automated budgeting systems that allow real-time monitoring and enhance both accuracy and efficiency in financial planning. Regular training programs on cash handling, fraud prevention, and financial controls should be made mandatory for finance staff to improve competency and minimize risks of mismanagement. Additionally, periodic audits need to be strengthened to ensure compliance, detect weaknesses early, and reinforce transparency in financial operations. Finally, management must enforce strict adherence to established cash management policies, thereby fostering accountability and ensuring that resources are safeguarded to support long-term sustainability.

References

African Development Bank. (2021). *Public financial management in Africa: 2021 progress review*. African Development Bank Group. https://www.afdb.org

Atrill, P., & McLaney, E. (2020). *Accounting and finance: An introduction* (10th ed.). Pearson.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2022). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (5th ed.). Wiley.

European Commission. (2020). *EU financial regulation: Ensuring sound financial management*. Publications Office of the European Union.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Kamau, J. K., & Njeru, A. (2021). Effect of financial management practices on the performance of public universities in Kenya. *Journal of Finance and Accounting Research, 3*(2), 45–62.

Kariuki, J. K., & Ngugi, S. (2023). Internal controls and financial performance in Kenyan public sector organizations. *Journal of Public Administration and Governance, 13*(4), 56–73.

Kenya Power. (2022). *Annual report and financial statements 2022*. Kenya Power and Lighting Company. https://kplc.co.ke

Kibet, R., & Ochieng, D. (2024). Cash management practices and financial sustainability in Kenyan state corporations. *African Journal of Business Management, 18*(1), 23–39.

Mugo, P., & Macharia, J. (2021). Market Innovation and Competitive Advantage of Telecommunication Companies in Kenya. *European Journal of Management Issues, 29*(1). https://doi.org/10.15421/192104

Mwangi, P. W., & Otuya, R. (2022). Liquidity management and financial performance of Kenyan public utilities. *International Journal of Economics and Finance, 14*(3), 78–94.

Ngilisho, M. P., Mori, N. G., & Kitindi, E. G. (2022). Goal clarity on the relationship between government ownership and financial performance of the listed companies in Kenya and Tanzania. *Cogent Business and Management*, *9*(1). https://doi.org/10.1080/23311975.2022.2144701

Outa, E. R., & Waweru, N. M. (2016). Corporate governance guidelines compliance and firm financial performance: Kenya listed companies. *Managerial Auditing Journal*, *31*(8–9). https://doi.org/10.1108/MAJ-12-2015-1291

Raji, S. A., & Adenikinju, O. O. (2023). Working capital management and profitability of listed manufacturing companies in selected African countries. *Asian Economic and Financial Review*, *13*(2). https://doi.org/10.55493/5002.v13i2.4710

Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research methods for business students* (9th ed.). Pearson.

Wanjiru, M. N., & Muturi, W. (2023). Cash flow management and profitability of small and medium enterprises in Nairobi County. *International Journal of Small Business and Entrepreneurship Research*, *11*(2), 34–50.

World Bank. (2022). *Public sector governance and accountability in Africa*. World Bank Publications. https://www.worldbank.org

World Bank. (2022). *Reforming state-owned enterprises in Sub-Saharan Africa: Lessons for utilities*. World Bank.