Working Capital Management and SME Performance in Selected SMES in Ibadan, Oyo State

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Abstract
This research investigated the influence of working capital management on SME performance in Ibadan, Oyo State, with a specific focus on working capital efficiency, cash, and accounts receivable management. The study is guided by resource-based and operating cycle theories. The population includes all 1108 staff members of SMEs in the selected three senatorial districts in Ibadan, and a sample size of 287 was determined using the Taro Yamane Formula. Results are presented through tables featuring percentages, frequency count, mean, and standard deviation. Hypotheses are tested via linear regressions at a 0.05 significance level. The analysis indicates a notable link between working capital management efficiency and SME profitability ($F = 61.758$, $p < 0.001$). Additionally, cash management significantly affects profitability ($F = 136.182$, $p < 0.001$), while accounts receivable's impact on return on investment is also significant ($F = 4.361$, $p < 0.003$). Moreover, inventory management significantly influences customer satisfaction ($F = 56.988$, $p < 0.001$). The study affirmed that proficient management of working capital significantly influences SME financial performance. Strong evidence links working capital efficiency, cash, accounts receivable, and inventory management to profitability and customer satisfaction. Significant p-values underscore the importance of these factors. It was recommended that SMEs improve working capital management through robust account management and inventory control.

Keywords: Account Receivable Management, Cash Management, Performance, Small and Medium Enterprises (SMEs), Working Capital Management, Performance, Working Capital Management Efficiency

Introduction
Globally, economic growth hinges on business activities that contribute to a nation's economy. Managing the financial aspects of businesses is crucial for their profitability and liquidity. Effective working capital management plays a pivotal role in enhancing corporate performance, influencing both profit and liquid assets. In the context of global business organizations, optimizing working capital is integral to overall corporate strategy, aiming to create shareholder value and achieve optimal performance. Small and Medium Enterprises (SMEs) play a vital role in contributing to societal opportunities, including GDP growth, employment generation, income creation, and community economic development. Recognizing their significance, governments worldwide, including Nigeria, actively support and create conducive environments for SMEs to thrive.

Small and Medium Enterprises (SMEs), acknowledged as a vital component of the economy, play a significant role in combating poverty and unemployment in both developed and underdeveloped economies (Arnaldi, 2021). They are recognized as catalysts for accelerating sustained growth and economic transformation globally. According to the World Bank, SMEs offer an efficient mechanism for fostering local enterprises, generating increased employment opportunities per unit of capital invested, and promoting the development of local technology (Soda, 2022). These factors underscore the crucial role SMEs play in a country's economic development. However, the absence of effective working capital management practices can undermine the positive impact of SMEs on national economies.

Effectively managing working capital is essential for SMEs to navigate their operations by ensuring the availability of cash to settle short-term debts, long-term debt maturity, and daily operational expenses. Successful working capital management is vital for the continuity of any firm (Oladimeji & Aladejebi, 2020).

Performance evaluation in Small and Medium Enterprises (SMEs) is a multidimensional concept crucial for economic success. The proficient management of working capital directly influences profitability, returns on investments, and stakeholder commitments (Rey-Ares, 2021). Balancing profitability and risk is a crucial aspect of working capital management, involving optimization tasks. For instance, adopting aggressive collection techniques may jeopardize customer relations, while maintaining high inventory levels poses risks of stockouts and hampers responsiveness. Working capital management entails optimizing a firm's short-term financing and investment decisions, covering current assets such as cash, receivables, inventory, marketable securities, and prepaid costs (Enow, 2022). Conversely, current liabilities encompass all money owed by the firm due within a year, referred to as accounts payables or current debt.

A significant challenge facing SMEs in Nigeria is the lack of access to funds and loans for business growth. Even when SMEs have access to cash, mismanagement and lack of accountability hinder their growth. Financial mismanagement and poor working capital management have been identified as leading causes of small business failure (Mache & Omodero, 2021). These issues often stem from SME owners' lack of awareness about their working capital status, inadequate attention to it, absence of a conventional credit policy, and a focus on cash receipts and bank account balance instead of their overall financial situation. Consequently, SMEs are often associated with low capital spending and fixed assets, yet their exit and loss ratios are disproportionately high. The available funds for acquisition and financing options for SMEs may not be appropriate and sufficient (Murimi, 2022).

Scholars have shown interest in understanding the influence of working capital components on SME performance, observing both positive and negative impacts on profitability, returns on investment, and stakeholder commitments (Coleman, 2021). However, limited attention has been given to the influence of working capital management on SME performance in the Nigerian market, with no known research conducted in Oyo State. Hence, this study aims to investigate the awareness of how working capital management influences the performance (profitability, returns on investment, customer satisfaction) of SMEs in Ibadan.

Aim and Objectives of the Study

The aim of this study was to investigate the effect of working capital management on the performance of SMEs in selected SMEs in Ibadan, Oyo State, while specific objectives are to:

1. explore the effect of working capital management efficiency on the profitability of SMEs in Ibadan.
2. examine the effect of cash management on the profitability of the selected SMEs in Ibadan.
3. investigate the effect of accounts receivable on the returns on investment (ROI) of the selected SMEs in Ibadan.
4. examine the effect of inventory management on customer satisfaction of the selected SMEs in Ibadan.

Hypotheses

H_01: There is no significant relationship between working capital management efficiency and profitability of SMEs in Ibadan.

H_02. There is no significant relationship between cash management and the profitability of SMEs in Ibadan.

H_03. There is no significant relationship between Accounts Receivable and the Return on Investment of SMEs in Ibadan.

H_04. There is no significant relationship between inventory management and customer satisfaction of SMEs in Ibadan.

Significance of the Study

This study contributes essential evidence on working capital development in business firms, specifically addressing the impact on SME performance in Ibadan, Oyo State, Nigeria. With limited existing studies on this subject in Nigeria and Oyo state, the research fills a gap in the literature. The findings are expected to benefit SME management and various stakeholders by offering more accurate metrics and perspectives for understanding how working capital influences performance. Small businesses can use this research for informed decision-making, while lenders and financial institutions gain insights for predicting SME profitability and assessing liquidity to provide additional funding.

Scope of the Study

The study was focused on the components of working capital management, i.e. Days Account Receivable (DAR); Inventory Turnover in Days (ITID); Days Account Payable (DAP) and Cash Conversion Cycle (CCC) and their effects on Return on Asset (ROA); Net Operating Profit (NOP) and Return on Equity (ROE). The study also focused on the performance matrix of SMEs such as profitability, returns on investment and stakeholders' commitment. This study is limited to SMEs operating in Ibadan, Oyo State.

Literature Review

This chapter reviews the existing literature by previous researchers pertinent and relevant to this study. The review covers the conceptual, theoretical, and empirical review, conceptual framework and the synthesis of gaps in the literature.

Performance Evaluation

Performance evaluation is essential for assessing an organization's market standing, encompassing operational, production, social responsibility, and financial metrics. Key indicators include profitability, growth, market value, shareholder return, economic value added, and customer satisfaction (Oladimeji & Aladejebi, 2020). High performance reflects managerial competence and efficient resource utilization, driven by industry and company-specific characteristics (Ullah, 2018).

Profitability

Profitability, a major indicator of organizational success, measures a company's ability to generate profits surpassing exploration and financing costs. It links business efficiency to the capacity for delivering outcomes (Coleman, 2021). Scholars define it as the organization's capacity to profit from commercial operations, showcasing effective management utilization of available market resources (Mache & Omodero, 2021).

Return on Investment (ROI)
Return on Investment (ROI) is a critical performance metric, indicating the profit generated from capital use and reflecting efficiency in proportion to invested resources (Coleman, 2021). Successful investments aim to raise profits, enhance customer satisfaction, and grow market share, contributing to medium and long-term growth (Coleman, 2021).

Customer Satisfaction
Customer Satisfaction, a key business concept, gauges the extent to which customers are pleased with a company's products, services, and overall experience (Mache & Omodero, 2021). It significantly influences customer loyalty, repeat purchases, positive word-of-mouth, and overall financial performance, particularly for small and medium-sized enterprises (SMEs) (Mache & Omodero, 2021).

Working Capital Management
Working Capital Management involves optimizing the link between a company's short-term assets and obligations (Oladimeji & Aladejebi, 2020). It ensures an efficient mix of components for capital sufficiency and accessibility (Oladimeji & Aladejebi, 2020).

Working Capital Efficiency
Working Capital Efficiency measures how a firm balances capital in receivables and inventories with payables, indicating creditworthiness and shaping investor opinions on financial health (Ullah, 2018). High efficiency minimizes the need for short-term borrowed capital, aiding long-term financial planning (Ullah, 2018).

Cash Management
Cash Management maintains an optimal cash amount in an organization, ensuring effective collection, distribution, and temporary investment (Simon-Oke, 2019). It aims to meet disbursement and collection schedules while minimizing funds locked up as cash balance (Simon-Oke, 2019).

Inventory Management
Inventory management optimizes investment in inventories, balancing adequate stock while minimizing investment (Joshua, 2021). Its goal is to turn over inventory quickly without revenue loss due to stockouts, a crucial aspect of working capital management (Joshua., 2021).

Accounts Receivable Management
Effective accounts receivable management reduces the time lag between sales completion and money acceptance, enhancing profit by growing sales and retaining consumers (Joshua, 2021).

Accounts Payable Management
Accounts payable, a key source of short-term financing, strategically strengthens supplier alliances, contributing to production efficiency and future expansion. The goal is to pay creditors slowly while maintaining a favorable credit rating (Joshua, 2021).

Theoretical Framework

Resource-Based Theory in SME Performance

The study applies Barney's Resource-Based Theory (1991) to analyze SME performance, emphasizing human and material resources. It highlights the role of individual managers in utilizing working capital for economic value and sustained competitive advantage.

Review of Empirical Studies

Negative effects on SME performance were found in Istanbul and Pakistan, specifically in Cash Conversion Cycle (CCC) (Murimi, 2022). Aggressive working capital management negatively impacted US firms' profitability (Arnaldi, 2021). Positive links were identified in Norway, Portugal, and Vietnam, emphasizing the impact of current assets on firm performance (Rey-Ares, 2021; Mache & Omodero, 2021).

Working Capital Management in SMEs: While larger manufacturing companies show a positive link between working capital management and profitability (Enow, 2022), SMEs present mixed findings. Positive relationships were reported in Portuguese, Spanish, and UK studies, whereas negative correlations were found in Spain, Istanbul, and Thailand (Mache & Omodero, 2021; Oladimeji & Aladejebi, 2020). Overall, the research on working capital management and SME profitability remains inconclusive.

Summary of the Gaps in the Literature Reviewed

The literature reveals inconsistent findings regarding the impact of working capital management on various performance metrics of SMEs across different settings. Studies explored relationships with profitability, return on assets, return on equity, sales growth, and company size, with a mix of positive and negative results. Notably, many studies focused on variables tested against a single dependent variable at different times, often in affluent economies, while fewer studies addressed underdeveloped economies, particularly in Africa. The study addresses these gaps by simultaneously examining all components of working capital management—cash, accounts payable, accounts receivable, and inventory—against multiple performance indicators, providing a more comprehensive perspective compared to previous research that treated these variables in isolation. Additionally, the poor performance of SMEs in Nigeria is attributed to insufficient government support and managerial shortcomings, emphasizing the need for improved resource management skills.

Methodology

This section outlines the study's methodology, covering research design, population, sample, research instrument, validity, reliability, data collection, and analysis methods.

Research Design: A descriptive research design was employed to vividly assess the impact of working capital management on SME performance.

Population of the Study: The study encompasses all employees within Small and Medium Enterprises (SMEs) in Ibadan, located in the Oyo Central Senatorial District, comprising eleven (11) Local Government Areas. Purposive selection targeted three (3) Local Governments with the highest concentrations of SME manufacturing organizations: Akinyele, Ibadan South West, and Ibadan South East. Nine SMEs, three from each selected Local Government Area, were chosen, including Nigeria Eagle Flour Mills (145 staff), Top Feeds Nigeria Limited (123 staff), BevPack Nigeria Limited (115 staff), Black Horse Plastics (153 staff), Gulflink Technical Limited Company (110 staff), Frigoglass Industries Nigeria Limited

(99 staff), Cashew Nut Production Company (86 Staff), Montab Nigeria Limited (105 staff), and Siegwerk West Africa (82 staff). The total population, extracted from employee registers, amounted to One thousand and eighteen (1018).

Sample and Sampling Technique: The sample size of 287 was determined using Taro Yemane formula. Quota sampling was used, focusing on the Account and Finance department, selecting ten respondents each from nine SMEs.

Description of the Research Instrument: An adapted structured questionnaire with Likert-type scales measured socio-demographics, working capital management, and SMEs' financial performance.

Validity of Research Instrument: Content Validity Index (CVI) was used, and the questionnaire was assessed by the supervisor for validity and internal consistency.

Reliability of the Research Instrument: Cronbach Alpha Coefficient and KMO were employed for reliability analysis, demonstrating acceptable values for working capital efficiency, cash management, account receivable management, inventory management, and SMEs' performance.

Method of Data Collection: Both primary data were used. Primary data was collected through self-administered questionnaires to the heads of the Account department and other finance staff, while secondary data was extracted from SMEs' records.

Method of Data Analysis: Descriptive and inferential statistics were employed. Data from questionnaires were presented in tables with percentages, frequency count, mean, and standard deviation. Hypotheses were tested using multiple regressions at a 0.05 significance level.

Result and Discussion of Findings

Presentation and analysis of field data findings are done here in the context of research questions. Frequency and percentage tables, mean values, and standard deviations are utilized for result representation. Research hypotheses are tested through Research Analysis, and we systematically address research questions aligned with our study objectives, culminating in interpretations and discussions of our discoveries.

Presentation of Data

Table 4.1: Demographic Distribution

Variables	Frequency	Percentage
Gender		
Male	147	51.43%
Female	140	48.57%
Age		
20-25	66	22.86%
26-30	60	20.00%
31-35	51	17.14%
36-40	43	14.29%
41-45	34	11.43%
45 and above	43	14.29%
Years of Operation		
2-5 years	58	22.86%
6-10 years	50	20.00%

11-20 years	43	17.14%
21-30 years	36	14.29%
Above 30 years	64	25.71%
Position		
Junior Cadre	115	40.00%
Middle level Cadre	89	31.43%
Management Level Cadre	83	28.57%

Source: Field Survey Report, 2023

Table 4.1 showcases the distribution of demographic data among the participants, presenting insights into various key variables such as Gender, Age, Years of Operation, and Position. with 51.43% males and 48.57% females. In terms of age, the majority fall within the 20-25 and 26-30 age groups, comprising 22.86% and 20.00%, respectively. Regarding years of operation, a notable percentage (25.71%) represents businesses with more than 30 years of operation. Positions within the companies are occupied predominantly by the Junior Cadre (40.00%), followed by the Middle level Cadre (31.43%) and Management Level Cadre (28.57%).

Testing of Hypotheses

Hypothesis One

H_{o1}: There will be no significant effect of working capital management efficiency on the profitability of SMEs in Ibadan.

Table 4.2 Working Capital Management Efficiency and Profitability of SMEs

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.834[a]	.696	.685	14.974

a. Predictors: (Constant), Efficiency

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13847.437	1	13847.437	61.758	.000[b]
	Residual	6054.012	285	224.223		
	Total	19901.448	286			

a. Dependent Variable: Profit

b. Predictors: (Constant), Efficiency

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	86.721	3.757		23.080	.000
	Efficiency	2.190	.279	.834	7.859	.000

a. Dependent Variable: Profit

Table 4.2 summarizes the regression analysis on working capital efficiency and SME profitability. The R-squared value of 0.696 indicates that about 69.6% of SME profitability variations in Ibadan can be explained by changes in "Working Capital Efficiency," highlighting strong explanatory power. The Adjusted R-squared value, slightly lower at 0.685, acknowledges model intricacies. The ANOVA table's F-statistic of 61.758 with a p-value < 0.001 emphasizes the statistical significance of the regression model, indicating the substantial role of "Working Capital Efficiency" in understanding SME profitability variability. The coefficient for "Working Capital Efficiency" is 2.190, with a t-statistic of 7.859 and a low p-value < 0.001, indicating that a unit increase in efficiency corresponds to a 2.190 unit rise in SME profitability.

Hypothesis Two

H02. There will be no significant effect of cash management on the profitability of SMEs in Ibadan

Effect of Cash Management on the Profitability of SMEs

Table 4.3 delves into the impact of effective Cash Management on SME profitability in Ibadan. The R-squared value of 0.835 indicates that about 83.5% of variability in SME profitability is explained by changes in "Cash Management," highlighting a strong association. The Adjusted R-squared value, slightly lower at 0.828, acknowledges model intricacies but underscores "Cash Management's" meaningful role. The ANOVA table's F-statistic of 136.182 with $p < 0.001$ emphasizes the statistical significance of the regression model, highlighting the substantial contribution of "Cash Management" in understanding SME profitability. The Cash Management Coefficient of 1.111, with a t-statistic of -11.670 and $p < 0.001$, indicates a positive relationship: each unit increase in "Cash Management" corresponds to a 1.111 unit rise in SME profitability

Hypothesis Three

H^0_3.There will be no significant effect of account receivable on the return on investment (ROI) of SMEs in Ibadan.

Effect of Account Receivable on the Return on investment of SMEs

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.51[a]	.31	.53	26.970

a. Predictors: (Constant), ACC Receivable

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	262.344	1	262.344	4.361	.003[b]
	Residual	19639.104	285	727.374		
	Total	19901.448	286			

a. Dependent Variable: Profit

b. Predictors: (Constant), ACC Receivable

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	76.897	17.444		4.408	.000
	ACC Receivable	2.441	.734	.715	-3.601	.003

a. Dependent Variable: Profit

Table 4.4 explores the impact of Accounts Receivable on SME Return on Investment (ROI). The R-squared value of 0.31 indicates that around 31% of ROI variability can be explained by "Accounts Receivable," suggesting a moderate explanatory power. The higher Adjusted R-squared value of 0.53 acknowledges "Accounts Receivable's" meaningful contribution to understanding SME ROI, considering potential confounding variables. The F-statistic of

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774[a]	.632	.628	9.044

a. Predictors: (Constant), Inventory

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6108.541	1	6108.541	56.988	.000[b]
	Residual	2232.198	285	81.519		
	Total	8340.739	286			

a. Dependent Variable: Profit

b. Predictors: (Constant), Inventory

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	48.185	3.490		27.501	.000
	Inventory	1.411	.095	.803	9.670	.000

a. Dependent Variable: Profit

4.361 with a p-value of 0.003 emphasizes the statistical significance of the regression model, highlighting "Accounts Receivable's" substantial role in explaining ROI variance. The Accounts Receivable Coefficient of 2.441, with a t-statistic of -3.601 and p-value of 0.003, suggests a positive relationship: each unit increase in "Accounts Receivable" corresponds to a 2.441 unit rise in SME ROI.

Hypothesis Four

H^0_4.There will be no significant effect of inventory management on customer satisfaction of SMEs in Ibadan.

Effect of Inventory Management on the Customer Satisfaction

Table 4.5 analyzes the relationship between Inventory Management and Customer Satisfaction. The R-squared value of 0.632 indicates that approximately 63.2% of Customer Satisfaction variability is explained by "Inventory Management," emphasizing its substantial impact. The Adjusted R-squared value, slightly lower at 0.628, acknowledges the meaningful contribution of "Inventory Management" while considering model complexity. The Regression Sum of Squares (6108.541) quantifies how well the model explains Customer Satisfaction variability. The F-statistic of 56.988 with $p < 0.001$ underscores the statistical significance, emphasizing "Inventory Management's" substantial role. The Inventory Management Coefficient of 1.411, with a t-statistic of 9.670 and p-value of 0.000, indicates a positive and impactful relationship: each unit increase in "Inventory Management" corresponds to a 1.411 unit rise in Customer Satisfaction.

Discussion of Findings

Objective one indicates that higher working capital management efficiency in SMEs is associated with greater profitability, supported by various studies. Effective management optimizes operations, minimizes costs, and enhances cash flow, improving profitability. Poor management is linked to lower profitability and increased financial risks. Objective two reaffirms the impact of cash management on profitability. Efficient practices contribute to higher profitability by ensuring liquidity, minimizing financial costs, and supporting investments. Studies emphasize the negative relationship between cash conversion cycle duration and profitability, highlighting the importance of effective cash flow management. Objective three underscores the significant impact of Account Receivable management on return on investment. Effective receivables management, including timely collections and minimized bad debts, enhances profitability. Objective four establishes a significant relationship between Inventory Management and profitability. Robust techniques in inventory management contribute to improved financial performance, aligning with existing research on efficient practices and higher profitability levels. The relationship between Inventory Management and profitability in manufacturing firms.

Conclusion

The study identifies significant effects of working capital management efficiency on profitability, return on investment, and customer satisfaction in SMEs. These findings align with prior research emphasizing the need for optimized working capital management to enhance SME profitability. Effective management can improve cash flow, reduce costs, and enhance financial stability. The practical implication is clear: implementing efficient working capital practices, including inventory control and receivables and cash management, can lead to sustained competitive advantage and long-term success for SMEs. The research underscores the pivotal role of working capital management in driving SME performance, highlighting the importance of understanding and strategically managing these components for financial success.

Recommendations

Tailored recommendations for SMEs based on the study's findings include improving working capital efficiency through effective inventory control and optimized cash flow. Prioritizing robust cash management, establishing clear credit policies, and adopting inventory control techniques like JIT management are crucial for financial stability and profitability. Additionally, focusing on customer satisfaction through excellent service, implementing continuous monitoring systems, and acknowledging industry-specific nuances in future research are key strategies for enhancing profitability.

References

Akung, J. (2012). Feminist Dimensions in Sefi Atta's Everything Good Will Come. *Studies in Literature and Language, 4*(1), pp:114-122. https://doi/10.3968/j.sll.1923156320120401. 1930

Anya, I. (2008). Interview with Sefi Atta. http://nigeriaworld.com/feature/publication/anya/080608. html

Atta, S. (2011). *Swallow*. Nigeria: AAA Press.

Atta, S. (2013.) *A bit of difference*. Nigeria: AAA Press.

Beauvoir, S. (1949). *The Second Sex.* Middlesex, U.K.: Penguin Books.

Evwierhoma, M. (2002). *Female Empowerment and Dramatic Creativity in Nigeria.* Ibadan: Caltop Publications Ltd.

Karmarkar, P. R. (2014). Apocalypse and Explication - A Study on Female Phase in Elaine Showalter's 'Towards Feminist Poetics' - An Indian Point of View. *International Journal of Humanities and Social Science Invention, (3)*2, pp: 35-41. www.ijhssi.org.

Krishnaswamy, N., Varghese, J. and Mishra, S. (2000). *Contemporary Literary Theory. A Student's Companion.* India: Macmillan.

Nwiyi, J. (2014). Survival and female (ad)venturing in Sefi Atta's Swallow. *International Journal on Studies in English Language and Literature, 2*(9), pp:1-5.

Olufunwa, H.O. (2012). Superwoman: enhanced femininity in contemporary woman's fiction. https://www.researchgate.net/publication/261634253

Uko, I. (2008). The Concept of Modern Womanhood in Promise Okekwe's Trilogy. *Journal of Gender Studies*, *5*(4), pp: 66-80.