EFFECT OF WORKING CAPITAL MANAGEMENT ON PERFORMANCE OF SUPERMARKETS IN MINNA METROPOLIS, NIGER STATE, NIGERIA

Kolo, Ruth Fatima¹, Dauda, Chetubo Kuta², Umar, Ja'afaru³, Zhiri, David Danjuma⁴ & Yewa, Shaba Usman⁵

1,2,3,4Department of Entrepreneurship, Federal University of Technology, Minna

⁵Lotus Bank PLC

¹ruth.kolo@futminna.edu.ng

²c.k.dauda@futminna.edu.ng

³come2paida@gmail.com

⁴zhiri.david@futminna.edu.ng

⁵yewaus@gmail.com

Corresponding author:

ruth.kolo@futminna.edu.ng, Phone No; +2348032888142

Abstract

Supermarkets, like any other business, rely on a delicate balance between their current assets and liabilities to meet their ongoing operational needs. Hence, this study examines the Effect of Working Capital Management on Performance of Supermarkets in Minna Metropolis, Niger State. The survey research design was adopted and data was collected through structured questionnaires. The population for the study is fifty-one (51) supermarkets registered with Corporate Affairs Commission (CAC) Minna, Niger state. A census-based sampling technique was adopted. Descriptive and inferential statistical were employed for data analysis. The study revealed that receivable management has a positive but significant effect on profitability level of supermarkets as well as positive and significant effect on the supermarket's return on equity. The study concluded that receivable management has the strongest effect on financial performance of supermarkets, which means that timely and effective cash collection from debtors will help to avoid unnecessary credit risk as well as protect supermarkets from customer defaults. It is recommended that managers of supermarkets should focus more on developing effective and efficient working capital management as a catalyst that will facilitate enough resources for day-to-day operating expenses as well as ensure the business keeps operating as a going concern.

Keywords: Working capital management, Performance, Efficient management theory. Inventory management, Creditor management, Debtor's management

Introduction

Working capital management (WCM) refers to the process of managing a company's short – term asset and liabilities in order to ensure that it has enough funds to operate effectively (Altaf & shah, 2017). This involves monitoring and controlling company's inventory levels, account payable, account receivable and cash balances to optimise cash flow and minimise the risk of insolvency (Singhania & Mehta, 2017). However, proper management of inventory can help supermarkets avoid stock outs and reduce the cost of holding excess inventory, improve customer satisfaction and increase sales revenue (Le, 2019). Moreso, effective management of

account payable and receivable can help supermarkets improve cash flow, which is critical for meeting operating expenses and investing in growth opportunities (Njoroge & Opuodho, 2022).

Ntuli & Nzuza (2022) affirmed that a good working capital management can help a supermarket optimise the inventory levels by reducing excess inventory and improving inventory turnover. This can free up cash for other investments, such as expanding the supermarket product line or opening new stores (Baker *et al.*, 2017). Furthermore, Shrivastava *et al.* (2017) opined that in managing a supermarket, accounts payable and account receivable can effectively improve cash flow by paying suppliers on time and collecting payment from customers promptly. Nevertheless, Supermarket often experience seasonal fluctuation in demand, which can make it difficult to manage inventory levels and cash flow (Simiyu *et al.*, 2024).

More so, during peak seasons, such as holidays, the supermarket may need to stock up on inventory to meet increased demand, but this can also tie up cash flow and create inventory management challenges during slower periods (Salehi *et al.*, 2019). Nevertheless, poor working capital management can lead to cash flow problems, missed opportunities, and even bankruptcy (Sawarni *et al.*, 2020). However, if a supermarket does not have enough cash on hand to pay the suppliers, it may face supply chain disruptions and damage their reputation among customers (Fijabi *et al.*, 2023; Altaf & Shah, 2017). It is against this backdrop that this study attempts to examine the effect of working capital management in supermarkets in Minna Metropolis.

The remaining part of the study is structured as follows. Section two provides the literature review of the variables considered for this study. Section three provides the methodology adopted for this study. Section four provides results and discussion, while, the last section contains conclusion and recommendations.

Literature Review

The study conceptualised working capital management as having three dimensions (inventory management, receivable management and payable management) as used in the studies of (Baker et al., 2017; Moussa, 2018; Soukhakian & Khodakarami, 2018; Mazanec, 2022; Njoroge & Opuodho, 2022). Inventory management measures the average number of days inventory is held by the supermarket before converting to cash (Bukwimba & Ngata, 2022) this denotes the number of days it takes supermarket to convert its inventory into cash. The inventory management in days is calculated as 365 × [inventories/purchase]. This variable shows that a longer conversion period indicates greater investment in inventory for a particular level of business activity while conversion period indicates minimal investment in inventory for a particular level of business activity (Lefebvre 2020; Almomani et al., 2021). More so, receivable management indicates the number of days accounts receivables takes before being converted to cash (Bukwimba & Ngata, 2022) this denotes the number of days that the supermarket takes to collect payments from debtors. It is calculated as 365 × [account receivable/sales]. The higher the value of average collection period, the more a firm's investment in accounts receivables, while the lower the value of average collection period, the less the firm's investment in accounts receivable (Lefebyre 2020; Ibrahim et al., 2021; Bukwimba & Ngata, 2022).

Furthermore, the payable management indicates the average time taken by the supermarket to pay creditors (Bukwimba & Ngata, 2022). It measures the number of days it takes supermarkets to make payment to their creditors. It is calculated as $365 \times [\text{account payable/purchase}]$. This variable shows that a higher value indicates how fast the supermarket takes to settle the payment commitments to creditors while the lower the value, the slower the firm is to settle the payment commitments to creditors (Lefebvre 2020; Almomani *et al.*, 2021). However, the study's dependent variable was measured based on financial performance (Bukwimba, & Ngata, 2022; Sunday *et al.*, 2023). In determining the measure of financial performance for this study, profitability and return on equity were used as indicators of financial measures because the variables measured relate to the growth needs of various stakeholders of the firm (Sunday *et al.*, 2023).

The conceptual framework depicts the independent and dependent variables of the study in the Figure 1.

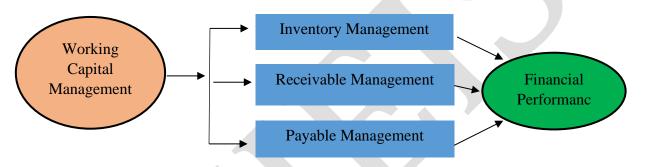


Figure 1: Conceptual Framework

Theoretical Framework for the Study

This study is anchored on pecking order theory. The theory was developed by Myers and Majluf in 1984. The theory is based on the assumption that businesses should prioritise internal financing through retained earnings and when internal sources of financing are insufficient, firms' managers may resort to external source. The theory provides a model for how business enterprises priorities their financing sources and make capital structure decisions that will enhance the overall business performance. The key findings of this theory are as follows: (a) Firms generally prefer to use internal sources of funds as their first choice. (b) In cases where internal financing is insufficient, firms will issue debt in some forms (c) However, issuing fresh equity is perceived or seen as a last resort in the hierarchical sequence. This action may diminish ownership stakes and entails distributing control among new stakeholders (Tahir and Anuar, 2016).

Furthermore, utilising the pecking order theory to managed working capital enable firms to preserve control and enhance flexibility for future investments as well as efficient and effective utilisation of financial resources to meet business obligations. Hence, the theory furnishes a framework for managing current asset and liability by prioritising the most appropriate strategies of managing them optimally for the overall benefit of the organisation. This approach can reduce a company's overall capital costs, minimise expenses and consistently be beneficial in maximising shareholder value. The theory is also being limited by changes in market conditions as it affects the relative costs of debt and equity over time which in turn serves as hindrances for good working capital management (Tahir & Anuar, 2016).

Empirical Review

Paul and Mitra (2018) investigated the relationship between working capital management (WCM) and corporate profitability. Working capital management was measured based on four variables: current ratio, debtor's turnover ratio, finished goods turnover ratio, and quick ratios. Industry profitability was measured through return on total assets. The source of data for the study is secondary. More so, the study population consisted of 576 steel companies. A multistage sampling technique was used for selecting only 35 companies that have been in operation for 18 years (2000–2017). The study employed panel data regression for their analysis. The results indicated that the influence of WCM on the firm performance of Indian steel companies was significant.

Moussa (2018) investigated the impact of well-managed working capital on firms' profitability and performance using Egyptian firms as the sample. The source of data for the study is secondary in nature. The study utilised a panel data analysis method, focusing on 68 listed industrial firms in the Egyptian Stock Exchange during the period of 2000–2017. Cash conversion cycle was used as a tool for measuring working capital management, while firm performance was measured through return on assets, and market valuation was measured using Tobin's Q. The results of the study, obtained through the application of generalised method of moment's techniques to test the research hypotheses, indicated interesting findings. Firstly, there was a significant relationship between firm performance and the length of the cash conversion cycle. This implied that firms with higher performance rates tended to pay less attention to working capital management. Secondly, the second model revealed a significant association between firm value and the cash conversion cycle. This finding suggested that investors in the Egyptian stock exchange valued firms with a longer cash conversion cycle.

Also, Ren et al. (2019) investigated the effect of working capital management (WCM) and firm performance within the context of the Chinese economy. The sample consisted of Chinese listed manufacturing firms, and the data was collected over the period from 2010 to 2018. WCM was measured using the cash conversion cycles (CCC), while profitability was measured using core operating profit ratios. The ownership structures of the firms were classified into state-owned enterprises (SOEs) and non-state-owned enterprises (non-SOEs) as well as institutional environments (IEs) were measured from dimensions of market factor (MF) and legal systems (LS). The findings of the study, based on two-way fixed effect regression models, revealed several results. Firstly, there was a negative and significant correlation between CCC and firm performance. Secondly, the negative and significant correlation between CCC and profitability was found to be larger for non-SOEs compared to SOEs, suggesting that non-SOEs may be more sensitive to changes in working capital management. Thirdly, both the markets factor (FM) and legal systems (LS) were found to strengthen the weak correlation between CCC and profitability, implying that the institutional environment plays a crucial role in shaping the relationship between working capital management and firm performance in the Chinese economy.

Panigrahi (2023) examined the effect of working capital management strategies on the financial performance of Indian cement companies. Utilising financial data spanning 11 years (2010-2020) from 31 companies listed on the Bombay Stock Exchange, the study seeks to ascertain the influence of various components of working capital, including average receivable period, inventory conversion period, average payment period, and cash conversion cycle, on firm performance both individually and collectively. The findings, analysed through Pearson's

correlation coefficient and random effect regression model, unveiled intriguing insights. Notably, a negative correlation emerges between return on assets (ROA) – a key measure of financial performance – and both inventory turnover period (ITP) and accounts payable period (APP). Conversely, the study indicates that accounts receivable period (ARP) and cash conversion cycle (CCC) do not significantly impact firm performance. Furthermore, liquidity metrics such as current ratio (CR) and quick ratio (QR) exhibit a noteworthy positive association with ROA. Additionally, the study reveals that firm size and leverage demonstrate an inverse relationship with ROA, indicating larger firms and those with lower leverage tend to exhibit stronger financial performance. However, the age of the firms does not significantly affect their financial performance.

Interestingly, Augustine (2024) investigated the impact of working capital management on the performance of listed cement companies in Nigeria. Employing an ex-post facto research design, data spanning the period from 2013 to 2022 were gathered from the annual financial reports of three prominent cement companies: Dangote Cement Plc, BUA Cement Plc, and Lafarge Cement Plc. Panel regression analysis was employed to analyse the data. The findings reveal significant insights: inventory management demonstrates a notable negative effect on performance, whereas account receivable management exhibits a positive and significant effect on performance. Consequently, the study provides actionable recommendations for enhancing performance within Nigerian cement companies. First, it recommended that firms strive to streamline the conversion of raw materials inventories into finished goods, aiming to minimise the number of days involved in this process. This streamlined approach allows for enhanced monitoring, cost reduction, and quality control. Additionally, extending additional time to debtors for debt repayment is advised. By providing debtors with more flexibility in repayment schedules, companies can potentially mitigate bad debts, leading to improved financial records

Based on this review, it is gathered that majority of existing researches that investigate the relationship between working capital management (WCM) and firm performance primarily rely on secondary data sources. (Moussa, 2018; Ren *et al.* (2019; Panigrahi, 2023; Augustine, 2024). The information was either retrieved from a third-party site or from the published audited financial statements. This information gathered through secondary sources come with peculiar weaknesses, in that the researcher will not get the needed first-hand information directly from the firms or managers who are responsible for managing working capital. To ensure that relevant and appropriate information is sourced, the current study will make use of questionnaires sequentially structured to measure the outcome of working capital on firm's performance.

Also, the prior studies were carried out on listed corporations on stock exchange which are usually few in number when compared to SME's firms that are not only large in number but serves as engine room for economic development (Moussa, 2018; Ren *et al.* (2019; Panigrahi, 2023; Augustine, 2024). The present study aims to examine the effect of working capital management (WCM) and firm performance, with a specific focus on supermarkets, which represent the most prevalent type of small and medium-sized enterprises (SMEs).

Methodology

Minna the capital of Niger state is located some 740 kilometres from Lagos and 140 kilometres from Abuja the Federal Capital of Nigeria and on latitude North 60.301 and longitude East 801

of the equator. By 2023, Minna has an estimated population of about 478,576 people (World Population Review, 2023).

The study employed a cross sectional survey research design. The study target population is 51 registered supermarkets in Minna Metropolis as sources from Corporate Affairs Commission, Minna office in the year 2023. The census - based method was employed for the study. More so, the study relied mainly on the use of primary data sources. Structured questionnaire was the main instrument used in the collection of the data. This study utilised the face and content validity in assessing the validity of the instruments. More so, the test-retest reliability was conducted at an interval of one week, the same questionnaires were used to take two separate measurements on the same supermarkets but at different times. Furthermore, descriptive statistics was used for analysing the demographic profile of the respondent. Multiple regression analysis was used for analysing the explanatory and explained variables. SPSS software package was employed for analysing demographic profile of respondents and explained variables.

Model specification

In assessing the effect of working capital management on the performance of supermarkets in Minna, metropolis, an econometrics model was built around the components of Working Capital Management (inventory management, receivable management and payable management) and financial performance (profitability and return on equity), the model is thus used in estimating the effect of these components on financial performance.

Having stated this, the model is thus formulated as follows:

$$Y = f(X_1, X_2, \dots, X_n)$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$
Where $Y =$ Dependent Variable of the study
$$X_1, \dots, X_n =$$
 Independent variable of the study
$$\epsilon =$$
Error term

Substituting the variable of this current study into equation 1 above, we have:

$$FP = F (IM, RM, PM)$$
 (2)

Where, FP = Financial performance

IM = Inventory Management

RM =Receivable Management

PM = Payable Management

Transform into linear equation as:

$$FP = \beta_0 + \beta_1 IM + \beta_2 RM + \beta_3 PM \tag{3}$$

Econometrically, the above model is further modified by introducing the error term. This is done to capture errors of miss-specification in the Model. Thus, the model can then be expressed econometrically as:

$$\begin{split} FP &= \beta_0 + \beta_1 IM + \beta_2 RM + \beta_3 PM + \acute{\epsilon} \\ FP &= \beta_0 + \beta_1 RM + \beta_2 IM + \beta_3 PM + \acute{\epsilon} \\ FP &= \beta_0 + \beta_1 PM + \beta_2 RM + \beta_3 IM + \acute{\epsilon} \\ \beta_1 &= \text{change in FP due to change in IM} \end{split} \tag{4}$$

 β_2 = Change in FP due to change in RM β_3 = Change in FP due to change in PM

Results and Discussion

Table 1 presents the demographic characteristics of supermarket respondents. Gender distribution of supermarket managers revealed that 72% (36 out of 50) were male, and 28% (14 out of 50) were female. distribution revealed the following, 12% (6 out of 50) had their age between 21 and 25 years, while, 40% (20 out of 50) respondent had their age between 25 and 30 years respectively. Finally, 48% which represents 24 respondents out of the 50 respondents had their age above 30 years. Managerial positions in supermarkets are senior level positions, and it is thus expected that majority of the respondents would be above the 30 years. More so,18% (9) had Secondary School Certificate Examination (SSCE) as their qualification or education level, 42% (21) had their education level as Diploma, 20% (10) had their education level as Higher National Diploma (HND), 16% (8) had their education level as Degree and 4% (2) respondents had their education level as Master Degree.

Table 1: Demographic Characteristic of the Respondents

	Super	market managers
	${f F}$	(%)
Gender		
Male	36	72%
Female	14	28%
Total	50	100
Age		
Less than 21 years	0	0
21-25 years	6	12%
25- 30 years	20	40%
More than 30	24	48%
otal	50	100
ducational qualifications		
SCE	9	18%
ND	21	42%
IND	10	20%
BACHERLOR DEGREE	8	16%
MASTERS	2	4%
Fotal	50	100

Source: Author's Field Survey (2023)

Regression Analysis results

Table 2: Regression Analysis for Profitability, Return on equity

Variables	(Profitabili ty Level)	(Return on equity Level)
Constant	-14.32	4.872
Inventory	0.492	-0.483
Management	(0.050)*	(0.008)*
Payable	0.427	-0.049
Management	(0.001)*	(0.777)
Receivable	0.605	0.190
Management	(0.005)*	(0.001)*
R Square	0.528	0.476
F-Value	5.327	2.842

Source: Author's Field Survey (2023)

The result from Table 2 showed for Profitability level, the R-squared value of 0.528 proves that the independent variable of the study explains about 52.8% of the total variation in the dependent variable, while the remaining 47.2% of the variation in the dependent variable is explained by variables not included in the study. This is indicated by the F-value which is 5.327 and statistically significant at 0.003 p< 0.05. For Return on equity, the R-squared value of 0.476 proves that the independent variable of the study explains 47.6% of the total variation in the dependent variable, while the remaining 52.4% of the variation in the dependent variable is explained by variables not included in the study. This is indicated by the F-value which is 2.842 and statistically significant at 0.003 p< 0.05.

Discussion of findings

The hypotheses tested for the study revealed the following results.

H1: there is no significant relationship between inventory management and performance of supermarkets in Minna, Niger State.

The regression coefficient of 0.492 shows a tremendous positive relationship between inventory management and supermarket performance, therefore, an increase in inventory management by a unit will lead to an increase of 49.2% units in supermarket performance (profitability level). This result has shown a positive and significant with a p-value of 0.05 at > 0.05. Based on this result, the study rejects the null hypothesis and accepts the alternative hypothesis. For return on equity, the regression coefficient of -0.483 shows a negative relationship between inventory management and supermarket performance, therefore, a decrease in inventory management by a unit will lead to a decrease of 48.3 % units in supermarket performance (return on equity). This result is shown to be statistically significant

with a p-value of 0.008 at > 0.05. Based on this result, the study rejects the null hypothesis and accepts the alternative hypothesis.

H2: there is no significant relationship between payable management and performance of supermarkets in Minna, Niger State.

The regression coefficient of 0.427 indicates a positive relationship between payable management and supermarkets performance, hence, an increase in payable management by a unit will lead to an increase of 42.70% units in supermarket performance (profitability level). This result is shown to be statistically significant with a p-value of 0.001 at > 0.05. Based on this result, the study rejects the null hypothesis and accepts the alternative hypothesis. For return on equity, the regression coefficient of -0.049 shows a negative relationship between payable management and supermarket performance, therefore, a decrease in payable management by a unit will lead to a decrease of 4.9% units in supermarket performance (return on equity). This result is shown to be statistically insignificant with a p-value of 0.777 at > 0.05. Based on this result, the study fails to reject the null hypothesis.

H3: there is no significant relationship between receivable management and performance of supermarkets in Minna, Niger State.

The regression coefficient of 0.605 indicates a positive relationship between receivable management and supermarkets performance; hence, an increase in receivable management by one unit will lead to an increase of 60.5% units in supermarket performance (profitability level). This result is shown to be statistically significant with a p-value of 0.005 at > 0.05. Based on this result, the study rejects the null hypothesis and accepts the alternative hypothesis. For return on equity, the regression coefficient of 0.190 shows a positive relationship between receivable management and supermarket performance. therefore, an increase in receivable management by one unit will lead to an increase of 19.0% units in supermarket performance (return on equity). This result is shown to be statistically significant with a p-value of 0.001 at > 0.05. Based on this result, the study rejects the null hypothesis and accepts the alternative hypothesis

Conclusion and Recommendations

This study investigated the effect of working capital management and performance of supermarkets in Minna Metropolis, Niger State, Nigeria. The study revealed that inventory management has a positive but significant effect on performance of supermarkets (profitability level) as well as negative and significant effect on performance of supermarket (return on equity) The second hypotheses revealed that payable management has a positive but significant effect on performance of supermarkets (profitability level) as well as negative and insignificant effect on performance of supermarket (return on equity). The third hypotheses revealed that receivable management has a positive but significant effect on performance of supermarkets (profitability level) as well as positive and significant effect on performance of supermarkets (return on equity).

The study concluded that receivable management has the strongest effect on financial performance of supermarkets in the study area which means that timely and effective cash collections from debtors will give a clear picture of supermarket finances in order to avoid unnecessary credit risk as well as protect supermarkets from customer defaults. The study therefore recommends that;

- 1. Managers of supermarket should focus more on developing effective and efficient working capital management as a catalyst that will facilitate enough resources for day-to-day operating expenses as well as ensure the business keeps operating as going concern.
- 2. Policy makers should ensure strict compliance with working capital management dimensions for developing local content policies by institutional bodies as a critical tool for business success.

References.

- Almomani, T. M., Almomani, M. A., & Obeidat, M. I. (2021). The relationship between working capital management and financial performance: Evidence from Jordan. *The Journal of Asian Finance, Economics and Business*, 8(6), 713-720.
- Augustine, O. O. (2024). Effect of Working Capital Management on The Financial Performance of Listed Cement Companies in Nigeria. *World Journal of Management and Business Studies* Vol. 3, No 1, 558-580
- Baker, H. K., Kumar, S., Colombage, S., & Singh, H. P. (2017). Working capital management practices in India: survey evidence. *Managerial Finance*. 43(3), 331-353
- Boţoc, C., & Anton, S. G. (2017). Is profitability driven by working capital management? Evidence for high-growth firms from emerging Europe. *Journal of Business Economics and Management*, 18(6), 1135-1155.
- Bukwimba, M. L., & Ngata, C. E. (2022). The Effect of Working Capital on Firm Financial Performance Management in The United Republic of Tanzania. *International Journal of Finance and Accounting*, *1*(1), 29-38.
- Fijabi, K., Ogunlalu, A. E., & Modupeola, A. M. (2023). Working Capital Management and Performance Metrics of Quoted Brewery Firms in Nigeria. *Open Journal of Social Sciences*, 11(10), 442-468.
- Ibrahim, K. Y., Usaini, M., & Elijah, S. (2021). Working capital management and business performance. *Nigerian Journal of Marketing (NJM)*, 7(1).
- Le, B. (2019). Working capital management and firm's valuation, profitability and risk. *International Journal of Managerial Finance*. 15(2) 191-204
- Lefebvre, V. (2020). Performance, working capital management, and the liability of smallness: A question of opportunity costs? *Journal of Small Business Management*, 1-30.
- Mazanec, J. (2022). The impact of working capital management on corporate performance in small—medium enterprises in the Visegrad Group. *Mathematics*, *10*(6), 951.
- Moussa, A. A. (2018). The impact of working capital management on firms' performance and value: Evidence from Egypt. *Journal of Asset Management*, 19(4), 259-273.
- Njoroge, G. W., & Opuodho, G. (2022). Relationship between working capital management practices and financial performance by registered property developers in Kenya. *International Journal of Finance*, 7(3), 1-24.
- Ntuli, S. P. A., & Nzuza, Z. W. (2022). Effect of Working Capital Management on Financial Performance of a State-Owned Enterprise in South Africa. *African Journal of Inter/Multidisciplinary Studies*, 4(1), 264-274.
- Panigrahi, A. (2023). Working Capital Management Strategies and Financial Performance: A Cause-and-Effect Analysis.
- Paul, P., & Mitra, P. (2018). Analysis of the Effect of Working Capital Management on Profitability of the Firm: Evidence from Indian Steel Industry. *Asia-Pacific Journal of Management Research and Innovation*, 14(1-2), 32-38.

- Salehi, M., Mahdavi, N., Dari, S. Z. A., & Tarighi, H. (2019). Association between the availability of financial resources and working capital management with stock surplus returns in Iran. *International Journal of Emerging Markets*. 14(2), 343-361
- Sawarni, K. S., Narayanasamy, S., & Ayyalusamy, K. (2020). Working capital management, firm performance and nature of business. *International Journal of Productivity and Performance Management*.
- Shrivastava, A., Kumar, N., & Kumar, P. (2017). Bayesian analysis of working capital management on corporate profitability: evidence from India. *Journal of Economic Studies*. 44(4), 568-584
- Simiyu, T. G., Achieng, L., & Makoti, N. V. (2024). Working Capital Management and Financial Performance of Small and Medium-Sized Enterprises (SMEs) and SACCOS in Kenya. *East African Finance Journal*, *3*(2), 149-159.
- Singhania, M., & Mehta, P. (2017). Working capital management and firms' profitability: evidence from emerging Asian countries. *South Asian Journal of Business Studies*. 6(1) 80-97
- Soukhakian, I., & Khodakarami, M. (2019). Working capital management, firm performance and macroeconomic factors: Evidence from Iran. *Cogent Business & Management*, 6(1), 20-27.
- Sunday, A., Turyahebwa, A., & Byamukama, E. M. (2023). Working capital management practices and performance of small and medium enterprises in western Uganda. *Kabale University Interdisciplinary Research Journal*, 2(1), 4-21.
- Tahir, M., & Anuar, M. B. A. (2016). The determinants of working capital management and firms performance of textile sector in Pakistan. *Quality & Quantity*, 50(2), 605-618.
- World Population Review (2023). Niger state Population 2022. Retrieved from https://worldpopulationreview.com/world-cities/abuja-population

APPENDIX I QUESTIONNAIRE

INVENTORY MANAGEMENT: In a scale of 1-5, where 1= Strongly Disagree (SD), 2=Disagree (D), 3= Undecided (U), 4=Agree (A), 5=Strongly Agree (SA).

S/N	STATEMENT	SD	D	U	A	SA
1	We always minimize investment in stock to avoid costs					
	associated with stock					
2	We have effective stock records					
3	We ensure sufficient cash flow in order to meet our short-term debt obligations					
4	Our inventories are always readily converted into cash					
5	We carryout weekly inventories taking					
6	We have effective inventory management systems					

7	We review our stock policy monthly			
8	We always maintain efficient levels of stock			

PAYABLEMANAGEMENT: In a scale of 1-5, where 1= Strongly Disagree (SD),

2=Disagree	(D), 3=	= Undecided	(U), $4=Agree$	(A), 5=Strongly	Agree (SA).
	(- /)		(- /) -	(/)	

S/N	STATEMENT	SD	D	U	A	SA
1	We usually have alternative sources of cash in case we					
	forecast deficit					
2	We usually remind ourselves when our credit obligation is					
	overdue					
3	In this supermarket we always set an effective credit limit					
4	We have an effective credit policy for our trade creditors					
5	We always pay our suppliers in 30 days					
6	We have an exceptional relationship with our creditors					
7	We always review our credit policy monthly					
8	We always wait longer to pay our bill					

RECEIVABLE MANAGEMENT: In a scale of 1-5, where 1= Strongly Disagree (SD), 2=Disagree (D), 3= Undecided (U), 4=Agree (A), 5=Strongly Agree (SA).

S/N	STATEMENT	SD	D	U	A	SA
1	We always ensure that all payment arrangements with					
	debtors are always confirmed in writing					
2	Our credit policy is clearly articulated in writing to all					
	debtors					
3	Our debtor's policies are routinely reviewed					
4	We routinely monitor the debts outstanding to ensure					
	proper action					
5	We always contact the debtor promptly to confirm they					
	received their invoice					
6	We always create a monthly debtors aged analysis					
7	We ensure close monitoring of the debtors ledger					
8	Credit data products such as ledger monitoring are					
	increasingly available to identify deterioration in credit					
	worthiness					
9	Our data integrity ensures credit limits are appropriate					

PROFITABILITY LEVEL: In a scale of 1-5, where 1= Strongly Disagree (SD), 2=Disagree (D), 3= Undecided (U), 4=Agree (A), 5=Strongly Agree (SA).

S/N	STATEMENT	SD	D	U	A	SA
1	The volume of sales of the business has increased for the					
	last 2 years					
2	Our operating profit to sales ratio has increased over the					
	last two years					
3	Our sales have improved over time					
4	The volume of purchases of the business has increased for					
	the last 2 years					

5	We incur low operating costs on sale			
6	The level of profits of the business has raised for the last 2			
	years			
7	The level of gross profit margin of the business has raised			
	for the last 2 years			

RETURN ON EQUITY: In a scale of 1-5, where 1= Strongly Disagree (SD), 2=Disagree (D), 3= Undecided (U), 4=Agree (A), 5=Strongly Agree (SA).

S/N	STATEMENT	SD	D	U	A	SA
1	The total assets are mainly financed by owner's equity					
2	We always exceed our owner's expectation					
3	We have high earnings					
4	Our owner(S) have realized a very high firm value					
5	We aim at increasing the wealth of the owner(s)					
6	The earnings declared have grown over the years					
7	Our return on equity has declined over the year					

Appendix 11

Model Summary

						Cl	hange Statis	tics	
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.508ª	.528	.509	4.03054	.258	5.327	3	46	.003

a. Predictors: (Constant), Debtor management, Inventory management, creditor management $\,$

Coefficients^a

-				Standardized Coefficients	t	Sig.
Model		В	Std. Error	Beta		
1	(Constant)	-14.321	11.394		-1.257	.215
	Inventorymanagement	0.492	2.387	.261	1.990	.050
	Creditormanagement	0.427	2.351	.573	3.552	.001
	Debtormanagement	0.605	2.865	491	-2.967	.005

a. Dependent Variable: profitability level

Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.395ª	.476	.408	.29240	.156	2.842	3	46	.048

a. Predictors: (Constant), Debtor management, Inventory management, creditor management

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	4.872	.827		5.894	.000
	Inventory management	-0.482	.173	391	-2.790	.008
	Creditor management	-0.049	.171	.049	.285	.777
	Debtor management	0.190	.208	.161	.913	.001

a. Dependent Variable: Return equity