

Working Capital Management and Financial Performance of Listed Consumer Goods Firms in Nigeria

THOMPSON, Emem Aniekan

Department of Accounting
Faculty of Management Sciences, Akwa Ibom State University, Obio Akpa campus.
ememaniekan9@gmail.com
07089267940

AKPAN, Dorathy Christopher

Department of Accounting
Faculty of Management Sciences, Akwa Ibom State University, Obio Akpa campus.
dorathyakpan@aksu.edu.ng
0803 605 6169

OKPO, Sunday A.

Department of Accounting
Faculty of Management Sciences, Akwa Ibom State University, Obio Akpa campus.
sundayokpo@aksu.edu.ng
0803 786 4947

*Corresponding author Tel.: +2347089267940, e-mail: ememaniekan9@gmail.com
DOI: 10.56201/jafm.vol.11.no2.2025.pg356.368

Abstract

Working capital management plays a crucial role in ensuring financial stability and operational efficiency for businesses. This study examines the effect of working capital management on the financial performance of listed consumer goods firms in Nigeria from 2014 to 2023. Using secondary data from 16 out of 21 listed companies, the study employs weighted least squares regression analysis via STATA 14.2 to assess the relationship between working capital components and return on equity (ROE). The findings reveal that the inventory holding period has a significant negative effect on ROE, indicating that excessive stock retention reduces profitability due to increased holding costs and inefficient capital allocation. The receivable collection period, however, shows a statistically non-significant positive effect on ROE, suggesting that variations in credit management practices may moderate its impact. These results underscore the importance of efficient working capital management in optimizing financial performance. The study recommends that consumer goods firms adopt strategic inventory management techniques, such as just-in-time (JIT) systems, to reduce holding costs and improve liquidity. Additionally, firms should strengthen their receivables collection processes effectively to maximize shareholder value. Future research could explore sectoral differences and incorporate additional financial metrics to provide deeper insights into the working capital-performance relationship.

Keywords: *Working Capital, Financial Performance, Consumer Goods, Return on Equity, Liquidity Management.*

1.0 Introduction

Working capital management is a critical aspect of financial management that directly affects a company's liquidity, operational efficiency, and overall financial performance (Adu, 2024). According to Ibrahim & Isiaka, (2021), the availability of a robust working capital management ensures that a company has sufficient liquidity to meet its short-term obligations, while also maximizing profitability (Iyalla & Ibrahim, 2023). Efficient working capital management in any business entity enhances operational efficiency which in turn boost the financial performance of such entity. According to Ibrahim & Isiaka, (2021), working capital management is essential for the survival of consumer goods firms because they maintain a large level of inventory to meet up customers demand which ties up significant amounts of capital. Efficient working capital contributes to the overall operational efficiency of firms by streamlining processes and contributing to the financial stability and sustainability of firms (Ahmed et al., 2020).

According to Mandipa & Sibindi, (2022), inventory management is the process of planning, organizing, and controlling the acquisition, storage, and usage of inventory (goods, materials, or products) to meet customer demand while minimizing costs and maximizing efficiency, and is related to working capital management as it helps to ensure effective working capital management and keep the firm in check (Hillebrand & Ahmed, 2022). Herison et al., (2022), also argues that inventory management is a measure of the working capital, as effective inventory management means efficient working capital management. The financial performance of a company is the measure of the results of the firm's policies and operations in monetary terms. These results are reflected in the firm's return on investment, return on assets, shareholder value, accounting profitability and its components (Mandipa & Sibindi, 2022). According to Mohammed & Joshua, (2019), the financial performance of any firm is a subjective measure of how well the firm can use assets from its primary mode of business, generate revenues and create value for its shareholders. The working capital management of a firm affects its financial performance tremendously, and aids in the achievement of its ultimate objective of maximizing shareholders' value (Mohammadi et al., 2019). This objective cannot be achieved if the working capital of the firm is not managed efficiently and effectively (Olaoye & Adeboboye, 2019). Therefore, effective working management ensures the company has sufficient liquidity to meet short-term obligations, reducing the risk of financial distress, reducing the need for external financing, thereby lowering interest expenses and increasing profitability.

The main objective of this study was to examine the effect of working capital management on the financial performance of listed consumer goods firms in Nigeria. However, the specific objectives of the study will be to;

1. Examine the effect of inventory holding period on return on equity listed consumer goods firms in Nigeria.

2. Determine the effect of receivable collection period on return on equity of listed consumer goods firms in Nigeria.

2.0 LITERATURE REVIEW

Working capital is defined as the net current assets (or net current operating assets) of the business. It refers to the amount of funds a business has available to finance its day to day operations. In accounting and financial statement analysis, working capital is defined as the firm's current assets and current liabilities (Ibrahim & Isiaka, 2021). Net working capital represents the excess of current assets over current liabilities and is an indicator of the firm's ability to meet its short-term financial obligations (Mandipa & Sibindi, 2022).

Ahmed et al., (2020), further defined management of working capital as all management actions and decisions that ordinarily influence the size and effectiveness of working capital. Working capital management has to do with the workings, inter-relations, interactions of the current assets and current liabilities of the firm, in order to make maximum use of the both to achieve the desired goal of the organization, which is geared towards liquidity and profitability. The conceptual framework for the study is shown in Figure 2.1.

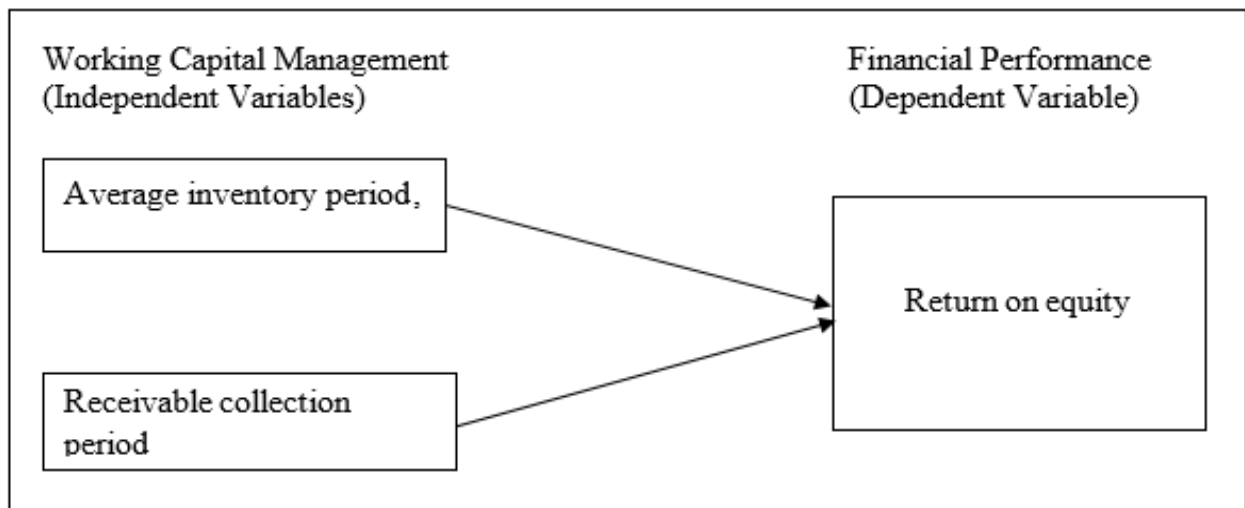


Figure 2. 1: Conceptual Framework

Working capital is a very essential aspect of firms' growth and financial performance and many researchers have carried out empirical studies on this area both locally and internationally. Some of these studies were reviewed in this section specifically to identify the variables used, methodology employed and the findings made. Ibrahim & Isiaka, (2021) examined the relationship between working capital and financial performance. Specifically, forty (40) consumer and industrial goods companies out of the population of fifty-seven (57) for the period of ten (10) years, 2011-2022. Ordinary least squares (OLS) regression method and Pearson Correlation were used for the study. The independent variable was represented by Average Payment Period (APP), Cash Conversion Cycle (CCC), Inventory Conversion Period (ICP) and Average Collection Period

(ACP), while the dependent variable was represented by Return on Assets. The findings showed that Cash Conversion Cycle (CCC), Average Payment Period (APP) and Inventory Conversion Period (ICP) showed significant positive impact on Return on Assets (ROA). However, Average Conversion Period (ACP) showed a negative impact on Return on Assets. Also, the control variables adopted in this study (size, growth, leverage and current ratio) have significant impact on financial performance of firms selected for the study.

Wanzala & Obokoh, (2024) investigated the impact of working capital management on the financial performance of these firms, particularly those listed on the Nairobi Securities Exchange (NSE), from 2003 to 2022. Working capital management was measured using the average age of inventory, average collection period, average payment period, and cash conversion cycle, whereas financial performance was measured using return on asset, return on equity, and net operating profit margin. Using panel regression analysis, the results showed that the average inventory age, average collection period, average payment period, and cash conversion cycle were all negatively related to financial performance for NSE-listed commercial and service firms. Based on the findings, it was recommended that Kenyan commercial and service firms adopt prudent optimal working capital management practices to improve firm financial performance and maximize shareholder wealth.

Anene et al., (2023) investigated the effect of working capital management on the financial performance of pharmaceutical firms listed on Nigeria exchange limited from 2017 to 2022. The specific objectives of the study were to determine the effect of average payment periods, average collection period, inventory conversion period, cash conversion cycle and current ratio on the financial performance of firms listed pharmaceutical firms on Nigeria exchange limited. The hypotheses synchronized with the objectives and the cause-and-effect research design was adopted for the study. Secondary data was collected from the annual reports of the entire four firms listed in that sector, which was analyzed using descriptive statistics, correlation and ordinary least square regression estimation. The study found that all the components of working capital management studied have statistically significant effect on the financial performance (Return on Assets) of firms listed on the natural recourses sector of Nigeria exchange limited. The study therefore recommends amongst others that the firms should as a matter of fact be tactful in handling accounts payables to ensure that days of accounts payables must be higher than the days of accounts receivables, which will provide them with additional capital that will facilitate higher turnover and increased profitability. The study is based on the liquidity theory, which is also known as liquidity management theory, focuses on the ability of a company to meet its short-term financial obligations promptly and efficiently (Pluskota et al., 2020). It deals with how firms manage their current assets and liabilities to ensure they have enough cash and liquid resources to cover day-to-day operations and unforeseen expenses. According to Bibi & Amjad, (2017), liquidity theory as a function of current assets and current liabilities is an important factor in determining working capital policies and indicates firm's capability of generating cash in case of need. This study is anchored on this theory because this theory states that liquidity is essential for the smooth functioning of business operations and the ability to seize growth opportunities.

3.0 METHODOLOGY

This study adopted the ex-post facto design and employed secondary data from 16 consumers' goods companies listed on the floor of the Nigeria Exchange Group for the period 2014 to 2023. According to the Nigerian Exchange Group (2023) fact book, the total number of consumer goods companies listed on the Nigerian Exchange Group at the end of 2023 financial year was 21 companies. The 16 companies were selected purposively from the 21 listed in the Nigerian Exchange Group.

The study employed the weighted least square regression analysis using STATA 14.2.

4.0 RESULT AND DISCUSSION

Table 4. 1: Descriptive statistics of working capital management and financial performance of listed consumer goods firms in Nigeria (2014-2023)

Variable	Obs	Mean	Std. Dev.	Min	Max
ROE	170	.479	4.709	-3.723	60.958
INVP	160	97.793	65.081	20.617	412.854
RECP	160	167.674	666.018	1.965	6056.321

Source: Author's computation (2024)

Table 4.1 shows the descriptive statistics of all variables under study. It was observed that the average company in the consumer goods sector had about 48% return on equity (ROE). The highest return on equity (ROE) observed in the sector was about 60.96% while the lowest was about -3.72%. The data had a standard deviation of 4.71% which showed high level of variability of return on equity of each firm. This means that ROE of firms were relatively very different or heterogeneous. It's also safe to say that return on equity in the consumer goods sector is on the high side.

For inventory holding period (INVP), it was observed that the highest number of days a company has ever held inventory between 2014 and 2023 was about 413 days. The shortest period of time in this case was about 21 days. From the descriptive, it can be said that the average company in the consumer goods sector keeps inventory for about 98 days before it's sold or used. The standard deviation for these was 65 days which shows a near average level of variability in the inventory holding period of the firms under study. Inventory holding period was also not very high in the sector. It can be said it's on the average or normal level checking from the supposed max (365 days).

For receivable collection period (RECP), it was observed that the average number of days it took companies to collect receivables was 168 days with a standard deviation of 666 days. This was very far from the mean so it indicates high level of variability in the dataset. Receivable collection period among consumer goods firms ranged between 2 to 6056 days and from these, it can be said

that receivable collection period in the consumer goods sector is on the high side. This is not good as this could affect cash availability.

4.1 Normality test

To assess whether a dataset aligns with a normal distribution and to estimate the probability that the underlying random variable is normally distributed, statisticians often use normality tests. In Stata, several tests can evaluate normality, but we will focus on the Shapiro-Wilk test, widely regarded as having the highest power for a given significance level based on Monte Carlo simulations. According to this test, a variable is considered normally distributed if the p-value is not statistically significant at the 1% or 5% level; otherwise, normality is rejected. The results are presented below.

Table 4. 2: Shapiro-Wilk W test for Normal data

Variable	OBS	W	V	Z	Prob>z
ROE	170	0.101	116.493	10.857	0.000
INVP	160	0.733	32.884	7.945	0.000
RECP	160	0.209	97.291	10.413	0.000

Source: Author's computation (2024)

4.2 Data Analyses

4.2.1 Correlations

Correlation analysis examines the associations between the independent and dependent variables without capturing cause and effects. Based on the findings in Section 4.1.2, it was evident that most variables did not follow normal distribution. Addressing this issue can involve various approaches, such as data transformation, employing robust techniques, or using non-parametric tests (Box & Watson, 1962; Hernandez, 2021; Peluso et al., 2021). As a result, the Spearman rank correlation is applied instead of Pearson's correlation. Spearman's method is non-parametric, robust, and mitigates the effect of outliers by pulling extreme values closer to the center (Chok, 2010).

Table 4. 3: Spearman's rank Correlation Coefficients

Variables	(1)	(2)	(3)
ROE	1.000		
INVP	-0.165	1.000	
RECP	0.056	-0.230	1.000

Spearman rho = 0.063

Source: Author's computation (2024)

Table 4.3 shows coefficients for the spearman correlation. From the output, it was observed that inventory holding period (INVP) has a weak negative correlation with return on equity (ROE) of listed consumer goods firms in Nigeria with coefficient; 0.165. This implies that to a low extent, long inventory holding periods without being the cause, always come with low return on equity in the sampled firms. Receivable collection period (RECP) has no correlation with return on equity (ROE) with 0.056 as coefficient.

Table 4.4 Regression Results

	(1) Pooled ordinary least squares ols roe	(2) Random effects gls rem roe	(3) Weighted least squares wls roe
invpl	-1.914** (0.018)	-1.914** (0.017)	-4.676*** (0.008)
recpl	1.010 (0.347)	1.010 (0.346)	0.563 (0.668)
size	0.487* (0.080)	0.487* (0.078)	0.272 (0.602)
Constant	-5.763 (0.299)	-5.763 (0.298)	-1.910 (0.796)

r^2	0.241	0.241	0.326
n	160.000	160.000	103.000
f/w	11.303	16.512	21.005
prob(f/w)	0.006	0.010	0.003
vif	1.67		
hettest	414.40(0.000)		
lagrange multiplier		0.00(1.000)	

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Source: Author's compilation (2024)

4.3 Test of hypotheses

The hypotheses of these study were tested using weighted least squares regression model as presented in table 4.4.

Hypothesis One

Ho: Inventory holding period does not have significant effect on return on equity of listed consumer goods firms in Nigeria.

H1: Inventory holding period has significant effect on return on equity of listed consumer goods firms in Nigeria.

The results obtained from the weighted least squares regression model showed that inventory holding period (INVP) with coefficient and p-value of -4.676 and 0.008 respectively, has a significant negative effect on return on equity of listed consumer goods firms in Nigeria. Thus, the null hypothesis was rejected and the alternate was accepted. This was because the p-value was less than 0.05 significant level. This implies that inventory holding period has significant effect on return on equity of listed consumer goods firms in Nigeria

Hypothesis Two

Ho: Receivable collection period does not have significant effect on return on equity of listed consumer goods firms in Nigeria.

H1: Receivable collection period has significant effect on return on equity of listed consumer goods firms in Nigeria.

The results obtained from the weighted least squares regression model in table 4.4 showed that receivable collection period has a coefficient and p-value of 0.563 and 0.668 respectively. It is evident that the p-value was greater than 0.05 level of significance. Therefore, the null hypothesis was accepted. This indicates that receivable collection period has no significant effect on return on equity of listed consumer goods firms in Nigeria.

4.4 Discussion of Findings

Results from the weighted least square regression model showed that inventory holding period (INVP) with coefficient and p-value of -4.676 and 0.008 respectively, has a significant negative effect on return on equity of listed consumer goods firms in Nigeria. This implies that as inventory holding period increases, return on equity decreases and vice versa. In other words, the longer the inventory holding period, the lower the return on equity of listed consumer goods firms in Nigeria.

This is a linear relationship in the inverse direction. Possible explanation is that a longer inventory holding period means that firms are taking more time to convert their inventory into sales. This delay can tie up resources in unsold goods, leading to increased storage costs, potential obsolescence, and reduced liquidity. These factors diminish the ability of the firm to utilize its assets effectively, which negatively impacts profitability and, consequently, the return on equity. This situation could result in higher working capital requirements, as firms may need to finance larger inventory stocks. Such inefficiencies divert resources that could otherwise be deployed in value-creating activities, further eroding the firm's equity returns. Also, the inverse linear relationship also emphasizes the opportunity cost associated with extended inventory holding. Funds locked in inventory are not available for other productive investments, such as market expansion or innovation. Additionally, consumer goods firms often operate in competitive markets where rapid turnover is essential to maintain product freshness and relevance. A lengthy holding period may lead to inventory losses, especially for perishable or trend-sensitive goods, thereby exacerbating the negative impact on financial performance. Rationally thinking, from a strategic perspective, firms with efficient inventory management systems are likely to enjoy better financial outcomes.

Receivable Collection Period and Return on Equity

From the regression results in table 4.4 , it was observed that a coefficient of 0.563 and a corresponding p-value of 0.668 was the case here, implying that receivable collection period has a statistically non-significant positive effect on the return on equity of listed consumer goods firms in Nigeria. This means that there exists a positive relationship between receivable collection period and return on equity but there was no sufficient evidence to support this relationship. In other words, receivable collection period has no significant effect on return on equity of listed consumer goods firms in Nigeria. Possible reason for this could be the diverse nature of credit management practices within these firms.

Another reason could be the variability in the creditworthiness of customers. Firms extending credit to customers with inconsistent payment patterns might experience delays or even defaults, which could negate the expected financial benefits. In such scenarios, the increase in sales volume achieved by offering credit terms may not translate into significant profitability gains, leaving the relationship between receivable collection period and ROE statistically insignificant. Additionally, external economic factors, such as inflation, currency fluctuations, or economic downturns, might influence the cash flow dynamics of consumer goods firms, diminishing the impact of receivables on overall financial performance. Firms operating in volatile markets might adopt conservative financial policies, prioritizing cash reserves over aggressive credit policies. This cautious approach could render the effect of RCP on ROE negligible within the broader financial framework.

The competitive nature of the consumer goods sector might also dilute the effect of receivable collection period. Firms may use longer collection periods as a strategic tool to attract and retain customers in highly competitive markets. However, the incremental benefits of such strategies may not be substantial enough to significantly affect return on equity, especially if they are accompanied by increased administrative costs and risks associated with managing extended credit terms. Lastly, the non-significant result might reflect efficient financial management practices among the studied firms. Firms may have implemented robust systems to mitigate risks associated

with longer receivable collection periods, such as discount incentives for early payments or stringent credit checks. These measures might balance the potential drawbacks of extended collection periods, rendering their effect on ROE statistically inconclusive.

On the contrary, studies such as those by Deloof, (2018) and Baños-Caballero et al., (2021) highlighted a negative relationship between receivable collection period and financial performance. They argued that prolonged receivable periods strain cash flow, increase bad debt risks, and raise costs associated with managing accounts receivables. This perspective diverges from the observed positive relationship, suggesting that while longer collection periods might foster sales, they could also impose liquidity constraints, particularly for firms with inefficient collection practices.

5 Conclusion

This study examined the effect of working capital management on the financial performance of listed consumer goods firms in Nigeria from 2014 to 2023. The findings revealed that inventory holding period has a significant negative effect on return on equity, implying that longer stock retention reduces profitability due to increased holding costs and tied-up capital. The receivable collection period, however, did not show a statistically significant effect on return on equity, suggesting that variations in credit management practices and market conditions might moderate its effect on financial performance. Additionally, the study confirmed that an efficient working capital management strategy is crucial for enhancing firms' profitability and financial stability. Firms that optimize their inventory turnover, manage accounts receivable efficiently can improve liquidity and maximize shareholder value. The results emphasize the need for consumer goods firms in Nigeria to adopt sound financial management practices, such as just-in-time inventory systems and robust credit policies, to enhance overall performance. Based on these findings, it is recommended that firms in the consumer goods sector should implement strategic inventory management techniques, optimize their receivables collection processes to maintain a balance between liquidity and profitability. Future research could expand this study by incorporating additional financial metrics and exploring sectoral differences in working capital management practices.

6 References

- Abdulazeez, D. A., Alhaji Baba, N., Fatima, K. R., & Abdulrahman, Y. (2018). Working capital management and financial performance of Listed Conglomerate Companies in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4(2), 49–66.
- Adu, C. A. (2024). Working Capital Management and Financial Performance of Consumer Goods Manufacturing Companies in Nigeria. *Wukari International Studies Journal*, 8(6), 226–233.
- Ahmed, S., Suntai, M. A., & Bakari, U. A. (2020). Working Capital Management and Financial Performance of Selected Consumer Goods in Nigeria. *Jalingo Journal of Social and Management Sciences*, 2(2), 68–78.

<http://oer.tsuniversity.edu.ng/index.php/jjsms/article/view/227>

- AL-Zararee, A., Almasria, N. A., & Alawaqleh, Q. (2021). The effect of working capital management and credit management policy on Jordanian banks' financial performance. *Banks and Bank Systems*, 16(4), 229–239. [https://doi.org/10.21511/bbs.16\(4\).2021.19](https://doi.org/10.21511/bbs.16(4).2021.19)
- Alhassan, I., & Islam, K. M. A. (2021). Credit Management Strategies and Financial Performance of Industrial Goods Sector in Nigeria. *Indian Journal of Finance and Banking*, 8(1), 59–74. <https://doi.org/10.46281/ijfb.v8i1.1495>
- Ali, S. B., Hussain, B. M., Big, U., Khan, Z. S., Raza, A., & Murad, H. (2021). The Enigma of Capital Structure Theories: An Empirical Investigation Between Peer Corporations in Pakistan. *International Journal of Advanced Research in Engineering and Technology (IJARET)*, 12(4), 113–124. <https://doi.org/10.34218/IJARET.12.4.2021.014>
- Anene, J. I., Edeh, L. S., & Odubuasi, A. C. (2023). Effect of Working Capital Management on the Financial Performance of Firms in Nigeria. *Tujamss*, 8(1), 186–204.
- Azmal, R., Negoro, D. A., & Syah, T. Y. R. (2019). The influence cash position analysis over debt to equity ratio, return on assets, and inventory turnover on dividend payout ratio: consumer goods companies in indonesia stock exchange 2012-2017 case study. *Journal of Multidisciplinary Academic*, 3(4), 76–81.
- Baños-Caballero, S., García-Teruel, P. J., & Martínez-Solano, P. (2021). The speed of adjustment in net operating working capital: an international study. *Spanish Journal of Finance and Accounting*, 50(4), 423–440. <https://doi.org/10.1080/02102412.2020.1864176>
- Bibi, N., & Amjad, S. (2017). The Relationship between Liquidity and Firms' Profitability: A Case Study of Karachi Stock Exchange. *Asian Journal of Finance & Accounting*, 9(1), 54–67. <https://doi.org/10.5296/ajfa.v9i1.10600>
- Boisjoly, R. P., Jr, T. E. C., & Iv, M. B. M. (2020). Working capital management : Financial and valuation impacts. *Journal of Business Research*, 108(November 2018), 1–8. <https://doi.org/10.1016/j.jbusres.2019.09.025>
- Box, G. E. P., & Watson, G. S. (1962). Robustness to Non-Normality of Regression Tests. *Biometrika*, 49(1), 93–106.
- Chok, N. S. (2010). *PEARSON'S VERSUS SPEARMAN'S AND KENDALL'S CORRELATION COEFFICIENTS FOR CONTINUOUS DATA*.
- Deloof, M. (2018). Does Working Capital Management Affect Profitability of Belgian Firms? *Journal of Business Finance & Accounting*, 30(3/4), 573–587.
- Herison, R., Sahabuddin, R., Azis, M., & Azis, F. (2022). The Effect of Working Capital Turnover, Accounts Receivable Turnover and Inventory Turnover on Profitability Levels on the Indonesia Stock Exchange 2015-2019. *Psychology and Education*, 59(1), 385–396.

- Hernandez, H. (2021). Testing for Normality: What is the Best Method? *ForsChem Research*, 6(5), 1–38. <https://doi.org/10.13140/RG.2.2.13926.14406>
- Hillebrand, B. L., & Ahmed, Y. A. (2022). *Working Capital Management Ratios of Panasonic Corporation and Sony Corporation* (Issue January).
- Ibrahim, U. A., & Isiaka, A. (2021). Working capital management and financial performance of non financial quoted companies in Nigeria. *International Journal of Research in Business and Social Science* (2147- 4478), 10(3), 241–258. <https://doi.org/10.20525/ijrbs.v10i3.1116>
- Iyalla, O. M., & Ibrahim, U. A. (2023). Financial Performance and Working Capital Management Practices of Nigeria’s Consumer Goods Manufacturing Firms. *WSEAS Transactions on Business and Economics*, 20, 2344–2352. <https://doi.org/10.37394/23207.2023.20.201>
- Mandipa, G., & Sibindi, A. (2022). Financial Performance and Working Capital Management Practices in the Retail Sector: Empirical Evidence from South Africa. *Risks*, 10(63), 1–17. <https://doi.org/10.3390/risks10030063>
- Mohammadi, P., Fathi, S., & Kazemi, A. (2019). Differentiation and financial performance: a meta-analysis. *Competitiveness Review*, 29(5), 573–591. <https://doi.org/10.1108/CR-10-2018-0067>
- Mohammed, S. R., & Joshua, A. A. (2019). Working Capital Management and Performance of Consumer Goods Companies Listed on the Nigerian Stock Exchange. *Journal of Mgt. Science & Entrepreneurship*, 19(7), 2019. www.hummingpubng.com
- Nsowah, J., Agyenim-boateng, G., & Anane, A. (2025). Effect of Inventory Management Practices on Healthcare Delivery and Operational Performance of Sunyani Regional Hospital. *Operations Research Forum*, 6(13), 1–20. <https://doi.org/10.1007/s43069-024-00405-w>
- Olaoye, C. O., & Adeboboye, R. (2019). Working Capital Management, Firm’s Performance, Comparative Analysis. *Information Management and Business Review*, 11(3), 34–45.
- Oluwatosin Olatunji, O. (2014). Working Capital Management Policy and Financial Performance in the Nigerian Foods and Beverages Industry: A Study of Nestle Nigeria Plc (2008-2012). *Research Journal of Finance and Accounting Wwww.Iiste.Org ISSN*, 5(20). www.iiste.org
- Peluso, A., Glen, R., & Ebbels, T. M. D. (2021). Multiple-testing correction in metabolome-wide association studies. *BMC Bioinformatics*, 22(1), 1–19. <https://doi.org/10.1186/s12859-021-03975-2>
- Pluskota, A., Bolek, M., & Wolski, R. (2020). Liquidity – Profitability Relationship Analysed with the Granger Causality Test on the Example of the Warsaw Stock Exchange. *Annales Universitatis Mariae Curie-Skłodowska, Sectio H – Oeconomia*, 54(2), 89.

<https://doi.org/10.17951/h.2020.54.2.89-101>

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). *Measuring Organizational Performance : Towards Methodological Best Practice †. XX(X).*

<https://doi.org/10.1177/0149206308330560>

Tanveer, M., & Ali, G. (2020). Impact of Board Traits and Ownership form on Investment Efficiency: A study on Pakistan’s Food Sector. *KASBIT Business Journal*, 13(2), 46–61. <https://kasbitoric.com/index.php/kbj/article/view/136>

Wanzala, R. W., & Obokoh, L. (2024). The Effects of Working Capital Management on the Financial Performance of Commercial and Service Firms Listed on the Nairobi Securities Exchange in Kenya. *Risks*, 12(8), 1–11. <https://doi.org/10.3390/risks12080119>