



## EFFECT OF AVERAGE ACCOUNT RECEIVABLES ON PROFITABILITY OF PRIVATE SECURITY FIRMS IN KISUMU COUNTY, KENYA

Jackline Nyawira Mwangi<sup>1i</sup>,  
Ondiwa Simon Oluoch<sup>2</sup>

<sup>1</sup>MBA Graduate,  
Department of Accounting and Finance,  
Maseno University,  
Maseno, Kenya

<sup>2</sup>Lecturer, Dr.,  
Department of Accounting and Finance,  
Maseno University,  
Maseno, Kenya

### Abstract:

In today's dynamic business environment, efficient working capital management is a critical factor in sustaining and enhancing profitability, managing risk, and maximizing firm value. While companies strive to align their strategies with growth objectives and annual profitability, inadequate liquidity can hinder their ability to generate returns for shareholders. Therefore, adopting effective working capital management practices is essential. Despite the significance of working capital management, there is a gap in understanding its impact on the profitability of private security firms in emerging economies like Kenya. This study aimed to examine the effect of working capital management on the profitability of private security firms in Kisumu County, Kenya, for the period 2019–2023. Specifically, it assessed the impact of the average accounts receivable period on profitability. A correlational research design was employed, focusing on private security firms registered with the Private Security Regulatory Authority in Kisumu County. The study relied on secondary data obtained from financial statements, using Return on Assets (ROA) as a measure of profitability. The results indicated that the average accounts receivable period had a statistically significant positive effect on profitability ( $\beta_1 = 2.012$ ,  $t = 3.181$ ,  $p = 0.04 < 0.05$ ). These findings are valuable to private security firm managers, scholars, and policymakers, including government entities, as they provide insights into the role of working capital management in enhancing financial performance.

JEL: G31, L84, M41

---

<sup>i</sup> Correspondence: email [mwangijackline00@gmail.com](mailto:mwangijackline00@gmail.com)

**Keywords:** working capital management, average accounts receivable, return on assets, profitability

## 1. Introduction

The management of short-term finances is a critical aspect of corporate financial strategy, focusing on the effective administration of short-term assets and liabilities to ensure optimal liquidity, profitability, and shareholder value enhancement (Smith, 2019). Efficient working capital management (WCM) entails the strategic regulation of short-term financial resources and obligations to maximize asset returns while minimizing liability-related costs (Johnson, 2021). A well-structured working capital position contributes to a firm's financial stability, supporting both liquidity maintenance and business expansion, thereby enhancing shareholder value.

Working capital refers to the capital required for daily operational activities, encompassing short-term financing needs. It is typically non-interest-bearing, such as funds allocated to inventory (Smith, 2022). The primary objective of WCM is to ensure the seamless continuity of business operations by maintaining adequate liquidity to meet short-term obligations and future operational expenditures (Naseer & Bibi, 2018). Effective short-term financial management is particularly essential for the profitability of security firms, as the strategic handling of short-term assets and liabilities significantly influences financial performance. While profitability remains a fundamental objective, maintaining sufficient liquidity is equally imperative.

The management of accounts receivable is largely influenced by a firm's credit policies and debt recovery mechanisms (Smith, 2022). The efficiency of accounts receivable management is often measured by a company's ability to recover outstanding payments from clients (Sharma & Kumar, 2011). A disproportionately high debtor turnover rate can negatively impact earnings (Corporate Finance Institute, 2019). Proper oversight of accounts receivable is crucial for sustaining business liquidity, solvency, and profitability (Ansah, 2011). Firms that effectively manage their accounts receivable tend to have higher liquidity levels, enabling them to meet short-term financial obligations as they arise.

Firms have increasingly recognized that prioritizing profitability at the expense of liquidity can lead to severe financial challenges (Naseer & Bibi, 2018). Therefore, achieving a balance between these two objectives is essential, as an overemphasis on either could have detrimental consequences. Ineffective liquidity management may result in insolvency or even bankruptcy (Naseer & Bibi, 2018). Consequently, working capital management must be carefully structured to sustain financial health and ultimately enhance firm profitability. Optimizing a firm's working capital position contributes significantly to overall firm value (Achchuthan & Kajamanthan, 2013).

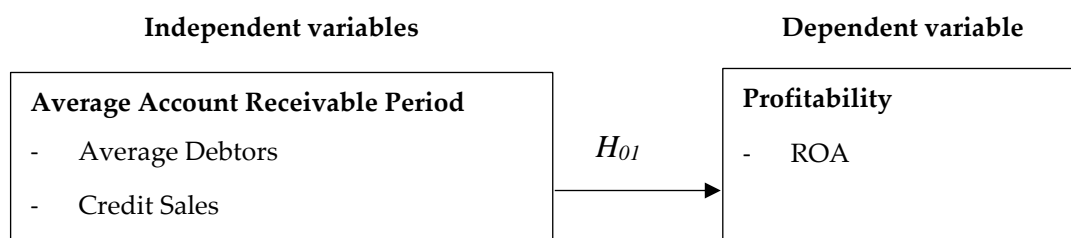
Financial performance is an objective measure of a firm's ability to utilize its assets effectively in its primary economic activities to generate revenue (Margaretha & Oktaviani, 2016). Researchers have employed both accounting-based and market-based

measures to assess business performance. Accounting-based measures evaluate the outcomes of managerial decisions (Hutchinson & Gul, 2004) and are preferred over market-based measures, particularly in studies on corporate governance and firm performance (Mashayekhi & Bazazb, 2008).

Gerrit and Mohammad (2010) identify multiple financial indicators used by firms to assess performance, including return on assets (ROA), return on sales, return on equity, return on investment, return on capital employed, and sales growth. This study adopts ROA as the primary measure of financial performance, as it is widely regarded as a significant profitability indicator. ROA quantifies the percentage of earnings generated per unit of assets invested. Rushdi and Tennant (2003) support the assertion that ROA is among the most reliable profitability metrics. Profitability, defined as a firm's capacity to generate income (Johnson, 2021), largely depends on operational efficiency and optimal resource utilization (Smith, 2022).

WCM plays a crucial role in enhancing profitability, as the effective management of cash, receivables, and inventory directly influences firm earnings (Smith, 2022). Excessive inventory accumulation may lead to increased costs due to storage, depreciation, obsolescence, and theft, all of which diminish profitability (Knauer & Wöhrmann, 2013). Conversely, insufficient inventory levels may result in stock shortages, loss of customer trust, and missed revenue opportunities, ultimately reducing firm profits.

**Figure 1: Conceptual Framework**



Source: Adopted and Modified from Iyewumi *et al.* (2015).

## 2. Literature Review

The majority of existing studies on WCM have primarily focused on sectors other than private security firms. For instance, research conducted by Anser and Malik (2013) and Madugba and Ogbonnaya (2016) concentrated on the manufacturing sector, while Yahaya (2016) investigated the pharmaceutical industry. Similarly, Okpe and Duru (2015) examined the building, oil, and gas sectors (Iyewumi *et al.*, 2015). A study by Kiptoo (2017) in Kenya explored the impact of WCM practices on the financial performance of tea processing firms. Using a cross-sectional descriptive research design, the study assessed the perceived effects of inventory and payment management on financial outcomes among 54 firms managed by the Kenya Tea Development Agency (KTDA). The findings indicated that while firms aimed to align their strategies with growth and profitability objectives, inadequate liquidity posed a significant barrier to maximizing

shareholder returns. However, methodological and contextual gaps were identified, as the study did not incorporate the average accounts payable period in its WCM framework and employed a descriptive methodology, which limited its ability to establish causal relationships between variables.

Yazdanfar and Ohman (2016) analyzed a cross-sectional panel dataset of 15,897 Swedish small and medium-sized enterprises (SMEs) across five industrial sectors from 2009 to 2012 to examine the impact of trade credit on profitability. Their findings revealed that trade credit had a significant negative effect on profitability, with accounts payable, short-term borrowing, and long-term borrowing identified as key elements adversely affecting financial performance. The study's contextual limitations included its exclusive focus on the Swedish market and the omission of cash conversion cycle (CCC) as a variable. This study aims to bridge these gaps by examining the effect of CCC on the profitability of private security firms in Kisumu County.

Iyewumi *et al.* (2015) investigated the relationship between WCM and corporate profitability in Nigeria's oil and gas sector, utilizing secondary data from publicly listed companies between 1995 and 2011. Their analysis, employing correlation techniques and Ordinary Least Squares (OLS) regression, demonstrated that WCM components—including CCC, average receivables period, average payables period, and inventory turnover—significantly influenced corporate profitability. Moreover, firm size was identified as a determinant of profitability.

Despite valuable insights from existing literature, a significant research gap remains concerning the direct impact of the average accounts receivable period on profitability within the private security sector. This study aims to address these gaps by investigating the relationship between WCM practices and profitability in private security firms in Kisumu County, Kenya.

### **3. Methodology**

This study employs a correlational research design to examine the influence of WCM practices on the profitability of private security firms in Kisumu County.

#### **3.1 Research Design**

Correlational research is used to assess statistical relationships between variables without implying causation (Fraenkel & Wallen, 2000; Creswell & Plano-Clark, 2011). This approach is appropriate for determining whether effective WCM, specifically the average accounts receivable period, is associated with profitability.

#### **3.2 Sample Size and Population**

The study targeted 30 private security firms listed by the Private Security Regulatory Authority (PSRA) in Kisumu County. The analysis covered financial data from 2019 to 2023, encompassing 150 observations.

### 3.3 Data Analysis

Secondary data were extracted from financial statements, covering variables such as total assets, liabilities, capital, and net income. Data were analyzed using SPSS, with results presented in tables and graphs.

### 3.4 Model Specification

A regression model was developed to establish the relationship between the Average Accounts Receivable (AAR) period and the profitability of private security firms in Kisumu County.

$$Y_i = \beta_0 + \beta_1 X_1 \text{ (AAR period)} + \epsilon_i \quad (3.1)$$

Where:

$Y_i$  = Dependent variable representing profitability metrics,

$\beta_0$  = Constant coefficients,

$\beta_1$  = Regression coefficient for Average Account Receivable Period,

$X_1$  = Average Accounts Receivable Period,

$\epsilon_i$  = Error term.

## 4. Results

The primary objective of this study was to determine the effect of working capital management practices on the profitability of private security firms in Kisumu County. Specifically, the study aimed to assess the impact of the Average Accounts Receivable (AAR) period on the profitability of these firms.

### 4.1 Average Accounts Receivable Period and Profitability

Table 1 presents the model summary of the effect of AAR on profitability (ROA).

**Table 1:** Model summary of the effect of AAR on profitability (i.e. ROA)

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.515 <sup>a</sup>	.265	.239	2.30971	2.000
a. Predictors: (Constant), Average Accounts Receivable					
b. Dependent Variable: Return on Assets					

As indicated in Table 1, the correlation coefficient ( $R = 0.515$ ) suggests a positive and moderate relationship between AAR and ROA. The coefficient of determination ( $R^2$ ) indicates that AAR accounts for 26.5% of the variance in ROA, while the remaining 73.5% is attributable to other factors not included in this study. The Durbin-Watson (D-W) statistic of 2.000 indicates no autocorrelation.

Table 2 presents the results of the Analysis of Variance (ANOVA).

**Table 2:** ANOVA of the effect of AAR on profitability (ROA)

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.969	1	53.969	10.117	.004 <sup>b</sup>
	Residual	149.374	28	5.335		
	Total	203.343	29			
a. Dependent Variable: Return on Assets						
b. Predictors: (Constant), Average Accounts Receivable						

The ANOVA results indicate that the Average Accounts Receivable period has a statistically significant effect on profitability (ROA), with  $p < 0.05$ . [ $F(1, 28) = 10.117$ ,  $p = .004$ ]. Since the model is significant at the 5% level, suggesting that AAR has a meaningful influence on ROA.

Table 3 presents the results of regression coefficients.

**Table 3:** Coefficients of the effect of AAR on profitability (ROA)

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.494	.851		2.929	.007		
	AAR	2.012	.633	.515	3.181	.004	1.000	1.000
a. Dependent Variable: Return on Assets								

Since the  $p$ -value = 0.004 is less than 0.05, it confirms that AAR has a significant effect on ROA among private security firms in Kenya. The regression coefficient ( $\beta_1 = 2.012$ ,  $t = 3.181$ ,  $p = 0.04 < 0.05$ ) indicates that a one-unit increase in AAR leads to a 2.012-unit increase in profitability (ROA). These findings align with prior studies by Iyewumi *et al.* (2015) and Okpe and Duru (2015), who reported a significant relationship between the average accounts receivable period and firm profitability.

## 5. Conclusions and Recommendations

The study established a positive and moderate relationship between the average accounts receivable period (AAR) and profitability, as measured by return on assets (ROA). The findings suggest that private security firms in Kisumu County generally maintain a shorter debtor collection period, experience minimal bad debts, and implement strong credit policies. These factors contribute to the significant effect of AAR on profitability.

Based on these findings, the study recommends that managers of private security firms should aim to further reduce the AAR to prevent cash from being tied up for extended periods. This would help mitigate liquidity challenges and ensure a steady cash flow for operational efficiency. To achieve this, firms should establish clear policies on working capital management to provide structured guidance on credit and receivables. Additionally, financial management staff should be trained on effective working capital

management practices to enhance their decision-making capabilities. Regular appraisals of working capital management should also be conducted to identify weaknesses and implement necessary improvements, ensuring optimal financial performance and sustainability of private security firms.

### Conflict of Interest Statement

The authors declare no conflicts of interest.

### About the Author(s)

**Jackline Nyawira Mwangi** is an MBA graduate from Maseno University, Kenya, with a specialization in Finance. She holds a bachelor's degree in commerce and has a growing interest in financial management, corporate governance, and SME performance in emerging economies. Her current research interests include working capital management, profitability analysis, and financial strategy for service-based industries. She has actively participated and presented abstracts in various conferences and workshops focused on financial inclusion and enterprise growth in Sub-Saharan Africa. ORCID: <https://orcid.org/0009-0009-7190-1117>

**Dr. Ondiwa Simon Oluoch** is an MSME consultant, and he is currently working with DT Global International Development EA Limited. Previously, he worked as an adjunct lecturer in the School of Business and Economics at Maseno University in Kenya. He holds a PhD in Business Administration, a Finance Major, an MBA, a Finance Major and a Bachelor of Business Administration Finance. His research interest is the operations of financial institutions and markets.

ORCID: <https://orcid.org/0000-0002-0521-5321>

### References

- Achchuthan, S., & Kajamanthan, R. (2013). Corporate governance practices and working capital management efficiency: Special reference to listed manufacturing companies in Sri Lanka. *Information and Knowledge Management*, 3(2), 216-226.
- Anser, R., & Malik, Q. A. (2013). Cash conversion cycle and firms' profitability—a study of listed manufacturing companies of Pakistan. *IOSR Journal of Business and Management*, 8(2), 83-87.
- Creswell, J., & Plano-Clark, V. (2011). *Designing and conducting mixed methods research*. CA: Sage: Thousand Oaks.
- Fraenkel, R. J., & Wallen, E. (2000). *How to design and evaluate research in education (Fourth ed.)*. San Francisco: McGraw-Hill.
- Gerrit, S., & Mohammad, J. A. (2010). Monitoring effects of the internal Audit Function: Agency Theory versus other explanatory variables. *International Journal of Auditing*. Blackwell Publishing Ltd.

- Hutchinson, M., & Gul, F. A. (2004). Investment opportunity set, corporate governance practices and firm performance. *Journal of Corporate Finance*, vol. 10 No. 4, 595-614.
- Iyewumi, T. A., Remy, H., & Omotayo, M. (2015). Working capital management and firm's profitability: the case of oil and gas industry in Nigeria. *Journal of Electronics and Computer Science*, 2(3), 1-21.
- Kiptoo, I. K. (2017). *Working capital management practices and financial performance of tea processing firms in Kenya*. Embu: Doctoral dissertation, University of Embu.
- Knauer, T., & Wöhrmann, A. (2013). Working capital management and firm profitability. *Journal of Management Control*, 24(1), 77-87.
- Kothari, C. R. (2017). *Research Methodology: Methods and techniques* (3rd ed.).
- Kumaraswamy, S. (2016). Impact of Working Capital on Financial Performance of Gulf Cooperation Council Firms. *International Journal of Economics and Financial Issues*, 6(3), 1136-1143.
- Madugba, J. U., & Ogbonnaya, A. K. (2016). Working capital management and financial performance: evidence from manufacturing companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 4, 98-106.
- Margaretha, F., & Oktaviani, C. (2016). Pengaruh Manajemen Modal Kerja Terhadap Profitabilitas pada Usaha Kecil dan Menengah Di Indonesia. *Jurnal Bisnis Dan Akuntansi*, 18(1), 11-24.
- Mashayekhi, B., & Bazazb, M. (2008). Corporate governance and firm performance in Iran. [http://dx.doi.org/10.1016/S1815-5669\(10\)70033-3](http://dx.doi.org/10.1016/S1815-5669(10)70033-3).
- Mwaura, C. N. (2017). *The Effect of Inventory Turnover on the Financial Performance of Medium and Large Retail Supermarkets in Kenya*. Doctoral dissertation, School of Business, University of Nairobi.
- Naseer, M., & Bibi, N. (2018). Liquidity management: comparison among manufacturing and merchandizing firms of Pakistan. *International Journal of Information, Business and Management*, 10(4), 124-137.
- Rushdi, M., & Tennant, J. (2003). "Profitability of Australian Banks: 1985-2001", . *Agenda: A Journal of Policy Analysis and Reform*, Vol. 10, No. 3, 229-243.
- Sharma, A., & Kumar, S. (2011). "Effect of working capital management on firm profitability: empirical evidence from India", *Global Business Review*, Vol. 12 No. 1. *empirical evidence from India", Global Business Review*, Vol. 12 No. 1, 159-173.
- Smith, A. (2019). Private Security Industry in Africa: Trends and Challenges. *Journal of Security Studies*, 25(2), 45-60.
- Smith, A. (2022). The Impact of Credit Policy and Collection Procedure on Accounts Receivable Management. *Journal of Finance and Accounting*, 40(3), 150-165.
- Van-Horne, J., & Wachowicz, J. (2005). *Fundamentals of Financial Management*. 11th ed. . New York: Prentice Hall.
- Yahaya, A. (2016). Effects of working capital management on the financial performance of the pharmaceutical firms in Nigeria. *International Journal of Economics, Commerce and Management United Kingdom*, 4(4).



Yazdanfar, D., & Öhman, P. (2014). The impact of cash conversion cycle on firm profitability: An empirical study based on Swedish data. *International Journal of Managerial Finance*, 10(4), 442-452.

Creative Commons licensing terms

Authors will retain copyright to their published articles, agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Economic and Financial Research shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind of content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).