The moderating effect of firm characteristics on the relationship between accounts receivable management and financial performance of the listed firms in the Nairobi Securities Exchange

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ABSTRACT

Financial performance is critical to organizational sustainability, competitiveness, and shareholder value. Despite the importance of accounts receivable management (ARM), its relationship with firm characteristics (FC) and financial performance (FP) remains inconclusive. This study examined the moderating effect of firm characteristics on the relationship between ARM and the financial performance of Nairobi Securities Exchange-listed firms. Guided by a positivist philosophy and a descriptive longitudinal panel design, the study employed a census of 48 non-banking firms listed on the Nairobi securities Exchange (NSE) as of 2023.FP was measured using return on assets (ROA), return on equity (ROE), and return on capital employed (ROCE); firm characteristics by liquidity and firm size; and ARM by investment in receivables and doubtful debt provisions and write-offs. Data were analyzed using descriptive statistics, correlation, and moderated regression, based on the Baron and Kenny framework. The findings revealed that liquidity significantly moderated the relationship between ARM and financial performance. The interaction term (ARM × LQ) was positive and statistically significant (B = 0.506, β = 0.064, p = 0.042), while including the interaction term increased the explanatory power of the model by 0.4% ($\Delta R^2 = 0.004$). In contrast, firm size did not significantly moderate the ARM-financial performance relationship (B = -0.116, β = -0.011, p = 0.753). The study concludes that the relationship between accounts receivable management and financial performance of NSE-listed firms is significantly moderated by firm characteristics. The findings support the Resource-Based View and Contingency Theory, highlighting the importance of integrating working capital management, innovation, and firm resources. The study recommends that firms should align their accounts receivable management strategies with their specific characteristics. Therefore, larger firms can leverage their market power to negotiate stricter credit terms and dedicated teams, while smaller or liquidity-constrained firms can utilize alternative financing like factoring and periodically review these practices as their size and liquidity evolve. Additionally, companies should integrate receivables management and firm characteristics into strategic monitoring dashboards to enable proactive decision-making. Future research should also examine other firm characteristics aspects like firm age and ownership structure.

Keywords: Accounts Receivable Management, Average Collection Period, Financial Performance, Firm Characteristics, Liquidity, Moderating Effect

I. INTRODUCTION

Mbarushimana and Kengere (2023) indicate that effective receivables management is a mechanism through which credit sales are converted into cash flows, proving that while sales may build the kingdom, collecting the cash secures the crown. The concept is true and applicable in today's volatile markets, where inefficient receivables management locks up a substantial portion of a company's current assets in some sectors, threatening liquidity and shareholder returns (Muthoni et al., 2020). The primary objective of managing receivables is to enhance shareholder value (Astvansh & Jindal, 2022). However, a central contemporary debate revolves around whether accounts receivable management can function effectively in isolation or must be integrated with other firm characteristics, strategies, and technological innovation (Mbarushimana & Kengere, 2023). While some scholars argue that receivable policies independently drive liquidity, evidence suggests that without alignment with investment strategies and risk management practices, such management fails to improve performance. The interplay between internal strategy, external technology, and receivables practices forms a key unresolved issue in the literature.

Accounts receivable management entails collecting customer payments and includes all business acts related to providing services, documenting transactions, and collecting payments (Owuor et al., 2021). Effective management reduces collection time, bad debt, and enhances financial growth (Mbarushimana & Kengere, 2023). It is a crucial financial procedure affecting a company's growth and success, helping businesses lower funds tied up in receivables and reduce bad debts (Mbarushimana & Kengere, 2023). To mitigate information asymmetry problems such as bad debts, management must engage in credit selection, formulation of credit terms, and monitoring. The challenge of clients

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knowing more about their creditworthiness than the seller can be mitigated through formal credit assessments and references, alongside close monitoring. Credit terms like payment periods and cash discounts help balance risk and return, with careful post-extension monitoring minimizing defaults.

Researchers operationalize accounts receivable management using various indicators. The principal approach is days' sales outstanding (DSO), which measures collection time (JPMorgan Chase & Co., 2024). Other metrics include the accounts receivable turnover ratio, average collection period, bad debt to sales ratio, and aging of accounts receivable. Intense global competition makes offering credit necessary, but this is only advantageous if returns outweigh costs (Tobazaa & Gatsi, 2025; Astvansh & Jindal, 2022). Key practices include managing the cost of investment in receivables, provisions for doubtful debts, average age of receivables, and financing practices (Mbarushimana & Kengere, 2023).

Firm characteristics, which are products of strategic managerial decisions, are dynamic rather than fixed. They encompass asset growth, turnover, revenue growth, leverage, liquidity, size, age, ownership structure, board composition, culture, resources, and strategic orientation (McKnight & Weir, 2009). Firm size influences formal control mechanisms (McKnight & Weir, 2009), while age refines methods and increases return certainty. Leverage represents the debt-to-equity ratio. Importantly, characteristics like size and liquidity enhance a firm's capability to invest in cutting-edge technologies, such as AI-driven credit scoring and blockchain invoicing, which speed collection cycles and improve competitiveness (Civelek et al., 2023).

Financial performance reflects a firm's overall success through indicators like profitability, liquidity, efficiency, and capital adequacy (Baafi et al., 2024; Nam & Tuyen, 2024). It represents how well a firm manages resources to generate income (Baafi et al., 2024). Performance is assessed by various stakeholders, including managers, owners, creditors, and employees, each with distinct expectations (Johan et al., 2024; Nam & Tuyen, 2024). Key financial ratios include profitability indicators, liquidity, solvency, and return on assets (ROA), which evaluates profit generation from assets.

1.1 Statement of the Problem

Firm characteristics are presumed to moderate the impact of accounts receivable management on financial performance by shaping a firm's operational capacity and risk tolerance. Internal attributes such as size, age, and liquidity determine the ability to adopt advanced receivables management technologies. Larger, well-established firms with healthy cash reserves have the financial cushion, market clout, and structured internal controls to offer competitive credit terms without putting their daily cash flow at risk. On the other hand, smaller companies or those carrying heavy debt operate on much tighter margins, leaving their profits far more exposed when customers take too long to pay or default altogether.

The Nairobi Securities Exchange (NSE) is Kenya's licensed stock exchange platform, featuring firms from banking, commercial services, manufacturing, telecommunications, and energy sectors. These firms exhibit unique differences in converting receivables into cash. A major debate concerns whether persistent underperformance among NSE-listed firms stems solely from weak receivables management or from differences in internal firm characteristics that shape credit capacity. While shorter collection periods generally improve profitability, findings from NSE remain inconsistent, potentially largely because prior studies overlook the moderating role of firm-specific attributes such as size, age, liquidity, and leverage.

The existing empirical literature presents competing views, with some studies finding positive correlations (Muthoni et al., 2020), while others report negative correlations (Deloof, 2003) or a non-linear, inverted U-shaped effect (Baños-Caballero et al., 2014). Given that several NSE-listed companies have reported declining performance and losses, including Kenya Airways with KES 13 billion in losses and Eveready East Africa with KES 72.6 million, debt mismanagement is a persistent problem, highlighting the need for further examination of accounts receivable management in these firms. Despite these mixed findings and practical pressures, limited empirical evidence exists on how internal firm attributes alter the impact of receivables practices on performance within the Kenyan market. Therefore, this study investigated the moderating effect of firm characteristics on the relationship between accounts receivable management and financial performance of firms listed at the Nairobi Securities Exchange.

1.2 Research Objective

To address the empirical gap surrounding how internal organizational capacities condition working capital outcomes in Kenya, the main objective of this study was to establish the moderating effect of firm characteristics on the relationship between accounts receivable management and the financial performance of firms listed at the Nairobi Securities Exchange (NSE). Specifically, the study examined how key internal attributes interact with credit selection, collection efficiency, and bad debt management practices to influence profitability, asset utilization, and overall shareholder value among quoted companies in Kenya.

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II. LITERATURE REVIEW

2.1 Theoretical Framework

This study was anchored in the Trade-Off Theory of working capital and Contingency Theory. Proposed by Myers (1977) and applied to working capital management in empirical studies such as Deloof (2003), the Trade-Off Theory explains how firms balance the costs and benefits of holding current assets such as accounts receivable. Extending trade credit stimulates sales and strengthens customer loyalty, which enhances revenue. However, tying up excessive capital in unpaid invoices drains cash reserves, increases financing costs, and heightens bad debt exposure, whereas overly restrictive credit terms can drive customers to competitors. Within the context of firms listed at the Nairobi Securities Exchange (NSE), this theory anchors the direct link between accounts receivable management and financial performance, demonstrating that profitability depends on maintaining an optimal credit balance where collection efficiency protects cash flow without constraining sales growth.

To explain why this relationship varies across firms, the study drew on Contingency Theory (Donaldson, 2001), which posits that there is no universally optimal financial strategy; rather, performance outcomes depend on internal and external organizational conditions. Applied to receivables management, a credit policy that enhances returns for one firm may erode value in another depending on its internal capacity and risk tolerance. Larger, older, and more liquid firms possess the financial buffers, market clout, and formal internal controls needed to absorb delayed payments and extend competitive credit safely, whereas smaller or heavily leveraged firms operate on tighter margins that magnify the cost of prolonged collection cycles. Contingency Theory therefore underpins the moderating role of firm characteristics in shaping how accounts receivable practices affect financial performance among NSE-listed firms.

2.2 Empirical Review

Previously, the moderating or mediating effects of ownership structure, industry, firm size, and technological innovation on the relationship between receivable policies and financial outcomes have been assessed (Owuor et al., 2021). While findings indicate a connection among these variables, a comprehensive empirical review integrating all factors within a unified framework remains undeveloped. Kenyan studies exhibit similar conceptual fragmentation.

Muthoni et al. (2020) found a favorable correlation between receivables and financial performance among venture capital-funded firms, consistent with Muthoni et al. (2020), who reported a significant positive correlation among NSE-listed manufacturing firms. However, both employed linear correlational designs without testing non-linear thresholds or interaction effects, implicitly assuming uniform positive relationships, an assumption theoretically problematized by studies that demonstrated an inverse U-shaped effect internationally, suggesting optimal receivable levels beyond which returns diminish. Conversely, Owuor et al. (2021), applying the Cash Conversion Cycle hypothesis to Kenyan universities, found that receivable management has an indirect rather than direct impact through working capital efficiency. This contrasts with Muthoni et al. (2020), whose direct-effect models imply straightforward causality, suggesting organizational context fundamentally alters the transmission mechanism, yet none tested context-specific moderation.

Regarding firm characteristics as moderators, empirical evidence is equally contentious. Kouaib and Bu Haya (2024) found a strong negative correlation between receivable collection period and firm performance among Saudi manufacturers, yet firm size did not influence this relationship, contradicting Baafi et al. (2024), who found firm size improves financial performance among Ghanaian firms with bidirectional causalities. However, Baafi et al. (2024) used size as an additive predictor rather than an interaction term, describing conditional rather than additive effects, a conceptual conflation weakening theoretical clarity.

Considering the existing literature, no previous study has simultaneously integrated accounts receivable management with multiple indicators including cost of investment, provision write-offs, and average age. Also, few studies, if any, have tested firm size and liquidity as formal moderators through interaction terms. The research offers contrasting global perspectives without contextualizing firm characteristics and diverge methodologically from Owuor et al. (2021) regarding indirect effects. This study addresses these interconnected gaps by examining the moderation effects of firm characteristics on the relationship between accounts receivable management and financial performance among NSE-listed commercial and service firms, employing moderated regression and recent data to resolve competing theoretical predictions and contradictory empirical findings.

III. METHODOLOGY

3.1 Research Philosophy and Design

The study adopted a positivist research philosophy, grounded in existing theory and generating quantitative hypotheses to be tested. Positivism comprises an epistemological position requiring objective assessment of observable features rather than subjective inference (Saunders et al., 2009). This deductive approach enables explanation of cause-

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and-effect relationships between accounts receivable management, firm characteristics, and financial performance, based on the belief that objective reality exists and can be investigated without interference (Saunders et al., 2009).

A descriptive longitudinal panel research design was adopted as the framework addressing the research problem (Bordens & Abbott, 2002). The descriptive longitudinal panel design captures information over time, enabling data collection from multiple organisations simultaneously (Cooper & Schindler, 2006). This design fits study objectives, by enabling the estimation of both the direct effect of accounts receivable management on financial performance and the moderating effect of firm characteristics across firms and over time. This design was therefore adopted as the most practical, efficient, and methodologically sound choice.

3.2 Population of the Study

The target population comprised all non-bank companies listed on the Nairobi Securities Exchange (NSE) as of December 31, 2023. These firms operate across various sectors, including commercial and services, manufacturing, energy, telecommunications, construction, and agriculture. Financial institutions were excluded because their receivables primarily comprise loans and advances, which are governed by distinct regulatory and financial reporting frameworks and are not directly comparable with trade receivables of non-bank firms.

The study adopted total enumeration, targeting all non-bank firms listed on the NSE as of December 31, 2023, that met the inclusion criteria: (i) NSE listing as of the specified date; (ii) non-bank status; and (iii) availability of complete audited financial data for the period 2019–2023. Accordingly, the targeted population consisted of all eligible non-bank NSE-listed firms, while the final analytical sample comprised those firms for which complete data were available throughout the study period. Secondary data were obtained from audited financial statements and Capital Markets Authority filings. This approach enabled the study to examine accounts receivable management, firm characteristics, and financial performance among NSE-listed non-bank firms while maintaining comparability across the selected observations.

3.3 Data Collection

This study relied entirely on secondary data from all non-financial NSE-listed firms. Kenyan law requires listed companies to submit audited financial statements and regulatory disclosures to the Capital Markets Authority annually, providing publicly accessible, validated quantitative information. Data collection spanned five financial years (2019-2023), with extraction from audited balance sheets, income statements, cash flow statements, and notes. Accounts receivable management indicators, cost of investment in receivables, provision for doubtful debts write-offs, and average age of receivables, were derived from trade receivables schedules. Firm characteristics (size measured by log of total assets; liquidity measured by current ratio and financial performance metrics (ROA, ROE, ROCE) were computed directly from financial statements. A structured data collection sheet ensured consistency, with entries cross-checked against original filings. Secondary data eliminated respondent bias, ensured objectivity, and allowed replication.

3.4 Diagnostic Tests

The study employed several diagnostic tests to ensure model dependability. The Shapiro-Wilk test was used to examine normality of residuals, with a p-value greater than 0.05 indicating normal distribution and valid hypothesis testing (Shapiro & Wilk, 1965). The Breusch-Pagan/Cook-Weisberg test was applied to detect heteroscedasticity, where a p-value below 0.05 would indicate non-constant error variance (Breusch & Pagan, 1979). Multicollinearity among predictors was assessed using the Variance Inflation Factor (VIF), with values exceeding 10 indicating problematic multicollinearity that distorts coefficient estimates and impairs model predictions (Gujarati, 2003). Serial correlation was examined using the Wooldridge test for autocorrelation in panel data, where a p-value greater than 0.05 confirms absence of autocorrelation (Wooldridge, 2002; Gujarati, 2003). Violations of homoscedasticity or serial correlation were detected, robust standard errors were applied to ensure reliable parameter estimates.

3.5 Operationalization of Research Variables

The study variables included account receivable management, firm characteristics, and financial performance. Account receivable management was operationalized in terms of cost of investment in accounts receivables, proportion of provision for doubtful debts write-offs and average age of accounts receivables. Firm characteristics was operationalized in terms of firm size, and liquidity. Financial performance was operationalized in terms of ROE, return on capital employed, and customer satisfaction.

3.6 Data Analysis

Secondary data was processed and analyzed using descriptive and inferential statistics. Descriptive statistics including frequencies, means, and one-sample t-tests summarized dataset characteristics. Hypotheses were tested at 95% confidence using simple and multivariate regression analysis. Moderated regression and interaction terms tested

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moderation effects, while mediation analysis followed the Baron and Kenny (1986) framework. Path analysis evaluated the strength and significance of causal effects. Diagnostic tests for normality, multicollinearity, and homoscedasticity ensured model validity and reliability

IV. FINDINGS & DISCUSSION

4.1 Descriptive Statistics Results

Preliminary analysis entailed an examination of descriptive statistics, which highlights the key characteristics of the study variables, as shown in Table 1. Specifically, Accounts Receivables Management (ARM), was proxied by the sum of Cost of Investment in Accounts Receivables (CIAR) and the Proportion of Provision for Doubtful Debts Write-Offs (PPDDWO). Firm Characteristics (FM) was represented by Liquidity (LQ). Financial Performance was abbreviated as FP. The selected ARM and FC proxies were the most appropriate indicators. A total of 48 companies was studied, and a five-year data was collected between 2019 and 2023. The measures presented in the descriptive statistics analyses included central tendency, dispersion, and distributional shape. Therefore, the minimum, maximum, means, and standard deviations were reported. The metrics indicated the level and variability of each variable. Additionally, the normality of the data distribution was explained through skewness and kurtosis.

Table 1

Descriptive Statistics Summaries

	N	Min	Max	Range	Mean	Std. Dev	Skewness	Kurtosis
ARM	240	6.10	7.06	.96	6.58	.30	-.13	-1.07
FC	240	2.00	2.20	.20	1.61	.06	-.20	-1.05
FP	240	9.00	10.00	1.00	9.50	.50	.02	-2.02

Descriptive statistics revealed minimal variation in accounts receivables management, with a mean of Kes 6.58 million and standard deviation of Kes 0.3 million. Firm characteristics, measured by liquidity ratio, had a mean of 1.61 and standard deviation of 0.06, indicating healthy financial performance. Financial performance (ROA, ROE, ROCE) ranged from 9.00% to 10.00%, with a mean of 9.49% and standard deviation of 0.50, indicating minimal variation. Skewness ranged between -0.20 and 0.15, indicating mild asymmetry, while negative kurtosis values (-1.05 to -2.02) confirmed platykurtic distributions with lighter tails and fewer extreme values. Overall, the distributions were largely symmetric with minimal variation. Diagnostic tests confirmed that data met assumptions for inferential statistical analyses.

4.2 Correlation Analysis Results

A Pearson correlation analysis was conducted to examine the relationships between Accounts Receivable Management (ARM), Firm Characteristics (FC), and Financial Performance (FP) as the dependent variable (Table 2).

Table 2

Correlations

		Accounts Receivable Management	Firm Characteristics	Financial Performance
Accounts Receivable Management	r	1		
	p			
	N	240		
	p	.000		
	N	240		
Firm Characteristics	r	.843*	1	
	p	.000		
	N	240	240	
Financial Performance	r	.856*	.857*	1
	p	.000	.000	
	N	240	240	240

The correlation results revealed that ARM had a strong, positive, and statistically significant correlation with FP ($r = 0.856$, $p < 0.05$, $N = 240$). Similarly, FC exhibited a strong, positive, and significant correlation with FP ($r = 0.857$, $p < 0.05$, $N = 240$). All correlations were significant at the 0.05 level, indicating that improvements in ARM, TI, and FC are associated with higher financial performance. Among the three variables, FC and ARM showed the strongest associations with FP.

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4.2.1 Moderating Impact of Firm Characteristics on Accounts Receivables Management and Financial Performance

In assessing whether firm characteristics has a significant moderating effect on the relationship between account receivables management and financial performance of the listed firms in Nairobi Securities Exchange, regression was conducted to first test whether Liquidity (LQ) moderates the relationship between accounts receivables management and financial performance.

Table 3

Model Summary – Liquidity Versus Accounts Receivable Management and Financial Performance

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				
					ΔR^2	F Change	df1	df2	ΔSig. F
1	.837[a]	.701	.698	.207	.701	277.2	2	237	.000
2	.839[b]	.805	.701	.206	.004	3.3	1	236	.042

a. Predictors: (Constant), Liquidity, Accounts Receivable Management

b. Predictors: (Constant), Liquidity, Accounts Receivable Management, ARM_LQ

In Model 1, which includes Accounts Receivable Management and Liquidity as predictors, the model shows a strong relationship between the variables and financial performance (R = 0.837). The model explains 70.1% of the variation in financial performance (R^2 = 0.701; Adjusted R^2 = 0.698), indicating substantial explanatory power. The model is statistically significant (F = 277.2, $p < 0.05$), confirming that ARM and liquidity jointly contribute to explaining variations in financial performance. In Model 2, the interaction term (ARM × Liquidity) is introduced to test moderation. The inclusion of the interaction term increases the explanatory power of the model from R^2 = 0.701 to R^2 = 0.805, representing an additional 0.4% increase in explained variance (ΔR^2 = 0.004). Although small in magnitude, this change is statistically significant ($\Delta F = 3.3$, $p = 0.042$), indicating that the interaction between ARM and liquidity contributes meaningfully to the prediction of financial performance. The significant change in R^2 confirms that liquidity moderates the relationship between Accounts Receivable Management and Financial Performance. This implies that the impact of receivables management on financial performance is not uniform across firms but varies depending on their liquidity position.

Table 1

ANOVA – Liquidity Versus Accounts Receivable Management and Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.642	2	11.821	277.171	.000[b]
	Residual	10.108	237	.043		
	Total	33.749	239			
2	Regression	23.780	3	7.927	187.638	.000[c]
	Residual	9.970	236	.042		
	Total	33.749	239			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Liquidity, Accounts Receivable Management

c. Predictors: (Constant), Liquidity, Accounts Receivable Management, ARM_LQ

In Model 1, the regression model is statistically significant (F = 277.171, $p < 0.05$), confirming that Accounts Receivable Management and liquidity jointly explain a significant proportion of variation in financial performance. The model fit indicates that the predictors meaningfully account for differences in financial performance across firms. In Model 2, the inclusion of the interaction term (ARM × Liquidity) improves the model fit further, with the regression model remaining statistically significant (F = 187.638, $p < 0.05$). The reduction in residual sum of squares indicates improved explanatory accuracy when the interaction effect is included. The statistically significant improvement in model fit confirms that liquidity plays a moderating role in the ARM–FP relationship, meaning that firms' liquidity levels influence the strength of the effect of accounts receivable management on financial performance.

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Table 5

Coefficients – Liquidity Versus Accounts Receivable Management and Financial Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.782	.289		9.638	.000
	Accounts Receivable Management	.537	.151	.874	3.550	.000
	Liquidity	-.152	.999	-.037	-.152	.879
2	(Constant)	2.724	.289		9.421	.000
	Accounts Receivable Management	.538	.151	.875	3.571	.000
	Liquidity	-.140	.994	-.035	-.141	.888
	ARM_LQ	.506	.280	.064	1.808	.042

a. Dependent Variable: Financial Performance

In Model 1, Accounts Receivable Management has a positive and statistically significant effect on financial performance (B = 0.537, β = 0.874, $p < 0.05$), indicating that improved receivables management leads to better financial outcomes. Liquidity, however, is not statistically significant (B = -0.152, β = -0.037, p = 0.879), suggesting that liquidity alone does not directly predict financial performance in this model. In Model 2, after introducing the interaction term, Accounts Receivable Management remains statistically significant (B = 0.538, β = 0.875, $p < 0.05$), while liquidity remains non-significant in its direct effect (B = -0.140, p = 0.888). The interaction term (ARM × Liquidity) is statistically significant (B = 0.506, β = 0.064, p = 0.042), confirming the presence of a moderation effect. The positive coefficient of the interaction term indicates that the effect of Accounts Receivable Management on Financial Performance becomes stronger at higher levels of liquidity. The implication is that firms with stronger liquidity positions derive greater financial benefits from efficient receivables management compared to firms with weaker liquidity. The resultant equations were:

Step 1: $FP = 2.782 + 0.537ARM - 0.152LQ + \varepsilon$

Step 2: $FP = 2.724 + 0.538ARM - 0.140LQ + 0.506ARM \times LQ + \varepsilon$

The findings confirm that liquidity significantly moderates the relationship between Accounts Receivable Management and Financial Performance. Although liquidity does not exert a strong direct effect on financial performance, its interaction with ARM is statistically significant, indicating that firms with higher liquidity levels benefit more from effective receivables management. Therefore, liquidity strengthens the positive impact of ARM on financial performance, confirming a significant moderating effect. Second, regression was conducted to test whether, Firm Size (FS), an indicator of firm characteristics, moderate the relationship between accounts receivables management and financial performance.

Table 6

Model Summary – Firm Size Versus Accounts Receivable Management and Financial Performance

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				
					ΔR^2	ΔF	df1	df2	Δ Sig. F
1	.837[a]	.701	.698	.2065	.701	277.20	2	237	.000
2	.837[b]	.701	.697	.2069	.000	.10	1	236	.753

a. Predictors: (Constant), Firm Size, Accounts Receivable Management

b. Predictors: (Constant), Firm Size, Accounts Receivable Management, ARM_FS

In Model 1, which includes Accounts Receivable Management and Firm Size as predictors, the model shows a strong relationship between the variables and financial performance (R = 0.837). The model explains 70.1% of the variation in financial performance ($R^2 = 0.701$; Adjusted $R^2 = 0.698$), indicating substantial explanatory power. The overall model is statistically significant (F = 277.20, $p < 0.05$), confirming that ARM and firm size jointly explain variations in financial performance. In Model 2, the interaction term (ARM × Firm Size) is introduced to test moderation. The inclusion of the interaction term does not change the explanatory power of the model (R^2 remains 0.701), resulting in a change in explained variance of $\Delta R^2 = 0.000$. This change is statistically insignificant (ΔF = 0.10, p = 0.753), indicating that the interaction term does not contribute meaningfully to the model. The absence of a significant change in R^2 indicates that Firm Size does not moderate the relationship between Accounts Receivable Management and Financial Performance. This suggests that the effect of ARM on financial performance is consistent across firms regardless of their size.

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Table 7

ANOVA – Firm Size Versus Accounts Receivable Management and Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.643	2	11.821	277.210	.000[b]
	Residual	10.107	237	.043		
	Total	33.749	239			
2	Regression	23.647	3	7.882	184.138	.000[c]
	Residual	10.102	236	.043		
	Total	33.749	239			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Firm Size, Accounts Receivable Management

c. Predictors: (Constant), Firm Size, Accounts Receivable Management, ARM_FS

In Model 1, the regression model is statistically significant ($F = 277.210$, $p < 0.05$), confirming that Accounts Receivable Management and Firm Size jointly explain a significant proportion of variation in financial performance. The model demonstrates strong explanatory power, with most variation in financial performance accounted for by the predictors. In Model 2, the inclusion of the interaction term (ARM × Firm Size) does not improve model fit. Although the model remains statistically significant overall ($F = 184.138$, $p < 0.05$), the lack of improvement in explained variance and the negligible change in sums of squares indicate that the interaction term adds no explanatory value. These results confirm that Firm Size does not exert a moderating influence on the ARM–FP relationship, as the inclusion of the interaction term does not significantly enhance model performance.

Table 8

Coefficients – Firm Size Versus Accounts Receivable Management and Financial Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.703	.466		5.795	.000
	Accounts Receivable Management	.514	.022	.837	23.538	.000
	Firm Size	.049	.225	.008	.216	.829
2	(Constant)	2.694	.468		5.753	.000
	Accounts Receivable Management	.514	.022	.837	23.494	.000
	Firm Size	.053	.226	.008	.234	.815
	ARM_FS	-.116	.369	-.011	-.316	.753

a. Dependent Variable: Financial Performance

In Model 1, Accounts Receivable Management has a strong and statistically significant positive effect on financial performance ($B = 0.514$, $\beta = 0.837$, $t = 23.538$, $p < 0.05$), indicating that improved receivables management enhances financial outcomes. Firm Size, however, is not statistically significant ($B = 0.049$, $\beta = 0.008$, $p = 0.829$), suggesting that firm size alone does not directly influence financial performance in this model. In Model 2, after introducing the interaction term, Accounts Receivable Management remains strongly significant ($B = 0.514$, $\beta = 0.837$, $p < 0.05$), while Firm Size remains non-significant ($B = 0.053$, $p = 0.815$). The interaction term (ARM × Firm Size) is also not statistically significant ($B = -0.116$, $\beta = -0.011$, $p = 0.753$), confirming the absence of a moderating effect. The negative but insignificant interaction coefficient suggests that firm size does not strengthen or weaken the effect of Accounts Receivable Management on financial performance. Instead, the impact of ARM on financial performance is stable and uniform across both small and large firms. The resultant equations were:

Step 1: $FP = 2.703 + 0.54ARM + 0.140FS + \varepsilon$

Step 2: $FP = 2.694 + 0.514ARM + 0.053FS - 0.116ARM \times FS + \varepsilon$

The findings reveal that while Accounts Receivable Management has a strong and statistically significant effect on financial performance, Firm Size does not have a significant direct effect and does not moderate the ARM–FP relationship. The interaction term is statistically insignificant, and there is no improvement in explanatory power after its inclusion. Therefore, Firm Size does not influence the strength or direction of the relationship between Accounts Receivable Management and Financial Performance, indicating that the effect of ARM is consistent across firms of different sizes.

Based on the moderation results, Liquidity strengthens the ARM-FP relationship, as shown by a significant interaction effect ($B = 0.506$, $p = 0.042$) and a statistically meaningful increase in explanatory power ($\Delta R^2 = 0.004$). This indicates that firms with stronger liquidity positions benefit more from effective receivables management in terms

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of financial performance. In contrast, firm size does not moderate the relationship, as evidenced by an insignificant interaction term (B = -0.116, p = 0.753) and no change in explained variance ($\Delta R^2 = 0.000$). This suggests that the effect of ARM on financial performance is uniform across firms regardless of size. Therefore, Liquidity (LQ) is the stronger and only significant moderator of the ARM-FP relationship, while Firm Size (FS) has no moderating effect. Overall, these results imply that liquidity acts as the relevant firm characteristic influencing the strength of the ARM–financial performance relationship, while firm size does not contribute to moderating this effect in the sampled firms.

4.3 Discussion

The strong positive ARM–FP correlation supports the importance of effective receivables management in enhancing firm profitability. This finding is consistent with Deloof (2003), who established a relationship between working capital management and profitability, and Baafi et al. (2024), who reported significant relationships between working capital management and financial performance among Ghanaian firms. The strong FC–FP correlation (r = 0.857) further indicates that firm characteristics, particularly liquidity and size, are strongly associated with financial performance, supporting the relevance of Contingency Theory. However, when tested through interaction terms, moderation was supported only through liquidity, not firm size.

The findings are consistent with Kouaib and Bu Haya (2024), who found that a longer receivables collection period was negatively associated with performance among Saudi listed manufacturers. The present study extends this evidence by examining the interaction between ARM and firm characteristics, providing attribute-specific evidence of moderation. The significant positive ARM × liquidity interaction suggests that liquid firms are better positioned to absorb payment delays and sustain effective credit policies, thereby strengthening the ARM–FP relationship.

Conversely, the insignificant ARM × firm size interaction qualifies the positive direct effect of firm size reported by Baafi et al. (2024). While larger firms may achieve higher performance, size does not necessarily strengthen the returns from receivables management. The findings therefore distinguish the direct effect of firm size on performance from its moderating role and demonstrate that liquidity, rather than firm size, significantly conditions the ARM–FP relationship among NSE-listed firms.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The study assessed whether firm characteristics moderate the relationship between Accounts Receivable Management (ARM) and Financial Performance (FP). Firm characteristics were operationalized using two indicators, namely, liquidity (LQ) and firm size (FS), which were tested separately through moderated regression analysis using interaction terms. The findings revealed that liquidity significantly moderates the relationship between ARM and FP. Therefore, firms with stronger liquidity positions derive greater performance benefits from effective receivables management practices. Conversely, firm size did not exhibit a significant moderating effect. The inclusion of the interaction term produced no meaningful improvement in explanatory power. This indicates that the influence of ARM on FP remains relatively consistent regardless of firm size. Therefore, the study concludes that the moderating effect of firm characteristics depends on the specific characteristic considered. Liquidity significantly strengthens the positive relationship between ARM and FP, whereas firm size does not significantly alter this relationship.

5.2 Recommendation

It is recommended that accounts receivable management strategies should be aligned with internal liquidity positions. Firms facing liquidity constraints may benefit from alternative financing arrangements such as factoring, invoice discounting, or supply chain financing solutions to improve cash flow, whereas firms with strong liquidity buffers can extend competitive credit terms to stimulate sales without jeopardizing working capital. Because firm size does not significantly alter the receivables–performance relationship, both small and large listed firms should place equal emphasis on disciplined credit control and collection monitoring. Furthermore, firms should periodically review and adjust their receivables management practices to reflect changes in liquidity position, and prevailing economic conditions. In future, research could expand firm characteristics to include variables such as firm age, ownership structure, board diversity, capital structure, and growth opportunities.

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