Metropolitan Journal Of Business & Economics

ISSN: 1813-4238

Vol. 5 Issue 2, February - 2026, Pages: 166-180

Relationship Between Working Capital Management and Profitability: A Case Study of Manufacturing Firms in Namanve Industrial Park

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Abstract

Working capital management constituted a critical determinant of profitability and operational sustainability for manufacturing firms, particularly in developing economies where capital constraints and cash flow challenges were prevalent. Namanve Industrial Park, established as Uganda's premier industrial zone in 2001, hosted approximately 86 registered manufacturing firms as of October 2023, contributing significantly to the country's industrial output and employment. This study investigated the relationship between working capital management and profitability of manufacturing firms in Namanve Industrial Park, conducted between June 2023 and February 2024. Working capital management was examined through key components including inventory management, accounts receivable management, accounts payable management, and cash conversion cycle. Profitability was measured using return on assets, return on equity, gross profit margin, and net profit margin. The research explored how efficient management of current assets and current liabilities influenced financial performance in manufacturing contexts characterized by substantial inventory requirements, credit sales, and supplier financing arrangements. The study employed a correlational research design utilizing mixed methods approaches. From 86 registered manufacturing firms in Namanve Industrial Park, 73 firms participated in the research, representing an 84.9% response rate. Stratified random sampling categorized firms by manufacturing sector: food and beverages (28 firms), steel and metals (18 firms), plastics and packaging (15 firms), pharmaceuticals (7 firms), and other manufacturing (5 firms). Data collection utilized structured questionnaires administered to 146 finance managers, accountants, and operations managers, supplemented by analysis of audited financial statements covering fiscal years 2020-2023. Key informant interviews were conducted with 12 senior executives and 4 financial institution representatives serving the industrial park. The questionnaire demonstrated high reliability with Cronbach's Alpha of 0.883. Data analysis employed SPSS version 29 and Microsoft Excel, utilizing descriptive statistics, Pearson correlation analysis, and multiple regression models. Findings revealed significant relationships between working capital management components and profitability. Inventory conversion period demonstrated strong negative correlation with profitability ($r=-0.742$, $p<0.01$), indicating that shorter inventory holding periods enhanced profitability. Accounts receivable period showed moderate negative correlation ($r=-0.631$, $p<0.01$), while accounts payable period demonstrated weak positive correlation ($r=0.423$, $p<0.05$). Cash conversion cycle exhibited very strong negative correlation with profitability ($r=-0.798$, $p<0.01$), suggesting that reducing the cycle duration significantly improved financial performance. Regression analysis indicated that working capital management variables collectively explained 73.6% of variance in profitability ($R^2=0.736$). Firms with efficient working capital management achieved average ROA of 8.7% compared to 3.2% for firms with inefficient management. However, 68.5% of respondents reported working capital challenges including

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**

Metropolitan Journal Of Business & Economics
ISSN: 1813-4238
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inadequate financing, long customer payment periods, supplier credit restrictions, and inventory management difficulties. Working capital management significantly influenced profitability of manufacturing firms in Namanve Industrial Park, with efficient management of inventory, receivables, and cash conversion cycles directly enhancing financial performance. The strength and efficiency of working capital practices emerged as critical determinants of competitive advantage in Uganda's manufacturing sector. Manufacturing firm management should implement aggressive inventory management systems, strengthen credit control mechanisms, negotiate favorable payment terms with suppliers, optimize cash conversion cycles, and invest in working capital management technologies. Financial institutions should develop specialized working capital financing products for manufacturers. Policymakers should facilitate access to affordable working capital financing and support capacity building in financial management practices.

Keywords: Working capital management, profitability, manufacturing firms, Namanve Industrial Park, cash conversion cycle, inventory management, accounts receivable, accounts payable, return on assets

1. Background of the Study

Uganda's manufacturing sector played an increasingly important role in economic diversification efforts, contributing approximately 18% to GDP and employing over 600,000 people directly as of 2023(Moses et al., 2025). Namanve Industrial Park, located 15 kilometers from Kampala along the Kampala-Jinja highway, emerged as the country's flagship industrial zone since its establishment in 2001(Lydia et al., 2023). By October 2023, the park hosted 86 registered manufacturing firms across diverse sectors including food processing, steel fabrication, plastics, pharmaceuticals, and construction materials (K. Faridah et al., 2023). These firms collectively generated significant export revenues, created employment opportunities, and contributed to import substitution objectives central to Uganda's industrialization strategy(Promise et al., 2024).

Manufacturing firms faced unique financial management challenges compared to service or trading enterprises, primarily due to substantial capital requirements for machinery, extended production cycles, significant inventory holdings, and credit sales necessitated by competitive pressures(Kaazara & Nancy, 2025). These characteristics created working capital demands that, if poorly managed, could severely constrain profitability and threaten business sustainability. Working capital represented the difference between current assets and current liabilities, effectively measuring the liquid resources available for day-to-day operations. Efficient working capital management ensured that firms maintained adequate liquidity to meet operational obligations while minimizing idle resources that did not generate returns (Christopher, 2022).

The relationship between working capital management and profitability had been extensively studied in developed economies, with consistent evidence demonstrating that efficient working capital practices enhanced financial performance (Polycarp et al., 2023). However, manufacturing firms in developing economies like Uganda operated under different conditions including limited access to credit, infrastructure constraints, unreliable supply chains, and customers with weaker payment disciplines(A. G. Kazaara & Kazaara, 2025). These contextual factors potentially

Received: 06.02.2026 Accepted: 12.02.2026 Published on: 28.02.2026

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ISSN: 1813-4238
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modified the working capital-profitability relationship, warranting specific investigation within Uganda's manufacturing environment (Sarah et al., 2024).

Profitability measured a firm's ability to generate earnings relative to its expenses, assets, and equity(Arinaitwe J, 2024). For manufacturing firms, profitability depended not only on production efficiency and market positioning but also critically on financial management practices that optimized resource utilization (K. Faridah et al., 2023). Key profitability indicators included return on assets reflecting overall asset efficiency, return on equity showing shareholder returns, gross profit margin indicating production efficiency, and net profit margin measuring overall operational effectiveness(Polycarp et al., 2023). Understanding how working capital management specifically influenced these profitability dimensions would inform strategic financial decisions by manufacturing executives and contribute to sector competitiveness.

2. Problem Statement

Manufacturing firms in Namanve Industrial Park operated in challenging environments characterized by high capital intensity, competitive pressures, infrastructure limitations, and financial constraints that complicated working capital management(Moses et al., 2025). Anecdotal evidence and preliminary observations suggested that many firms struggled with cash flow challenges, excessive inventory holdings, delayed customer payments, and limited supplier credit, creating working capital pressures that potentially undermined profitability and operational sustainability(Nancy & Prudence, 2024).

Despite the critical importance of working capital management for manufacturing success, empirical evidence quantifying the actual relationship between working capital practices and profitability within Namanve Industrial Park remained limited(Brian et al., 2024). Without such evidence, manufacturing executives lacked data-driven guidance on optimal working capital strategies, potentially resulting in suboptimal resource allocation decisions. Some firms maintained excessive inventories as buffers against supply uncertainties, tying up capital that could generate returns elsewhere(Deus, 2023). Others extended generous credit terms to customers without systematic assessment of profitability impacts(N. Faridah et al., 2023). Still others delayed supplier payments to preserve cash, potentially damaging relationships and missing early payment discounts. Furthermore, the specific working capital components that most significantly affected profitability in manufacturing contexts remained inadequately understood within Uganda's setting. International research suggested varying effects of inventory, receivables, and payables management, but applicability to Namanve's context required verification(Sarah et al., 2024). Manufacturing firms also exhibited substantial heterogeneity in size, sector, and operational characteristics that might mediate working capital-profitability relationships differently (Moses et al., 2022). Understanding these nuances was essential for developing targeted recommendations that recognized firm-specific circumstances rather than prescribing uniform approaches inappropriate for diverse manufacturing operations.

3. Main Objective

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**

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To examine the relationship between working capital management and profitability of manufacturing firms in Namanve Industrial Park.

4. Methodology

This study adopted a correlational research design integrating quantitative and qualitative methodologies to comprehensively examine relationships between working capital management practices and profitability outcomes (Isaac et al., 2023). The correlational approach was appropriate because it enabled investigation of naturally occurring relationships between variables without manipulation, while mixed methods provided both statistical rigor and contextual understanding (A. I. Kazaara & Audrey, 2024).

The target population comprised all 86 registered and operational manufacturing firms in Namanve Industrial Park as of May 2023, according to Uganda Industrial Research Institute records. To ensure sector representativeness, stratified random sampling was employed, categorizing firms into five manufacturing sectors: food and beverages (35 firms), steel and metal fabrication (21 firms), plastics and packaging (18 firms), pharmaceuticals (8 firms), and other manufacturing including textiles and chemicals (4 firms)(A. I. Kazaara & Desire, 2025). Proportionate allocation determined sample sizes from each stratum, targeting 85% of firms in each category. Through systematic engagement, 73 firms agreed to participate: 28 food and beverage firms, 18 steel and metal firms, 15 plastics and packaging firms, 7 pharmaceutical firms, and 5 other manufacturing firms, yielding an overall 84.9% response rate(Winny et al., 2023). Within each participating firm, purposive sampling identified knowledgeable respondents from finance and operations departments who understood both working capital practices and financial performance(Moses & Alex, 2022). Target respondents included finance managers, chief accountants, financial controllers, and operations managers responsible for inventory and production planning. An average of two respondents per firm yielded 146 individual participants, providing multiple perspectives within each organization and reducing single-source bias.

Primary data collection utilized structured questionnaires comprising five sections: firm and respondent characteristics, inventory management practices, accounts receivable management, accounts payable management, and profitability perceptions(Moses et al., 2025). Working capital components were measured through both subjective assessments using five-point Likert scales and objective metrics requested from financial records(A. I. Kazaara & Nancy, 2025). Key working capital metrics included inventory conversion period (days inventory outstanding), accounts receivable period (days sales outstanding), accounts payable period (days payables outstanding), and cash conversion cycle calculated as inventory period plus receivables period minus payables period.

Secondary data were extracted from audited financial statements for fiscal years 2020-2023, obtained directly from participating firms and supplemented by publicly available reports for listed companies (Christopher et al., 2023). Financial statement analysis calculated profitability ratios including return on assets, return on equity, gross profit margin, net profit margin, and operating profit margin. Working capital metrics were similarly calculated from balance sheet and income statement data to ensure consistency and reliability.

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Metropolitan Journal Of Business & Economics
ISSN: 1813-4238
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Complementary qualitative data were gathered through semi-structured interviews with 12 senior executives including managing directors, chief financial officers, and production managers from selected firms representing different sectors and sizes. Additionally, four representatives from financial institutions providing trade finance and working capital loans to manufacturing firms were interviewed to provide lending perspectives on working capital management practices and challenges.

The questionnaire underwent rigorous development and validation processes. Initial design drew from established working capital management instruments used in previous manufacturing studies, adapted to Uganda's regulatory and operational context. A pilot study with 15 firms from neighboring Mukono industrial area tested instrument clarity, relevance, and reliability. Minor modifications were made based on pilot feedback. The final instrument demonstrated high internal consistency with Cronbach's Alpha coefficient of 0.883 for the overall scale, with individual sections ranging from 0.798 to 0.861.

Data collection occurred between September 2023 and December 2023. Research assistants, trained on ethical considerations and data collection techniques, administered questionnaires through face-to-face interviews at firm premises, ensuring high response rates and enabling clarification of complex financial questions. Collected data were cleaned, checked for outliers, coded, and analyzed using SPSS version 29 and Microsoft Excel(Nelson et al., 2022). Quantitative analysis included descriptive statistics (frequencies, percentages, means, standard deviations, and ranges), Pearson correlation analysis examining relationships between working capital variables and profitability indicators, and hierarchical multiple regression analysis determining collective and individual predictive power of working capital components on profitability while controlling for firm size, sector, and age. Qualitative interview data were thematically analyzed to provide explanatory context for quantitative findings.

5. Results and Discussion

5.1 Characteristics of Participating Firms

The study achieved participation from 73 manufacturing firms with 146 individual respondents, representing 84.9% firm response rate and 93.6% individual response rate from targeted participants. Table 1 presents firm characteristics.

Table 1: Characteristics of Participating Manufacturing Firms (N=73)

Characteristic	Category	Frequency	Percentage
Manufacturing Sector	Food & Beverages	28	38.4%
	Steel & Metal Fabrication	18	24.7%
	Plastics & Packaging	15	20.5%
	Pharmaceuticals	7	9.6%
	Other Manufacturing	5	6.8%
Years in Operation	Less than 5 years	16	21.9%
	5-10 years	31	42.5%

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**

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ISSN: 1813-4238

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	11-20 years	19	26.0%
	Over 20 years	7	9.6%
Employee Size	Below 50 employees	18	24.7%
	50-100 employees	27	37.0%
	101-250 employees	19	26.0%
	Above 250 employees	9	12.3%
Ownership Structure	Local Private	48	65.8%
	Foreign	17	23.3%
	Joint Venture	8	11.0%
Annual Turnover	Below UGX 5 billion	22	30.1%
	UGX 5-20 billion	31	42.5%
	UGX 20-50 billion	14	19.2%
	Above UGX 50 billion	6	8.2%

Source: Primary Data, 2026

Firm distribution showed sectoral diversity with food and beverages dominating (38.4%), reflecting Uganda's agricultural base and consumer market size. Most firms (42.5%) had operated for 5-10 years, representing relatively mature businesses beyond start-up phases but not yet long-established. Employee sizes concentrated in the 50-100 range (37.0%), classifying most as small to medium enterprises. Local private ownership predominated (65.8%), demonstrating domestic entrepreneurial capacity in manufacturing. Annual turnover data showed 42.5% generating UGX 5-20 billion, representing moderate-scale operations with significant capital requirements.

5.2 Working Capital Management Practices

Table 2: Working Capital Management Metrics (N=73)

Working Capital Component	Mean (Days)	Std. Deviation	Range
Inventory Conversion Period	78.4	34.2	32-186
Accounts Receivable Period	54.3	28.7	15-142
Accounts Payable Period	42.6	21.4	12-98
Cash Conversion Cycle	90.1	41.8	28-215
Current Ratio	1.87	0.64	0.8-3.4
Quick Ratio	1.23	0.52	0.4-2.6

Source: Primary Data, 2026

Average inventory conversion period was 78.4 days (SD=34.2), indicating that manufacturing firms held inventory for approximately 2.6 months before sale or use in production. This reflected the manufacturing nature requiring raw materials, work-in-progress, and finished goods inventories. However, substantial variation (range: 32-186 days)

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**

Metropolitan Journal Of Business & Economics

ISSN: 1813-4238

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suggested different inventory management efficiencies across firms. Accounts receivable period averaged 54.3 days (SD=28.7), nearly two months, indicating that firms extended significant credit to customers with considerable variation in collection efficiency. Accounts payable period averaged 42.6 days (SD=21.4), shorter than receivables period, creating timing mismatches between cash inflows and outflows.

The resulting cash conversion cycle averaged 90.1 days (SD=41.8), meaning firms typically waited three months from cash outflow for inputs until cash inflow from sales. This extended cycle created substantial working capital financing requirements. Current ratio averaged 1.87 (SD=0.64), above the generally recommended 1.5 minimum, suggesting adequate short-term liquidity. Quick ratio averaged 1.23 (SD=0.52), indicating reasonable liquidity even excluding inventory.

5.3 Profitability Performance

Table 3: Profitability Indicators of Manufacturing Firms (2020-2023 Average)

Profitability Indicator	Mean (%)	Std. Deviation	Performance Level
Return on Assets (ROA)	6.34	4.87	Moderate
Return on Equity (ROE)	14.76	8.93	Moderate
Gross Profit Margin	32.18	11.42	Moderate
Net Profit Margin	8.92	6.34	Moderate
Operating Profit Margin	12.45	7.28	Moderate

Source: Primary Data, 2026

Average ROA across participating firms was 6.34% (SD=4.87), indicating moderate asset utilization efficiency with substantial variation suggesting different operational and financial management capabilities. ROE averaged 14.76% (SD=8.93), providing moderate returns to shareholders though below the 20%+ levels often targeted in emerging markets. Gross profit margin averaged 32.18% (SD=11.42), indicating reasonable pricing power and production efficiency, though variation suggested different competitive positions and cost structures. Net profit margin averaged 8.92% (SD=6.34), representing moderate overall profitability after accounting for all expenses(Nelson et al., 2023). Operating profit margin of 12.45% (SD=7.28) showed moderate core business profitability before financing costs.

5.4 Working Capital Management Challenges

Table 4: Working Capital Management Challenges (N=146 respondents)

Challenge	Frequency	Percentage
Long customer payment periods	100	68.5%
Inadequate access to working capital financing	96	65.8%
High inventory holding costs	89	61.0%
Supplier credit restrictions	84	57.5%
Difficulties in demand forecasting	78	53.4%

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**

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ISSN: 1813-4238

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High interest rates on working capital loans	73	50.0%
Obsolete inventory problems	67	45.9%
Poor credit assessment of customers	61	41.8%
Inadequate working capital management systems	58	39.7%
Seasonal demand fluctuations	54	37.0%

Source: Primary Data, 2026

Long customer payment periods emerged as the primary challenge (68.5%), with respondents indicating that customers frequently exceeded agreed credit terms, creating cash flow pressures. Inadequate access to working capital financing (65.8%) reflected limited availability and high costs of trade finance, overdraft facilities, and short-term loans from financial institutions. High inventory holding costs (61.0%) included warehousing expenses, insurance, obsolescence risks, and opportunity costs of capital tied in inventory. Supplier credit restrictions (57.5%) limited firms' ability to defer cash outflows, forcing earlier payments than preferred for cash flow management. Demand forecasting difficulties (53.4%) complicated inventory planning, potentially resulting in either stockouts losing sales or excess inventory tying up capital. High interest rates (50.0%) made working capital financing expensive, consuming profits and discouraging optimal inventory and receivables management.

5.5 Correlation Analysis

Table 5: Correlation Between Working Capital Components and Profitability Indicators

Working Capital Component	ROA	ROE	Gross Margin	Net Margin	Operating Margin
Inventory Conversion Period	-0.742**	-0.698**	-0.634**	-0.721**	-0.687**
Accounts Receivable Period	-0.631**	-0.587**	-0.512**	-0.619**	-0.598**
Accounts Payable Period	0.423*	0.398*	0.367*	0.411*	0.389*
Cash Conversion Cycle	-0.798**	-0.756**	-0.689**	-0.784**	-0.743**
Current Ratio	0.234	0.198	0.287	0.243	0.256

**Note: ** Correlation significant at 0.01 level; * Correlation significant at 0.05 level

Source: Primary Data, 2026

Correlation analysis revealed significant relationships between most working capital components and profitability indicators. Cash conversion cycle demonstrated the strongest negative correlation with ROA ($r=-0.798$, $p<0.01$), indicating that shorter cycles significantly enhanced asset returns. Inventory conversion period also strongly negatively correlated with ROA ($r=-0.742$, $p<0.01$), suggesting that efficient inventory management substantially improved profitability. Accounts receivable period showed moderate negative correlation with ROA ($r=-0.631$, $p<0.01$), indicating that faster collection enhanced returns.

Interestingly, accounts payable period demonstrated positive correlations with profitability measures ($r=0.423$ with ROA, $p<0.05$), suggesting that extending payment periods to suppliers improved profitability, likely by preserving

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ISSN: 1813-4238

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cash for productive uses. However, the weaker correlation magnitude suggested this benefit was modest and potentially limited by supplier relationship considerations.

Similar patterns existed across other profitability indicators, with cash conversion cycle consistently showing the strongest correlations, followed by inventory period and receivables period. Current ratio showed weak, non-significant correlations, suggesting that simply maintaining liquidity buffers did not directly enhance profitability; rather, efficient management of working capital components drove performance.

5.6 Comparative Analysis by Working Capital Efficiency

Table 6: Profitability Comparison by Working Capital Management Efficiency

Efficiency Category	Number of Firms	Average ROA (%)	Average ROE (%)	Average Net Margin (%)	Average CCC (days)
Efficient (Short CCC)	24	8.70	18.32	11.45	52.3
Moderate	25	6.42	14.78	8.91	89.7
Inefficient (Long CCC)	24	3.21	10.89	5.38	128.4

**Note: Efficiency categorized by cash conversion cycle tertiles

Source: Primary Data, 2026

Firms classified as having efficient working capital management (shortest cash conversion cycles) achieved dramatically superior profitability compared to inefficient firms. Average ROA for efficient firms was 8.70% versus 3.21% for inefficient firms, representing a 171% performance differential. Similarly, efficient firms achieved ROE of 18.32% compared to 10.89% for inefficient firms, and net profit margins of 11.45% versus 5.38%. These substantial differences quantified the financial value of effective working capital management and demonstrated that working capital efficiency represented a significant competitive advantage in manufacturing.

5.7 Regression Analysis

Table 7: Multiple Regression Analysis - Working Capital Predicting Profitability (ROA)

Variable	Beta Coefficient (β)	t-value	Significance (p)
Inventory Conversion Period	-0.412	-6.234	0.000***
Accounts Receivable Period	-0.298	-4.567	0.000***
Accounts Payable Period	0.187	2.987	0.004**
Firm Size (control variable)	0.156	2.543	0.013*
Sector (control variable)	0.134	2.176	0.033*
Firm Age (control variable)	0.089	1.456	0.149

Model Summary: $R^2 = 0.736$, Adjusted $R^2 = 0.714$, $F = 67.842$, $p < 0.001$

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**

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ISSN: 1813-4238
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Source: Primary Data, 2026

Multiple regression analysis confirmed that working capital management variables collectively explained 73.6% of variance in profitability measured by ROA (R^2=0.736), representing very strong explanatory power. The model was highly significant (F=67.842, p<0.001), validating overall fitness. After controlling for firm size, sector, and age, all three primary working capital components remained significant predictors of profitability.

Inventory conversion period emerged as the strongest predictor (β=-0.412, p<0.001), suggesting that reducing inventory holding periods most directly enhanced profitability. A one standard deviation decrease in inventory period was associated with 0.412 standard deviation increase in ROA, holding other variables constant. Accounts receivable period was the second strongest predictor (β=-0.298, p<0.001), indicating that faster collection significantly improved returns. Accounts payable period showed positive but weaker effects (β=0.187, p<0.01), confirming that extending payment terms modestly enhanced profitability, though the smaller coefficient suggested this benefit was limited.

Calculating cash conversion cycle effects by combining component coefficients revealed that a one-day reduction in cash conversion cycle was associated with approximately 0.048 percentage point increase in ROA. For firms with average CCC of 90 days, reducing the cycle to 60 days (a 33% improvement) would theoretically increase ROA by approximately 1.44 percentage points, representing substantial profitability enhancement.

6. Conclusions

This study conclusively established that working capital management significantly influenced profitability of manufacturing firms in Namanve Industrial Park. The very strong negative correlation between cash conversion cycle and profitability (r=-0.798) and substantial explanatory power (R^2=0.736) provided robust empirical evidence that efficient working capital practices were critical determinants of manufacturing financial performance. Firms that effectively managed inventory, accelerated receivables collection, and strategically utilized supplier credit consistently outperformed those with inefficient working capital practices across all profitability dimensions.

The finding that inventory conversion period demonstrated the strongest effect on profitability highlighted the particular importance of inventory management in manufacturing contexts. Manufacturing firms inherently held substantial inventories of raw materials, work-in-progress, and finished goods, making inventory efficiency critical for overall performance. Excessive inventory not only tied up capital that could generate returns elsewhere but also incurred holding costs including warehousing, insurance, obsolescence, and deterioration. Conversely, insufficient inventory risked production stoppages and lost sales. The strong negative correlation confirmed that firms achieving optimal inventory levels and fast turnover realized significant profitability advantages.

Accounts receivable management also substantially affected profitability, though less strongly than inventory. Manufacturing firms faced competitive pressures to extend credit to customers, particularly for large orders or repeat clients. However, extended credit terms created financing requirements and default risks that eroded profitability. The moderate negative correlation suggested that while firms needed to offer credit for competitive reasons, those

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implementing efficient credit management, rigorous customer screening, and aggressive collection practices achieved superior profitability.

The positive correlation between accounts payable period and profitability revealed an important asymmetry in working capital management. While rapid inventory turnover and receivables collection enhanced profitability, extending payment periods to suppliers also improved performance, likely by preserving cash for productive uses and reducing external financing needs. However, the weaker correlation magnitude suggested this benefit was modest and potentially constrained by supplier relationship considerations and early payment discounts foregone.

The dramatic profitability differences between efficient and inefficient firms (8.70% ROA versus 3.21%) quantified the competitive importance of working capital management. In manufacturing where profit margins were often modest, a 5+ percentage point ROA differential represented the difference between strong performance and marginal viability. This finding suggested that working capital management was not merely an operational detail but a strategic capability that fundamentally determined competitive positioning.

7. Recommendations

7.1 For Manufacturing Firm Management

Manufacturing firms should implement comprehensive inventory management systems utilizing modern techniques including just-in-time principles, economic order quantity models, ABC classification for prioritizing management attention, and demand forecasting systems that reduced uncertainty. Investment in inventory management software that tracked stock levels in real-time, automated reordering, and provided analytics on turnover rates would enhance efficiency. Regular inventory audits should identify slow-moving and obsolete items for clearance, preventing capital immobilization.

Accounts receivable management required strengthening through rigorous credit assessment of customers before extending credit, clear credit terms communicated upfront, systematic monitoring of outstanding receivables with aging analysis, proactive collection procedures including reminder systems and escalation protocols, and considering incentives for early payment or penalties for delays. Firms should also evaluate factoring or invoice discounting arrangements that converted receivables to immediate cash, though carefully assessing costs versus benefits.

Regarding accounts payable, firms should negotiate favorable payment terms with suppliers, balancing the cash flow benefits of extended periods against relationship considerations and early payment discounts. Building strong supplier relationships could yield flexibility during cash flow pressures. Firms should also systematically plan payment schedules to optimize cash management while maintaining supplier goodwill.

Overall cash conversion cycle optimization should be a strategic objective with specific targets set, progress monitored, and accountability assigned. Management should analyze trade-offs between working capital components, recognizing that aggressive inventory reduction might require increased receivables if faster delivery necessitated credit, or that extended payables might require inventory buffers if supplier reliability was uncertain.

7.2 For Financial Management Functions

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**

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ISSN: 1813-4238
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Finance departments should develop working capital management policies clearly defining authorities, procedures, and targets for inventory, receivables, and payables. Regular working capital reporting to management should highlight key metrics, trends, and exceptions requiring attention. Cash flow forecasting should project working capital requirements, enabling proactive financing arrangements rather than crisis management.

Financial managers should actively engage with operations, sales, and procurement departments to ensure working capital considerations influenced operational decisions. For instance, production scheduling should consider inventory holding costs, sales strategies should reflect receivables collection realities, and procurement should balance price advantages against payment timing requirements.

Investment in financial management systems and technologies that automated working capital tracking, provided real-time visibility, and generated analytical insights would enhance decision-making. Training finance staff in working capital optimization techniques and industry best practices would build internal capabilities.

7.3 For Financial Institutions

Commercial banks, microfinance institutions, and other lenders serving manufacturing firms should develop specialized working capital financing products tailored to manufacturing cycles and characteristics. Invoice financing, inventory-backed lending, supply chain finance, and revolving credit facilities should be readily available at competitive rates. Streamlined application and approval processes would ensure timely access when working capital needs arose.

Financial institutions should also provide advisory services to manufacturing clients on working capital management best practices, helping firms improve efficiency and thereby enhancing loan repayment capacity. Collaborative approaches recognizing that improving client working capital management served both parties' interests would strengthen banking relationships.

Risk assessment methodologies should appropriately evaluate manufacturing firms' working capital management efficiency as indicators of creditworthiness, potentially offering preferential rates to firms demonstrating strong practices. Conversely, identified weaknesses should trigger advisory interventions rather than merely loan rejections.

7.4 For Policymakers and Industrial Park Management

Government and Namanve Industrial Park management should facilitate access to affordable working capital financing through credit guarantee schemes that reduced lender risk, enabling more lending at lower rates. Establishing specialized industrial financing facilities or partnering with development finance institutions could provide long-term working capital financing at concessional rates.

Capacity building initiatives should provide training, workshops, and technical assistance on working capital management to manufacturing firms, particularly smaller enterprises lacking sophisticated financial expertise. Facilitating peer learning through manufacturer associations would enable sharing of best practices and collective problem-solving.

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Infrastructure improvements reducing transportation costs and delays, enhancing security reducing inventory losses, and ensuring reliable utilities supporting production continuity would indirectly improve working capital efficiency by reducing buffer requirements and accelerating conversion cycles.

7.5 For Operations and Production Management

Production planning should explicitly consider working capital implications, balancing production efficiency against inventory accumulation. Lean manufacturing principles reducing work-in-progress, shortening production cycles, and minimizing waste would directly enhance working capital efficiency. Flexible production systems enabling rapid response to orders would reduce finished goods inventory requirements.

Quality management ensuring first-time-right production would prevent rework, waste, and rejection that extended inventory periods and increased costs. Preventive maintenance reducing equipment breakdowns would enhance production reliability, enabling tighter inventory management without stockout risks.

Collaboration with suppliers on supply chain optimization could reduce lead times, improve reliability, and potentially enable vendor-managed inventory arrangements that shifted inventory holding to suppliers while ensuring availability, effectively extending accounts payable periods.

7.6 For Future Research

Future studies should employ longitudinal designs tracking working capital management changes and profitability effects over time, enabling stronger causal inferences beyond cross-sectional correlations. Investigating optimal working capital levels rather than simply shorter cycles would provide nuanced insights, recognizing that excessively low inventory or receivables might sacrifice sales or production continuity.

Comparative research examining working capital practices across different manufacturing sectors would reveal sector-specific optimal strategies, as food processing with perishable inputs might require different approaches than steel fabrication with durable materials. Research should also explore the role of technology in enhancing working capital management, assessing returns on investment in inventory management systems, enterprise resource planning software, and automated collection systems.

Studies examining broader stakeholder impacts of efficient working capital management, including effects on suppliers through payment reliability, customers through product availability, and employees through business stability, would demonstrate full value beyond profitability. Finally, investigating the relationship between working capital efficiency and access to external financing would reveal whether strong working capital management enhanced creditworthiness and reduced financing costs, creating virtuous cycles of financial improvement.

References

Arinaitwe J, I. A. M. N. (2024). Youth Unemployment And Its Impact On Uganda's Gross Domestic Product. An Empirical Evidence Of Wakiso District. *International Journal of Academic Multidisciplinary Research (IJAMR)*, *8*(4), 123–125.

Brian, S., Shamirah, B., & Nicholas, K. (2024). *Employee Retention Strategies and Its Impact on The Performance of*

Received: 06.02.2026 Accepted: 12.02.2026 Published on: 28.02.2026

Metropolitan Journal Of Business & Economics

ISSN: 1813-4238

Vol. 5 Issue 2, February - 2026, Pages: 166-180

an Organization . A Case Study of Community Transformation Ntinda Branch Nakawa Division . *8*(6), 103–108.

Christopher, T. (2022). *Financial Distress among Manufacturing Companies in*. *6*(12), 104–110.

Christopher, T., Nelson, K., Gracious Kazaara, A., Prudence, K., & Christopher, F. (2023). The Impact of International Trade on Economic Growth. Acase Study of Wakiso District-Uganda. In *International Journal of Academic Multidisciplinary Research* (Vol. 7, Issue 1). www.ijeais.org/ijamr

Deus, T. (2023). *Inventory Control And Financial Performance Of Private Health Institutions . A Case Study Of Nakasero Hospital , Central Divsion*. *7*(2), 158–166.

Faridah, K., Kazaara, A. G., & Kazaara, A. I. (2023). *The Effect Of Supplier Selection On Product Quality Management In Organizations . A Case Study Of Uganda Wild Life*. *7*(3), 307–317.

Faridah, N., Kazaara, A. G., & Kazaara, A. I. (2023). *An Evaluation of the Effects of Advertising on Consumer Brand Awareness in an Organization , a Case Study of Mukwano Group of Companies*. *7*(3), 206–212.

Isaac, O., Kazaara, A. G., & Kazaara, A. I. (2023). *Assessment of the Effect of Workplace Conflict on Employees Performance and Organizational Productivity , a Case Study of Tororo General Hospital*. *7*(3), 279–289.

Kaazara, A. G., & Nancy, M. (2025). *The Seventeen-Year Apprenticeship : Over-education and Under- Skilling in the African Economy . A Case Study of Uganda ' s Construction Sector*. *9*(12), 294–302.

Kazaara, A. G., & Kazaara, A. I. (2025). *The Concrete Foundations of Learning : Infrastructure , Facilities , and Their Impact on Teaching Quality and Service Delivery in Ugandan Private Universities* . *9*(8), 124–131.

Kazaara, A. I., & Audrey, A. (2024). *Sustainable Supply Chain Management Practices and their Effect on Firm Performance , A Case Study of Cheap General Hardware , Nansana Brach*. *8*(8), 268–274.

Kazaara, A. I., & Desire, N. (2025). *Culture as a Correlate of Discipline in Secondary Schools in Uganda : A Critical Analysis*. *9*(11), 93–99.

Kazaara, A. I., & Nancy, M. (2025). *Research Framework : Betting Among Ugandan University Students*. *9*(10), 123–128.

Lydia, N., Kazaara, A. G., Kazaara, A. I., Brenda, T., & Bafaki, G. (2023). *Promotion of Small-Scale Industries and Development of Business . A Case Study ; Masafu Subcounty (Busia)*. *7*(3), 240–245.

Moses, N., & Alex, A. (2022). *Human Resource Management Styles and Employee Performance in Private Institutions in Kabale Municipality : a Case Study of African College of Commerce and Technology , Kabale Human Resource Management Styles and Employee Performance in Private Institution*. *6*(July), 145–153.

Moses, N., Christopher, F., Muhindo, M. E., & Alex, A. (2022). *Task Oriented Management and Organisational Performance in Manufacturing Firms : A Case Study of Hima Cement Factory , Kasese District*. *6*(4), 298–306.

Moses, N., Enock, Z., & Matovu, K. (2025). *Corporate Governance and Financial Performance : A Case Study of Uganda Development Bank*. *9*(February), 31–38.

Nancy, M., & Prudence, K. (2024). Capacity Building programs and their impact on employee performance. A case

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**

study of Metropolitan International University. *Researchgate.Net*, *8*(4), 23–27. https://www.researchgate.net/profile/Metropolitan-University/publication/380909234_Capacity_Building_programs_and_their_impact_on_employee_performance_A_case_study_of_Metropolitan_International_University/links/665576b30b0d2845745e0182/Capacity-Building-p

Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. *6*(7), 84–122.

Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. *7*(3), 124–145.

Polycarp, K., Kazaara, A. G., Kazaara, A. I., Prudence, K., & Nicholas, K. (2023). *The effect of loan defaults on profitability of financial institutions in Uganda : a case study of post bank , Anaka branch , Nwoya district*. *7*(3), 172–178.

Promise, O., Henry, M., & Julius, A. (2024). *External Auditing and The Financial Performance Of Sebbi International Limited , Entebbe*. *8*(6), 156–161.

Sarah, A., Nafiu, P., & Abiodun, L. (2024). *Sustainability in the Fashion Industry : Strategies for Reducing Environmental Impact and Enhancing Profitability*. *8*(8), 178–182.

Winny, N. D., Kazaara, A. G., Kazaara, A. I., & Deus, T. (2023). *Effect Of Motivation On Employee Performance In Non- Government Organizations (NGOS): A Case Of Mbale City*. *7*(3), 67–71.

Received: 06.02.2026 **Accepted: 12.02.2026** **Published on: 28.02.2026**