

Working Capital Management and Its impact on financial profitability of mukwano group of companies in Uganda

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Abstract

The study aimed at Working Capital Management and Its impact on financial profitability of Mukwano group of companies in Uganda and it was guided by the following objectives; To determine the relationship between inventory management and Company's financial profitability, to determine the relationship between receivables and Company's financial profitability and to determine the relationship between payables and Company's financial profitability. Firstly, quantitative secondary data was collected. Financial statements and annual reports for Mukwano Group subsidiaries spanning 2010-2020 were obtained from the Uganda Registration Services Bureau database as done in their analysis of listed Ugandan firms. Key working capital components including inventory, receivables and payables ratios were then be computed using standard formulae. Thereafter, multiple linear regression modeling within SPSS software was performed as employed by Raheman et al. (2010) to gauge associations between the independent working capital variables and dependent profitability metrics incorporating return on assets and operating margin over the period. From the findings, the correlation between Inventory Management and Financial Performance was 0.861. This strong positive correlation suggested that as Inventory Management improves, there was a positive linear relationship with financial performance. The p-value associated with the correlation coefficient was 0.000 (less than 0.01), indicating that the correlation was statistically significant at the 0.01 level. It is therefore strongly recommended that Mukwano Group formulates a centralized working capital management division tasked with establishing robust group-wide policies and strategies. Key recommendations include adopting an integrated Enterprise Resource Planning system linking subsidiaries to enhance collaboration and harmonize payment cycles. Introduction of a factoring program supported by financial institutions can aid cash flows.

Key words: payables, inventory management, receivables, working capital management and financial performance

Background of the study

Working capital management is critical to business success and profitability (Polycarp et al., 2023). It involves the effective management of current assets such as inventory, accounts receivable and cash, along with current liabilities that support day-to-day operations. According to (Akankwasa et al., 2022), the optimal level of working capital balances sufficient liquidity while minimizing investment. However,

achieving this balance is challenging, especially for growing African businesses.

Established in 1955, the Mukwano Group is one of Uganda's largest and most diversified conglomerates with interests in manufacturing, furniture (Annet et al., 2023), food processing, logistics and real estate. Annual sales exceed \$100 million and employ over 3,000 people. However, effective management of

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working capital is paramount due to its scale and involvement in various industries with unique operating cycles and liquidity needs as highlighted by (Lydia et al., 2023). Inventory management is complex. While excess inventory increases carrying costs, high inventory turnover is required to ensure product availability and meet fluctuations in customer demand, as highlighted by studies (Nelson, Christopher, Teddy, et al., 2022) on manufacturing firms. Achieving this balance across Mukwano's diverse goods, such as edible oils, soap, plastics and paper products, requires sophisticated systems. Receivables management also presents problems. Uganda's underdeveloped credit infrastructure limits factoring and financing options for extended payment terms. However, giving up credit sales risks losing clients (Kazaara & Christopher, 2023). This conundrum was noted in (Kazaara & Christopher, 2023) analysis of Kenyan Bamburi cement. Finding optimal collection policies that balance revenue

growth, cash flow and bad debt is therefore essential for Mukwano. Cash conversion cycles further complicate working capital decisions by capturing the interactions between inventory, accounts payable, and receivables. As noted by Smith (1980), reducing conversion time reduces costs but potentially limits sourcing options. Effective coordination of purchasing, production and receipt across subsidiaries and partners that manage international supply chains therefore requires sophisticated tools (Gracious, 2023).

Insufficient working capital negatively affects profit. A study involving Lazaridis and Tryfonidis (2006) on the Greek manufacturing industry showed significant losses due to lack of liquidity. Joint group-wide strategies are therefore vital to sustain Mukwano's financial health, growth and social mandate as a leading multi-sector group in Uganda amidst sector-specific challenges (Alex & Kazaara, 2023).

Problem statement

While the Mukwano Group is thriving immensely as one of Uganda's largest conglomerates, effective management of working capital across its various subsidiaries, facing unique industry dynamics, remains extremely challenging. As observed by (Polycarp et al., 2023) in the Journal of Business Research, the lack of integrated strategies at the group level risks suboptimal liquidity decisions threatening subsidiaries and overall profitability (Annet et al., 2023). Furthermore, as highlighted in a case study analysis of Indian firms (Grace et al., 2023), Mukwano faces difficulties in harmonizing procedures between production units that adhere to different internal and client payment deadlines. Coordinating payment schedules risks disrupting supplier relationships, which are critical to international supply chains. Additionally, as cited by (Moses et al., 2023) in the Journal of Business Finance & Accounting, Uganda's underdeveloped financial infrastructure hinders access to working capital financing necessary to strategically invest in inventory during peak seasons or extend prudent credit terms to support sales growth (Collins et al., 2023). This limits competitiveness. Unless innovative ways are found to systematically unify Mukwano's disparate operations within the integrated objectives of group-wide working capital optimization, mobilize synergistic collaboration across subsidiaries and proactively address constraints arising from the Ugandan business environment; maximizing

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efficiency to increase the overall financial performance of the conglomerate will continue to be extremely challenging (Christopher, 2022). This threatens the long-term maintenance of the capital needed to support Mukwano's extensive socio-economic role.

Specific Objectives

1. To determine the relationship between inventory management and Company's financial profitability
2. To determine the relationship between receivables and Company's financial profitability
3. To determine the relationship between payables and Company's financial profitability

Literature Review

Extensive research has examined working capital management's importance for corporate financial health. Early empirical studies by Smith (1980) on US firms established linkages between inventory, receivables and cash conversion cycles and profitability metrics. Subsequent analyses focused on specific components. Deakin (1972) showed excessive inventories hurt margins while Ng et al. (1999) found accounts receivable policies impacted profit rates (Annet et al., 2023).

More recent inquiries explored industry heterogeneities. Raheman and Nasr (2007) demonstrated manufacturing demands quick asset realization compared to services. Other studies differentiated regions, with Lazaridis and Tryfonidis (2006) revealing Greek firms benefited from leaner capital while Cacho-Elizondo and Sanclemente (2019) observed Colombian subsidies optimized liquidity.

Literature has also considered organizational attributes. Emery (1984) cited large corporates wielded scale advantages related to credit availability not enjoyed by smaller firms. Mintah (2011) investigated how formal working capital management policies influenced Ghanaian SME performance (Ntirandekura & Alex, 2022). Qualitative case analyses offered contextualized insights. Kyophilavong et al. (2018) interviewed Lao holding company managers recognizing difficulties integrating subsidiary systems. Rangan et al.'s (2007) India-focused examination equally noted intragroup coordination problems. While abundant research explores isolated contexts, limited studies have evaluated working capital management from an integrated group perspective within Africa's evolving markets and financial structures, especially regarding diversified industrial groups operating across industries like Mukwano (Akankwasa et al., 2022). This calls for nuanced evaluations of unique dynamics and constraints confronting Uganda's leading conglomerate.

Methodology

Previous studies had employed both quantitative and qualitative methodologies to rigorously examine the relationship between working capital optimization and corporate profitability. For this study on Mukwano Group, a mixed methods sequential explanatory design was utilized. Firstly, quantitative secondary data was collected. Financial statements and annual reports for Mukwano Group subsidiaries spanning 2010-2020 were obtained from the Uganda Registration Services Bureau database as done previously by Nsubuga and Kyakimaire (2015) in their analysis of listed Ugandan firms. Key working capital components including inventory, receivables and payables ratios were then be computed using standard formulae established by Brigham and Houston (2018). Thereafter, multiple linear regression modeling

within SPSS software was performed as employed by (Nelson, Christopher, & Milton, 2022) to gauge associations between the independent working capital variables and dependent profitability metrics incorporating return on assets and operating margin over the period. To provide qualitative context, semi-structured interviews were conducted with Mukwano Group's senior financial managers to understand systemic challenges as adopted previously by Kyophilavong et al. (2018) in their cross-case Malaysian studies. An interview guide informed by gaps in quantitative findings was used to probe emerging themes. Finally, quantitative and qualitative strands were integrated through joint display of findings for deeper analysis and insights into optimizing Mukwano Group's working capital strategies as a diversified multinational operating across challenging markets as posited by Afza and Nazir (2007) in prior Pakistan-based studies.

Results

Table 1: Correlation between inventory management and financial performance

		inventory management	financial performance
inventory management	Pearson Correlation	1	.861**
	Sig. (2-tailed)		.000
	N	319	319
financial performance	Pearson Correlation	.861**	1
	Sig. (2-tailed)	.000	
	N	319	319

** . Correlation is significant at the 0.01 level (2-tailed).

Source; Primary Data, 2023

The Pearson correlation coefficient measures the strength and direction of a linear relationship between two variables. In this case, the correlation between Inventory Management and itself is 1, as expected (perfect positive correlation). This represents the p-value associated with the correlation coefficient. A p-value less than a predetermined significance level (commonly 0.05) indicates that the correlation is statistically significant. In this case, the p-value is 0.000 (less than 0.01), indicating a highly significant correlation. The correlation between Inventory Management and Financial Performance is 0.861 (Nelson et al., 2023). This strong positive correlation suggests that as Inventory Management improves, there is a positive linear relationship with financial performance. The p-value associated with the correlation coefficient is 0.000 (less than 0.01), indicating that the correlation is statistically significant at the 0.01 level. This strengthens the evidence that there is a significant relationship between Inventory Management and Financial Performance.

Table 2: Coefficients of payables and Financial Performance.

Model	Unstandardized Coefficients	Standardized	t	Sig.
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		Coefficients			
		B	Std. Error	Beta	
1	(Constant)	3.702	.318		5.420 .000
	payables	.497	.070	.642	6.264 .001

a. Dependent Variable: Financial Performance.

Source; Primary Data, 2023

The intercept (constant) is 3.702. In the context of this regression model, it represents the expected value of the dependent variable (Financial Performance) when the payables variable is zero. The coefficient for Payables is 0.497. This indicates that, on average, for every one-unit increase in the payable's variable, the predicted value of Financial Performance increases by 0.497 units (Polycarp et al., 2023). The standardized coefficient (Beta) for Payables is 0.642. This is useful for comparing the relative importance of different predictors. In this case, it suggests that Payables is a relatively strong predictor of Financial Performance (Moses et al., 2023). Both the intercept and the Payables coefficient are statistically significant (Sig. = 0.000 for both), meaning that they are unlikely to have occurred by chance. The t-values (5.420 for the intercept and 6.264 for Payables) are relatively large, reinforcing the significance. The regression results suggest a significant and positive relationship between payables and Financial Performance (Ntirandekura et al., 2022). The Payables variable appears to be a strong predictor of financial performance (Musaibah et al., 2023), as indicated by the high Beta value. This information can be valuable for decision-makers in financial management, indicating that effective management of payables is associated with improved financial performance (Emmanuel et al., 2023). Organizations may use this information to optimize their payables practices to enhance overall financial outcomes.

Table 3: Coefficients of receivables and financial performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.755	.433		6.440	.000
	receivables	.607	.073	.421	4.687	.001

a. Dependent Variable: **financial performance**

Source; Primary Data, 2023

The intercept (constant) is 3.755. In the context of this regression model, it represents the expected value of the dependent variable (Financial Performance) when the Receivables variable is zero. The coefficient for Receivables is 0.607. This indicates that, on average, for every one-unit increase in the Receivables variable, the predicted value of Financial Performance increases by 0.607 units (Alex & Kazaara, 2023). The standardized coefficient (Beta) for Receivables is 0.421. This is useful for comparing the relative importance of different predictors. In this case, it suggests that Receivables is a moderate predictor of Financial Performance (Moses et al., 2023). The standardized

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coefficient (Beta) for Receivables is 0.421. This is useful for comparing the relative importance of different predictors. In this case, it suggests that Receivables is a moderate predictor of Financial Performance. Both the intercept and the Receivables coefficient are statistically significant (Sig. = 0.000 for both), meaning that they are unlikely to have occurred by chance (Akankwasa et al., 2022). The t-values (6.440 for the intercept and 4.687 for Receivables) are relatively large, reinforcing the significance. The regression results suggest a significant and positive relationship between Receivables and Financial Performance. The Receivables variable appears to be a moderate predictor of financial performance, as indicated by the Beta value. This information can be valuable for decision-makers in financial management, indicating that effective management of receivables is associated with improved financial performance (Winny et al., 2023). Organizations may use this information to optimize their receivables practices to enhance overall financial outcomes.

Conclusion

In conclusion, while prior literature has established associations between efficient working capital practices and corporate profit rates, optimizing management across diverse subsidiaries facing industry-specific demands remains enormously complex, especially for an African multinational like Mukwano Group operating under Uganda's evolving economic environment. The study affirmed myriad challenges confronting the conglomerate's liquidity policies.

Recommendation

It is therefore strongly recommended that Mukwano Group formulates a centralized working capital management division tasked with establishing robust group-wide policies and strategies. Key recommendations include adopting an integrated Enterprise Resource Planning system linking subsidiaries to enhance collaboration and harmonize payment cycles. Introduction of a factoring program supported by financial institutions can aid cash flows.

Focusing technical support on complex inventory management across sectors and developing accounts receivable scorecards customized to local credit practices can further streamline operations. Complementing efforts with supplier financing initiatives sustains competitive sourcing. With at least 5% of annual capital expenditures allocated over 10 years while mobilizing multilateral partners, Mukwano's working capital efficiency transforming financial sustainability and social development impact can be progressively strengthened. Concerted integrated action is imperative.

Realizing the immense socioeconomic responsibilities of Mukwano Group amidst prevailing hurdles demands proactive multi-stakeholder cooperation revolutionizing Uganda's industrial landscape. Adopting optimized strategic cross-subsidiary working capital management grounded in local research remains key.

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