JRIIE Journal of Research Innovation and Implications in Education
Center for Research Implications & Practice

Website:www.jriiejournal.com ISSN 2520-7504 (Online) Vol.9, Iss.1, 2025 (pp. 594 - 604)

The Effect of Working Capital Management on Financial Performance of Manufacturing Companies in Rwanda: A Case of Horizon Sopyrwa, 2021-2023

Iraguha Berthile & Kato Mahazi Kasozi
University of Kigali
ORCID: https://orcid.org/0009-0009-4254-1212
Email: bellyra2015@yahoo.fr

Abstract: *This research investigated the effect of working capital management on the financial performance of manufacturing companies in Rwanda, with a specific focus on Horizon Sopyrwa 2021-2023. The findings showed that inventory control management had a major impact on financial performance. Inventory control management had a statistically substantial effect on financial results, according to the regression analysis, with a standardized coefficient (β) of 0.38 (p = 0.002) for ROA, 0.44 (p = 0.001) for ROE, and 0.26 (p = 0.031) for liquidity ratios. The analysis indicated that accounts receivable management had a significant positive impact on financial performance. Regression results supported these findings, with a standardized coefficient (β) of 0.28 (p = 0.008) for ROA, 0.33 (p = 0.004) for ROE, and 0.32 (p = 0.005) for liquidity ratios. The results further showed that accounts payable management positively influenced financial performance. The results of regression analysis demonstrated that accounts payable management had a significant impact on financial performance, with standardized coefficients (β) for liquidity ratios of 0.34 (p = 0.002), ROE of 0.28 (p = 0.006), and ROA of 0.25 (p = 0.020). The study came to the conclusion that improving the financial performance of Rwandan manufacturing enterprises requires effective working capital management techniques. The research paper suggests that Horizon Sopyrwa and similar companies use best practices in working capital management to boost revenue, liquidity, and overall financial health.*

Keywords: *Working Capital Management, Inventory Control Management, Accounts Receivable Management, Accounts Payable Management and Financial Performance*

How to cite this work (APA):

Iraguba, B. & Mahazi, K. (2025). The effect of working capital management on financial performance of manufacturing companies in Rwanda: A case of Horizon Sopyrwa: 2021-2023. *Journal of Research Innovation and Implications in Education*, *9*(1), 594 – 604. **https://doi.org/10.59765/vyek83.**

1. Introduction

A key factor in determining financial performance is working capital management (WCM), particularly in industries that require a lot of capital, like manufacturing. It includes handling cash, payables, inventory, and receivables to achieve a balance between liquidity and profitability. Effective WCM becomes crucial for maintaining operations and increasing funding in the manufacturing sector, where production cycles are long, and inventory levels are large (Lazaridis & Tryfonidis, 2020). Cash shortages, higher financing costs, and eventually decreased profitability and market competitiveness might result from poor WCM processes (Deloof, 2019).

Horizon Sopyrwa, a leading pyrethrum processor in Rwanda, faces WCM challenges typical of the

manufacturing sector. The company's reliance on agricultural inputs makes it vulnerable to seasonal fluctuations, impacting inventory and cash flow management. Additionally, as an export-oriented business, Horizon Sopyrwa's receivables management is complicated by foreign trade terms, affecting cash availability and liquidity (Murenzi, 2021).

In Rwanda, where financial constraints are common, manufacturers like Horizon Sopyrwa face additional hurdles in accessing affordable working capital financing, impacting their ability to grow and remain competitive (Kwame, 2020).

Despite the significant role of manufacturing in Rwanda's economy, studies focusing on WCM and its influence on financial performance within the Rwandan manufacturing sector are limited. Most existing research on WCM has been conducted in developed economies (e.g., Deloof, 2019; Lazaridis & Tryfonidis, 2020), where firms have easier access to financial resources and less seasonal volatility in production. The unique economic and operational constraints faced by Rwandan manufacturers highlight a need for localized studies. In light of Rwanda's government's emphasis on industrialization as part of Vision 2050, which seeks to make manufacturing a significant source of jobs and GDP, this disparity is especially pertinent (Government of Rwanda, 2022).

While previous research has documented the relationship between WCM and financial performance, limited attention has been paid to manufacturing firms in developing economies like Rwanda. The sector's specific challenges such as limited access to financing, seasonal production cycles, and dependency on export markets are underexplored in the existing literature (Adebayo & Oluleye, 2018). Therefore, using Horizon Sopyrwa as a case study, by exploring how WCM affects Rwandan manufacturing's financial performance, the current study aims to bridge this gap. By examining WCM's contribution to profitability, this study offers information that can guide the creation of policies as well as business strategies.

1.1 Objective of the study

This study's main goal was to investigate how working capital management affects Rwandan manufacturing companies' finance performance, with a particular emphasis on Horizon Sopyrwa.

Specific Objectives:

i. To evaluate the effect of inventory control management on financial performance of manufacturing companies in Rwanda.
ii. To assess the effect of account receivables management on financial performance of manufacturing companies in Rwanda.
iii. To examine the effect of account payables management on financial performance of manufacturing companies in Rwanda.

2. Literature Review

2.1 Theoretical Review

The study was supported by trade credit theory, transaction cost theory and trade off theory

2.1.1 Trade Credit Theory

The theory finds its roots in the works of classical economists like Adam Smith (1776), who recognized the importance of credit in facilitating trade and economic transactions. But the turn of the century saw the official development of it, with significant contributions from scholars such as Brennan, Maksimovic, and Zechner (1988), who highlighted the dual role of trade credit in providing financing and ensuring quality assurance between buyers and suppliers. Their model explained how suppliers, due to their close relationships with customers, often had better information about their creditworthiness than banks, allowing them to manage credit risk more effectively. Further advancements were made by Petersen and Rajan (1997), who demonstrated empirically that trade credit is particularly valuable for firms with limited access to bank financing. These firms benefit from trade credit flexibility, as it allows them to manage cash flow fluctuations and sustain operations without immediate financial strain.

In research on Horizon Sopyrwa, trade credit is the most crucial component of financing management. Manufacturing firms often rely on trade credit to finance inventory purchases, reducing the need for immediate cash outflows. Efficient management of trade credit can reduce financing costs and improve cash flow, which directly impacts financial performance. Firms with better credit management can maintain liquidity, avoid costly external financing, and enhance profitability.

2.1.2. Transaction Cost Theory

Transaction Cost Theory, developed by Coase (1937) and expanded by Williamson (1979), emphasizes the expenses related to business transactions, such as negotiating, monitoring, and enforcing contracts. Concerning cash management, this theory emphasizes minimizing the transaction costs related to managing inventories, trade credit, and cash holdings. Businesses seek to lower the expenses related to acquiring and overseeing financial resources. By optimizing trade credit terms or inventory levels, firms can lower the costs of negotiation and enforcement of financial transactions (Williamson, 1981).

In Horizon Sopyrwa, minimizing transaction costs related to managing inventories and trade credit would

increase the efficiency of finances management. For instance, to lower finance expenses, the company may bargain with suppliers for more favorable financing terms or modify inventory levels to strike a balance between the expense of keeping extra goods and the danger of stock outs. Efficient transaction cost management enhances financial performance by reducing unnecessary expenses and improving operational efficiency.

2.3 Empirical Studies

In his study on the repercussions of inventory handling on the financial success for Kenyan manufacturing companies, Kariuki (2022) geared to evaluate the connection between the manufacturing companies' financial performance and inventory control practices, such as stock level management and procurement procedures. Effective inventory control practices were found to significantly enhance the financial performance of firms. Also found that firms that implemented robust inventory control solutions like Economic Order Quantity (EOQ) and Just-in-Time (JIT), reported improved profitability and reduced stock-out costs, Inconsistent inventory practices were linked to poor cash flow and lower profitability. The study came to an end that inventory control management is a crucial determinant of financial performance. Firms with strong inventory management processes were able to maintain liquidity, minimize wastage, and enhance overall profitability. It advised manufacturing companies to adopt Systems for automated inventory management to improve accuracy and reduce manual errors; Managers ought to concentrate on training staff in inventory optimization techniques to ensure stock levels are balanced with demand.

Mugisha and Rukundo (2023) examined how different inventory management practices affected the financial performance of manufacturing firms in Uganda, with a focus on turnover, lead times, and profitability in his research, "Inventory Management Practices and Financial Results of Industries in Uganda". The study found that inventory control procedures such accurate demand forecasting and profitability were directly improved by routine stock audits and return on investment; Companies that experienced frequent stockouts had lower financial performance, as they could not meet customer demand efficiently and concluded that reliable inventory control mechanisms are essential to improving profitability. Companies that optimize their inventory management reduce operating costs and enhance customer satisfaction, leading to better financial outcomes. The study recommended integrating real-time inventory tracking technologies to increase the precision of stock data and it also suggested increasing collaboration between the procurement and sales departments to increase inventory control's effectiveness.

Mwangi and Kiragu (2022) investigated the connection between economic performance and handling receivables of Kenyan manufacturing companies. It found that efficient management of receivables transactions improved liquidity and profitability; Businesses with stringent credit rules and effective collection procedures saw a decrease in bad debts and an improvement in cash flow, whereas those with more permissive credit policies experienced a rise in defaults and late payments, it led to problems with money circulation and decreased profitability. According to the study's findings, firms with clear credit policies and effective debt collection systems fared better financially, and maintaining a steady cash flow requires effective control of receivables and guarantees profitability. The study recommended implementing stricter credit policies and regularly reviewing customer creditworthiness to reduce default risks and firms were advised to invest in accounts receivable automation systems to improve tracking and recovery.

Nkurunziza (2023) investigated the impact of receivables management on Rwandan manufacturing enterprises' financial performance with the goal of analyzing the relationship between receivables management and factory financial performance. Strong accounts receivable management procedures, such as prompt invoicing and follow-ups, were found to improve financial performance, as shown by higher net profit margins; in contrast, ineffective receivables management caused businesses to struggle with liquidity, which negatively affected their operational capabilities and overall profitability. It was concluded that overseeing accounts receivable is critical for maintaining profitability and liquidity and firms that effectively control credit sales and manage customer payments tend to have stronger financial health. The study recommended the use of technology to automate receivables management to reduce delays and errors in invoicing and establishing clear credit terms and conducting regular customer credit evaluations were also advised to lessen the dangers of non-payment.

Karemera (2023) conducted the research focused on how management of debts payable affects financial performance, particularly liquidity and profitability, in the Rwandan manufacturing sector. The study found that companies that maintained long terms of credit with suppliers to increase cash reserves cycles reported better liquidity but noted strain on supplier relationships and firms that optimized their payment schedules, paying suppliers on time while maintaining cash flow, experienced better profitability and operational effectiveness. It therefore concluded that an effective oversight of bills payable positively affects a firm’s liquidity and profitability. However, extending credit periods should be done carefully to avoid damaging supplier relationships. The report suggested a fair strategy to payables management, which includes automating payment procedures to increase efficiency and prevent late payments and establishing flexible

payment terms that enable businesses to manage cash flow without endangering relationships with suppliers.

3. Methodology

This section provided an explanation of the research design and the methodology that was applied in carrying out the research study and justification for using a particular research design.

3.1 Research Design

This study used a correlational research design to examine the connection between the financial results of Rwandan manufacturing companies as determined by liquidity ratios, return on equity, and return on investment, and methods of operational costs management, such as inventory control, receivables, and payments.

3.2 Study Population

For this study, the population was the set of personnel in Horizon Sopyrwa; the total population was 92 workers from administration, accounting and logistic department, and 15,383 stakeholders of the company which totalized them to 15,475 populations including Administration Department, Finance Department, Logistics and Stock Department, Production Department, other Stakeholders (Farmers, NAEB etc)

3.3 Sample Size and Sampling

The sample was determined using the Taro Yamane formula. The sample was determined using the Taro Yamane formula: $n= N/ (1+N (e)^2)$ Where: n signifies the sample size N signifies the population under study e signifies the margin error (it was 0.1)

$n= 15,475/ (1+15,475(0.1)^2) = 99.35794542536116$

The study, therefore, sampled 100 respondents (including 70 workers and 30 stakeholders). In this research, two sampling techniques were employed: stratified sampling and simple random sampling.

3.4 Data Collection Instruments

The study considered a closed-ended questionnaire (Mugenda, 2013). Two questionnaires were prepared for employees of Horizon Sopyrwa and other farmers of the company. The questionnaire was employed on staff as well as farmers who work with the company.

The researcher reviewed literature from financial statements and other reports from Horizon Sopyrwa. Various relevant documents like financial reports, stock reports and minutes of relevant meetings were also viewed.

3.5 Data Analysis

The data in this study was examined using SPSS version 26.0, which is the Statistical Package for Social Science. The data was collected and analyzed using mean levels and percentages in order to determine the relationship between managing working capital and financial results of manufacturing companies like Horizon Sopyrwa.

3.6 Ethical Consideration

Before data collection begins, researchers obtained ethical approval from the University of Kigali's ethics review board by submitting research proposal to the relevant ethics committee for review and approval, ensuring that all ethical concerns are thoroughly addressed. Participation in the dissertation was voluntary, and there was no excessive pressure on participants to participate; they were free to do so. Furthermore, confidentiality was prioritized, and no identifying information was disclosed in the final research findings.

4. Results and Discussion

In this section, the inferential analysis explores the connections between manufacturing organizations' revenue growth and working capital allocation, with a specific emphasize on SOPYRWA. The inferential analysis aims to provide deeper insights into the impact of various working capital coordination practices on key financial performance indicators, such as Return on activities, yield on equity, and liquidity ratios.
The data collected from the respondents were analyzed using inferential statistical methods to assess the extent to which inventory control monitoring, receivables controlling, and payables coordination contribute to improving financial performance. The analysis also tested potential correlations between these independent variables (operational capital management methods) and the dependent variables (financial performance indicators).

The results of the inferential analysis offer valuable insights into how efficient use of working capital can influence liquidity, profitability, and the overall financial condition of manufacturing companies. These findings can guide decision-making for managers at SOPYRWA and similar companies in optimizing their working capital strategies to boost their financial performance. The following sections present the detailed results of the inferential analysis, which include correlation coefficients, regression analysis, and hypothesis testing, shedding light on the relationship between management of operational capital and the financial success of SOPYRWA over the period from 2021 to 2023.

Table 1: Correlation Coefficients between Working Capital Management Practices and Financial Performance Indicators

Variables	ROA	ROE	Liquidity Ratio
Inventory Control Management	0.56	0.63	0.49
Accounts Receivable Management	0.51	0.58	0.54
Accounts Payable Management	0.52	0.55	0.60

Source: Primary Data, 2025

The three operational capital management procedures (Inventory Control oversight, debt recovery Management, and outstanding liabilities monitoring) and the financial performance metrics (Return on capital and activities, and Liquidity Ratio) at Horizon Sopyrwa are correlated, as revealed in table 1. These correlation coefficients quantify how strongly and in which direction each working capital management strategy and the corresponding financial performance metric are related.

4.1 Inventory Control Management

The correlation coefficient of 0.56 between inventory control management and ROA indicates a moderate positive relationship. This suggests that as Horizon Sopyrwa improves its inventory management, the company is likely to experience better returns on its invested assets. Efficient inventory management reduces the risk of overstocking and understocking, both of which can adversely affect profitability and asset utilization. A greater rotation in inventories, resulting from effective control, enables better use of assets, thus enhancing ROA. The positive correlation of 0.63 between inventory control management and ROE reflects a somewhat stronger relationship. Effective inventory control reduces wastage, lowers costs, and improves operational success, which in turn leads to higher returns for the shareholders (equity). A well-managed inventory ensures that capital invested in stock is used efficiently, generating more profits relative to the equity base, thereby enhancing ROE. Inventory control management and the liquidity ratio have a moderately positive correlation of 0.49. The business can maximize the flow of cash by efficiently controlling the quantity of inventory, which guarantees that it has enough liquid assets to fund its short-term obligations. In order to prevent the company from holding an excess of stock, which would tangle up cash, or from running out of stock, which could impede sales and cash flow, inventory management is crucial.

4.2 Accounts Receivable Management

The correlation coefficient of 0.51 between credits handling and ROA indicates a moderate positive relationship. Effective management of receivables makes sure that the company collects payments from customers in a timely manner, improving cash flow. This enhanced cash flow, in turn, allows the company to reinvest in assets or reduce liabilities, thereby improving the return on resources. Efficient receivables management reduces bad debts and optimizes asset utilization, positively impacting profitability. The link between the overseeing of receivables balances and ROE shows a strong positive relationship. When the company efficiently manages accounts receivable, it can accelerate the inflow of cash, which provides more capital for reinvestment. This boosts the company's aptitude to generate returns on equity. Improved collection practices and clear credit policies ensure that the company maintains a nutritious balance between receivables and equity, leading to higher profits for shareholders. The positive correlation of 0.54 between the client’s payment tracking and liquidity ratio indicates a moderate to strong relationship. Efficient management of that account contributes to better cash flow, ensuring that the horizon has enough funds to settle its short-term obligations.
When the company collects outstanding receivables more quickly, it strengthens its liquidity position by increasing available cash resources. Nkurunziza (2023) investigated the impact of receivables management on Rwandan manufacturing enterprises' financial performance with the goal of analyzing the relationship between receivables management and factory financial performance.

4.3 Accounts Payable Management

The 0.52 correlation coefficient between cash outflows management and ROA indicates a moderate positive relationship. Its efficient management ensures that the company can negotiate favorable terms with suppliers while maintaining its liquidity. Proper management of payables helps the company conserve cash, reducing the need for external financing, and helps sopyrwa to use its assets more effectively, leading to an improved ROA. The 0.55 correlation between supplier obligation management and ROE shows a positive relationship, suggesting that managing payables effectively contributes to higher returns on equity. By maintaining appropriate payment schedules and utilizing credit phrases, the business is able to maximize financial resources and increase profits. Efficient payables management can avail cash for reinvestment, thereby enhancing returns to shareholders. The 0.60 correlation between accounts payable management and liquidity ratio is the strongest among the relationships presented in the table. This indicates that better management of payables strongly enhances liquidity. The business can

save money and keep a healthy liquidity ratio by negotiating favorable conditions of payment with suppliers and ensuring timely payment. An instance, the company could be able to settle its short-term loans without experiencing any financial problems.

The correlation coefficients suggest that methods for managing operating funds are positively related to the financial metrics' indicators, with moderate to strong relationships observed across all variables. These results underscore the importance of managing inventory, receivables, and payables effectively in order to enhance financial performance. Inventory Control Management shows moderate to strong positive correlations with all three financial performance indicators (ROA, ROE, and liquidity ratio), emphasizing its critical role in asset utilization, profitability, and liquidity management. Efficient handling of accounts receivable increases profitability by enhancing cash flow, which may then be reinvested in assets and equity. It also shows positive correlations with ROA, ROE, and the liquidity ratio. Liquidity is the most positively connected of the three financial performance metrics with accounts payable management. This suggests that controlling payables improves liquidity while also having a favorable effect on total profitability and yield on equity and assets.

Conclusion: According to the correlation analysis in Table 1, Horizon Sopyrwa's financial outcomes, as indicated by ROA, ROE, and liquidity ratio, is significantly improved by operational funds management practices. Through increasing profitability and guaranteeing there is enough cash on hand to cover immediate obligations, these interconnected activities support the company's overall financial health. Therefore, maintaining financial stability and growth in manufacturing organizations such as Horizon Sopyrwa requires good management of financial assets. Not far for Mugisha and Rukundo (2023) examined how different inventory management practices affected the financial performance of manufacturing firms in Uganda. The study found that inventory control procedures such accurate demand forecasting and profitability were directly improved by routine stock audits and return on investment

Table 2: Regression Analysis of Working Capital Management Practices on Financial Performance Indicators

Dependent Variable	Independent Variable	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t-Statistic	p-Value
ROA	Constant	0.12		2.05	0.042
	Inventory Control Management	0.25	0.38	3.12	0.002
	Accounts Receivable Management	0.20	0.28	2.70	0.008
	Accounts Payable Management	0.18	0.25	2.40	0.020
ROE	Constant	0.15		2.80	0.006
	Inventory Control Management	0.35	0.44	4.25	0.001
	Accounts Receivable Management	0.30	0.33	3.45	0.004
	Accounts Payable Management	0.22	0.28	2.85	0.006
Liquidity Ratio	Constant	0.08		1.72	0.089
	Inventory Control Management	0.19	0.26	2.20	0.031
	Accounts Receivable Management	0.23	0.32	2.91	0.005
	Accounts Payable Management	0.24	0.34	3.10	0.002

Source: Primary Data, 2025

Table 2 presents the summary of responses of a regression analysis conducted to determine the effect of management practices of working capital on the financial success at Horizon Sopyrwa. The regression model sheds light on the importance and intensity of the connection between the independent variables (working capital management practices) and the dependent variables (financial performance indicators).

4.4 Regression Results for ROA (Return on Assets)

The constant term represents the baseline level of ROA when all independent variables (working capital management methods) are zero. The positive value of 0.12 indicates that, even without any interventions in working capital management, the company is likely to achieve a positive return on assets. The constant term is statistically significant, as provided by the p-value of 0.042, which is below the conventional significance level

of 0.05. The inventory control management coefficient is 0.25, meaning that ROA rises by 0.25 units for every unit increase in inventory control procedures. Inventory control management has a moderately beneficial effect on ROA, as displayed by the standardized coefficient (Beta) of 0.38.

The statistical significance of this effect is demonstrated by the t-statistics of 3.12 and the p-value of 0.002, which is under 0.05. This demonstrates how enhanced inventory management techniques enhance the company's use of its assets, resulting in higher returns.
The coefficient for outstanding dues management is 0.20, indicating that a unit improvement in receivables management leads to a 0.20 increase in ROA. The standardized coefficient (Beta) of 0.28 shows a moderate positive relationship. The t-statistics of 2.70 and p-value of 0.008 (less than 0.05) suggest that this relationship is statistically significant. Efficient system of managing outstandings improves cash inflows, thereby enhancing asset utilization and profitability. The coefficient for management of bills payable is 0.18, indicating a significant impact on ROA. The standardized coefficient (Beta) of 0.25 suggests a moderate effect. The t-statistics of 2.40 and p-value of 0.020 (less than 0.05) confirm that this relationship is statistically significant. By managing payables effectively, Horizon Sopyrwa can maximize its cash flow and improve profitability, contributing to a better return on assets.

4.5 Regression Results for ROE (Return on Equity)

The constant term for ROE is 0.15, suggesting that the baseline ROE would be 0.15 when working capital overseeing techniques are at zero. The p-value of 0.006 is statistically significant, indicating that the constant is important for the model. The coefficient for trade credits management is 0.35, indicating a strong positive effect on ROE. The standardized coefficient (Beta) of 0.44 shows that inventory control management has a relatively high impact on ROE compared to other variables. The t-statistics of 4.25 and p-value of 0.001 (less than 0.05) confirm the statistical significance of this effect. Effective revenue collections management directly contributes to higher returns on equity, as it optimizes the use of capital and increases profitability.

The coefficient for accounts receivable management is 0.30, which suggests that improving receivables management by one unit leads to a 0.30 increase in ROE. The standardized coefficient (Beta) of 0.33 reflects a moderate to strong impact on ROE. The t-statistics of 3.45 and p-value of 0.004 (less than 0.05) indicate that this relationship is statistically significant. Efficient management of receivables ensures timely cash flow, which enhances profitability and, consequently, return on equity. coefficient for accounts creditors management is 0.22, indicating a positive effect on ROE.

The standardized coefficient (Beta) of 0.28 shows a moderate effect on ROE. The t-statistics of 2.85 and p-value of 0.006 (less than 0.05) confirm that this relationship is statistically significant. Efficient management of payables ensures that the company maintains liquidity and profitability, leading to higher earnings on equity.

4.6 Regression Results for Liquidity Ratio

The constant term for liquidity ratio is 0.08, suggesting a positive baseline value for liquidity. However, the p-value of 0.089 (greater than 0.05) indicates that the liquidity ratio cannot be explained by the constant term in a statistically significant way. This suggests that other factors may play a more prominent role in influencing liquidity. The coefficient for inventory control management is 0.19, indicating that improvements in inventory management positively affect liquidity. The standardized coefficient (Beta) of 0.26 shows a moderate impact. The t-statistics of 2.20 and p-value of 0.031 (less than 0.05) express a statistically meaningful relationship between inventory control and liquidity. Proper inventory management ensures that the revenue generated is at its peak, contributing to better liquidity.

The coefficient for accounts receivable management is 0.23, demonstrating a favorable impact on liquidity. The standardized coefficient (Beta) of 0.32 shows a moderate to strong relationship. The t-statistics of 2.91 and p-value of 0.005 (less than 0.05) confirm the statistical significance of this effect. By improving receivables management, the company accelerates cash inflows, strengthening its liquidity position. The coefficient for expense settlement management is 0.24, indicating that better management of payables positively impacts liquidity. The standardized coefficient (Beta) of 0.34 reflects the strongest relationship among the three working capital practices. The t-statistics of 3.10 and p-value of 0.002 (less than 0.05) confirm that this effect is statistically significant. Efficient management of payables helps the company maintain adequate liquidity by ensuring that cash is not unnecessarily tied up in payables.

All three working capital management techniques, including control of stock management, outstanding debts management, and balances payable management, are demonstrated by the regression analysis have a statistically significant positive impact on the financial performance indicators (ROA, ROE, and liquidity ratio) at Horizon Sopyrwa. Inventory control management has the strongest effect on ROE, with a high standardized coefficient, followed by a positive influence on ROA and liquidity ratio. Karemera (2023) conducted the research focused on how management of debts payable affects

financial performance, particularly liquidity and profitability, in the Rwandan manufacturing sector.
Accounts receivable management is also an important factor influencing financial performance, particularly in improving liquidity and ROE. Accounts payable management significantly contribute to improving liquidity, followed by positive effects on ROA and ROE. In conclusion, effective management of inventory, receivables, and payables is quite important in enhancing the financial condition of Horizon Sopyrwa, as evidenced by the positive relationships with ROA, ROE, and liquidity ratios. These findings highlight the importance of efficient operational funds management for improving profitability, shareholder returns, and financial stability. The findings are in agreement with Kariuki (2022) geared to evaluate the connection between the manufacturing companies' financial performance and inventory control practices, such as stock level management and procurement procedures.

Table 3: ANOVA Results for the Effect of Working Capital Management on Financial Performance

Source of Variation	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-Statistic	p-Value
Between Groups	21.50	3	7.17	12.56	0.000
Within Groups (Error)	56.90	96	0.59		
Total	78.40	99			

Source: Primary Data, 2025

Dependent Variable: Financial Performance Indicators (ROA, ROE, Liquidity Ratio)
Independent Variables: Inventory Control Management, Accounts Receivable Management, Accounts Payable Management

The ANOVA results displayed in table 3 shed light on the impact of the administration of working capital on Horizon Sopyrwa's financial results. The key statistical components of the table help to determine if the variation in financial performance indicators, such as ROA, ROE, and liquidity ratio, can be ascribed to different aspects of working capital management practices, specifically inventory control, trade receivable, and trade payable management. The Sum of Squares (SS) values show that a large percentage of the total variation in financial performance (21.50 out of 78.40) can be characterized to the differences between the groups of current financial investments. This is supported by the degrees of freedom (df), where the between-group variation (df = 3) reflects the three independent variables being examined: inventory control, accounts receivable, and accounts payable management.
The within-group variation (df = 96), which represents the differences within each group, is much smaller, indicating that most of the variability within the data can be laid out by the variation between the groups.

The Mean Square (MS) for between groups (7.17) is relatively higher than that of within groups (0.59), indicating that the variation between the different aspects of cash reserves management techniques is much larger than the variation within each group. This supports the notion that these techniques themselves have a notable impact on economic growth. F-statistics (12.56) is an important indicator in this analysis. It represents the proportion of the Mean Square between groups to the Mean Square within groups. A higher F-statistic value suggests that the differences between the groups are much larger than those within the groups. In this case, the F-statistics are significantly high, signaling that business operations practices have a substantial effect on the profit of Horizon Sopyrwa.

The p-value of 0.000 further strengthens the conclusion. The p-value is far less than the commonly accepted significance level of 0.05, suggesting that the observed differences in financial performance are statistically significant. This means that the null hypothesis, which posited that management of cash reserves does not have a significant positive effect on financial performance, can be rejected. Thus, the results illustrate that these practices of cash reserves do, in fact, influence financial performance at Horizon Sopyrwa. Given these findings, it is clear that managing financial capital is an important determinant of the company’s financial success. The significant differences in financial performance indicators (ROA, ROE, and liquidity ratio) are linked to practices in inventory control, accounts receivable, and accounts payable management. Therefore, Horizon Sopyrwa should continue to refine its working capital strategies, ensuring that each of these areas is effectively managed to enhance financial performance.

In conclusion, the ANOVA results highlight that working fund management plays a crucial role in influencing the financial strength of Horizon Sopyrwa. The statistically significant differences in the business outcomes indicators reflect the importance of optimizing practices in inventory control, receivables balances, and payables balance management. To maintain and improve financial outcomes, it is recommended that Horizon Sopyrwa focuses on improving the efficiency of its financial resources management practices.

Future research could also explore which of these practices, namely inventory control, receivables, or payables has the most substantial impact on the profitability results of the company, providing a more granular understanding of where improvements could be made. Supported by Mwangi and Kiragu (2022)

investigated the connection between economic performance and handling receivables of Kenyan manufacturing companies. It found that efficient management of receivables transactions improved liquidity and profitability.

Table 4: Hypothesis Testing Results for Working Capital Management and Financial Performance

Hypothesis (Ho)	Test Statistic (t)	Degrees of Freedom (df)	p-Value	Decision
H_o1: Inventory control management has no significant positive effect on the financial performance of manufacturing companies in Rwanda.	3.12	99	0.002	Reject **H_o1** (Significant)
H_o2: Accounts receivable management has no significant positive effect on the financial performance of manufacturing companies in Rwanda.	2.70	99	0.008	Reject **H_o2** (Significant)
H_o3: Accounts payables management has no significant positive effect on the financial performance of manufacturing companies in Rwanda.	2.40	99	0.020	Reject **H_o3** (Significant)

Source: Primary Data, 2025

The hypothesis testing results, as presented in table 4, provide critical insights into the influence of financial resources on the financial outcomes of manufacturing companies in Rwanda, specifically at Horizon Sopyrwa. This analysis is based on three main aspects of working capital management: inventory control management, accounts receivable management, and accounts payable management. The test statistics, p-values, and decisions made regarding the null hypotheses offer a clear comprehension of the significance of these practices in improving financial performance.

For H_o1: Inventory control management has no significant positive effect on the financial performance of manufacturing companies in Rwanda, the test statistic was discovered to be 3.12 with a p-value of 0.002. We dismiss the null hypothesis since the p-value is below the significance level of 0.05. This suggests that inventory control management has a significant positive effect on financial performance. In other words, the methods used to achieve the highest inventory levels, ensuring accurate stock management, and maintaining effective inventory control significantly improve cash flow and financial performance indicators such as liquidity ratio, ROA, and ROE.

Regarding H_o2: Accounts receivable management has no significant positive effect on the financial performance of manufacturing companies in Rwanda, the test statistic was 2.70 with a p-value of 0.008. Again, the p-value is below the significance threshold of 0.05, leading to the rejection of the null hypothesis. This indicates that accounts receivable management has a significant positive impact on financial results. The research results emphasize crucial effective credit policies, regular risk assessments, and efficient collection procedures in maintaining strong cash inflows and minimizing financial losses, ultimately contributing to improved liquidity, ROA, and ROE.

Finally, for H_o3: Accounts payables management has no significant positive effect on the financial performance of manufacturing companies in Rwanda, the test statistic was 2.40 with a p-value of 0.020. With a p-value lower than 0.05, we disqualify the null hypothesis, confirming that accounts payable management significantly influences financial performance. This emphasizes the critical role of supplier relationship management, cash flow forecasting, and timely payment scheduling in maintaining financial stability, reducing financial strain, and improving liquidity and profitability.

In conclusion, the hypothesis testing results conclusively demonstrate that all three dimensions of working financial resources management namely inventory control, accounts receivable, and accounts payable management have a significant positive effect on the financial performance of Horizon Sopyrwa and, by extension, manufacturing companies in Rwanda. These findings underscore the importance of optimizing working capital management strategies to improve overall a sustainable business, revenue generation, and financial resources.

5. Conclusion and Recommendations

5.1 Conclusions

This study aimed to examine the effect of working capital management on the financial performance of manufacturing companies in Rwanda, with a specific focus on Horizon Sopyrwa. The research addressed three key aspects of working capital management—inventory control management, accounts receivable management, and accounts payable management—and assessed their influence on financial performance indicators, including Return on Assets (ROA), Return on Equity (ROE), and Liquidity Ratio.

Every one of the three working capital management strategies contributes significantly to improving financial performance, according to the results of both descriptive and inferential analysis. The findings showed a steady and favorable correlation between key financial performance metrics and efficient inventory, receivables, and payables management.

Strong statistical support for the link between working capital management and financial success was offered by the regression and ANOVA studies. It was discovered that the financial performance metrics were significantly improved by all three working capital management domains. This conclusion was further supported by the hypothesis testing results, which showed that inventory control, accounts receivable management, and accounts payable management all significantly improve the financial performance of Rwandan manufacturing companies. All three of the null hypotheses (Ho1, Ho2, and Ho3) were rejected.

Overall, the study underscores the importance of effective working capital management in improving the financial performance of manufacturing companies. Companies that efficiently manage their inventories, receivables, and payables are better positioned to maintain liquidity, profitability, and financial stability. Given the positive impact of these management practices on financial performance, it is recommended that manufacturing companies in Rwanda, particularly Horizon Sopyrwa, continue to refine and strengthen their working capital management strategies to sustain growth, enhance profitability, and improve their financial health.

5.2 Recommendations

The following recommendations emanated from this study:

1. Companies should invest in modern inventory management software, such as Enterprise Resource Planning (ERP) systems, to monitor stock levels in continuous time, optimize stock replenishment, and minimize stock obsolescence.

2. Companies should set reasonable credit limits depending on the creditworthiness of their customers and implement transparent credit approval procedures. Credit arrangements should strike a balance between reducing financial risk and being competitive.

3. Advanced forecasting tools should be used to predict upcoming payment obligations and plan accordingly to prevent financial strain.

5.3 For Future Research

For future researchers, it is recommended to expand the scope of this study by exploring the impact of other factors influencing the financial performance of manufacturing companies in Rwanda, such as technological adoption, methods for governing supply chains, and the role of external economic factors like inflation and exchange rates.

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