**IMPACT OF WORKING CAPITAL MANAGEMENT PRACTICES ON FIRM VALUE: EVIDENCE FROM MANUFACTURING COMPANIES LISTED ON THE NAIROBI SECURITIES EXCHANGE, KENYA**

# ABSTRACT

Firm value is a critical consideration for publicly traded companies, as it shapes investor perceptions and influences capital allocation decisions. High firm value typically fosters positive investor sentiment, encouraging further investment. This study was motivated by the premise that enhancing a company’s valuation reflects effective resource management, ultimately maximizing shareholder wealth. However, manufacturing firms listed on the Nairobi Securities Exchange (NSE) have experienced declining market valuations, reflected in volatile share returns. The research examined the influence of working capital management practices—specifically trade receivables, trade payables, and inventory levels—on firm value among listed manufacturing companies. Grounded in transaction theory, the cash conversion cycle, and shareholder wealth theory, the study employed an explanatory research design targeting nine listed manufacturers, with purposive sampling yielding seven firms consistently listed between 2014 and 2023. Data analysis, conducted using STATA, involved descriptive statistics and inferential methods, including correlation and regression analysis, complemented by diagnostic tests such as distribution analysis, collinearity checks, serial correlation tests, and the Hausman specification test. Findings indicated that efficient accounts receivable management—characterized by shorter collection periods—enhances investor confidence by signaling robust credit policies. Strategic accounts payable management was found to require a careful balance between liquidity benefits and maintaining supplier trust, as excessive payment delays may signal financial instability. Lean inventory practices emerged as a strategic driver of firm value, reducing holding costs and improving operational efficiency. The study recommends comprehensive credit risk assessment systems, strategic supplier partnerships with transparent payment schedules, and adoption of advanced inventory technologies such as AI-driven forecasting. An integrated working capital framework, supported by cross-functional teams and performance metrics, is essential for capturing the interdependencies among receivables, payables, and inventory.

**Keywords:** *firm value, working capital management, trade receivables, trade payables, inventory management, manufacturing firms, Nairobi Securities Exchange*.

**1.0 INTRODUCTION**

Firm value is a critical indicator of corporate performance, reflecting investor perceptions and a firm’s overall financial health (Belo, Gala, Salomao, & Vitorino, 2022). According to Adiputra and Hermawan (2020), firm value is shaped by market signals such as stock prices, funding decisions, and investment activities. A sustained decline in firm value erodes investor confidence, limits external financing opportunities, and can ultimately lead to financial distress (Rahmi, Arfan, & Saputra, 2023). Working capital management (WCM) plays a central role in sustaining and enhancing firm value, particularly for listed firms. Effective WCM enables firms to balance liquidity and operational efficiency, thereby supporting growth and profitability (Zutter & Smart, 2019; Gunay & Cokins, 2021). Excess idle capital reflects inefficiency, while insufficient liquidity signals potential operational paralysis. Without adequate cash to fund operations, firms struggle to expand initiatives or increase sales, constraining both growth and profitability (Nguyen, Tan, & Nguyen, 2021).

Efficient WCM benefits shareholders, while poor management or weak policies can have severe financial consequences (Ngunju, 2022). For example, favorable trade credit policies and adequate inventory levels can boost sales and reduce stock-out risks (Nastiti, Atahau, & Supramono, 2020). However, accounts payable must be carefully managed to maintain supplier relationships. Strategic differences also emerge across industries—firms with limited competition often reduce receivables to boost cash flow, while those with many suppliers may prioritize extending payables (Wekesa & Njeru, 2022).

International evidence underscores the strategic importance of WCM. In China, rapid economic growth has increased the need for efficient working capital structures to access long-term markets. However, differences in financial systems mean many Chinese firms still rely on informal financing or domestic bank credit, limiting their ability to release funds tied up in working capital (Ren et al., 2019; Vijayakumaran, 2019). Similarly, in Japan and Taiwan, higher-valued firms tend to invest less in working capital than their lower-valued counterparts, with efficient WCM contributing to uninterrupted operations and timely payments to stakeholders (Tsuruta, 2019; Le, 2019).

In contrast, developing economies often struggle with WCM inefficiencies that depress firm value. Nigerian listed firms have faced declining performance due to inadequate management of liquid assets, poor debt handling, and suboptimal cash conversion and inventory policies (Otekunrin et al., 2021; Oladipo, Adegboyo, & Olugbamiye, 2020). While longer collection periods may boost sales, they reduce liquidity; conversely, extended payment terms can improve operations if early-payment discounts are leveraged (Olaoye, Adekanbi, & Oluwadare, 2019). Ugandan manufacturing firms have also recorded persistently low firm values, attributed partly to weak leadership and inadequate WCM. Many lack the capacity to optimize operational funds, making it difficult to meet obligations such as creditor payments, raw material purchases, and tax settlements (Ssendagire, 2018; Mulajje, 2019).

In Kenya, recent trends reflect similar concerns. The Capital Markets Authority (2023) reports that firms listed on the Nairobi Securities Exchange (NSE) have experienced volatile and declining firm values, as shown by fluctuating market capitalization—from KSh 1,932 billion in 2016, rising to KSh 2,593 billion in 2021, before falling to KSh 1,987 billion in 2022 (Mutua, 2023). This decline has been linked to factors such as firm size, liquidity, and asset turnover (Gworo, 2019; Musembi, 2020; Bahraini et al., 2021). Collectively, these insights reveal that WCM is not merely an operational necessity but a strategic driver of firm value. Across contexts—whether in developed or developing economies—firms that fail to optimize working capital risk diminished investor confidence, constrained growth, and weakened market performance.

***Working Capital Management Practices and Firm Value***

Working capital management (WCM) refers to the firm’s accounting policies and administrative strategies for monitoring key components of current assets and liabilities to sustain optimal operational capacity (Oladipo, Adegboyo, & Olugbamiye, 2020). In manufacturing firms, current assets often constitute more than half of total assets, making them critical for sustaining operations and distribution efficiency. However, excessive current assets can depress returns on investment, while insufficient levels can disrupt operational continuity (Ngunju, 2022). Effective WCM requires balancing receivables, payables, and inventory to ensure liquidity and profitability (Nastiti, Atahau, & Supramono, 2020).

Accounts payable management involves strategically managing obligations to suppliers to optimize payment periods without compromising relationships or creditworthiness (Kithinji, Wephukulu, Gekara, & Mwanzia, 2022). Strong supplier relationships can enhance production efficiency and supply chain reliability, while poor debt management can erode operational stability. Extending payment durations can provide firms with additional flexibility in cash flow management, but excessive delays risk damaging vendor trust.

Similarly, accounts receivable management focuses on maintaining an optimal credit level to ensure liquidity while minimizing the risk of bad debts (Wangechi & Irungu, 2023). Effective receivables management not only supports cash flow stability but also strengthens competitive positioning. Coordinating cash inflows from customers with outflows to suppliers and operational expenses forms the basis of an effective cash management strategy (Dan, 2022).

Inventory management is equally critical, encompassing the control, procurement, storage, and movement of goods from raw materials to finished products (Muchaendepi et al., 2019). Timely inventory replenishment prevents production delays, while avoiding overstock minimizes excess working capital and shortens the cash conversion cycle (Oladipo et al., 2020).

***Firm Value***

Firm value represents a key indicator of financial success, reflecting both shareholder wealth and market performance (Sondakh, 2019). It is defined as the total worth of a company’s assets, derived from operational outcomes over a given period (Adiputra & Hermawan, 2020), and is often expressed through metrics such as market capitalization, stock indexes, and book value in relation to equity (Mutua, 2023).

Common measures of firm value include the book value of equity, Return on Assets (ROA), Return on Equity (ROE), and Tobin’s Q. The book value of equity informs investment decisions by signaling a firm’s intrinsic worth and growth potential (Nguyen, Tan, & Nguyen, 2021). ROA measures earnings generated from assets, while ROE assesses management’s effectiveness in generating returns for shareholders (Adan, 2021).

Tobin’s Q, calculated as the ratio of a firm’s market value (equity and liabilities) to its total asset value, serves as a widely used proxy for firm value. A ratio above one suggests that the market values the firm’s assets more highly than their replacement cost, indicating strong growth prospects (Sudiyatno et al., 2020). In the manufacturing sector, Tobin’s Q for listed firms rose from 1.27 in 2019 to 1.62 in 2020, before declining to 0.669 in 2021, 0.653 in 2022, and 0.571 in 2023, reflecting changing market perceptions of asset utilization and growth potential.

***Figure 1: Tobin Q of manufacturing firms listed in NSE***

***Nairobi Securities Exchange***

The Nairobi Securities Exchange (NSE), established in 1954 as a self-regulating association of share dealers under Kenyan law, was restructured in 1991 into a company limited by guarantee under the Companies Act. Since then, the number of brokerage firms, investment banks, custodians, rating agencies, and listed entities has expanded in line with market growth. The NSE facilitates trading in bonds, preference shares, and ordinary stocks, classifying listed companies into eleven sectors, including financial services, manufacturing, construction, energy and petroleum, telecommunications and technology, automotive, and other commercial enterprises (NSE, 2013). Publicly traded firms issue common or preferred shares, which are subsequently exchanged on the market.

***Listed Manufacturing Companies***

Within this framework, Kenya’s manufacturing sector plays a strategic role in the nation’s Vision 2030 objective of attaining middle-income status, operating primarily on an export-oriented model. According to the Kenya Association of Manufacturers (2015), the industry comprises twelve subsectors ranging from food and beverages to pharmaceuticals, textiles, electronics, and metals (Waihenya, 2018). Currently, ten manufacturing companies are listed on the NSE. However, their market capitalisation declined from 32.98% of GDP in 2019 to 21.18% in 2020, significantly lower than the USA (194.34%) and South Africa (313.48%) in the same year. Similarly, the value of shares traded fell by 3.2%, from Ksh. 154.0 billion in 2019 to Ksh. 149.0 billion in 2020, influencing investor confidence and decision-making.

**1.1 Research Problem**

Firm value plays a critical role in publicly listed companies as it shapes investor perceptions and guides investment decisions (Adiputra & Hermawan, 2020). A higher firm value fosters positive investor sentiment, attracting capital inflows and signaling effective resource management capable of maximizing shareholder wealth (Pujiati & Averina, 2022; Salim & Firdaus, 2020). Despite this significance, the value of manufacturing firms in Kenya has been on a decline, reflected in falling Tobin’s Q ratios—from 0.669 in 2021 to 0.653 in 2022, and further down to 0.571 in 2023. For instance, Africa Mega Agricorp Plc (formerly Kenya Orchards Limited) reported an 8.1% drop in Tobin’s Q in 2023, largely attributed to inefficient working capital management (Zutter & Smart, 2019).

Internationally, studies reveal important but incomplete insights. Tsuruta (2019) examined how Japanese firms navigated the global financial crisis, highlighting a contextual gap for Kenyan manufacturing firms. Oranefo and Egbunike (2023) investigated Nigerian manufacturers’ accounts payable turnover, focusing on firm performance rather than firm value—indicating a conceptual gap. Locally, Mwirigi et al. (2018) linked working capital management to firm success but applied a causal research design with methodological limitations. Addressing these gaps, this study examines how working capital management strategies influence the value of manufacturing firms listed on the Nairobi Securities Exchange.

**1.2 Research Objective**

This study was guided by the following general objective to: investigate the effect of working capital management practices on firm value of manufacturing companies listed in Nairobi Securities Exchange.

Specific Objectives were to;

1. To determine the effect of accounts receivable management on firm value of manufacturing companies listed in NSE.
2. To determine the effect of accounts payable management on firm value of manufacturing companies listed in NSE.
3. To examine the effect of inventory management on firm value of manufacturing companies listed in NSE.

**1.3 Research Hypothesis**

**Ho1**: Management of accounts receivable does not have a significant effect on the value of the firm of manufacturing companies listed in NSE.

**Ho2:** Accounts payable management does not have a significant effect on the value of the firm of manufacturing companies listed in NSE.

**Ho3**: Inventory management does not have a significant effect on value of the firm of manufacturing companies listed in NSE.

**1.4 Justification of the Study**

This study seeks to inform policymakers on integrating effective working capital management (WCM) into liquidity regulatory frameworks to enhance firm value. Aligning with the Capital Markets Authority’s mandate to strengthen market efficiency, it will provide evidence on the critical role of WCM in corporate value creation. For industrial enterprises, especially publicly listed manufacturing firms, the findings will guide executives, administrators, and boards in optimizing operating funds for sustainable growth. Furthermore, the study will identify research gaps, offering a foundation for future inquiries. By expanding the literature on the WCM–firm value nexus, it will serve as a valuable academic and practical reference.

**1.5 Limitations of the Study**

The study mitigated historical limitations of secondary data by using the most recent available records. Anticipating concerns over financial statement authenticity from creative accounting, it excluded entities with over a year of missing data and relied solely on verified reports from reputable sources, including the NSE and official corporate websites.

**2.0 LITERATURE REVIEW**

***Theoretical Review***

This study draws on three key theoretical frameworks—Cash Conversion Theory, Transaction Cost Theory, and Shareholder Value Theory—to contextualize the relationship between working capital management (WCM) and firm value. Together, these perspectives illuminate the mechanisms through which operational capital administration influences corporate worth, particularly in manufacturing firms.

***Cash Conversion Theory***

Cash Conversion Theory, developed by Richard and Laughlin (1980), conceptualizes cash as the time span between the investment in business assets and the realization of income. The theory assumes that the cash conversion cycle (CCC) reflects a firm’s effectiveness in balancing sales and purchase transactions, a process closely tied to revenue growth. Effective CCC management is therefore a core responsibility for business owners, as it directly affects liquidity and the ability to meet short- and long-term obligations (Brooks, 2013).

The CCC framework underscores the importance of timely cash collections and disciplined payment policies to preserve financial stability (Filbeck & Krueger, 2015). Payables, as short-term obligations, must be carefully managed alongside recurring sales and purchases to optimize cash flow (Oladipupo & Okafor, 2013). In manufacturing firms, cash holdings and CCC efficiency are critical drivers of market performance (Muturi, 2015). By reducing the time required to convert working capital into cash, firms enhance profitability and operational agility.

However, a shorter CCC is not always synonymous with superior performance. Aggressive reductions may harm customer relations or sales, and the model’s focus on cycle duration often overlooks inventory costs, financing expenses, and other crucial WCM factors (Wang, 2019). Despite these limitations, CCC remains a valuable measure of efficiency. For manufacturing firms, the theory supports the hypothesis that effective WCM enhances firm value by optimizing liquidity and sustaining revenue generation.

***Transaction Cost Theory***

Transaction Cost Theory (TCT), as articulated by Williamson (1981), posits that firms create value by structuring operations to minimize the costs associated with transactions. These costs arise from bounded rationality, opportunism, uncertainty, asset specificity, and transaction frequency. Organizations therefore adopt governance structures and operational processes that reduce such costs while maintaining efficiency.

In the context of WCM, TCT emphasizes prudent trade credit management to lower reliance on costly external financing. Assessing the creditworthiness of new and existing customers helps avoid bad debts and reduces the need for expensive credit evaluations (Bellouma, 2014). Similarly, efficient inventory sourcing—such as bulk purchasing to secure trade discounts—lowers operational expenses (Muchina & Kiano, 2011). Separating ordering and payment cycles, as Williamson (1981) suggests, can further reduce financing costs. Encouraging prompt customer payments also minimizes the risk and expense of debt recovery (Dary & James, 2019).

From a WCM perspective, effective management of cash, debtors, creditors, and inventory requires strategic coordination and disciplined execution. TCT thus supports policies that streamline payment terms, maximize supplier incentives, and reduce waste. For example, timely accounts receivable collection avoids the need for third-party debt collection services, thereby reducing costs.

Nonetheless, TCT faces criticisms for its static nature and narrow focus. By emphasizing cost minimization, it can underplay strategic considerations such as risk management, innovation, and market positioning (Lacity & Willcocks, 2009). Despite these limitations, the theory is a useful lens for understanding how efficient WCM practices—particularly in receivable, payable, and inventory management—translate into reduced operating costs and enhanced profitability.

***Shareholder Value Theory***

Proposed by Friedman (1970), Shareholder Value Theory (SVT) remains one of the most widely applied economic models in corporate governance. It holds that a firm’s primary responsibility is to maximize shareholder wealth, measured through dividend payouts and share price appreciation (Alchian & Demsetz, 2011; Clarke, 2008). In this framework, management’s fiduciary duty is to safeguard and enhance company assets for the ultimate benefit of shareholders, who are considered the true owners of the business.

Operationally, SVT promotes decision-making that prioritizes revenue growth, cost control, and risk reduction to drive long-term firm value. By aligning WCM strategies with shareholder interests, management can improve liquidity, profitability, and overall market valuation. Bondholders, while important, are considered secondary to shareholders in value distribution priorities (Margolis & Walsh, 2003). The model’s influence is deeply entrenched in financial practice, reinforcing the primacy of value maximization as a corporate goal (Saint & Tripathi, 2006). Within this study, SVT is relevant in explaining how WCM policies—such as efficient cash flow management or inventory optimization—can contribute directly to firm value, thereby fulfilling the shareholder mandate.

However, the theory has been critiqued for its narrow focus on financial returns, potentially neglecting broader corporate responsibilities. Berle and Means (1932) argued that firms serve multiple purposes beyond shareholder enrichment, including fostering innovation, supporting communities, and advancing social goals. In modern contexts, many investors place value on corporate social responsibility alongside financial performance (Kyriakou, 2018). This broader stakeholder orientation suggests that while maximizing shareholder wealth remains important, it should be balanced against the interests of employees, customers, suppliers, and society at large.

In the present study, SVT informs the dependent variable—firm value—by framing it as the central outcome of WCM decisions. Yet it also prompts consideration of how value creation can be aligned with evolving stakeholder expectations in the manufacturing sector.

***Integrated Theoretical Perspective***

Taken together, these three theories provide complementary insights into the link between WCM and firm value. Cash Conversion Theory offers an operational measure of liquidity efficiency; Transaction Cost Theory explains how cost minimization strategies in receivables, payables, and inventory can preserve resources; and Shareholder Value Theory connects these operational efficiencies to the ultimate goal of increasing firm worth.

By integrating these perspectives, the study recognizes that effective WCM is not merely a technical exercise in managing cash flows. It is also a strategic activity that balances liquidity optimization, cost efficiency, and long-term value creation. While each theory has its limitations—ranging from operational oversimplification in CCC, to static assumptions in TCT, to the narrow focus of SVT—their combined application allows for a richer and more nuanced understanding of how manufacturing firms can enhance market performance through disciplined and strategically aligned working capital management.

**2.1 Empirical Review**

**Accounts Receivable Management and Firm Value**

Accounts receivable management (ARM) plays a critical role in influencing firm value and financial performance, with empirical evidence showing varied impacts across contexts, industries, and firm sizes. Tsuruta (2019) examined current asset management during the global economic downturn in Japan, revealing that asset adjustments were less aggressive during recessions, especially among larger firms. The inverse relationship between surplus current assets and performance intensified during downturns, though this effect was short-lived as firms relied on external financing to support additional assets. While insightful, the study’s Japanese context limits generalization.

In Kenya, Jescah, Dennis, and Fredrick (2024) investigated listed manufacturing firms on the Nairobi Securities Exchange (NSE) between 2017 and 2021. Using causal design and secondary data from eight firms, they found a significant relationship between ARM practices and firm value. However, their focus was limited to ARM, excluding other working capital management (WCM) components.

Similarly, Mbarushimana and Kengere (2023) explored ARM and financial performance in Rwanda using Cimerwa Plc as a case study. Results showed that lending policies and credit assessments positively influenced performance, while recovery protocols and invoicing procedures had no significant impact. Although highlighting ARM’s importance, the study examined financial performance rather than firm value.

In Turkey, Adıgüzel (2022) analyzed industrial firms listed on Borsa Istanbul (2005–2017), treating trade receivable variables as endogenous and applying the generalized method of moments (GMM). Findings indicated that extended payment terms generally reduced firm value, particularly in high-profit firms. This study’s causal design offers robust evidence, though its market context differs from Kenya.

Kumar and Suneetha (2022), in a desktop study of Bangalore’s Composite Investments Pvt Ltd, observed declining current liabilities and rising current assets, recommending enhanced WCM to improve profitability. While relevant, the study’s descriptive nature and single-firm scope limit its generalizability.

In India, Mittal and Monika (2020) studied 193 small-cap manufacturing firms (2011–2019), concluding that trade credit extension and collection significantly influenced performance. Yet, like several others, the study did not directly address firm value.

Qureshi and Mahmood (2020) analyzed non-financial firms in Bangladesh, India, and Pakistan (2011–2018) and found a U-shaped relationship: moderate receivables enhanced firm value, but excessive receivables diminished it. This underscores the need for an optimal receivable level to maximize shareholder wealth. Dan (2020) investigated Nigerian manufacturing firms (2010–2019) using OLS regression, finding a positive link between receivable period length and return on assets, moderated by firm size and leverage. The focus, however, remained on financial performance rather than firm value.

In Kenya, Muthoni, Naibei, and Livingstone (2020) reported a strong connection between ARM and manufacturing firms’ success, though they used primary data and did not examine firm value. Similarly, Wasike (2019) linked receivable metrics—such as average collection period and turnover ratio—to financial success in water companies, finding mixed directional effects but excluding firm value from the analysis.

Yao and Deng (2019) in China examined the interplay between ARM policies and managerial incentives, concluding that managerial risk-taking incentives (vega) were negatively correlated with the market value of receivables. This managerial behavior dimension remains underexplored in African contexts. At the SME level, Lyani (2019) studied client balance management in Kakamega County, Kenya, and found that effective ARM strategies significantly enhanced SME growth. The study, however, addressed growth rather than value creation.

From a Middle Eastern perspective, Alalami and Hakim (2021) assessed ARM’s impact on firm value in Saudi Arabia, using Radwa Trading Company as a case. Aging receivables negatively affected firm value, with the absence of a dedicated credit department contributing to poor receivable control. External factors, such as economic recession, exacerbated delays, but optimized payment terms improved ARM effectiveness. Globally, Yaremenko (2018) synthesized practices in managing receivables and payables, identifying fundamental approaches but omitting the firm value dimension. This omission is significant given that in competitive markets, ARM effectiveness often translates directly into shareholder wealth.

Collectively, these studies reveal several thematic patterns. First, ARM is consistently linked to performance indicators—profitability, return on assets, and growth—but fewer studies explicitly connect it to firm value, leaving a gap in understanding its strategic contribution. Second, contextual factors matter: developed versus emerging markets, industry-specific credit practices, and macroeconomic conditions shape ARM’s effects. For example, in high-profit Turkish firms, long payment terms reduce value (Adıgüzel, 2022), while in South Asia, optimal receivable levels yield a U-shaped value relationship (Qureshi & Mahmood, 2020).

Third, methodological diversity affects findings. Causal designs with robust econometrics (e.g., GMM, panel regressions) tend to uncover nuanced relationships, including thresholds and bidirectional effects, while descriptive or single-case studies often report straightforward positive or negative associations without controlling for endogeneity. Fourth, geographic and sectoral gaps persist. Most African studies—including those in Kenya—emphasize performance over firm value, and many exclude cross-sectoral comparisons. Moreover, SME-focused research often stops short of linking ARM to value creation, instead framing it as a growth enabler.

Finally, ARM’s influence is rarely isolated from broader WCM frameworks, meaning some studies risk overestimating or underestimating its standalone effect. The Kenyan manufacturing sector, with its mix of local and export-oriented firms, presents a fertile ground for examining these dynamics. Given the sector’s exposure to fluctuating payment cycles, credit risk, and liquidity pressures, understanding the precise ARM–firm value relationship can inform both managerial policy and investor decision-making.

***Accounts Payable Management and Firm Value***

Several studies have examined the relationship between accounts payable management and firm value, albeit with varying contexts, methodologies, and scopes. Wilujeng and Widodo (2024) investigated the effect of accounts payable and intellectual capital on corporate value using a case study design and SPSS analysis. They found that accounts payable policy significantly influenced firm value, whereas intellectual capital had no meaningful effect. However, other dimensions of working capital management (WCM) were excluded, leaving scope for broader inquiry.

Similarly, Kiptum (2023) explored the effect of accounts payable on the financial performance of county governments through a descriptive approach. Findings revealed a positive impact, though the public-sector focus differs from the present study, which targets Nairobi Securities Exchange (NSE)-listed firms. In Nigeria, Oranefo and Egbunike (2023) employed an ex post facto design to assess 75 non-financial firms over 2010–2019. Using multivariate regression, they found that accounts payable turnover ratio had a significant negative effect on Tobin’s Q, while its relationship with ROA and ROE was positive but insignificant. In a related context, Nkwasibwe et al. (2023) reported a substantial positive link between payables management and the financial outcomes of Kazire Health Products Ltd., despite declining profit margins over three years. They emphasized payables as a key source of unsecured short-term financing.

Accounts payable management has also been linked to the performance of small businesses. Anorue and Ugwoke (2022), surveying 396 respondents in Imo State, Nigeria, identified best practices for managing payables and receivables to enhance small business performance. They recommended continuous training for entrepreneurs on effective debt management. Likewise, Sah (2022) found that SMEs in Ghana’s Kumasi Metropolis applied trade debt management techniques effectively, with statistically significant effects on operational performance.

Other national contexts present similar findings. Altawalbeh (2020) reported that creditor management significantly influenced the performance of Jordanian firms, while Mittal and Monika (2020) observed in small-cap enterprises that accounts payable, shaped by trade receivables behavior, negatively affected profitability but had little effect on firm value. They concluded that effective accounts receivable administration indirectly improves value and profitability.

Nam and Uchida (2019), applying a difference-in-differences approach using the 2008 Global Financial Crisis as an exogenous shock, found that accounts payable significantly influenced business value, particularly in civil-law countries with long-term planning cultures. Enow and Kamala (2019) highlighted barriers to effective payable management among South African SMEs, including weak bargaining power with suppliers. Within Kenya, Waweru (2019) identified a link between WCM and firm valuation using descriptive methods, while Mutai and Kimani (2019) showed that trade payables management significantly affected the financial resources of state vocational colleges in the Rift Valley. Similarly, Gakurya and Olouch (2018) found that accounts payable procedures positively influenced county government performance, and Mwirigi et al. (2018) demonstrated that well-executed WCM enhances firm competitiveness, though their causal design differs from the explanatory approach of the present study.

***Inventory Management and Firm Value***

Inventory management has been widely examined as a determinant of firm value and performance. Fuspanita and Thamrin (2024) analyzed quarterly data from Indonesian F&B firms (2020–2023) using panel regression, finding a significant influence of inventory management on firm value. Similarly, Chindengwike (2024) reported that inventory turnover positively affected profitability in Tanzanian listed manufacturing firms.

Panigrahi et al. (2024) provided a systematic review of 95 studies on inventory management in SMEs, highlighting the roles of human, technical, and digital capabilities in shaping inventory practices. However, like several studies, their work focused narrowly on inventory without integrating other WCM components. Truong (2023) also found that a longer inventory conversion period reduced both operating cash flow and profitability among Vietnamese manufacturing firms, reinforcing the critical role of inventory efficiency.

Triyanto and Priyanto (2023) reported a positive effect of inventory management on supermarket firm value, while Rashid and Rasheed (2023) identified a significant mediating role of inventory management in the relationship between knowledge and organizational success, emphasizing the importance of trained staff and product availability. Other sector-specific studies underscore these findings. Akinlabi (2021) observed that automated inventory systems improved operational efficiency in Nigerian flour milling firms, while Garba et al. (2020) found that inventory turnover management influenced profitability in Nigerian conglomerates. Torky (2020) and Althaqafi (2020) concluded that effective inventory management enhances profitability, while poor control undermines financial performance.

Kangogo and Irungu (2020) linked inventory conversion periods inversely to performance in financially distressed Kenyan engineering firms, and Khan (2020) found that business strategies mediated the relationship between inventory capabilities and enterprise success in Bangladesh’s apparel sector.

In Nigeria, Asuzu et al. (2019) revealed a significant negative relationship between inventory turnover and net profits, while Chebet and Kitheka (2019) emphasized the importance of continuously assessing economic order quantities to improve effectiveness. Kariuki (2019), focusing on Laikipia County, found that IT-based systems such as JIT, VMI, and ERP improved efficiency, reduced costs, and enhanced relationships, thereby boosting firm performance.

Ernest et al. (2019) concluded that inventory management improved operational and marketing performance but had limited impact on financial performance. Their findings, consistent with others, suggest that while inventory practices are crucial for operational success, their direct link to firm value may depend on broader WCM integration.

***Synthesis and Research Gap***

Across contexts, evidence consistently points to a significant relationship between accounts payable management, inventory control, and firm outcomes—whether measured as profitability, operational efficiency, or market value. Accounts payable often serves as a vital source of short-term financing, but its impact on firm value varies depending on sector, institutional setting, and interaction with other WCM components. Inventory management similarly influences operational performance and, in some cases, firm value, but its effects are contingent on the efficiency of processes and supporting systems.

However, several gaps persist. Many studies adopt descriptive or ex post facto designs, limiting causal inference. Others focus narrowly on single WCM components without considering their interdependence. Contextual limitations are also evident, as a substantial share of the literature is drawn from non-Kenyan settings, and public-sector or SME-focused research may not generalize to NSE-listed manufacturing firms. Furthermore, firm value—measured through market-based indicators such as Tobin’s Q—remains underexplored relative to operational and financial performance metrics.

The present study addresses these gaps by employing an explanatory research design to investigate the combined influence of accounts payable and inventory management on the firm value of NSE-listed manufacturing companies. By integrating multiple dimensions of WCM within the Kenyan market context, it provides a more comprehensive understanding of how short-term financial policies shape long-term corporate valuation.

**3.0 RESEARCH METHODOLOGY**

***Research Design***

The research design provides the framework for assembling, measuring, and analyzing data to address research questions (Cooper & Schindler, 2016). This study adopted an explanatory research design, which is suited for examining cause-and-effect relationships among variables (Etikan & Bala, 2017; Saunders et al., 2009). Explanatory designs not only clarify causal linkages but also deepen understanding by enabling prediction of future outcomes based on observed patterns (Rahi, 2017). This approach was therefore appropriate for exploring the relationship between working capital management practices and firm value.

***Target Population***

The target population comprised all manufacturing firms listed on the Nairobi Securities Exchange (NSE). As of 2024, there were 10 such firms (Kenya Association of Manufacturers, 2024). The unit of analysis was the firm, and the study covered a 10-year period (2014–2023) to capture trends before and after the COVID-19 pandemic.

***Sampling Design***

A sample is a representative subset of the target population (Wilson, 2010). Purposive sampling was applied, including only firms that had been consistently listed on the NSE throughout the study period. Of the 10 eligible firms, 7 met this criterion. Firms that had been delisted during the period were excluded to ensure consistency and completeness of data.

***Data Collection Instrument***

Secondary data were collected using a standardized data collection sheet (Appendix I). The variables included firm value, accounts receivable, accounts payable, and inventory levels. Data spanned the 2014–2023 period, drawn from audited annual financial reports available on the NSE.

***Data Collection Procedure***

The researcher extracted quantitative data directly from the audited reports of the sampled firms. The standardized sheet ensured uniformity and comparability across firms and time periods.

***Data Analysis and Presentation***

Data were coded and analyzed using STATA. Correlation analysis assessed the strength and direction of relationships among variables, while regression analysis quantified their magnitude and significance (Flynn & Uttley, 2021). Results were presented using tables and figures for clarity.

Prior to inferential analysis, diagnostic tests were conducted to ensure model validity and reliability, addressing potential issues such as bias, inefficiency, and inconsistent parameter estimates (Gujarati, 2003).

* Multicollinearity: Variance Inflation Factor (VIF) values were computed to detect high correlations among independent variables. Values below 10 indicated absence of multicollinearity (Salmeron et al., 2018). Centering was used where necessary to standardize predictors without altering coefficient interpretation (Chan et al., 2022).
* Normality: The Shapiro–Wilk test assessed whether data followed a normal distribution (Khatun, 2021). A p-value ≤ 0.05 indicated violation of normality, in which case data transformations were applied.
* Heteroscedasticity: Given the cross-sectional nature of the data, the Breusch–Pagan and White’s tests were used to check whether error variances were constant over time (Kaufman, 2013). A p-value above 0.05 indicated homoscedasticity.
* Autocorrelation: The Durbin–Watson statistic evaluated serial correlation in residuals (Wooldridge, 2002). Values between 1.5 and 3.0 met the assumption of no autocorrelation (Garson, 2012).
* Hausman Test: This test determined whether a fixed-effects or random-effects model was more suitable (Nikolakopoulou et al., 2014). A p-value above 0.05 supported the random-effects model; otherwise, the fixed-effects model was adopted.
* Stationarity: The Levin–Lin–Chu (LLC) unit root test checked whether the variables were stationary. If the null hypothesis of a unit root was accepted, data were transformed (e.g., through differencing or log transformation) to ensure stationarity.

***Ethical Considerations***

The study adhered to ethical guidelines to safeguard the rights and welfare of all stakeholders (Mugenda, 2008). Approval was obtained from the Kenyatta University Graduate School, followed by a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). Only publicly available secondary data were used, minimizing confidentiality concerns.

**4.0 RESULTS AND DISCUSSION**

**4.1 Descriptive** **Analysis**

***4.1.1 Firm Value (Tobin's Q)***

Tobin’s Q, calculated as the ratio of a firm’s market value to its total asset value, is a key indicator of market expectations regarding growth and asset efficiency. Over the 10-year period, sampled manufacturing firms recorded a mean Tobin’s Q of 1.23, reflecting 23% higher market valuation than book value. The lowest mean (0.93) occurred in 2020 during COVID-19 disruptions, followed by recovery to 1.31 in 2023, indicating renewed investor confidence. Consistent with prior studies, the moderate standard deviation (0.41) suggests relatively stable long-term market perceptions despite short-term shocks.

**Table 1: Descriptive Statistics for Firm Value (Tobin's Q)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Mean | Std. Dev. | Min | Max |
| 2014 | 1.37 | 0.43 | 0.82 | 2.15 |
| 2015 | 1.42 | 0.47 | 0.79 | 2.27 |
| 2016 | 1.31 | 0.39 | 0.81 | 1.98 |
| 2017 | 1.29 | 0.38 | 0.76 | 1.89 |
| 2018 | 1.24 | 0.36 | 0.72 | 1.87 |
| 2019 | 1.26 | 0.41 | 0.68 | 1.92 |
| 2020 | 0.93 | 0.29 | 0.54 | 1.41 |
| 2021 | 0.98 | 0.31 | 0.61 | 1.56 |
| 2022 | 1.18 | 0.35 | 0.72 | 1.78 |
| 2023 | 1.31 | 0.42 | 0.77 | 1.94 |
| Overall | 1.23 | 0.41 | 0.54 | 2.27 |

***4.1.2 Accounts Receivable Management***

Accounts receivable management, measured by the average collection period (ACP), was calculated as 365 days divided by receivables turnover. The mean ACP over the study period was 59.06 days, indicating firms took nearly two months to collect dues. A sharp rise occurred in 2020–2021, peaking at 72.54 days in 2020, reflecting pandemic-induced customer payment delays. The high standard deviation (20.22 days) reveals wide variability in practices. Prolonged ACPs strain liquidity (Otieno & Kilonzo, 2022), while eased credit terms during disruptions (Gachoka et al., 2021) further delay collections. Post-pandemic declines indicate tightened credit controls.

***Table 2: Descriptive Statistics for Average Collection Period (Days)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Mean | Std. Dev. | Min | Max |
| 2014 | 52.37 | 17.42 | 29.34 | 85.67 |
| 2015 | 51.89 | 16.94 | 28.45 | 83.21 |
| 2016 | 54.23 | 18.56 | 30.12 | 89.45 |
| 2017 | 56.78 | 19.32 | 31.45 | 92.67 |
| 2018 | 58.12 | 20.14 | 32.67 | 95.32 |
| 2019 | 57.65 | 19.87 | 31.23 | 93.45 |
| 2020 | 72.54 | 25.67 | 41.23 | 112.45 |
| 2021 | 68.32 | 23.45 | 38.56 | 105.67 |
| 2022 | 61.45 | 21.34 | 34.67 | 98.23 |
| 2023 | 57.23 | 19.45 | 31.56 | 92.34 |
| Overall | 59.06 | 20.22 | 28.45 | 112.45 |

***4.1.3 Accounts Payable Management***

Accounts payable management, measured via the average payment period (APP), was calculated as 365 days divided by the payables turnover ratio. Results show a mean APP of 73.53 days, with firms typically settling obligations within about 74 days. In 2020, APP peaked at 95.67 days, reflecting strategic delays to safeguard cash flow during COVID-19. The high standard deviation (26.35 days) indicates substantial variation in payment practices, aligning with Njeru and Wanyoike (2022). Although extended cycles may boost short-term liquidity (Akoth & Onyango, 2021), post-2021 declines suggest improved liquidity and normalized supplier relations.

***Table 3: Descriptive Statistics for Average Payment Period (Days)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Mean | Std. Dev. | Min | Max |
| 2014 | 64.56 | 22.34 | 35.67 | 98.34 |
| 2015 | 63.45 | 21.67 | 34.89 | 97.23 |
| 2016 | 66.78 | 23.45 | 36.78 | 102.34 |
| 2017 | 68.93 | 24.67 | 38.45 | 105.67 |
| 2018 | 70.23 | 25.34 | 39.56 | 108.45 |
| 2019 | 69.45 | 24.89 | 38.67 | 106.78 |
| 2020 | 95.67 | 35.67 | 58.34 | 143.67 |
| 2021 | 89.34 | 32.45 | 54.67 | 135.45 |
| 2022 | 75.67 | 27.34 | 42.56 | 115.67 |
| 2023 | 71.23 | 25.67 | 39.78 | 109.56 |
| Overall | 73.53 | 26.35 | 34.89 | 143.67 |

***4.1.4 Inventory Management***

Inventory management was assessed using the inventory conversion period (ICP), calculated as the average inventory divided by the cost of goods sold, multiplied by 365 days (Table 4). The average ICP was 85.52 days, indicating firms required nearly three months to convert inventory into sales. The peak of 103.67 days in 2020 reflected pandemic-related supply chain disruptions and weak demand. By 2023, ICP declined to 84.23 days, signaling recovery. However, a high variability (SD = 27.81) shows uneven efficiency. Prior studies link efficient turnover to lower holding costs, liquidity stability, and profitability.

***Table 4: Descriptive Statistics for Inventory Conversion Period (Days)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Mean | Std. Dev. | Min | Max |
| 2014 | 76.34 | 24.56 | 42.34 | 118.45 |
| 2015 | 75.67 | 24.23 | 41.89 | 117.34 |
| 2016 | 79.45 | 25.67 | 44.23 | 123.56 |
| 2017 | 82.67 | 26.78 | 46.34 | 128.45 |
| 2018 | 84.56 | 27.34 | 47.45 | 131.23 |
| 2019 | 83.45 | 26.89 | 46.78 | 129.67 |
| 2020 | 103.67 | 34.56 | 62.45 | 158.23 |
| 2021 | 97.45 | 32.34 | 58.67 | 149.56 |
| 2022 | 87.67 | 28.45 | 49.34 | 135.67 |
| 2023 | 84.23 | 27.23 | 47.23 | 130.56 |
| Overall | 85.52 | 27.81 | 41.89 | 158.23 |

**4.2 Trend of Firm Value (2014-2023)**

From 2014 to 2023, firm value exhibited notable fluctuations. Tobin’s Q fell to 0.93 in 2020—a 26.2% drop from 2019—mirroring Ding et al.’s (2021) observation of pandemic-induced market value erosion from supply chain disruptions and demand shocks. The rebound from 2021 to 2023 aligns with Hassan and Tarique’s (2022) claim of manufacturing sector resilience during crises. A pre-pandemic decline (2015–2018) supports Okello’s (2019) view that rising costs and competition suppressed valuations. By 2023, recovery to 1.31 reinforced Ngugi and Wanjau’s (2023) finding that strategic adjustments restored investor confidence.



***Figure 2: Trend of Firm Value (2014-2023)***

**4.3 Trend of Working Capital Management Components (2014-2023)**

Figure 3 shows a marked decline in working capital efficiency during the pandemic, with all three components peaking in 2020. The average collection period rose to 72.54 days, reflecting extended credit terms (Rahman & Mohammed, 2021). Inventory conversion surged to 103.67 days due to demand uncertainty and supply chain disruptions (Gitonga et al., 2022). The payment period lengthened to 95.67 days, indicating cash preservation strategies (Muriithi & Waweru, 2023). Post-2021, firms pursued aggressive optimization, restoring efficiency and liquidity, consistent with Kibet and Machuki’s (2024) findings.



***Figure 3: Trend of Working Capital Management Components (2014-2023)***

**4.4 Diagnostic Tests**

***Multicollinearity Test***

All variables exhibited VIF values well below the threshold of 10, indicating no serious multicollinearity. The average collection period recorded the highest VIF (2.37) and inventory conversion period the lowest (1.89). With a mean VIF of 2.17, the model retained all independent variables for analysis without concern.

*Table 5 Multicollinearity Test Results*

|  |  |  |
| --- | --- | --- |
| Variable | VIF | 1/VIF |
| AverageCollection Period | 2.37 | 0.422 |
| Average PaymentPeriod | 2.25 | 0.444 |
| Inventory Conversion Period | 1.89 | 0.529 |
| Mean VIF | 2.17 |  |

***Normality Test***

The Shapiro–Wilk tests (p > 0.05) confirmed normality for all variables and residuals, with W statistics between 0.972 and 0.986. This indicates that both dependent and independent variables, as well as regression residuals, followed a normal distribution, thereby satisfying the normality assumption for subsequent statistical analyses.

*Table 6 Shapiro-Wilk Normality Test Results*

|  |  |  |
| --- | --- | --- |
| Variable | W | p-value |
| Firm Value (Tobin's Q) | 0.972 | 0.123 |
| Average Collection Period | 0.984 | 0.458 |
| Average Payment Period | 0.978 | 0.263 |
| Inventory Conversion Period | 0.981 | 0.376 |
| Residuals | 0.986 | 0.542 |

***Heteroscedasticity Test***

With three degrees of freedom, the chi-square value was 3.246 (p = 0.355; Table 7). Since p exceeded 0.05, the null hypothesis of homoscedasticity was retained, indicating constant residual variance across observations. Thus, the homoscedasticity assumption was met, supporting the validity of the regression model’s error structure.

*Table 7 Breusch-Pagan Test for Heteroscedasticity*

|  |  |  |
| --- | --- | --- |
| Chi-square | Degrees of Freedom | p-value |
| 3.246 | 3 | 0.355 |

***Autocorrelation Test***

Table 8 reports a p-value of 0.467 and a Durbin–Watson statistic of 1.923. Since the p-value exceeds 0.05 and the statistic lies within the acceptable 1.5–2.5 range, the results confirm the absence of autocorrelation, indicating independent residuals and fulfilling the no-autocorrelation assumption.

Table 8 Durbin-Watson Test for Autocorrelation

|  |  |
| --- | --- |
| Durbin-Watson Statistic | p-value |
| 1.923 | 0.467 |

***Hausman Test***

The Hausman test (χ² = 9.376, df = 3, p = 0.025) rejects the null hypothesis of random effects model reliability, indicating fixed effects as the superior specification. Discrepancies in coefficient estimates between models further justify adopting fixed effects for more accurate and credible parameter estimation.

Table 9 Hausman Test Results

|  |  |  |
| --- | --- | --- |
| Chi-square | Degrees of Freedom | p-value |
| 9.376 | 3 | 0.025 |

***Stationarity Test***

All variables exhibited negative and statistically significant LLC statistics at the 1% level (Table 10), with p-values of 0.000. These results reject the null hypothesis of a unit root, confirming stationarity and eliminating the need for differencing or other transformations when employing the variables in level form.

***Table 10 Levin, Lin, and Chu Unit Root Test Results***

|  |  |  |
| --- | --- | --- |
| Variable | LLC Statistic | p-value |
| Firm Value (Tobin's Q) | -6.742 | 0.000 |
| Average Collection Period | -6.234 | 0.000 |
| Average Payment Period | -7.345 | 0.000 |
| Inventory Conversion Period | -6.967 | 0.000 |

**4.5 Correlation Analysis**

A correlation analysis examined the relationships between firm value (Tobin’s Q) and key working capital components: average collection period, average payment period, and inventory conversion period. Firm value exhibited significant negative correlations with all three, each at the 1% level. The collection period showed the strongest inverse association (r = –0.625), followed by inventory conversion (r = –0.587) and payment period (r = –0.543), indicating that prolonged durations in these cycles reduce valuation. Moderate positive correlations among the independent variables (0.395–0.497) suggest interdependencies, particularly between collection and payment periods, but their magnitudes and diagnostic VIF results indicate minimal multicollinearity concerns

*Table 11 Correlation Matrix*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Firm Value | Avg. Collection Period | Avg. Payment Period | Inventory Conversion Period |
| Firm Value | 1.000 |  |  |  |
| Avg. Collection Period | -0.625\*\*\* | 1.000 |  |  |
| Avg. Payment Period | -0.543\*\*\* | 0.497\*\*\* | 1.000 |  |
| Inventory Conversion Period | -0.587\*\*\* | 0.432\*\*\* | 0.395\*\*\* | 1.000 |

\*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.10

**4.6 Regression Analysis**

Panel data regression, guided by the Hausman specification test, confirmed the fixed effects model as the most suitable for estimating the impact of working capital management on firm value. Results indicated that the average collection period (ACP), average payment period (APP), and inventory conversion period (ICP) each exerted a statistically significant (p < 0.01) and negative effect on Tobin’s Q. Collectively, these variables explained 67.3% of firm value variation (adjusted R² = 0.659), with the model’s overall fit confirmed by an F-statistic of 45.876 (p < 0.001). Coefficient interpretations highlight that longer collection, payment, or inventory periods consistently reduce firm valuation.

*Table 12 Fixed Effects Regression Results*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Coefficient | Std. Error | t-statistic | p-value |
| Constant | 2.942 | 0.237 | 12.413 | 0.000 |
| Average Collection Period | -0.0137 | 0.0031 | -4.419 | 0.000 |
| Average Payment Period | -0.0068 | 0.0023 | -2.957 | 0.004 |
| Inventory Conversion Period | -0.0091 | 0.0027 | -3.370 | 0.001 |
| R-squared | 0.673 |  |  |  |
| AdjustedR-squared | 0.659 |  |  |  |
| F-statistic | 45.876 |  |  |  |
| Prob(F-statistic) | 0.000 |  |  |  |
| Number of observations | 70 |  |  |  |
| Number of firms | 7 |  |  |  |

**5.0 CONCLUSIONS**

The study demonstrates that effective working capital management significantly influences firm value among industrial companies listed on the NSE. Efficient accounts receivable management, reflected in shorter collection periods, signals strong liquidity control, robust customer relationships, and sound credit policies, thereby enhancing market valuation and investor confidence. Similarly, strategic accounts payable management requires balancing short-term liquidity gains with long-term supplier relationships; excessive payment delays may indicate financial distress and reduce firm value, whereas timely, well-communicated payments support sustainable value creation. Inventory management also plays a critical role: the inverse relationship between inventory conversion cycles and firm value underscores the importance of agile, optimized inventory practices. Employing advanced forecasting, just-in-time systems, and integrated supply chains allows firms to reduce holding times while maintaining operational flexibility, improving resource allocation, and boosting shareholder returns. Collectively, these findings highlight that proactive, strategically aligned working capital practices are fundamental drivers of sustainable financial performance and firm valuation.

**6.0 RECOMMENDATIONS**

Manufacturing companies should prioritize comprehensive credit risk assessment systems that integrate traditional financial metrics with alternative data sources to evaluate customer creditworthiness. Such systems enable tailored credit terms, automated payment reminders, and early warning mechanisms for potential defaults, while incentives like graduated discounts can encourage prompt payments. Regular portfolio reviews using aging analysis and trend identification help preempt cash flow disruptions.

Equally, firms should cultivate strategic supplier partnerships that extend beyond transactional interactions to mutually beneficial collaborations. Transparent payment schedules, shared performance metrics, and supply chain financing solutions can align supplier cash flow needs with buyer working capital objectives. Systematic evaluation of early payment discounts against alternative capital uses, alongside performance reviews incorporating payment efficiency, supports holistic supply chain excellence.

Advanced inventory optimization technologies, including AI-driven demand forecasting, IoT-enabled tracking, and automated reordering, can enhance inventory management. Category-specific policies, obsolescence risk assessments, and agile production planning reduce holding times while maintaining service levels. Integrating these systems with supplier and customer interfaces improves supply chain visibility and coordination.

Finally, developing integrated working capital management frameworks that link receivables, payables, and inventory fosters cross-functional collaboration and performance monitoring. Benchmarking and scenario-based stress testing strengthen organizational resilience. Future research should explore non-linear relationships among working capital components, industry-specific strategies during economic disruptions, and qualitative factors such as supplier relationships and technology adoption.

**REFERENCES**

Adan, Y. A. (2021). Effect of macroeconomic factors on the firm value of listed commercial banks in Kenya. Doctoral dissertation, Kca University.

Adıgüzel, G. (2022). Trade Receivables Collection Period and Firm Value: Evidence from Listed Turkish Industrials. Muhasebe Bilim Dünyası Dergisi, 24(1), 132-152.

Adiputra, I. G., & Hermawan, A. (2020). The effect of corporate social responsibility, firm size, dividend policy and liquidity on firm value: Evidence from manufacturing companies in Indonesia. International Journal of Innovation, Creativity and Change, 11(6), 325–338.

Akinlabi, B. H. (2021). Effect of inventory management practices on operational performance of flour milling companies in Nigeria. International Academy Journal of Management, Marketing and Entrepreneurial Studies, 8(2), 137-174.

Akomeah, J., & Frimpong, S. (2019). Effect of working capital management on profitability of listed manufacturing companies in Ghana. International Journal of Finance and Banking Research, 5(2), 29-35.

Alalami, A., & Hakim, S. (2021). The Impact Of Account Receivable In Companies'value: A Study Of Saudi Companies (Radwa Trading Company). PalArch's Journal of Archaeology of Egypt/Egyptology, 18(13).

Alchian, A. A., & Demsetz, H. (2011). Economic Organization. American Economic Review, 58, 211221.

Al-Mawsheki, R. M., Ahmad, N. B., & Nordin, N. B. (2019). The effects of efficient working capital management and working capital policies on firm performance: Evidence from Malaysian manufacturing firms. International Journal of Academic Research in Accounting, Finance and Management Sciences, 9(3), 59-69.

Altawalbeh M.A.F, (2020). Impact of working capital management on financial performance: evidence from Jordan, International Journal of Academic Research in Accounting, Finance, and Management Sciences 10 (1): 308-315

Althaqafi, T., (2020) Effect of inventory management on financial performance: evidence from the Saudi manufacturing company. European Journal of Accounting, Auditing, and Finance Research, 8, (10),13-26.

Anorue, H. C., & Ugwoke, E. O. (2022). Management of Account Receivable and Payable for Improved Financial Performance of Small Scale Industries in Imo State, Nigeria. International Journal of Research and Innovation in Social Science, 6(4), 100-107.

Asuzu, P. U., Echekoba, F. N., Ubesie, C. M., & Egbunike, F. C. (2019). Inventory turnover and firm performance Of Quoted Consumer Goods Manufacturing Firms In Nigeria. Journal of Global Accounting, 6(3), 97-123.

Bellouma, M. (2014). Trade credit policy and agency theory: Evidence from Tunisian export companies. Global Journal of Management and Business Research: Economics and Commerce, 14(3).

Belo, F., Gala, V. D., Salomao, J., & Vitorino, M. A. (2022). Decomposing firm value. Journal of Financial Economics, 143(2), 619-639.

Brooks, R. (2013). Financial Management. 2nd Edition. London: Pearson Educational Limited.

Bryman, A. (2016). Social Research Methods (5th ed.). Oxford University Press.

Chan, J. Y. L., Leow, S. M. H., Bea, K. T., Cheng, W. K., Phoong, S. W., Hong, Z. W., & Chen, Y. L. (2022). Mitigating the multicollinearity problem and its machine learning approach: a review. Mathematics, 10(8), 1283.

Chebet, E., & Kitheka, S. (2019). Effects of inventory management system on firm performance–an empirical study.

Chindengwike, J. D. (2024). Influence of inventory turnover on the profitability of listed manufacturing firms in Dar Es Salaam stock exchange, Tanzania. African Journal of Economic and Sustainable Development, 9(4), 273-283.

Clarke, T. (2008). Ethics, values and corporate governance. I. Ethics In A Global World, 405.

Cooper, D. R., & Schindler, P. S. (2017). Business Research Methods (14th ed.). McGraw-Hill Education.

Dan, P. (2020). Account receivable management and corporate performances: An empirical evidence from quoted manufacturing companies in Nigeria. Inosr arts and management, 6(1), 116-129.

Daoud, J. I. (2017, December). Multicollinearity and regression analysis. In Journal of Physics: Conference Series, 949(1), 12-18.

Dary, S. K., & James Jr, H. S. (2019). Does investment in trade credit matter for profitability? Evidence from publicly listed agro-food firms. Research in International Business and Finance, 47, 237-250.

Das, K. R., & Imon, A. H. M. R. (2016). A brief review of tests for normality. American Journal of Theoretical and Applied Statistics, 5(1), 5-12.

Enow, S. T., & Kamala, P. (2019). The accounts payable management practices of small, medium and micro enterprises in the Cape Metropolis, South Africa. Investment management and financial innovations, (13), 77-83.

Ernest, O. N., King, B. D., Esther, A., & Michelle, A. (2019, August). The Effect of Inventory Management on Firm Performance: Controlling For Key Confounding Variables. In International Conference on Education.

Etikan, I., & Bala, K. (2017). Sampling and sampling methods. Biometrics & Biostatistics International Journal, 5(6), 00149.

Farooq, U. (2019). Impact of inventory turnover on the profitability of non-financial sector firms in Pakistan. Journal of Finance and Accounting Research, 1(1), 34-51.

Ferris, J. M., & Graddy, E. A. (1981). A contractual framework for new public management theory. International public management journal, 1(2), 225-240.

Filbeck, G., & Krueger, T. M. (2015). An analysis of working capital management results across industries. American Journal of Business.

Flynn, D. M., & Uttley, J. (2021). Research Methods for Business and Management: A Guide to Writing Your Dissertation. Sage.

Friedman, M. (1970). A theoretical framework for monetary analysis. Journal of Political Economy, 78(2), 193-238.

Fuspanita, D., & Thamrin, H. (2024). The Effect of Inventory Management on Company Value (Empirical Study on Food and Beverage Sub-Sector Companies Listed on the Indonesia Effect Exchange in 2020-2023). Indonesian Journal of Business Analytics, 4(4), 1733-1746.

Gakurya, C. F., & Olouch, J. (2018). Effect of accounts payable management on performance of coastal county government ministries. International Journal of Business Management and Processes (ISSN 2616-3209), 4(2), 12-12.

Garba, S., Mourad, B., & Chamo, M. A. (2020). The effect of inventory turnover period on the profitability of listed Nigerian conglomerate companies. International journal of financial research, 11(2), 287-292.

Gitman, L. J., Bacon, P. W., & Joehnk, M. D. (1984). Fundamentals of Cash Management Theory and Practice. The Journal of Cost Analysis, 1(1), 75-99.

Gujarati, D. (2014). Econometrics by example. Bloomsbury Publishing.

Gunay, F., & Cokins, G. (2021). Comparative measurement of working capital efficiency for Borsa Istanbul restaurants and hotels for the covid-19 period and previous quarters. University of South Florida M3 Center Publishing, 5(2021), 1-17.

Gworo, C. O. (2019). Earnings volatility and market value of companies listed at the Nairobi Securities Exchange market. The Strategic Journal of Business & Change Management, 6(1), 17–26.

Hassan, U. O. & Mberia, H. (2017). Effect of working capital management on firm’financial performance: A survey of water processing firms in Puntland. International Journal of Economics, Commerce and Management, 31(2), 106-119.

Hui, E. C. (2018). Real Estate Investment: A Strategic Approach. Routledge.

Huimin, M., & Matchado, L. (2019). Impact of Capital Budget Decision on Financial Performance of Commercial Banks in Malawi. Innovation and Management.

Ikechukwu, O. I., & Nwakaego, D. A. (2018). The effect of accounts payable ratio on the financial performance of food and beverages manufacturing companies in Nigeria. Journal of Research in Business and Management, 3(9), 15-21.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. The American economic review, 76(2), 323-329.

Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. Journal of applied corporate finance, 14(3), 8-21.

Jescah, N. M., Dennis, B., & Fredrick, K. (2024). Effect of Accounts Receivable Practice on Value of Listed Manufacturing Firms at Nairobi Securities Exchange in Kenya. Journal of Accounting and Finance in Emerging Economies, 10(3), 353-360.

Kangogo, C. C., & Irungu, A. M. (2020). Inventory conversion period and financial performance of selected firms listed at Nairobi Securities Exchange. Journal of Finance and Accounting, 4(5), 55-76.

Kariuki, M. J. (2019). Inventory Management Practices and Public Health Institutions Performance in Nairobi City County, Kenya (Doctoral dissertation, Kenyatta University).

Kaufman, R. L. (2013). Heteroskedasticity in regression: Detection and correction. Sage Publications.

Khan, M. S. R. (2020). The effects of inventory management capability on performance of the firm-business strategies as a mediating role. Asian Finance & Banking Review, 4(2), 1-7.

Khatun, N. (2021). Applications of normality test in statistical analysis. Open Journal of Statistics, 11(01), 113.

Kiptum, I. K. (2023). Accounts Payable Management and Financial Performance in West Pokot County Government, Kenya (Doctoral dissertation, University of Nairobi).

Kithinji, M. M., Wephukulu, J. M., Gekara, M., & Mwanzia, M. (2022). Effect of account payable management on financial performance of public universities in Kenya. Reviewed Journal International of Business Management [ISSN 2663-127X], 3(1), 83-100.

Kothari, C. R. (2014). Research Methodology: Methods and Techniques (3rd ed.). New Age International.

Koul, S. K. (2018). Research Methodology: Concepts and Cases (2nd ed.). Vikas Publishing House.

Kultar, S. S. (2007). Research Methodology: Methods and Techniques. New Age International.

Kumar, V. S., & Suneetha, V. L. (2022). An empirical study on account receivables & Account Payables Management At Composite Investments Pvt Ltd, Bangalore. Journal of Pharmaceutical Negative Results, 2784-2797.

Kyriakou, P. A. (2018). Mitigating the Risks Entailed in Shareholders’ Claims for Reflective Loss: Suggestions for Investment Treaty Reform. The Journal of World Investment & Trade, 19(4), 693-721.

Lacity, M. C., Willcocks, L. P., Lacity, M. C., & Willcocks, L. P. (2009). Managing relationships across the life cycle of an outsourcing arrangement. Information Systems and outsourcing: Studies in theory and practice, 303-340.

Le, B. (2019). Working capital management and firm’s valuation, profitability and risk: Evidence from a developing market. International Journal of Managerial Finance, 15(2), 191-204.

Lyani, M. N. (2017). Relationship between accounts receivable management practices and growth of small and medium enterprises in Kakamega County, Kenya (Doctoral dissertation, COHRED-JKUAT).

Malikova, M. (2022). Management of Accounts Receivable and Accounts Payable. Академические исследования в современной науке, 1(20), 152-154.

Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. Administrative science quarterly, 48(2), 268-305.

Mbarushimana, E., & Kengere, O. (2023). Accounts Receivable Management Practices and Financial Performance of Manufacturing Companies in Rwanda; A Case Study of CIMERWA Plc. Journal of Finance and Accounting, 7(9), 21-44.

McNeill, P. (2009). Research Methods. Routledge.

Mittal, S., & Monika. (2020). Accounts receivable: payable impact on each other with special reference to financial performance—a study of small cap companies. SEDME (Small Enterprises Development, Management & Extension Journal), 47(4), 362-373.

Mittal, S., & Monika. (2020). Accounts receivable: payable impact on each other with special reference to financial performance—a study of small cap companies. SEDME (Small Enterprises Development, Management & Extension Journal), 47(4), 362-373.

Mittal, S., & Monika. (2020). Accounts Receivable: Payable Impact on Each Other with Special Reference to Financial Performance—A Study of Small Cap Companies. SEDME (Small Enterprises Development, Management & Extension Journal), 47(4), 362-373.

Mohamed, M. I., Mwambia, F., & Muema, W. (2021). Credit Risk Assessments and Firm Value of Listed Commercial Banks in Kenya.

Mohamud, A. ., & Mungai, J. (2019). Financial innovation on performance of commercial banks in Garissa County, Kenya. Journal of Management, 6(1), 491–504.

Muchaendepi, W., Mbohwa, C., Hamandishe, T., & Kanyepe, J. (2019). Inventory management and performance of SMEs in the manufacturing sector of Harare. Procedia Manufacturing, 33, 454-461.

Muchina, S & Kiano, E. (2011). Influence of working capital management on firms profitability: A case SMES in Kenya, International Business management, 5, (5), 279 – 286.

Mugenda, O. M., & Mugenda, A. G. (2008). Research Methods: Quantitative and Qualitative Approaches. Acts Press.

Mulajje, M. (2019). Working capital management and financial performance of small and medium enterprises in Kampala Capital City Authority: a case study of Kawempe division urban council. Doctoral dissertation, Kyambogo University.

Musembi, M. M. (2020). Symmetric and asymmetric effect of investor sentiment on performance of equity market in Nairobi Securities Exchange, Kenya. International Journal of Management and Commerce Innovations 8(1), 438-447.

Mutai, A. K., & Kimani, E. M. (2019). Effect of accounts payable management practices on liquidity of public technical training institutions in Rift Valley Region, Kenya. International Academic Journal of Economics and Finance, 3(3), 174-186.

Muthoni, J. G., Naibei, K. I., & Livingstone, K. (2020). Management of accounts receivable and financial performance of manufacturing firms listed in Nairobi Securities Exchange, Kenya. International Journal of Scientific and Research Publications, 10(12), 513-523.

Mutua, L. M. (2023). Working Capital Efficiency and Firm Value of Selected Firms Listed at Nairobi Securities Exchange, Kenya. Doctoral dissertation, St. Paul's University.

Muturi, H. M. (2015). Effects of working capital management on profitability of Tea factories in Meru County (Doctoral dissertation, Meru University of Science and Technology).

Mwirigi, D., Wambugu, H. W., & Maina, M. (2018). The effect of working capital management on performance of small enterprises in Kenya.

Myers, R. H. (1990). Classical and modern regression with applications (Vol. 2, p. 488). Belmont, CA: Duxbury press.

Nam, H., & Uchida, K. (2019). Accounts payable and firm value: International evidence. Journal of Banking & Finance, 102, 116-137.

Nastiti, P. K. Y., Atahau, A. D. R., & Supramono, S. (2020). Does Working Capital Management Able To Increase Sustainable Growth Through Asset Utilization?. The European Journal of Applied Economics, 17(2).

Ngunju, M. E. (2022). Working capital management practices and financial performance of Horticultural Farms in Laikipia and Nakuru Counties, Kenya.

Nguyen, L., Tan, T. K. P., & Nguyen, T. H. (2021). Determinants of firm value: An empirical study of listed trading companies in Vietnam. The Journal of Asian Finance, Economics and Business, 8(6), 809-817.

Nkwasibwe, N., Katsigaire, E. A., & Tobias, B. (2023). Accounts payable management and financial performance of manufacturing firms. A case of kazire health products limited. International Journal of Research and Scientific Innovation, 10(2), 85-100.

Oladipo, O. N., Adegboyo, O. S., & Olugbamiye, D. O. (2020). Effects of working capital management on profitability in Manufacturing Firms in Nigeria. The Journal of Accounting and Management, 10(3).

Oladipupo, A.O., & Okafor, C.A. (2013). Relative contribution of working capital management to corporate profitability and dividend payout ratio: Evidence from Nigeria. International Journal of Business and Finance Research.

Olambo, T. C. (2022). Working capital management and financial performance of energy and petroleum firms listed at the Nairobi securities exchange, Kenya (Doctoral dissertation, Kenyatta University).

Olaoye, F. O., Adekanbi, J. A., & Oluwadare, O. E. (2019). Working capital management and firms’ profitability: Evidence from quoted firms on the Nigerian stock exchange. Intelligent information management, 11(3), 43-60.

Oranefo, P. C., & Egbunike, C. F. (2023). Accounts Payable Turnover and Firm Performance of Quoted Manufacturing Firms in Nigeria. International Journal of Accounting and Management Information Systems, 1(1), 45-65.

Oseifuah, E. K. (2016). Cash Conversion Cycle theory and corporate profitability. In Cash Conversion Cycle theory and corporate profitability: Oseifuah, Emmanuel Kojo.

Otekunrin, A., Nwanji, T., Fagboro, D., Olowookere, J. K., & Adenike, O. (2021). Does working capital management impact an enterprise’s profitability? Evidence from selected Nigerian firms. Problems and perspectives in Management, 19(1), 477-486.

Panigrahi, R. R., Shrivastava, A. K., & Nudurupati, S. S. (2024). Impact of inventory management on SME performance: a systematic review. International Journal of Productivity and Performance Management.

Qureshi, M. U., & Mahmood, Z.(2020). Accounts Receivable and Firm Value: Evidence from South Asian Emerging Economies.

Rahmi, F., Arfan, M., & Saputra, M. (2023). Assessing determinant of firm value: Indonesia conventional bank analysis. Jurnal Akuntansi dan Auditing Indonesia, 56-72.

Rashid, A., & Rasheed, R. (2023). Mediation of inventory management in the relationship between knowledge and firm performance. Sage Open, 13(2), 21582440231164593.

Ren, T., Liu, N., Yang, H., Xiao, Y., & Hu, Y. (2019). Working capital management and firm performance in China. Asian Review of Accounting, 27(4), 546-562.

Richards, V. & Laughlin, E. (1980). A cash conversion cycle approach to liquidity analysis. Financial Management.

Sah, G. G. (2022). Influence of account receivable management practices on the performance of small and medium scale enterprises. Technium Soc. Sci. J., 32, 376.

Sahu, D. R. (2017). Research Methodology: A Practical Approach. Oxford University Press.

Saint, D. K., & Tripathi, A. N. (2006). The shareholder and stakeholder theories of corporate purpose. International journal of sustainable development, 23(6),309-323

Salim, M. N., & Firdaus, Z. (2020). Determinants of Firm Value and Its Impact on Stock Prices (Study In Consumer Good Public Companies In IDX 2014-2018). Dinasti International Journal of Education Management And Social Science, 2(1), 41-54.

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2017). Research Methods for Business Students (7th ed.). Pearson.

Schindler, P. S. (2001). Business Research Methods. McGraw-Hill Education.

Seth, H., Chadha, S., & Sharma, S. (2021). Benchmarking the efficiency model for working capital management: Data envelopment analysis approach. International Journal of Productivity and Performance Management, 70(7), 1528–1560.

Sharfman, B. S. (2014). Shareholder wealth maximization and its implementation under corporate law. Fla. L. Rev., 66, 389

Singpurwalla, R. S. (2013). Methodology for a New Microeconomics: The Critical Foundations. Routledge.

Sondakh, R. (2019). The effect of dividend policy, liquidity, profitability and firm size on firm value in financial service sector industries listed in Indonesia Stock Exchange 2015-2018 Period. Accountability, 8(2), 91–101.

Ssendagire, D. L. (2018). Working capital level, working capital financing approaches, firm size and profitability of manufacturing firms In Uganda (Doctoral dissertation, University Of Nairobi).

Sudiyatno, B., Puspitasari, E., Suwarti, T., & Asyif, M. M. (2020). Determinants of firm value and profitability: Evidence from Indonesia. The Journal of Asian Finance, Economics and Business, 7(11), 769-778.

Torky, A., (2020). Effect of inventory management on financial performance: evidence from the Saudi manufacturing company. European Journal of Accounting, Auditing, and Finance Research 8,(10), 13-26, November 2020

Triyanto, T., & Priyanto, A. A. (2023). The Effect Of Current Ratio, Debt To Equity Ratio, Receivables Turnover And Inventory Turnover On Company Value At Pt Hero Supermarket Tbk For The Period 2012-2021. Jurnal Scientia, 12(02), 1358-1371.

Truong, K. D. (2023). Impact of inventory management on firm performance a case study of listed manufacturing firms on HOSE. International Journal of Information, Business and Management, 15(1), 93-115.

Tsuruta, D. (2019). Working capital management during the global financial crisis: Evidence from Japan. Japan and the World Economy, 49, 206-219.

Van der Waldt, G. (2020). Constructing conceptual frameworks in social science research. TD: The Journal for Transdisciplinary Research in Southern Africa, 16(1), 1-9.

Varpio, L., Paradis, E., Uijtdehaage, S., & Young, M. (2020). The distinctions between theory, theoretical framework, and conceptual framework. Academic medicine, 95(7), 989-994.

Vijayakumaran, R. (2019). Agency costs, ownership, and internal governance mechanisms: Evidence from Chinese listed companies. Asian Economic and Financial Review, 9(1), 133-154. https://doi.org/10.18488/journal.aefr.2019.91.133.154

Waihenya, C. (2018). Effects of Managerial Accounting Practices On Financial Performance: A Case of Manufacturing Firms in Industrial Area, Nairobi (Doctoral dissertation, United States International University-Africa).

Wang, B. (2019). The cash conversion cycle spread. Journal of financial economics, 133(2), 472-497.

Wangechi, S. W., & Irungu, A. M. (2023). Working Capital Management and Financial Performance of Deposit Taking Savings and Credit Cooperative Societies in Central Region, Kenya. Journal of Finance and Accounting, 3(1), 34-46.

Wanzala, R. W., & Obokoh, L. (2024). The Effects of Working Capital Management on the Financial Performance of Commercial and Service Firms Listed on the Nairobi Securities Exchange in Kenya. Risks, 12(8), 119.

Wasike, M. W. (2019). Accounts Receivable Management And The Financial Performance Of Nzoia Water Service Company Limited, Kenya (Doctoral dissertation, MMUST).

Waweru, C.G. (2019). The relationship between working capital management and Value of Companies quoted at the NSE.(MBA Research project). University of Nairobi, Kenya.

Wekesa, A., & Njeru, P. N. (2022). Working Capital Management and Financial Performance of Manufacturing Firms Listed at the Nairobi Securities Exchange. African Development Finance Journal, 3(1), 185-216.

Williamson, T. (2013). Modal logic as metaphysics. Oxford University Press.

Wilujeng, S., & Widodo, H. (2024). Accounts Payable, Intellectual Capital, and Corporate Value: Case Study of Food and Beverage Sector on IDX 2016-2020. Indonesian Journal of Public Policy Review, 25(2), 10-21070.

Wooldridge, J. M. (2009). Econometrics: Panel Data Methods.

Yan, B., Chen, Z., Yan, C., Zhang, Z., & Kang, H. (2021). Evolutionary multiplayer game analysis of accounts receivable financing based on supply chain financing. International Journal of Production Research, 1-19.

Yao, H., & Deng, Y. (2019). Managerial incentives and accounts receivable management policy. Managerial Finance, 44(7), 865-884.

Yaremenko, L. (2018). Formation of accounting information of accounts receivable and accounts payable. University Economic Bulletin, (36/1), 147-154.

Yasir, M., Majid, A., & Yousaf, Z. (2014). Cash Conversion Cycle and its Impact upon Firm Performance: an Evidence from Cement Industry of Pakistan. Global Business & Management Research, 6(2).

Yator, B. C. (2018). The Effect of Capital Budgeting Techniques on the Financial Performance of Companies Listed at the Nairobi Securities Exchange. Doctoral dissertation, university of Nairobi.