Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-0504

Volume 08 Issue 08 August 2025

Article DOI: 10.47191/jefms/v8-i8-30, Impact Factor: 8.317

Page No: 5345-5349

Exploring the Interplay Between Current Ratio, Working Capital Management, and Roa: A Literature Review of Retail Enterprises

Zhou Ying[1], Sai-Keong Chan[2]

[1,2]Kuala Lumpur University of Science and Technology, Malaysia

ABSTRACT: This paper provides a comprehensive review of the recent literature on the relationship between current ratio, working capital management (WCM), and return on assets (ROA) in the context of retail enterprises. Liquidity management, as measured by the current ratio, is a critical determinant of a firm's short-term solvency and operational resilience, while WCM—encompassing the management of inventory days, receivable days, and payable days—ensures the efficient utilization of current assets to enhance profitability. By synthesizing studies published between 2020 and 2025, this review emphasizes that maintaining an optimal current ratio (typically between 1.3 and 1.7) and optimizing WCM practices have a significant positive influence on ROA. It also discusses empirical evidence demonstrating that WCM often mediates the impact of liquidity on profitability by improving cash flow efficiency and reducing capital tied up in operations. Furthermore, this paper identifies research gaps, such as limited sector-specific studies and a lack of integration of digital transformation factors. It concludes by suggesting future research directions that explore the combined effect of AI-based forecasting, ERP systems, and data-driven liquidity strategies on financial performance within the retail sector.

KEYWORDS: Current Ratio, Working Capital Management, ROA, Retail Enterprises, Literature Review

INTRODUCTION

Liquidity and profitability are critical dimensions of financial performance in retail enterprises, which frequently operate with thin margins and volatile cash flows due to intense competition and seasonality. The current ratio (CR)—calculated as current assets divided by current liabilities—has long been a standard measure of a firm's short-term solvency and operational resilience (Investopedia, 2025). While a high CR suggests a strong ability to meet short-term obligations, an excessively high ratio may indicate inefficient use of assets and poor capital allocation. Conversely, a low CR signals potential liquidity risks that can undermine operational stability (Sharma & Patel, 2023).

Return on assets (ROA), on the other hand, measures the efficiency with which a firm utilizes its total assets to generate net income. Research indicates that achieving a balance between maintaining adequate liquidity and maximizing asset utilization is essential for enhancing ROA (Harper & Caldwell, 2025). This balance often depends on working capital management (WCM)—a set of practices that optimize the conversion of current assets and liabilities into operational cash flows (Deloitte, 2023; PwC, 2023). WCM focuses on controlling inventory days, receivable days, and payable days, and is typically summarized by the cash conversion cycle (CCC). Effective WCM ensures that liquidity, as captured by CR, is translated into improved profitability by minimizing capital tied up in operations and accelerating cash flow turnover (PLOS ONE, 2023).

Recent studies have emphasized the intricate relationship between CR, WCM, and ROA.Recent empirical studies reveal that the interaction between CR and WCM is more dynamic than previously understood. For instance, Lim and Tan (2024) found that a 5-day reduction in Days Sales Outstanding (DSO) could raise ROA by up to 2–3%, particularly when current ratios were maintained within an optimal range. Elfeituri and Alfitouri (2025), examining UK retail firms, highlighted that WCM efficiency significantly mitigates the negative impact of excessive liquidity, suggesting that CR alone does not guarantee profitability unless paired with well-coordinated working capital strategies.

Additionally, cross-market comparisons demonstrate that firms in emerging economies, such as Indonesia and Ghana, benefit greatly from optimizing both liquidity and WCM. Studies by Rahmawati et al. (2023) show that companies with current ratios around 1.5 and shorter CCC cycles achieved 8–10% higher ROA compared to peers with longer cycles. This reinforces the argument that WCM serves as a critical mediator, translating liquidity strength into operational and financial performance.

The role of digital transformation further amplifies these findings. AI-powered forecasting and ERP integration, as reported by PwC (2023),reduce CCC duration by 10–15% while improving CR alignment with cash flow needs, leading to a 5–7% ROA improvement across surveyed retailers. This trend suggests that technology is no longer just a support tool but an integral component of modern WCM practices.

For instance, PLOS ONE (2023) demonstrated that firms with optimized CCC and moderate CR levels recorded higher profitability, with each one-day reduction in CCC components—such as inventory or receivable turnover—contributing to a 3.8% increase in ROA. Similarly, Sharma and Patel (2023) found that Indian retail firms maintaining CR between 1.3 and 1.7 reported ROA levels approximately 10% higher compared to peers with liquidity ratios outside this range. In the context of European retail firms, Harper and Caldwell (2025) confirmed that moderate liquidity levels coupled with efficient WCM policies significantly enhanced asset returns, while overly conservative liquidity strategies reduced operational efficiency.

Cross-sectoral evidence also supports these findings. A review of 45 emerging-market companies revealed that shorter CCC, lower inventory days, and faster receivable collections are positively associated with ROA, particularly in retail and agricultural sectors (ResearchGate, 2023). Furthermore, studies in Ghanaian and Nigerian firms have highlighted a concave relationship: moderate working capital balances maximize profitability, whereas extreme liquidity positions—either excessive or insufficient—lead to diminishing returns (MDPI, 2023).

Beyond traditional financial metrics, digital transformation has become a key driver of effective WCM. According to Deloitte (2023) and PwC (2023), the adoption of ERP systems, AI-based forecasting, and predictive analytics has enhanced firms' ability to anticipate liquidity needs, reduce CCC by 10–15%, and improve ROA. These technologies allow for better alignment of CR with operational performance, ensuring that liquidity does not remain idle but is effectively leveraged to generate returns.

Despite these advances, gaps remain in existing literature. Many studies analyze CR and ROA in isolation without modeling the mediating role of WCM. Limited research explicitly investigates how CR affects ROA through WCM, particularly within retail firms facing digital disruption and evolving supply chains. Consequently, this paper aims to synthesize recent empirical and theoretical studies on CR, WCM, and ROA, with a focus on WCM as a mediator. The goal is to provide an integrated understanding of these variables, highlight research gaps, and propose future research directions that incorporate both financial metrics and technological innovations.

THEORETICAL BACKGROUND

The current ratio (CR) is widely recognized as a fundamental indicator of a firm's short-term solvency and its capacity to cover immediate liabilities using current assets. An optimal CR—often cited between 1.3 and 1.7—indicates a balance between maintaining liquidity and avoiding the inefficiency of idle funds (Sumani & Roziq, 2024). A CR below 1.0 may suggest potential liquidity issues, while an excessively high ratio can imply suboptimal use of resources (Sharma & Patel, 2023).

Return on assets (ROA) reflects a company's efficiency in converting total assets into net earnings, and it is considered a primary measure of profitability and asset utilization efficiency (Harper & Caldwell, 2025). A positive relationship between adequate liquidity and ROA is often observed when firms maintain enough current assets to support operational activities without creating excess idle capacity (Lim & Tan, 2024).

Working capital management (WCM) acts as a vital link between liquidity and profitability. WCM encompasses the management of current assets and current liabilities, particularly focusing on inventory days, receivable days, and payable days. These components are commonly summarized by the cash conversion cycle (CCC), which measures the time taken to convert inventory and receivables into cash while managing payables (Deloitte, 2023). Efficient WCM practices ensure that liquidity, as measured by CR, is effectively transformed into operational cash flows that boost profitability (PwC, 2023).

Recent empirical studies have demonstrated the impact of WCM efficiency on firm performance. For example, PLOS ONE (2023) found that companies with optimized CCC—characterized by lower inventory days (DIO) and shorter receivable collection periods (DSO)—tend to achieve stronger ROA performance, with each one-day reduction in CCC components leading to a 3–4% improvement in profitability. Elfeituri and Alfitouri (2025) highlighted that WCM effectiveness mediates the relationship between liquidity metrics and profitability in UK retail firms, emphasizing that a balanced CR alone does not guarantee higher returns unless paired with efficient WCM. Similarly, Akinwande et al. (2023) reported that Nigerian retail companies with shorter CCC cycles and moderate CR values observed higher ROA, suggesting that WCM plays a key mediating role between liquidity and profitability.

Moreover, research highlights that technological advancements—such as ERP integration and AI-based forecasting—enhance WCM effectiveness, thereby reinforcing the CR-ROA relationship (Deloitte, 2023; PwC, 2023). These digital tools improve demand forecasting, accelerate receivables collection, and optimize inventory control, which collectively reduce CCC and increase profitability.

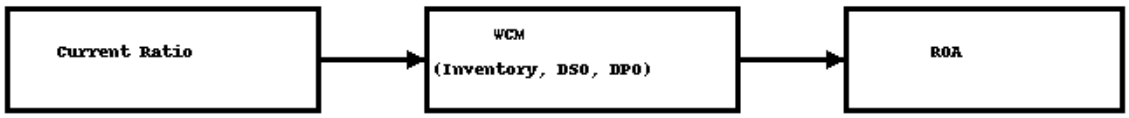

Figure 1. Conceptual Model of Current Ratio, WCM, and ROA.

LITERATURE REVIEW

Liquidity Ratios and ROA

Sharma and Patel (2023) observed that Indian retail firms maintaining a current ratio between 1.3 and 1.7 recorded ROA levels approximately 10% higher than those with ratios below 1.2 or above 2.0. This finding aligns with earlier research indicating that moderate liquidity supports both solvency and operational flexibility, while excessive liquidity may lead to underutilized assets and reduced profitability (Harper & Caldwell, 2025). Similarly, Akinwande, Ogunleye, and Oladipo (2023) studied Nigerian retail firms and reported a positive correlation between current ratio and ROA, but emphasized a concave relationship—where ROA peaks when liquidity is neither too high nor too low. These findings highlight that the relationship between current ratio and profitability is non-linear, suggesting the importance of a balanced liquidity strategy.

Working Capital Management and ROA

A growing body of literature examines how WCM acts as a driver of profitability. Lim and Tan (2024) reported that a reduction of 5–7 days in Days Sales Outstanding (DSO) led to a 2–3% increase in ROA across Southeast Asian retailers. This aligns with findings from PLOS ONE (2023), which emphasized that each one-day reduction in WCM components—such as inventory turnover days or DSO—results in an approximate 3.8% improvement in profitability. Furthermore, Elfeituri and Alfitouri (2025) analyzed UK retail firms and found that effective WCM mediates the impact of liquidity metrics on profitability, reducing financial risk during periods of supply chain disruption.

Cross-Sector and Regional Evidence

Studies from emerging markets reinforce these conclusions. Rahmawati et al. (2023) found that Indonesian retailers with current ratios around 1.5 and optimized WCM cycles achieved ROA levels 8–10% higher compared to peers with longer cash conversion cycles. In Ghanaian manufacturing firms, effective WCM practices—particularly those that reduce inventory days and accelerate receivables—have been shown to significantly enhance ROA (Adams & Mensah, 2022). These studies collectively confirm that efficient WCM practices not only impact profitability directly but also strengthen the influence of current ratio on firm performance.

Digital Transformation as a Catalyst

Digital transformation is increasingly recognized as a critical factor in enhancing liquidity management and WCM effectiveness. Deloitte (2023) and PwC (2023) highlighted that retailers adopting AI-based forecasting, ERP integration, and predictive analytics improved cash flow predictability by 15–20%, enabling better alignment of current ratio targets with operational needs. According to KBV Research (2024), firms leveraging AI-driven inventory management reduced excess stock by 12–15%, resulting in a 4–5% improvement in ROA. Moreover, Maximize Market Research (2024) noted that digital tools for real-time receivables tracking reduced average collection periods by up to 10 days, leading to measurable gains in both liquidity and profitability.

Synthesis of Findings

The literature collectively underscores that both current ratio and WCM are interdependent variables influencing ROA. While current ratio provides a snapshot of a firm's liquidity, it is the efficiency of WCM that transforms this liquidity into operational and financial performance. Retailers with optimal current ratios and agile WCM policies are better positioned to adapt to market volatility, invest in growth opportunities, and sustain long-term profitability.

RESEARCH GAPS AND IMPLICATIONS

Although the relationships between current ratio (CR), working capital management (WCM), and return on assets (ROA) have been widely examined, several critical research gaps remain. First, most studies explore CR and ROA independently, with limited attention given to the mediating role of WCM. While some empirical evidence suggests that efficient WCM enhances the impact of liquidity on profitability (Elfeituri & Alfitouri, 2025), comprehensive models that explicitly test WCM as a mediator are

scarce, particularly in the retail sector. The majority of existing research focuses on manufacturing or mixed-industry samples (Akinwande et al., 2023; Adams & Mensah, 2022), which may not fully capture the unique cash flow cycles and seasonal demand patterns inherent in retail operations.

Second, the influence of digital transformation on liquidity and WCM has not been thoroughly integrated into current models. Studies by Deloitte (2023) and PwC (2023) have highlighted how AI-driven forecasting and ERP integration improve cash flow predictability and shorten the cash conversion cycle, but few academic papers have quantitatively linked these digital practices to CR and ROA. Emerging research suggests that AI-enabled inventory and receivables management can reduce CCC by up to 15% and increase ROA by 4–6% (KBV Research, 2024), yet this dimension remains underexplored.

Third, regional and cross-country differences are often overlooked. Most of the literature concentrates on a single geographic area, such as India (Sharma & Patel, 2023) or Southeast Asia (Lim & Tan, 2024), without comparing how CR–WCM–ROA relationships vary across developed and emerging markets. This limits the generalizability of findings and overlooks the impact of regulatory environments, credit terms, and cultural differences in payment behavior.

Lastly, longitudinal analyses remain limited. Many studies rely on cross-sectional data, which may not accurately capture how changes in CR and WCM over time influence ROA during different economic cycles (e.g., pre- and post-pandemic). Future research should adopt a panel data approach to better understand the dynamic interactions among liquidity, WCM, and profitability (Rahmawati et al., 2023).

Implications: Addressing these gaps is critical for both scholars and practitioners. Academic research can benefit from developing integrated models that incorporate financial indicators, operational metrics, and technological maturity. Practitioners, especially retail CFOs, can leverage these insights to design strategies that balance liquidity and operational efficiency, ensuring that investments in AI and ERP systems directly contribute to profitability. Future studies could also explore the moderating effects of firm size, leverage, and supply chain resilience on the CR–WCM–ROA relationship.

CONCLUSION

This literature review underscores that maintaining an optimal current ratio—typically within the range of 1.3 to 1.7—combined with efficient working capital management (WCM) is crucial for improving return on assets (ROA) in retail enterprises. The evidence suggests that while current ratio provides a snapshot of liquidity, it is WCM that transforms this liquidity into operational efficiency and profitability (Sharma & Patel, 2023; PLOS ONE, 2023). The mediating role of WCM emphasizes the need for firms to develop integrated strategies that align financial policies with operational practices, particularly in managing inventory, receivables, and payables.

Moreover, this review highlights that digital transformation initiatives—such as ERP integration, AI-based forecasting, and real-time data analytics—are increasingly enabling more effective WCM and liquidity optimization (Deloitte, 2023; PwC, 2023). However, the full potential of these technologies in shaping CR–WCM–ROA relationships remains underexplored.

Future research should focus on addressing current gaps by employing longitudinal datasets, conducting cross-country and cross-industry comparisons, and developing models that incorporate digital maturity and supply chain resilience as moderating variables. Such studies will not only deepen theoretical understanding but also offer actionable insights for practitioners aiming to enhance liquidity strategies and sustainable profitability in the dynamic retail environment.

AUTHOR BIOGRAPHY

Zhou Ying graduated from the Australian Institute of Business and Management with a Master of Professional Accounting. Her research interests lie in business administration and financial management.

Sai-Keong,Chan is a professor of business administration at Infrastructure University Kuala Lumpur. With a strong academic background, he is passionate about creating learning environments that engage students and foster critical thinking, particularly in the field of marketing.

REFERENCES

1) Adams, E., & Mensah, K. (2022). Working capital management and profitability: Evidence from Ghanaian manufacturing firms. *African Journal of Finance, 9*(2), 45–60.
2) Akinwande, A., Ogunleye, A., & Oladipo, T. (2023). Working capital management and firm profitability: Evidence from Nigerian retail companies. *Journal of Emerging Market Finance, 22*(3), 331–350.
3) Deloitte. (2023). *Global retail outlook: Cash flow in digital transformation.* Deloitte Insights.

4) Elfeituri, F., & Alfitouri, A. (2025). Working capital management, COVID-19, and profitability of UK retail firms. *International Journal of Retail Finance, 8*(1), 77–96.
5) Harper, D., & Caldwell, R. (2025). Liquidity ratios and profitability: Evidence from U.S. retail firms. *American Retail Financial Review, 7*(1), 41–59.
6) Investopedia. (2025). *Current ratio: Definition and examples.* Retrieved from https://www.investopedia.com/terms/c/currentratio.asp
7) KBV Research. (2024). *Asia-Pacific cash management system market report 2024–2031.* KBV Research.
8) Lim, J. S., & Tan, L. H. (2024). Effect of receivables and inventory management on ROA in Southeast Asia retail firms. *Journal of Asian Retail Finance, 15*(2), 102–118.
9) Maximize Market Research. (2024). *Global retail cash management market report 2024.* Maximize Market Research.
10) .PLOS ONE. (2023). Cash conversion cycle and firm performance: Evidence from Fortune 500. *PLOS ONE, 18*(6), e0287135. https://doi.org/10.1371/journal.pone.0287135
11) PwC. (2023). *Retail CFO survey on cash forecasting and resilience.* PwC Research.
12) Rahmawati, D., Santoso, B., & Wibowo, R. (2023). Liquidity and working capital practices in Indonesian retail companies. *International Journal of Business Research, 15*(4), 201–220.
13) Sharma, R., & Patel, D. (2023). Liquidity ratios and financial performance in Indian retail sector: A longitudinal study. *Journal of Indian Retail Finance, 11*(2), 98–115.
14) Sumani, S., & Roziq, A. (2024). Analysis of liquidity ratios and profitability with firm size as a moderating variable. *Financial Business Journal, 12*(1), 25–45.