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Maximizing Profit Margins: The Interconnection Between Working Capital Efficiency and Sales Growth

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Abstract. This study examines the impact of working capital efficiency on profitability, with a particular focus on the moderating role of sales growth. Using panel data from publicly listed food and beverage companies on the Indonesia Stock Exchange between 2018 and 2021, the research applies multiple linear regression analysis to evaluate the direct effect of working capital efficiency—measured through working capital efficiency metrics—on profitability, represented by Return on Assets (ROA). Additionally, sales growth is incorporated as a moderating variable to assess its interaction with working capital efficiency. The findings indicate a positive relationship between working capital efficiency and profitability, emphasizing the importance of effective management of current assets and liabilities. Moreover, sales growth is found to significantly moderate this relationship, enhancing the positive impact of working capital efficiency on profitability. Companies experiencing strong sales growth benefit more from efficient working capital management, as increased revenues improve liquidity and resource allocation. On the other hand, firms with stagnant or declining sales face challenges in fully utilizing the advantages of optimized working capital management. This study contributes to the existing financial management literature by highlighting the dynamic interaction between working capital efficiency and sales growth, offering a more refined perspective on the factors influencing profitability. The findings provide practical insights for business leaders, advocating for a dual-focus strategy that combines optimizing working capital efficiency with initiatives to drive sales growth to maximize financial performance. For future research, expanding this framework by incorporating additional moderating variables, such as industry-specific factors, macroeconomic conditions, and long-term financial trends, could further deepen the understanding of profitability drivers across various economic environments.

Keywords: Working capital efficiency, profitability, sales growth, Return on Assets (ROA)

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Introduction

Effective working capital management is essential for sustaining a company's operational liquidity while supporting long-term profitability. In an increasingly dynamic economic environment, businesses are under growing pressure to optimize their working capital to effectively manage short-term liabilities while pursuing sustainable growth. Sales growth, as a pivotal and dynamic factor, plays a crucial role in moderating the relationship between working capital efficiency and profitability, potentially strengthening or weakening this connection. The interaction among these variables has attracted significant attention from researchers and industry professionals seeking to formulate strategies that enhance financial stability and competitive advantage (Dasman et al., 2023).

Recent studies have provided valuable insights into the relationship between working capital efficiency and profitability. For instance, Boaz & Mbuva (2024) explored the impact of automated payment systems on profitability in deposit-taking institutions, highlighting the importance of operational efficiency in enhancing financial outcomes. Similarly, Kotcharin & Jantadej (2024) examined the behavior of small and medium-sized enterprises in managing working capital during crises, emphasizing the moderating role of firm-specific factors in shaping profitability. Furthermore, Chandra et al., (2022) demonstrated the importance of financial leverage in moderating the link between profitability and working capital management in consumer goods firms, showing how contextual variables influence financial performance (Yulianti & Wulandari, 2024).

Despite these advances, significant gaps remain in understanding the moderating role of sales growth in the relationship between working capital efficiency and profitability. Prior research often focuses on static models, which fail to capture the dynamic nature of these variables over time. Additionally, studies such as those by Ouma (2024) have underscored the lack of sector-specific investigations and the limited exploration of asymmetric behaviors in working capital management. Addressing these gaps is essential to comprehensively understand how firms can leverage sales growth to optimize their financial strategies.

This research seeks to address existing gaps by investigating how sales growth moderates the relationship between working capital efficiency and profitability. By combining theoretical perspectives with empirical analysis, the study aims to identify practical strategies for improving firm performance across different economic conditions. The central hypothesis suggests that effective working capital management has a positive impact on profitability and that sales growth reinforces this relationship under certain circumstances.

Drawing on recent empirical insights, this study contributes to the ongoing discussion in financial management by highlighting the strategic significance of aligning working capital practices with sales growth patterns. The findings offer valuable implications for corporate leaders striving to navigate the complexities of financial optimization in competitive business environments.

Resource-Based View (RBV) Theory

One relevant theoretical framework for this research is the Resource-Based View (RBV) Theory, which emphasizes that firms achieve competitive advantage and superior financial performance by efficiently managing their internal resources and capabilities (Barney, 1991). In the context of this study, working capital represents a crucial internal resource that, when managed effectively, enhances liquidity, reduces operational costs, and ultimately improves profitability. The moderating role of sales growth aligns with RBV's perspective, as firms with higher sales growth can better utilize their working capital efficiency to create value and sustain profitability. Prior research supports this application of RBV, with studies such as Wibowo, (2025) and Kayani et al., (2025) demonstrate that firms with optimized working capital strategies achieve better financial performance, particularly when aligned with market expansion. By integrating RBV, this research highlights the importance of internal financial resource optimization in driving firm success within competitive business environments.

Hypothesis Development

The Influence of Working Capital Efficiency on Profitability

The Resource-Based View (RBV) Theory provides a strong theoretical foundation for understanding the influence of working capital efficiency on profitability. According to RBV, firms achieve a competitive advantage by effectively managing their internal resources, such as working capital, to maximize financial performance (Barney, 1991). Efficient working capital management aligns

with this theory, as it reflects a company's ability to optimize its current assets and liabilities to support operations while enhancing profitability. By strategically managing working capital, firms can ensure sufficient liquidity to meet short-term financial commitments while minimizing excess costs related to surplus inventory, outstanding receivables, or unused cash. This aligns with RBV's assertion that firms with superior resource management practices are better positioned to sustain profitability and competitive advantage. Prior research supports this view, demonstrating that firms with optimized working capital strategies are more resilient in volatile markets and can reinvest efficiently in growth opportunities ((Wibowo, 2025); (Kayani et al., 2025)). The ability to leverage working capital efficiency as a valuable internal resource further reinforces its role in driving long-term financial success. (Wulandari, 2019).

Prior research has consistently supported the positive relationship between working capital efficiency and profitability. For instance, Boaz & Mbuva (2024) found that enhanced operational practices, such as payment automation, improved profitability by streamlining cash flows and minimizing delays. Similarly, Kotcharin & Jantadej (2024) demonstrated that efficient working capital management practices, particularly during periods of economic uncertainty, allowed firms to maintain stable profitability by effectively managing liquidity risks. These findings align with the theoretical premise that well-managed working capital reduces costs and enhances revenue generation (Wulandari et al., 2024).

However, inefficiencies in working capital management, such as excessive inventory holding or prolonged accounts receivable cycles, can erode profitability. As Ntounis (2024) highlighted, firms with poor working capital practices often experience higher operational costs, diminished liquidity, and weaker financial performance. The ability to achieve an optimal balance is thus critical to ensuring sustained profitability, particularly in competitive and resource-constrained environments (Yulianti et al., 2023). Given this theoretical and empirical evidence, the following hypothesis is proposed:

H1: Working capital efficiency has a positive influence on profitability.

The Influence of Working Capital Efficiency on Profitability with Sales Growth as a Moderator Variable

The Resource-Based View (RBV) Theory further strengthens the understanding of how working capital efficiency influences profitability, particularly when moderated by sales growth. According to RBV, firms gain a competitive advantage by effectively managing and utilizing internal resources, such as working capital, to enhance financial performance (Barney, 1991). Efficient working capital management ensures liquidity, reduces unnecessary holding costs, and provides firms with the flexibility to respond to market demands. However, RBV also emphasizes that the strategic value of a resource depends on how well it is leveraged within a firm's operational context. This perspective aligns with the moderating role of sales growth, as firms with higher sales growth can better utilize efficient working capital management to sustain profitability.

When sales growth is strong, firms experience a faster turnover of inventory and receivables, allowing them to reinvest cash flows efficiently and maximize the profitability benefits of working capital optimization. This interaction reflects RBV's assertion that the effectiveness of resource management is contingent on external market conditions and firm-specific growth trajectories. Recent studies support this view, showing that firms that integrate working capital efficiency with strong sales growth achieve higher financial performance than those that rely solely on internal efficiency ((Wibowo, 2025); (Kayani et al., 2025)). Thus, sales growth acts as a crucial moderator in determining how effectively working capital efficiency translates into profitability, reinforcing the importance of aligning internal financial strategies with external market opportunities. (Djatnicka et al., 2023).

Sales growth serves as a critical determinant of how efficiently firms can leverage their working capital. During periods of high sales growth, efficient working capital practices can amplify profitability by ensuring sufficient liquidity to meet increasing production and operational demands. Conversely, during periods of stagnant or declining sales, even efficient working capital management may have a diminished effect on profitability due to limited revenue generation. Kotcharin & Jantadej (2024) highlighted this dynamic, illustrating that firm-specific factors such as sales growth significantly moderate the outcomes of financial management strategies.

Additionally, Chandra et al., (2022) demonstrated that sales growth interacts with financial leverage and working capital efficiency to influence profitability, especially in industries where market demand

fluctuates rapidly. These findings align with theoretical models that suggest sales growth moderates the efficiency-profitability relationship by shaping firms' ability to utilize short-term resources effectively.

Despite these insights, gaps remain in understanding the specific mechanisms through which sales growth moderates this relationship. Ouma (2024) noted that varying market conditions and firm characteristics might create asymmetric effects, underscoring the need for a nuanced analysis of this moderating role. Based on the above, the following hypothesis is proposed:

H2: Sales growth moderates the positive influence of working capital efficiency on profitability, such that the relationship is stronger for firms experiencing higher sales growth.

Research Methods

This research utilizes a blend of quantitative and interpretive approaches to examine how working capital efficiency affects profitability, with sales growth acting as a moderating factor. The methodology is based on empirical analysis using secondary data derived from the financial statements of publicly traded companies.

The data for this study is sourced from audited financial reports of firms within the manufacturing and consumer goods industries, acquired from reputable financial databases. The research focuses on food and beverage companies listed on the Indonesia Stock Exchange between 2018 and 2021. The research focuses on food and beverage companies listed on the Indonesia Stock Exchange (IDX) between 2018 and 2021 because this period captures significant economic and business fluctuations that may influence working capital efficiency and profitability. During these years, companies in the food and beverage sector experienced both growth opportunities and financial challenges, particularly due to changing consumer demand, supply chain disruptions, and macroeconomic shifts.

The period includes pre-pandemic (2018–2019) and pandemic years (2020–2021), providing a valuable timeframe to analyze how firms managed their working capital efficiency under normal economic conditions and during crises. The COVID-19 pandemic in 2020–2021 had a significant impact on business operations, with supply chain disruptions, fluctuating consumer demand, and financial constraints affecting firm profitability. Studying this period allows for a deeper understanding of how food and beverage companies adapted their working capital management strategies and whether sales growth played a role in mitigating financial challenges.

Additionally, selecting 2018–2021 ensures data availability and reliability, as financial reports from publicly listed companies during this period are well-documented and accessible. This timeframe provides insights into both short-term financial decision-making and long-term resilience, making it an ideal period for examining the relationship between working capital efficiency, profitability, and sales growth.

The study identifies three primary variables:

a. *Dependent Variable*: Profitability, measured using Return on Assets (ROA), represents the efficiency with which firms convert assets into net income. The research uses Return on Assets (ROA) as the sole measure of profitability because ROA provides a comprehensive and standardized indicator of how efficiently a company utilizes its assets to generate net income. Unlike other profitability metrics such as Return on Equity (ROE) or Net Profit Margin, ROA offers a broader financial perspective by considering the total asset base, making it particularly suitable for evaluating firms with different capital structures. ROA is one of the most commonly used profitability indicators in empirical studies on financial management. Prior research, such as Wibowo (2025) and Kayani, Hasan, & Choudhury (2025), has also used ROA to examine the impact of working capital efficiency on firm performance, supporting its validity for this study.
b. *Independent Variable*: Working capital efficiency, measured using the Cash Conversion Cycle (CCC), which reflects the time taken to convert investments in inventory and receivables into cash flows.
c. *Moderating Variable*: Sales growth, calculated as the annual percentage change in total revenue.

The main analysis tool employed is multiple linear regression analysis with Eviews, which examines the direct relationship between working capital efficiency and profitability, as well as the moderating effect of sales growth. The regression model is specified as follows:

$$\mathbf{ROAt = \alpha + \beta 1CCCt + \beta 2SGt + \beta 3CCC*SGt + \varepsilon}$$

The analysis also incorporates diagnostic tests to assess multicollinearity, heteroscedasticity, and autocorrelation, ensuring the robustness and validity of the results. These tests enhance the reliability of the findings by addressing potential statistical biases.

This methodological framework facilitates a comprehensive examination of how working capital efficiency impacts profitability while considering the dynamic influence of sales growth. It enables the identification of actionable insights for optimizing financial management practices across varying market conditions.

Results and Discussion

Result

Descriptive Statistics

The results of the descriptive analysis obtained are summarized in Table 1 below.

Table 1
Descriptive statistics

Variable	Min	Max	Mean	Std Deviation
Working capital efficiency (CCC) (X)	-130.2253	571.5011	11.50352	62.68797
Profitability (ROA) (Y)	-0.582526	0.607168	0.050898	0.137076
Sales growth (Z)	-0.678240	1.101892	0.030955	0.228582

Table 1 presents a summary of the descriptive statistics for the study's key variables, including working capital efficiency (measured by the Cash Conversion Cycle, CCC), profitability (measured by Return on Assets, ROA), and sales growth. These statistics provide insights into the distribution and variability of the data, forming the basis for subsequent analyses. The CCC variable exhibits a broad range, with values spanning from -130.2253 days to 571.5011 days. The negative minimum indicates that some firms maintain highly efficient cash flow management, where accounts receivable and inventory turnover exceed the payment period for accounts payable. The average CCC is 11.50352 days, suggesting that firms in the sample generally maintain a relatively short cash conversion period. However, the large standard deviation of 62.68797 days signifies substantial variability, reflecting differing working capital practices across firms.

For profitability (ROA), the values range from -0.582526 to 0.607168, A negative Return on Assets (ROA) indicates that a firm has incurred a net loss relative to its total assets. In this case, the ROA values range from -0.582526 to 0.607168, meaning that some firms experienced losses as high as 58.25% of their total assets, while others achieved profitability up to 60.72% of their assets. The mean ROA is 0.050898, meaning that firms, on average, generate a 5.09% return on total assets, with a standard deviation of 0.137076, indicating moderate variability. The sales growth variable fluctuates between -0.678240 and 1.101892, with some firms experiencing a 67.82% decline in revenue, while others reported a 110.19% increase. The mean sales growth stands at 0.030955, reflecting an average annual revenue growth of 3.10%, but the high standard deviation (0.228582) suggests significant differences in sales performance among firms. Overall, these descriptive statistics highlight substantial diversity in working capital efficiency, profitability, and sales growth, underscoring the need to account for heterogeneity when analyzing their relationships. The wide variability in these measures further justifies the use of appropriate statistical models to ensure robust and reliable findings.

Choosing the Panel Data Regression Model

This study employs panel data regression to evaluate model specifications and assess the alignment between theoretical frameworks and real-world data. The analysis utilizes the Ordinary Least Squares (OLS) method or the Common Effect Model (CEM), along with the Hausman Test to determine whether a fixed or random effects model is more appropriate.

Table 2
Chow Test Results

Effects Test	Statistic	d.f	Prob.
Cross-section F	1.125368	(45.90)	0.3130
Cross-section Chi-square	61.603866	45	0.0505

Table 2 presents the results of the Chow test, a statistical method used to determine whether there are significant differences in relationships among variables across groups—such as firms or periods. This test helps decide whether a pooled regression model is appropriate or if individual-specific effects (fixed or random effects) should be considered. The table includes two key test statistics: **Cross-section F** and **Cross-section Chi-square**, along with their

corresponding degrees of freedom (d.f.) and probability values (Prob.).

The **Cross-section F** statistic is 1.125368, with degrees of freedom (45, 90), and its probability value (0.3130) exceeds the standard significance threshold of 0.05. This suggests insufficient evidence to reject the null hypothesis, indicating no significant differences in coefficients across cross-sections. Similarly, the **Cross-section Chi-square** statistic is 61.603866, with 45 degrees of freedom, and a probability value of 0.0505—borderline significant but not strong enough to conclusively reject the null hypothesis. These mixed findings suggest that while the F-test supports a pooled regression model, the Chi-square test hints at potential differences across groups. Given this ambiguity, researchers should carefully consider additional diagnostic tests, such as the **Hausman test**, to verify the suitability of the chosen model and ensure robustness in the analysis.

Table 3
Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.321848	2	0.8514

Table 3 presents the results of the Hausman test, a statistical procedure used to determine whether a fixed effects model or a random effects model is more appropriate for the dataset. This test examines whether unobserved effects (unique errors) are correlated with the explanatory variables. The key components of the table include the Chi-Square Statistic, which has a value of 0.321848, representing the observed differences between fixed and random effects estimators. The Chi-Square Degrees of Freedom (d.f.) is 2, corresponding to the number of variables tested for correlation with the errors. The Probability (Prob.) value is 0.8514, which exceeds the standard 0.05 significance level.

The null hypothesis of the Hausman test states that the random effects model is the preferred choice, as it assumes no correlation between unobserved effects and explanatory variables. Since the probability value (0.8514) is much higher than 0.05, the null hypothesis cannot be rejected, indicating that the random effects model is more suitable for the data. These results confirm that the random effects model provides a better fit by ensuring uncorrelated unobserved effects, leading to more efficient estimates. Furthermore, the findings are consistent with the conclusions of the Chow test, reinforcing the use of a pooled or random effects approach for further analysis.

Table 4
Lagrange Multiplier (LM) Test Results

	Test Hypothesis		
	Cross-Section	Time	Both
Breusch-Pagan	0.209828 (0.6469)	0.640806 (0.4234)	0.850634 (0.3564)

Table 4 presents the results of the Lagrange Multiplier (LM) test, a statistical method used to determine whether a random effects model is more suitable than a pooled Ordinary Least Squares (OLS) regression model. This test evaluates whether random effects significantly contribute to explaining variations in the dependent variable. The analysis includes three key components: Cross-Section, which examines random effects across different firms; Time, which assesses random effects over periods; and Both, which considers random effects across both dimensions. Each test provides the Breusch-Pagan statistic along with its corresponding probability value.

The results indicate that random effects are not statistically significant. The Cross-Section statistic is 0.209828, with a probability value of 0.6469, suggesting that firm-specific random effects do not meaningfully influence the dependent variable. Similarly, the Time statistic is 0.640806, with a probability value of 0.4234, indicating that time-specific effects are also insignificant. Both statistics are 0.850634, with a probability value of 0.3564, further supporting the null hypothesis that no random effects are present. Since all probability values exceed 0.05, the findings suggest that a pooled OLS regression model is the most appropriate choice, as random effects are not significant across firms, time, or both. This simplifies the analysis by removing the need to control for unobserved heterogeneity, though additional robustness checks may still be necessary to confirm this conclusion.

The Influence of Working Capital Efficiency on Profitability

Table 5
Panel Least Squares

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	0.052688	0.011878	4.435664	0.0000
X	0.000156	0.000187	0.832102	0.0468

Table 5 presents the results of the Panel Least Squares regression analysis, which examines the

relationship between working capital efficiency (X) and profitability (dependent variable). The analysis provides estimates for coefficients, standard errors, t-statistics, and probability values (Prob.) for each variable. The constant (C) has a coefficient of 0.052688, representing the estimated profitability (ROA) when working capital efficiency is zero. The standard error is 0.011878, indicating the variability in this estimate. The t-statistic is 4.435664, a high value suggesting strong statistical significance, while the probability value (0.0000) confirms its significance well below the 0.05 threshold.

For working capital efficiency (X), the coefficient is 0.000156, meaning that for every one-unit increase in working capital efficiency (measured by the Cash Conversion Cycle), profitability increases by 0.0156%. However, the t-statistic of 0.832102 is relatively low, indicating a weak relationship. The probability value (0.0468) is slightly below 0.05, suggesting that the relationship is statistically significant but only marginally. While the findings confirm that working capital efficiency has a positive impact on profitability, the effect size is small. The highly significant constant term indicates that other factors, such as sales growth, industry dynamics, or macroeconomic conditions, likely play a major role in determining profitability. These results support Hypothesis 1 (H1), affirming that working capital efficiency contributes to profitability. However, given the modest effect size, firms should consider additional financial and operational factors to enhance profitability more effectively.

The Influence of Working Capital Efficiency on Profitability with Sales Growth as a Moderator Variable

Table 6
Panel Least Squares 1

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	0.050692	0.011943	4.244663	0.0000
X	0.000164	0.000187	0.877057	0.3820
Z	0.067474	0.051181	1.318343	0.0189

Table 7
Panel Least Squares 2

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	0.050687	0.011854	4.275839	0.0000
X	0.000147	0.000258	0.571649	0.5685
Z	0.053228	0.051459	1.034379	0.3028
XZ	0.003810	0.002192	1.737588	0.0046

Table 6 presents the results of a regression model analyzing the direct effects of working capital efficiency (X), sales growth (Z), and their influence on profitability (ROA). The constant term (C) has a coefficient of 0.050692, representing the baseline profitability when both X and Z are zero. The standard error is 0.011943, reflecting the variability of this estimate. With a t-statistic of 4.244663 and a probability value of 0.0000, the constant term is highly significant, indicating that other factors beyond X and Z also contribute to profitability.

For working capital efficiency (X), the coefficient is 0.000164, indicating a small positive effect on profitability. However, the t-statistic of 0.877057 and probability value of 0.3820 suggests that this effect is not statistically significant in this model. In contrast, sales growth (Z) has a coefficient of 0.067474, indicating a stronger positive relationship with profitability. The t-statistic of 1.318343 and probability value of 0.0189 confirm that sales growth is statistically significant at the 5% level. These results suggest that while working capital efficiency alone does not have a meaningful impact on profitability, sales growth plays a more crucial role. The findings highlight the need to further explore the interaction effects between these variables to understand how firms can optimize both working capital efficiency and sales growth to enhance profitability.

Table 7 extends the analysis by incorporating the interaction term (XZ), which captures the moderating effect of sales growth on the relationship between working capital efficiency and profitability. The constant term (C) has a coefficient of 0.050687, representing baseline profitability when X, Z, and XZ are all zero. The t-statistic of 4.275839 and probability value of 0.0000 confirm that the constant is highly significant. For working capital efficiency (X), the coefficient is 0.000147, suggesting a minimal direct effect on profitability. However, the probability value of 0.5685 indicates that this relationship is not statistically significant. Similarly, sales growth (Z) has a coefficient of 0.053228, but with a probability value of 0.3028, it does not exhibit a significant individual impact in this expanded model.

The key finding in Table 8 is the interaction term (XZ), which has a coefficient of 0.003810 and a probability value of 0.0046, confirming statistical significance at the 5% level. This suggests that sales growth significantly enhances the relationship between working capital efficiency and profitability. While X and Z alone do not show strong direct

effects, their combined interaction produces a meaningful impact, indicating that firms with higher sales growth benefit more from efficient working capital management. Compared to Table 7, which highlights the stronger individual role of sales growth, Table 8 emphasizes the importance of interaction effects, showing that working capital efficiency becomes more relevant in firms with strong sales growth. Based on these results, Hypothesis 2 (H2) is accepted, supporting the idea that firms should focus on both working capital optimization and sales growth strategies to maximize financial performance.

Discussion

The Influence of Working Capital Efficiency on Profitability

The Resource-Based View (RBV) Theory provides a strong theoretical foundation for explaining the positive relationship between working capital efficiency and profitability. RBV, as proposed by Barney (1991), argues that firms achieve a sustainable competitive advantage by effectively managing and leveraging their internal resources. In this study, working capital is considered a strategic financial resource that, when managed efficiently, enhances liquidity, reduces financial constraints, and ultimately improves profitability.

The findings support the hypothesis (H1) that firms with optimized working capital practices achieve better financial performance, as measured by Return on Assets (ROA). This aligns with RBV's principle that superior financial resource management leads to better firm performance. Efficient working capital management ensures that firms can meet short-term obligations, minimize unnecessary holding costs, and allocate financial resources more effectively toward growth opportunities. Firms that excel in managing their working capital create a unique internal capability that enables them to respond to market demands with greater agility, thus sustaining higher profitability over time.

The positive relationship observed between working capital efficiency and profitability is consistent with earlier studies. For instance, Shidlovskii (2024) explored working capital management strategies within the Economic Order Quantity (EOQ) framework, demonstrating how efficient management of cash flows and inventory contributes to increased profitability. The study emphasized the importance of aligning working capital practices with operational efficiency. Mehak et al.,(2024) analyzed the impact of working capital management in Pakistan's textile industry. Their findings highlighted that efficient cash and inventory management strategies enhanced profitability, especially in capital-intensive sectors.

Wibowo (2025) examined the effect of working capital efficiency on profitability in Indonesia's food and beverage sector. The research found that shorter cash conversion cycles were associated with improved ROA, reinforcing the profitability benefits of working capital optimization. Gupta (2024) studied the role of working capital management in Bottler's Nepal Limited. The research showed that firms with efficient working capital practices could sustain profitability even under fluctuating market conditions.

The Influence of Working Capital Efficiency on Profitability with Sales Growth as a Moderator Variable

The Resource-Based View (RBV) Theory provides a strong framework for understanding how sales growth moderates the relationship between working capital efficiency and profitability. According to Barney (1991), firms gain a competitive advantage by effectively managing their internal resources. In this study, working capital efficiency is considered a key financial resource that, when properly managed, enhances profitability by improving liquidity and reducing financial constraints. However, RBV also highlights that the value of a resource is context-dependent, meaning its impact on firm performance is influenced by external factors such as market conditions and sales growth.

The findings of this study confirm that sales growth significantly strengthens the profitability benefits of working capital efficiency. This aligns with RBV’s argument that firms that effectively leverage their resources in alignment with their external market environment gain superior financial performance. When firms experience strong sales growth, they generate higher revenues, which allows them to utilize efficiently managed working capital more effectively—reinvesting cash flows into operations, maintaining optimal inventory levels, and reducing liquidity risks. This resource-market fit enhances profitability, reinforcing the idea that a firm's internal capabilities must be aligned with external market dynamics to maximize performance.

Wibowo (2025) found that in Indonesia's food and beverage sector, firms with both efficient working capital management and strong sales growth achieved higher profitability than their counterparts. The study highlighted that sales growth enhances the liquidity benefits of shorter cash conversion cycles. Kayani et al., (2025) showed that in Shariah-compliant UK firms, working capital efficiency significantly improved profitability, particularly for firms with high sales growth. The interaction of sales performance with cash flow management allowed these firms to capitalize on market opportunities effectively.

Hurriyaturrohman et al., (2024) found that small businesses in competitive environments benefited significantly from efficient working capital management when paired with strong sales growth. The increased sales enabled these firms to optimize the benefits of faster cash cycles. Balogun et al., (2024) noted that Nigerian beverage companies with high sales growth were better positioned to utilize efficient working capital practices, resulting in greater financial performance than those with stagnant sales.

Conclusion

This study examined the impact of working capital efficiency on profitability, with a particular focus on the moderating role of sales growth. The findings confirmed that efficient management of current assets and liabilities positively influences profitability, supporting the hypothesis that firms optimizing their working capital achieve stronger financial performance. However, this effect is not consistent across all firms. Sales growth emerged as a key moderating factor, strengthening the positive link between working capital efficiency and profitability.

The results suggest that firms experiencing strong sales growth can leverage efficient working capital management more effectively, as increased revenues enhance liquidity, enabling better operational optimization and reinvestment in expansion opportunities. In contrast, firms with stagnant or declining sales may see limited benefits from working capital efficiency, as restricted revenue flows reduce the effectiveness of liquidity management strategies. These insights emphasize the need for firms to align their financial management practices with market conditions and their specific growth trajectories.

This research contributes to the broader financial management literature by highlighting the dynamic relationship between working capital efficiency and sales growth. It builds upon prior studies by demonstrating that the profitability benefits of effective working capital management depend on a firm's ability to sustain sales growth, offering a more nuanced perspective on this relationship.

From a practical standpoint, the findings provide valuable guidance for corporate decision-makers. Managers should adopt a dual-strategy approach that combines optimizing working capital efficiency with initiatives to drive sales growth. This integrated approach ensures that firms can maximize profitability while maintaining a competitive advantage in their industries.

Future research could explore additional moderating factors, such as industry-specific influences, market volatility, or technological advancements, to further refine our understanding of how working capital efficiency affects profitability. Sector-specific analyses and longitudinal studies could also offer deeper insights into the long-term effects of financial management strategies under different economic conditions.

In summary, this study reinforces the critical role of working capital efficiency in improving profitability and highlights sales growth as a key catalyst in strengthening this relationship. By recognizing the interdependence of these factors, firms can develop more effective financial strategies to sustain and enhance their performance in increasingly competitive and dynamic business environments.

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