

# Can Cash Conversion Cycle and Trade Credit Optimize Profitability?

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## ABSTRACT

The manufacturing sector is a cornerstone of Indonesia's economic development, yet persistent profitability fluctuations highlight ongoing difficulties in managing working capital efficiently. The Cash Conversion Cycle (CCC), Trade Credit Receivable (TCR), and Trade Credit Payable (TCP) are among the key financial indicators that significantly shape a firm's operational and financial outcomes. Accordingly, this study investigates how these three variables affect the profitability of manufacturing companies listed on the Indonesia Stock Exchange. A quantitative research design was adopted, employing panel data regression with a Fixed Effect model to control for firm-specific characteristics. The sample encompasses 196 companies with 784 total observations recorded between 2021 and 2024. Return on Assets (ROA) is used as the profitability measure, while CCC, TCR, and TCP function as the independent variables. The results demonstrate that CCC and TCP negatively and significantly affect profitability, indicating that extended cash cycles and heavy reliance on supplier credit can erode financial performance. In contrast, TCR shows a significant positive effect, suggesting that effective receivables management contributes to stronger revenue generation. Practically, the results indicate that a one-unit increase in CCC and TCP reduces ROA by 0.0000338 and 0.0277, respectively, whereas a one-unit improvement in TCR increases ROA by 0.2174. These findings collectively underscore the importance of efficient working capital management in manufacturing firms. By optimizing the cash conversion cycle and maintaining a well-balanced trade credit strategy, companies can meaningfully enhance their profitability and ensure long-term financial sustainability within Indonesia's competitive manufacturing landscape.

**Keywords:** Cash Conversion Cycle; Profitability; Trade Credit Receivable; Trade Credit Payable; Working Capital.

## INTRODUCTION

Indonesia's economic development depends on the manufacturing sector as a key driver of GDP, creating added value, employment, and export growth while supporting industrial transformation. However, its declining GDP contribution from 20.16% in 2017 to 18.98% in 2024 indicates structural challenges that require strategic optimization. The instability of the manufacturing sector is reflected in fluctuating GDP growth, ranging from -2.93% in 2020 to around 4.64% in 2024 (BPS, 2026), alongside increasing global competition. ROA is a key indicator of operational efficiency, reflecting a firm's ability to generate profit from its assets and widely used by investors to assess performance (Sriwiyanti et al., 2021). During 2021-2024, ROA ranged from 0.1% to 30%, with an average of 8.9%, highlighting profitability fluctuations due to inefficient resource management (Pratiwi & Armaniah, 2025).

Companies require working capital to sustain operations, maintain liquidity, and optimize profitability (Stavropoulos & Zounta, 2025). A key measure is the Cash Conversion Cycle (CCC), which includes SCP, ACP, and PDP, and reflects how efficiently operational investments are converted into cash (Desai, 2021). While SCP and ACP tend to lengthen the cycle by delaying cash inflows, PDP can shorten it by postponing payments. This highlights the importance of adaptive

working capital management to sustain profitability, particularly in the manufacturing sector amid post-pandemic challenges.

To boost business profitability, working capital management mostly depends on trade credit, particularly through the balance of accounts payable and receivable. Research by Chalil & Siregar (2021) highlights that in 2010, non-financial entities maintained a 26.55% ratio of accounts receivable to revenue, compared to a 16.13% ratio for accounts payable. Furthermore, an analysis of 592 IDX-listed firms revealed that from 2010 to 2019, receivables and payables grew by 3.61% and 2.10%, respectively. These patterns imply that trade credit is evolving into a crucial short-term funding source, especially in developing nations (Hasan & Alam, 2022).

An effective credit policy can enhance sales and market share through flexible payment terms, thereby supporting profit growth. However, excessive receivables and longer collection periods may disrupt cash flow and increase default risk. Conversely, well-managed payables allow firms to utilize supplier credit as a cost-free short-term financing source, enabling more efficient capital allocation. Therefore, maintaining an optimal balance between receivables and payables is essential to sustain liquidity while maximizing profitability.

Research on the relationship between CCC and ROA shows inconsistent results. Some studies find a positive and significant effect, suggesting that a longer CCC can enhance profitability in certain contexts (Andrean & Paranita, 2022; Ayuningtyas & Prasetyono, 2021; Fronika et al., 2022; Herdiyansah & Devi, 2024). Others report a positive but insignificant relationship (Radeya & Haryanto, 2022; Rahmawati & Hady, 2023), while several studies confirm a negative and significant effect, indicating that a longer CCC reduces profitability (Miftahuddin & Sampurno, 2023; Ramadhanti & Muharam, 2024). These conflicting findings highlight an unresolved empirical gap regarding the role of CCC in financial performance.

Research on profitability was also conducted by Annistysia & Witono (2024) using trade credit variables, where companies utilize trade credit through receivables and payables (Baker et al., 2022). The study finds that Trade Credit Receivable (TCR) affects profitability, while Trade Credit Payable (TCP) does not. However, this contradicts Al-Eitan et al., (2023), who show that only TCP has a significant positive effect, whereas TCR has no significant impact. These inconsistent findings indicate an unresolved empirical gap in the literature. Despite extensive studies, limited evidence exists for Indonesia's post-pandemic manufacturing sector, as prior research often relies on pre-pandemic or non-Indonesian data and examines CCC and trade credit components separately. The novelty of this study lies in its integrated analysis of CCC, TCR, and TCP within a single empirical model, providing more comprehensive insights during the 2021–2024 recovery period.

The mixed findings on the impact of trade credit and the CCC on firm profitability highlight the lack of consensus regarding the role of working capital efficiency in financial performance. This research is important to conduct because it raises issues that are highly relevant for Indonesian manufacturing companies facing global competition and post-pandemic economic pressures, while the increasing reliance on trade credit as short-term financing demands further evaluation of its effectiveness. This study contributes by employing an integrated approach that simultaneously examines CCC, TCR, and TCP within a single empirical framework, which remains relatively underexplored. Using data 2021-2024, it aims to analyze the effects of these variables on profitability, proxied by ROA, both individually and jointly, in order to provide stronger empirical evidence and practical insights for optimizing working capital management.

## LITERATURE REVIEW

### Cash Conversion Cycle Theory

Richards and Laughlin's Cash Conversion Cycle framework (1980) suggests that shorter cycles protect companies from working capital inefficiencies, thereby driving better financial outcomes. In order to evaluate how well a company manages its working capital components specifically, inventory, debt collection, and supplier payments the Cash Conversion Cycle determines the net time interval required for cash expenditures to be converted back into cash revenues. Faster cash turnover and more effective asset usage are associated with shorter CCC, which may boost profitability as determined by ROA. The association between CCC and ROA in this study can

therefore be explained by this idea (Richards & Laughlin, 1980).

### **Pecking Order Theory**

According to Myers & Majluf's (1984) Pecking Order Theory, businesses prioritize internal funding sources (retained earnings), debt, and equity issuance in order to meet their funding demands. In this study, trade credit payable is viewed as a relatively easier and more economical source of short-term external funding compared to formal loans, so it is used to support working capital needs. In the meantime, trade credit receivable impacts the CCC efficiency and represents internal cash invested in operational activities. According to this idea, trade credit management and CCC regulations influence the finance structure's effectiveness, which in turn affects the business's profitability.

### **Cash Conversion Cycle and Profitability**

Under the framework of CCC Theory, a company's profitability and liquidity are heavily influenced by how effectively it regulates the periods for inventory, receivables, and payables. A condensed conversion cycle is vital as it accelerates the recovery of operational capital, ensuring that liquid assets are available to meet immediate liabilities and fund strategic growth initiatives. ROA serves as the efficiency proxy in this study, representing a firm's capacity to convert its total assets into generated profit. The longer the CCC, the greater the potential for inefficiency and cost burdens that can suppress financial performance. A number of empirical findings support this argument, where Miftahuddin & Sampurno (2023), Olorunfemi et al., (2020), Ramadhanti & Muharam (2024) demonstrate that ROA is significantly impacted negatively by CCC. However, prior studies also report inconsistent results, with some indicating positive or insignificant relationships, suggesting that the effect of CCC may vary depending on firm characteristics and working capital strategies (Andrean & Paranita, 2022; Ayuningtyas & Prasetiono, 2021; Fronika et al., 2022; Herdiyansah & Devi, 2024). Despite these inconsistencies, this study expects a negative relationship, as longer cash conversion cycles are theoretically associated with higher holding costs and reduced liquidity. In light of the theoretical framework and empirical evidence presented, the following hypothesis is developed:

H1: Cash Conversion Cycle (CCC) has a negative effect on Profitability

### **Trade Credit Receivable and Profitability**

Trade Credit Receivable (TCR) is a company policy that provides payment flexibility to customers as a strategy to increase competitiveness and drive sales growth (Detthamrong & Chansanam, 2023). Appropriate credit provision can expand market share, increase transaction volume, and strengthen long-term relationships with customers, thereby potentially increasing company revenue. This increase in revenue is ultimately expected to drive profit growth, as long as the risk of uncollectible receivables and credit management costs remain at a controlled level. According to the theory of Pecking Order, this policy reflects the optimization of operational funds to support productive activities that generate profits. According to Wahyuningtyas & Fanani's (2025) research, trade credit receivables should theoretically increase a company's profitability. However, prior studies report mixed findings, with some indicating insignificant or even negative effects, suggesting that the benefits of trade receivables depend on firms' ability to manage collection efficiency and credit risk (Baker et al., 2022). Despite these inconsistencies, this study expects a positive relationship, as effective receivables management is likely to enhance sales and profitability. In view of the conceptual framework and the diverse experimental findings reviewed, the study formulates the following research propositions:

H2: Trade credit receivable has a positive effect on company profitability.

### **Trade Credit Payable and Profitability**

TCP is a credit facility from suppliers that allows companies to defer payment for purchases of raw materials or merchandise. Optimal utilization of trade debt can help maintain liquidity and provide a source of short-term funding without interest costs, so that company funds can be allocated to productive and profitable operational activities. With efficient payment management,

companies can increase financial flexibility and support profitability performance. Using the Pecking Order Theory as a foundation, where debt serves as a secondary funding source to internal capital, this study hypothesizes that Trade Credit Payable positively affects profitability. Empirical support for this relationship is found in the work of Al-Eitan et al., (2023), confirming that leveraging payable credit can contribute to stronger corporate performance. This argument is further supported by recent international evidence, particularly studies on the Cash Conversion Cycle (CCC), which indicate that efficient management of payables contributes to improved firm performance and profitability. Prior empirical findings by Li et al., (2016), Hoang et al., (2019), and Abuhommous & Almanaseer (2021) consistently show that trade credit utilization plays a significant role in enhancing financial outcomes. The current study formulates the following assumptions based on the combination of the previously indicated theoretical foundations and practical insights:

H3: Trade Credit Payable has a positive effect on company profitability.

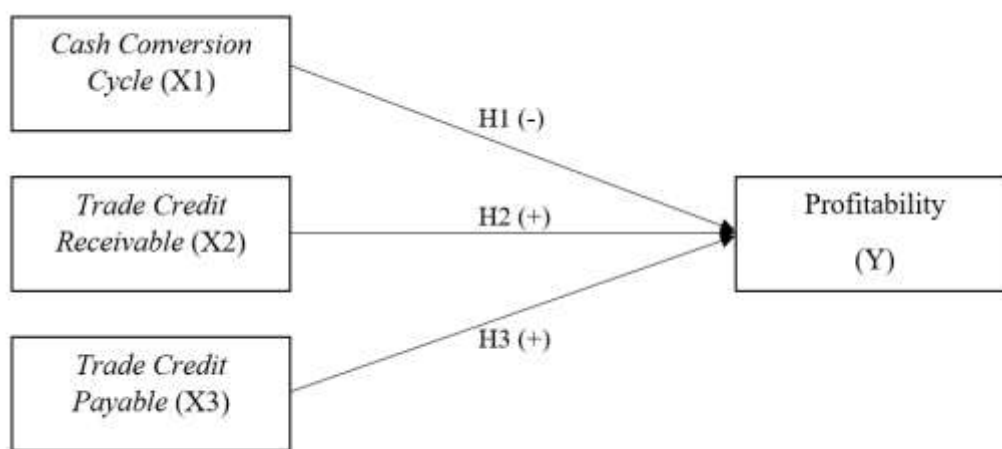


Figure 1. Research Model  
Source: Processed data (2026)

### METHOD

A quantitative causal framework is employed here to determine the extent to which fluctuations in the CCC and trade credit drive measurable changes in financial outcomes (Rahmawati & Hady, 2023). Such a methodology facilitates a methodical investigation into the relationship between operational liquidity management and corporate profitability. The application of panel data techniques allows the study to observe longitudinal trends from 2021 to 2024 while simultaneously identifying performance disparities across the sampled firms. This approach enables objective testing of causal relationships between variables while simultaneously analyzing differences across companies and changes in performance over time. The sample selection was conducted using purposive sampling with clearly defined inclusion and exclusion criteria. From the initial population of 344 manufacturing firms listed on the IDX, 140 firms were excluded due to reporting negative earnings during the 2021-2024 period, as profitability (ROA) is the main dependent variable. In addition, 8 firms were excluded due to incomplete financial data required to calculate CCC, TCR, and TCP. After applying these criteria, the final sample consisted of 196 firms, resulting in 784 firm-year observations in a balanced panel dataset.

Data collection for this study was conducted via a documentation approach, extracting historical financial figures from official corporate repositories (Silalahi & Silalahi, 2021). The Bloomberg database, the official IDX website, and the annual reports of the corresponding corporations provided the financial data, which was supplemented with pertinent scholarly literature. To ensure data accuracy and consistency, all information was carefully verified for completeness and reliability across consecutive periods. Companies that did not provide comprehensive financial documentation were excluded from the final sample to maintain the validity and robustness of the statistical analysis.

To assess financial outcomes, the research employs ROA as a dependent variable, supported by

independent measures including the Cash Conversion Cycle and trade credit metrics. Following Pham & DINH (2023), ROA provides a clear window into the efficiency of a firm's asset management. ROA serves as a critical metric for determining the effectiveness of resource allocation in driving profitability. Its widespread adoption in financial literature highlights its importance as a gauge of operational performance. A higher ROA value indicates better managerial efficiency in converting investments in assets into net income, while a lower ROA suggests less effective use of resources. The direct correlation between profit and total assets allows ROA to serve as a robust gauge of operational success, providing insights that are not skewed by the company's specific financial structure. The following formula is used in this study to determine ROA:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

To evaluate how efficiently a firm manages its working capital, analysts frequently utilize the CCC, which quantifies the span between initial cash disbursements to vendors and the eventual collection of revenue (Maysuri & Dalimunthe, 2018). This composite indicator merges several operational facets, including Stock Conversion Period (SCP), Average Collection Period (ACP), and Payment Deferral Period (PDP). A minimized CCC is often equated with heightened efficiency, as it demonstrates that resources tied up in the production-to-sales pipeline are being liberated quickly. Because of this, the CCC remains a standard benchmark for gauging an organization's overall functional effectiveness in management studies. In this study, CCC is calculated using the following formula:

$$\text{CCC} = \text{SCP} + \text{ACP} - \text{PDP}$$

$$\text{SCP} = \frac{\text{Inventory}}{\text{Cost of Good Sold}} \times 365 \text{ days}$$

$$\text{ACP} = \frac{\text{Account Receivable}}{\text{Sales}} \times 365 \text{ days}$$

$$\text{PDP} = \frac{\text{Account Payable}}{\text{Cost of Good Sold}} \times 365 \text{ days}$$

Trade credit represents a vital element of working capital strategy, involving the reciprocal practice of extending or accepting credit during business-to-business transactions. It operates as a short-term financing tool that occurs when vendors offer grace periods for payments, enabling firms to acquire inventory or raw materials without an immediate cash requirement. Trade Credit Receivable (TCR) represents the proportion of receivables arising from credit sales relative to the firm's total assets, and Trade Credit Payable (TCP) reflects the extent to which the company utilizes supplier financing in relation to its total assets (Annistysia & Witono, 2024). Proficient management of these credit components can bolster financial versatility and drive overall corporate profitability. In this study, TCR and TCP is calculated using the following formula:

$$\text{TCR} = \frac{\text{Account Receivable}}{\text{Total Assets}}$$

$$\text{TCP} = \frac{\text{Account Payable}}{\text{Total Assets}}$$

This study employs EViews to execute panel data regression. Descriptive statistics are used to define the features of the research variables at the beginning of the data analysis process. To select the most suitable estimation model, a series of feasibility tests were implemented. To address potential biases and maintain consistency, the study incorporated robust standard errors alongside classical assumption testing. The core hypotheses were tested via a multiple linear regression approach. The statistical significance of the variables was evaluated using T-tests and F-tests, and the coefficient of determination ( $R^2$ ) demonstrated how well the independent variables explained the dependent variable.

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

Description:

- Y = Profitability
- X1 = Cash Conversion Cycle
- X2 = Trade Credit Receivable
- X3 = Trade Credit Payable
- $\beta_1, \beta_2, \beta_3$  = Koefisien regresi
- $\varepsilon$  = Error

**RESULTS**

A dataset of 784 observations served as the foundation for this study's descriptive statistical analysis. The profitability variable, ROA (Y), recorded a mean of 0.081108 with a standard deviation of 0.072268, reflecting varying levels of performance across the sampled firms. The CCC (X1) variable showed a mean of 123.0546. however, its high standard deviation of 204.9883 points to a significant dispersion in data and a broad range of values. Meanwhile, TCR (X2) and TCP (X3) reported mean values of 0.143553 and 0.099789, respectively. While these variables displayed differences in company characteristics, their volatility was more moderate compared to the CCC. Overall, the descriptive results confirm that the data exhibits sufficient variation to proceed with further analytical testing.

Table 1. Descriptive Statistics Results

|              | Y        | X1        | X2       | X3       |
|--------------|----------|-----------|----------|----------|
| Mean         | 0.081108 | 123.0546  | 0.143553 | 0.099789 |
| Median       | 0.062941 | 92.79869  | 0.122407 | 0.060071 |
| Maximum      | 0.617825 | 1859.375  | 0.759535 | 3.649672 |
| Minimum      | 0.000106 | -3734.514 | 6.66E-05 | 0.000331 |
| Std. Dev.    | 0.072268 | 204.9883  | 0.118662 | 0.164356 |
| Skewness     | 2.034405 | -6.990848 | 1.320643 | 13.44723 |
| Kurtosis     | 9.879452 | 169.9741  | 5.255940 | 279.7761 |
| Jarque-Bera  | 2086.815 | 917144.0  | 394.1449 | 2526059. |
| Probability  | 0.000000 | 0.000000  | 0.000000 | 0.000000 |
| Sum          | 63.58846 | 96474.82  | 112.5456 | 78.23487 |
| Sum Sq. Dev. | 4.089353 | 32901805  | 11.02508 | 21.15121 |
| Observations | 784      | 784       | 784      | 784      |

Source: Processed by the author (2026)

The study concentrated on choosing a suitable panel data regression model after statistical analysis had described the dataset's properties. The objective was to determine whether method Random Effect Model (REM), Fixed Effect Model (FEM), or Common Effect Model (CEM) would best capture the distinctive features of the data while preserving consistency and reducing bias. To achieve this, the researchers conducted a formal selection process starting with the Chow Test before moving on to formal hypothesis testing.

Table 2. Chow Test

| Effects Test             | Statistic  | d.f.      | Prob.  |
|--------------------------|------------|-----------|--------|
| Cross-section F          | 10.392165  | (195.585) | 0.0000 |
|                          | 1172.90913 |           |        |
| Cross-section Chi-square | 2          | 195       | 0.0000 |

Source: Processed by the author (2026)

The probability value obtained from the Chow Test was 0.0000, which falls well below the standard 0.05 threshold. This suggests that the FEM is a better option than the CEM, as it successfully captures unique characteristics across the manufacturing firms. To further refine the model selection, the Hausman Test will be conducted. By analyzing the correlation between individual traits and independent variables, this test seeks to determine whether the FEM or REM offers a more reliable and effective estimator.

Table 3. Hausman Test

| Test Summary         | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob.  |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 13.836547         | 3            | 0.0031 |

Source: Processed by the author (2026)

A Hausman test was performed to identify the best effective estimator, yielding a probability of 0.0031. The FEM was preferred over the REM because this value is much less than 0.05. In order to preserve consistency and precisely capture the unique features present in the manufacturing sector data, the study used the FEM.

The accuracy of an estimation model is verified through classical assumption tests. According to (Gujarati & Porter, 2009), the Central Limit Theorem suggests that a large sample size causes the sampling distribution to approximate normality, regardless of the population's original distribution. Since this analysis involves a substantial dataset of 784 observations, the normality assumption is not a critical issue. The resulting estimates maintain their consistency property, ensuring they are robust enough for statistical inference and hypothesis testing.

Every inter variable correlation was less than 0.80, according to the correlation matrix analysis. These findings indicate that the independent variables are sufficiently different to move forward with the estimation based on typical multicollinearity testing. This suggests that there is little to no association between the independent variables. These results demonstrate that the model satisfies the non-multicollinearity assumption, providing a robust foundation for the ensuing analytical procedures.

Table 4. Multicollinearity Test

|    | X1        | X2       | X3        |
|----|-----------|----------|-----------|
| X1 | 1.000000  | 0.089791 | -0.668560 |
| X2 | 0.089791  | 1.000000 | 0.270036  |
| X3 | -0.668560 | 0.270036 | 1.000000  |

Source: Processed by the author (2026)

Additionally, the adoption of a robust standard error technique anticipates the potential of heteroscedasticity and autocorrelation, ensuring that the estimated parameters remain constant and yield trustworthy statistical conclusions. The robust standard errors test yielded the following results:

Table 5. Robust Test

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | 0.056825    | 0.004539   | 12.51999    | 0.0011 |
| X1       | -3.38E-05   | 4.16E-06   | -8.134779   | 0.0039 |
| X2       | 0.217416    | 0.021516   | 10.10495    | 0.0021 |
| X3       | -0.027700   | 0.008525   | -3.249290   | 0.0475 |

Effects Specification

|                                       |          |                   |          |
|---------------------------------------|----------|-------------------|----------|
| Cross-section fixed (dummy variables) |          |                   |          |
| R-squared                             | 0.785336 | F-statistic       | 10.80903 |
| Adjusted R-squared                    | 0.712680 | Prob(F-statistic) | 0.000000 |

Source: Processed by the author (2026)

After the Fixed Effect model was established, regression estimation was performed using a robust approach to address potential heteroscedasticity, thereby producing more reliable coefficient estimates. These outputs reveal how significantly the independent factors influence the dependent variable. The established regression equation is defined below:

$$Y = 0.056825 - 3.38E-05X1 + 0.217416X2 - 0.027700X3 + \varepsilon$$

When all independent variables (X1, X2, and X3) are held constant or set to zero, the anticipated value of the dependent variable (Y) is indicated by the constant value of 0.056825. A one unit rise in X1 is linked to a 0.000338 drop in Y, according to the regression coefficient for X1, which is -0.000338 if all other independent variables stay the same. Similarly, the coefficient for X2 is 0.217416, meaning that, while keeping the other variables constant, each additional unit of X2 leads to an increase of 0.217416 in Y. On the other hand, the coefficient of X3 is -0.027700, suggesting that if all other independent variables are held constant, a one-unit rise in X3 will reduce Y by 0.027700.

The model's R-squared value of 0.785336 indicates that the independent variables and fixed effects combined account for 78.53% of the variance in the dependent variable. The remaining 21.47% can be attributed to external factors not considered in this study. Furthermore, even after accounting for sample size and predictor count, the model still explains 71.27% of the variation, according to the adjusted R-squared of 0.712680. When taken as a whole, these figures support the estimation's strong explanatory capacity.

All independent factors have a statistically significant impact on the dependent variable, according to partial hypothesis testing at a 5% significance level based on the Fixed Effects Model (FEM) t-test results. This conclusion is drawn from the comparison between the calculated t-statistics and the corresponding probability values, all of which fall below the 0.05 threshold. The regression analysis reveals that X1 exerts a significant negative impact on the dependent variable ( $t = -8.134779$ ,  $p = 0.0039$ ). This suggests that an increase in the Cash Conversion Cycle leads to a measurable reduction in corporate performance, *ceteris paribus*.

The regression results for X2 reveal a highly significant positive correlation ( $t = 10.10495$ ,  $p = 0.0021$ ), suggesting that more effective management of trade credit receivables contributes positively to firm performance. This finding indicates that higher values of X2 contribute to an increase in the criterion variable. In contrast, the analysis identifies a significant negative correlation for X3 ( $t = -3.249290$ ,  $p = 0.0475$ ). This suggests that while X3 is a significant predictor, its influence on the dependent variable is inverse, meaning higher levels of X3 correspond to lower profitability. Although the magnitude of its effect is smaller compared to X1 and X2, the result still confirms its meaningful contribution to the model.

This finding contradicts the proposed hypothesis (H3), which predicted a positive relationship between X3 and firm performance. This unexpected result suggests that the role of X3 may vary depending on the firm's financial and operational conditions. This unexpected negative relationship is not entirely inconsistent with prior empirical and theoretical perspectives. Several studies suggest that excessively lenient credit policies or inefficient working capital management may adversely affect firm performance due to increased default risk, higher administrative costs, and reduced liquidity (Akbar et al., 2021). In such cases, firms may experience diminishing returns from extending credit, particularly when the marginal benefits of increased sales are outweighed by the costs of delayed cash inflows. Furthermore, agency problems and weak monitoring mechanisms can exacerbate the negative impact of higher X3 levels, leading to suboptimal financial outcomes. Therefore, the negative coefficient of X3 may reflect inefficiencies in credit policy implementation rather than a fundamental contradiction of theory, highlighting the importance of balancing growth-oriented strategies with prudent risk management. Overall, these findings demonstrate that each independent variable plays a significant role in explaining variations in the dependent variable within the FEM framework.

## DISCUSSION

Since the empirical results show that CCC has a statistically significant detrimental effect on the profitability metric, the first hypothesis is accepted. The data aligns with the expected theoretical framework for this variable. Miftahuddin & Sampurno (2023) and Ramadhanti & Muharam (2024) both corroborate this conclusion. This implies that a company's profitability will decrease with the length of its cash conversion cycle. In contrast, a shorter CCC accelerates the transformation of inventory and accounts receivable into cash. This efficiency helps maintain high liquidity levels and serves to maximize corporate earnings.

According to CCC Theory, this metric quantifies the time interval between the initial investment in working capital and the subsequent generation of cash inflows. A longer CCC indicates money that has been invested in inventory and accounts receivable for a longer period of time, which raises opportunity costs and liquidity risk and may ultimately lower profitability. Therefore, this study reinforces the CCC theory, demonstrating that effective working capital strategies that minimize the cash conversion cycle are instrumental in maximizing a company's profit potential.

The second hypothesis is accepted based on the evidence that TCR significantly and positively impacts profitability. This alignment indicates that the management of trade credit receivables contributes effectively to the company's earnings. Wahyuningtyas & Fanani (2025) corroborate this conclusion. This means that improving credit policies for customers can increase company profitability. Empirically, this indicates that effective credit provision can drive sales growth, expand market share, and increase revenue, which ultimately leads to higher profits.

Consistently with the Pecking Order hierarchy, these findings reflect a strategic tendency among firms to utilize retained earnings and internal cash flows before resorting to outside capital markets. Trade credit receivables reflect a company's operational strategy in managing credit-based sales to increase revenue flow. As long as the risk of uncollectible receivables can be controlled, this policy is an effective instrument in improving profit performance.

The results of the regression confirm the third hypothesis, revealing that an increase in Trade Credit Payable (TCP) is associated with a significant decline in firm profitability. Chalil & Siregar's research from 2021 supports this conclusion. This implies that a decrease in business profitability really follows an increase in the usage of trade debt. This condition may indicate that high dependence on supplier credit has the potential to create implicit burdens, such as the loss of potential cash payment discounts or pressure on supplier relationships, which ultimately depresses company profits. In the perspective of Pecking Order Theory, debt, including trade credit payable, is an alternative source of funding after internal sources. However, this theory does not state that all forms of debt always increase profitability, but rather emphasizes the order of preference for funding. If the use of trade debt exceeds the optimal level or reflects liquidity constraints, it can have a negative impact on profit performance.

## CONCLUSION

It has been shown that the CCC has a significant negative influence on profitability, indicating that shorter cash conversion cycles are associated with improved financial performance. Profitability can also be enhanced through effective receivables management, as Trade Credit Receivable has a positive and significant effect on profitability. Conversely, Trade Credit Payable has a significant negative impact, suggesting that excessive reliance on supplier credit may reduce firm profitability. These findings highlight the critical role of efficient working capital management in improving the profitability of manufacturing firms. From a practical perspective, managers should prioritize shortening the cash conversion cycle by accelerating receivables collection and improving inventory turnover, while carefully controlling the use of trade credit from suppliers to avoid excessive financial pressure. For investors, these results emphasize the importance of evaluating firms' working capital efficiency particularly CCC, TCR, and TCP as key indicators in assessing financial performance and investment potential. From a conceptual standpoint, the results contribute to the literature on corporate financing structure and working capital management.

This study has several limitations. First, the relatively limited number of variables and the use of a linear model may not fully capture potential non-linear or threshold effects in the relationship between working capital management and profitability. Second, external macroeconomic factors

such as inflation, interest rates, and exchange rate fluctuations were not included in the model. Third, the analysis is limited to manufacturing firms in Indonesia over the 2021–2024 period, which may restrict the generalizability of the findings. In addition, the use of secondary data may introduce reporting bias and differences in accounting practices across firms. Lastly, potential endogeneity issues, such as reverse causality between profitability and working capital variables, may not be fully addressed by the estimation method used. Future research is recommended to incorporate more comprehensive variables, including macroeconomic indicators and firm-specific characteristics such as leverage and firm size, to provide deeper insights. Moreover, the application of advanced estimation techniques, such as Generalized Method of Moments (GMM) or instrumental variable approaches, is suggested to address potential endogeneity issues. Extending the observation period and conducting cross-sector or cross-country comparisons may also improve the robustness and generalizability of the findings.

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