

**THE EFFECT OF WORKING CAPITAL ON RETURN ON ASSETS AND RETURN ON EQUITY****Dina Kristiana<sup>1\*</sup>, Reniati Karnasi<sup>2</sup>**<sup>1,2</sup>Fakultas Ekonomi dan Bisnis Universitas TrisaktiEmail: <sup>1\*</sup>[dinakristiana176@gmail.com](mailto:dinakristiana176@gmail.com), <sup>2</sup>[reniati@trisakti.ac.id](mailto:reniati@trisakti.ac.id)**Abstract**

The purpose of this study was to determine the effect of working capital management on profitability in manufacturing companies listed on the Indonesia Stock Exchange (IDX). Working capital management is measured by accounts receivable, inventory, accounts payable, and the cash conversion cycle, while profitability is measured by return on assets and return on equity. This research is a quantitative research with a research design in the form of hypothesis testing. The analytical method in this study uses multiple regression analysis using E-views 10.0 software. The data is obtained from the financial reports of manufacturing companies that have been published and listed on the Indonesia Stock Exchange (IDX) for 2018-2022. The sample in this study was taken using a purposive sampling technique, namely 127 manufacturing companies that have been published and listed on the Indonesian Stock Exchange (IDX). The results of the study show that the variables accounts receivable and inventory have a significant negative effect on return on assets, while the account payable and cash conversion cycle variables have no effect on return on assets and return on equity

**Keywords:** profitability, account receivable, account payable, inventory, cash conversion cycle**INTRODUCTION**

*Working Capital Management* (WCM) is one of the challenges faced by companies, which can provide a comfortable and appropriate level of liquidity to enable companies to cover their short-term financial obligations – resulting from financing their operations – in order to ensure the continuity of the company's business and maximize their profits (Aldubhani et al., 2022; Brigham & Houston, 2019).

Working capital management is even more important in emerging and developing countries, where unstable financial market conditions and uncertainties associated with the economic situation cause severe turbulence and general price instability (Alvarez et al., 2021). Establishing a reasonable working capital policy will allow the company to increase profitability and create value for investors (Anwar, 2018; Nguyen et al., 2020). WCM plays an important and influential role in the operational performance of the company's resources, liquidity, profitability and overall company value. Thus, the company seeks to balance the risks and returns resulting from investments in current assets to achieve optimal levels of working capital investment (Amponsah-Kwatiah & Asiamah, 2021; Saebah et al., 2023).

Aldubhani et al., (2022) have conducted a study with account receivable, *inventory*, *account payable*, and *cash conversion cycle measurement variables* that examined the effect of *working capital management* on profitability in *companies going public in Qatar* found that *companies with shorter receivables collection periods* and *cash conversion cycles* are more profitable. Longer inventory turnover periods and debt repayment periods associated with higher corporate profitability (Mahmood et al., 2019; Munawir, 2010). The effect of working capital management on companies going public found that the relationship was positive and statistically significant between all components of working capital and profitability, suggesting that the increase in each variable is considered to determine the increase in employment in profitability (Fahmi, 2018; Saebah & Merthayasa, 2023). According to Alvarez, T. et. al., (2021) the influence of working capital management on companies found a negative relationship between the increase in this variable and profitability, which is determined by the need for greater financial resources.

Research by Alvarez T. et. al., (2021) in addition to using account receivable, inventory, account payable, and cash conversion cycle also uses current ratio and size measurements of both profitability variables are positively and significantly correlated with account receivable, inventory, account payable, and cash conversion cycle (Gonçalves, 2018; Purwaji & Muslim, 2023; Rangkuti, 2013). The results showed a positive and statistically significant relationship between all components of working capital and profitability, indicating that the increase in each variable is considered to determine the increase in performance in terms of ROA and ROE

**RESEARCH METHODS**

**Sampling Method**

This study uses the dependent variable namely Leverage and the independent variable namely *Account Receivable*, *Inventory*, *Account Payable*, *Cash Conversion Cycle* with different measurement indicators (Prabowo et al., 2023). The unit of analysis used is manufacturing sector companies listed on the Indonesia Stock Exchange and have annual reports according to the required data in the 2018-2022 period. The analysis method used by this study is *regression data panel* and uses *Eviews 10 software* (Sugiyono, 2019).

**Table 1**  
**Sample Measurement**

<b>Variable</b>	<b>Measurement</b>	<b>Skala</b>
<b>Variable Dependencies</b>		
<b>Profitability</b>		
<i>Return on Asset</i>	$ROA = \frac{EBIT}{Total\ Asset}$	Ratio
<i>Return on Equity</i>	$ROE = \frac{Net\ Profit}{Total\ Equity}$	Ratio
<b>Independent Variables</b>		
<b>Working Capital Management</b>		
<i>Account Receivable</i>	$Receivable = \frac{Average\ of\ Accounts\ Receivable}{Sales} \times 365$	Ratio
<i>Inventory</i>	$INV = \frac{Average\ of\ Inventory}{Cost\ of\ Goods\ Sold} \times 365$	Ratio
<i>Account Payable</i>	$AP = \frac{Average\ of\ Account\ Payable}{Cost\ of\ Goods\ Sold} \times 365$	Ratio
<i>Cash Conversion Cycle</i>	$CCC = SE + INV - AP$	Ratio

**Data Analysis Methods**

The regression model of this study can be formulated as follows:

**Model 1:  $ROA = a + b1AR + b2INV + b3AP + b4CCC + \epsilon$**

**Model 2:  $ROE = a + b1AR + b2INV + b3AP + b4CCC + \epsilon$**

**T Test**

The T test is used to measure the presence of a significant or insignificant influence between the independent variable and the dependent variable. The decision-making criteria in the t test are as follows (Setiawati, 2022; Staniewski & Awruk, 2019):

1. If the p-value of  $t < 0.05$  then  $H_0$  is rejected, thus indicating that the independent variable affects the dependent variable.
2. If the p-value  $t > 0.05$  then  $H_0$  is accepted, thus indicating that the independent variable does not affect the dependent variable.

**RESULTS AND DISCUSSION**

**Descriptive Statistics**

<b>Stage 2</b>					
<b>Descriptive Statistics</b>					
<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Maximum</b>	<b>Minimum</b>	<b>Std. Dev.</b>
<i>Return On Asset</i>	635	0.071337	0.770196	-0.957725	0.123494
<i>Return On Equity</i>	635	0.048640	2.554641	-4.962281	0.446443
<i>Account Receivable</i>	635	880.9398	328068.1	0.000000	14391.03
<i>Inventory</i>	635	420.1622	126272.2	0.000000	5337.814
<i>Account Payable</i>	635	470.3674	189083.4	0.000000	8034.663
<i>Cash Conversion Cycle</i>	635	830.7346	265256.9	-379.3756	11697.94

Source : Data processed by *Eviews 10*

From the data above, it can be seen that the value of the number of research samples (N) used in 2018-2022 was 635 samples with the number of manufacturing industries as many as 127 companies and 5 years of observation. There are 6 variables that are studied entirely with the following interpretation (Lyngstadaas, 2020) (Lyngstadaas, 2020; Utami & Melvani, 2022):

1. *Return On Asset* has an average value of 0.071337 with a standard deviation value of 0.123494. PT Sunson Textile Manufacture Tbk has the lowest *return on assets* with a value of -0.002 in 2019, while the company with the highest ROA value is PT Unilever Indonesia Tbk of 0.630 in 2018.
2. *Return On Equity* has an average value of 0.048640 with a standard deviation value of 0.446443. PT. Indospring Tbk has the lowest return on equity value of 0.023 in 2020, while the company with the highest *return on equity* value is PT. SiantarTop Tbk amounted to 0.235 in 2020.
3. *Account Receivable* has an average value of 880.9398 with a standard deviation value of 14391.03. PT. Gudang Garam Tbk has the lowest account receivable value with a value of 0.7542 in 2018, while the company with the highest *account receivable value* is PT. Mustika Ratu Tbk amounted to 246,098 in 2020.

4. *Inventory* has an average value of 420.1622 with a standard deviation value of 5337.814. PT. Alakasa Industrindo Tbk has the lowest tangibility with a value of 0.176 in 2022, while the company with the highest *inventory* value is PT. Jakarta Kyoei Steel Tbk amounted to 126272,195 in 2019.
5. *Account Payable* has an average value of 470.3674 with a standard deviation value of 8034.663. PT. Kirana Megatara Tbk has the lowest account payable value with a value of 0.372 in 2018, while the company with the highest account payable value is PT. Prima Alloy Steel Universal Tbk amounted to 625,074 in 2022.
6. *Cash Conversion Cycle* has an average value of 830.7346 with a standard deviation value of 11697.94. PT. Unilever Indonesia Tbk has the lowest cash conversion cycle value with a value of 2,838 in 2022, while the company with the highest cash conversion cycle value is PT. Langgeng Makmur Industri Tbk amounted to 338,088 in 2018.

### T Test

T testing is used to test how much influence the regression coefficient of each independent variable has on the dependent variable. Here are the results of the T test (Hanafi, n.d.):

**Table 3**  
**Model 1 T Test Results**

<b>Independent Variables</b>	<b>Variable Dependencies</b>		
	<b>TWO PEOPLE</b>		
	<b>Coefficient</b>	<b>Prob.</b>	<b>Conclusion</b>
Konstanta	0.199035	-	-
<i>Account Receivable</i>	-0.016478	0.0255	Significant
<i>Inventory</i>	-0.017996	0.0143	Significant
<i>Account Payable</i>	0.005512	0.4173	Insignificant
<i>Cash Conversion Cycle</i>	8.40E-07	0.0650	Insignificant

1. *Account Receivable* Based on the results of processing the table above, it is obtained that the significant value of account receivable is  $0.0000 < 0.05$  (alpha 5%) with a coefficient of -0.016478, which means that there is a negative and significant influence between receivable accounts on return on assets.
2. Based on the results of the table management above, it is obtained that a significant value of  $0.0000 < 0.05$  (alpha 5%) with a coefficient of -0.017996, which means that there is a negative and significant influence between *inventory* and *return on assets*.
3. Based on the results of the table management above, it is obtained that the significant value of account payable is  $0.0000 < 0.05$  (alpha 5%) with a coefficient value of 0.005512, which means that there is no significant influence between account payable and return on assets.
4. *Cash Conversion Cycle* Based on the results of the table management above, it is obtained that the significant value of *profitability* is  $0.0000 < 0.05$  (alpha 5%) with a coefficient of 8.40E-07, which means that there is no significant influence between *the cash conversion cycle* and *return on asept*.

**Table 4**  
**Model 2 T Test Results**

<b>Variable Dependencies</b>
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<b>Independent Variables</b>	<b>ROE</b>		
	<b>Coefficient</b>	<b>Prob.</b>	<b>Coefficient</b>
Konstanta	0.281763	0.0300	-
<i>Account Receivable</i>	-0.029086	0.02671	Insignificant
<i>Inventory</i>	-0.039102	0.0976	Insignificant
<i>Account Payable</i>	0.016774	0.4321	Insignificant
<i>Cash Conversion Cycle</i>	1.68E-06	0.3880	Insignificant

1. Based on the results of processing the table above, it is obtained that the significant value of receivable accounts is  $0.0000 < 0.05$  (alpha 5%) with a coefficient of -0.029086, which means that there is no significant influence between receivable accounts on return on equity.
2. Based on the results of the table management above, it is obtained that the significant value is  $0.0000 < 0.05$  (alpha 5%) with a coefficient of -0.039102, which means that there is no significant influence between inventory and return on equity.
3. Based on the results of the table management above, it is obtained that the significant value of account payable is  $0.0000 < 0.05$  (alpha 5%) with a coefficient value of 0.016774, which means that there is no significant influence between account payable and return on equity.
4. Cash Conversion Cycle Based on the results of the table management above, it is obtained that the significant value of profitability is  $0.0000 < 0.05$  (alpha 5%) with a coefficient of 1.68E-06, which means that there is no significant influence between the cash conversion cycle and return on asset.

## CONCLUSION

This study was conducted with the aim of identifying and testing the effect of variables such as account receivable, inventory, account payable, and cash conversion cycle on the level of profitability in manufacturing companies. The research sample involved 635 manufacturing companies listed on the Indonesia Stock Exchange for the last five years, namely the period 2018-2022. The results of the analysis and discussion concluded several important findings. First, receivable accounts have a negative influence on return on assets, although they do not have a significant effect on return on equity. Second, inventory also has a negative influence on return on assets without affecting return on equity. Third, account payable does not show a significant effect on return on assets or return on equity. Finally, the cash conversion cycle has no effect on either level of profitability.

The implications of these findings provide valuable managerial guidance. Company managers can consider these variables in determining the optimal capital structure. A better understanding of account receivables, inventory, account payables, and cash conversion cycles can help create a capital structure that supports shareholder welfare. For investors, the study contributes by suggesting that they consider factors such as account receivable, inventory, account payable, and cash conversion cycle before making investment decisions. This information can provide a picture of the company's future condition, helping investors make more informed decisions. As a suggestion for future research, it is suggested that companies can increase stock returns by focusing on increasing return on assets and return on equity. Control variables of working capital management and profitability are also highlighted as fundamental for business

survival and development. These findings provide valuable empirical evidence, especially for emerging economies, on the relationship between working capital management and profitability.

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