# Working Capital Management: A Policy for Company Performance

## R.A. Widyanti Diah Lestari[1*]; Nolla Puspita Dewi[2]

[1] Faculty of Economics and Business, University of Batam, Indonesia
[2] Faculty of Economics and Business, University of Batam, Indonesia
* Corresponding Email:[1*] widyanti@univbatam.ac.id;[2] nolla@univbatam.ac.id

**Abstract** - The aim of this research is to analyze the influence of working capital management components on profitability as measured by ROA (return on assets). The components of working capital management in this research include account receivable period, account payable period, inventory period, cash conversion cycle, firm size, sales growth, leverage, gross working capital turnover, current assets to total assets, and current liabilities to total assets. The research subjects were companies listed on the Indonesia Stock Exchange in 2017-2021. Through purposive sampling, 67 companies were selected that met the requirements, a total of 335 observation data. The research results show that the cash conversion cycle and leverage have a significant negative influence on company profitability, while company size has a significant positive influence on profitability in listed companies in Indonesia. This research also shows that the account receivable period, account payable period, inventory period, sales growth, gross working capital turnover, current assets to total assets, and current liabilities to total assets do not have a significant influence on company profitability on the Indonesia Stock Exchange.

**Keywords**: Return On Asset, Firm Size, Working Capital Turnover

# 1. INTRODUCTION

The main goal when starting a business is to maximize profits, and working capital management plays a role in achieving this goal. Working capital management is important for companies whose assets include current assets. It directly affects the money and profitability of the company. Poor working capital management can result in failures such as bankruptcy or lack of funds for the company's operational needs.

Adequate working capital effectively supports short-term liabilities and ensures smooth operations with minimal disruption. Cash determined by current assets and current liabilities is very important in determining the company's working capital policy and cash management capabilities in a given period.

The balance between profit and profitability increases firm value. Studies on the effect of working capital management on profitability have been conducted by many experts, including Samioglu and Demirgunes (2008), Vishani and Shah (2007), Lazaridis and Trifonidis (2006), Padach (2006), and Deloof (2003). The results of previous research show that some aspects of working capital have a significant effect on profitability. The results also prove that working capital policy plays an important role in influencing profits to reflect the company's performance.

## 2. RESEARCH METHODS

This research is deductive and is basic research, because it aims to test the hypothesis whether there is a significant influence between the independent variables. namely account receivable period, account payable period, inventory period, cash conversion cycle, firm size, sales growth, leverage, gross working capital turnover, current assets to total assets and current liabilities to total assets on the dependent variable profitability.

In terms of the problem, this research is comparative causal research, where this research examines the effect of account receivable period, account payable period, inventory period, cash conversion cycle, firm size, sales growth, leverage, gross working capital turnover, current assets to total assets, and current liabilities to total assets profitability.

The object of this research is manufacturing companies listed on the Indonesia Stock Exchange, with a purposive sampling method, namely the selection of samples not randomly according to the following criteria:

The time horizon in this study is a cross-sectional study which is a study to determine the comparative relationship of several subjects

1. Public companies listed on the IDX from 2017 to 2021, with financial statements in rupiah currency and have positive operating profit data.
2. Has the data needed in the research, in the form of account receivable, account payable, annual sales, cost of goods sold, inventory, total assets, current assets, current liabilities and total debt.

studied and a time series study which emphasizes research data in the form of time series data.

The dependent variable in this study is profitability, which is measured using return on assets (ROA). The independent variables to be studied, namely factors that affect profitability, such as:

1. Account Receivable Period. This ratio calculates the average period of time required to manage the company's receivables (Gitman, 2006).
2. Account Payable Period. This ratio measures the average period of time required to manage the company's debt (Gitman, 2006).
3. Inventory Period. Samiloglu and Dermigunes (2008) define inventory period as the number of days it takes for inventory to be turned into a more liquid asset within the company.
4. Cash Conversion Cycle
   Cash conversion cycle is one of the main measurements in assessing working capital management by showing the time required

between the purchase of raw materials and the receipt of sales of finished goods (Padachi, 2006), with the formula:

$$CCC = IP + ARP - APP$$

Where:
CCC = cash conversion cycle
IP = inventory period
ARP = account receivable period
APP = account payable period

5. Firm Size

According to Padachi (2006) firm size can be measured through the logarithm of company sales. Firm size has the following formula:

$$Firm\ Size = Log\ Sl.$$

Where:
Log = logarithm
Sl.   = sales

6. Sales Growth

Sales growth is the sales growth rate of a company during one period. If there is a negative value or zero value for the beginning and end of the year then the growth is declared meaningless (no growth). The calculation of sales growth is sought from changes in annual sales from the company's financial statements. The equation for calculating sales growth is:

$$SGROWTH = \frac{SALESt - SALES\ t - 1}{SALES - 1}$$

Where:
SGROWTH = sales growth
SALESt = sales value in year t (current year sales)
SALESt-1 = sales value in year t-1 (previous sales)

7. Leverage

In the accounting equation, the value of assets is equal to the value of debt or liabilities plus capital (shareholders or owner's equity) (Meigs & Meigs, 1983). From this equation it can be concluded that the company's assets consist of debt and capital. This leverage ratio is used to measure the proportion of company funding using debt (Gitman, 2006). According to Ulupui, (2006), the higher the proportion of relative debt will increase the risk of the company. The level of debt and the nature of debt (maturity and fixed and variable interest rates) will be influenced by industry and economic factors. Capital-intensive industries tend to use high levels of debt to fund their property, plant and equipment. Debt to fund these activities tends to be long-term in nature.

The equation to calculate leverage is as follows:

$$SGLEV = \frac{TDEBT}{TA}$$

Where:
LEV              leverage
TDE = total company debt
TA        = total assets of the company

8. Gross Working Capital Turnover Ratio

According to Padachi (2006), gross working capital turnover ratio is the ratio of sales to current assets. Gross Working Capital Turnover Ratio has the following formula:

$$CA.TURN = \frac{SL}{CA}$$

Where:
CA.TURN = gross working capital turnover ratio
SL = sales
CA = current assets

9. Current Assets to Total Assets

Current assets to total assets is a ratio that affects the profitability of a company. Where current assets to total assets can see how much portion of current assets is contained in total assets (Padachi, 2006). Current assets to total assets has the following calculation formula:

$$CATA = \frac{CA}{TA}$$

Where:
CATA    current assets to total assets
CA        current assets
TA        total assets

10. Current Liabilities to Total Assets

Current liabilities to total assets is a ratio that affects the profitability of a company. Where current liabilities to total assets can see how much proportion of current liabilities is contained in total assets (Padachi, 2006).

Current liabilities to total assets has the following calculation formula:

$$CLTA = \frac{CL}{TA}$$

Where:
CLTA     current liabilities to total assets
CL= current liabilities
TA       total assets

## 3. RESULTS AND DISCUSSION

The data used in this study are secondary data and the population in this study are companies listed on the Indonesia Stock Exchange for the period 2017 to 2021. The number of samples that meet the criteria is 67 manufacturing companies (335 observation data). The total number of companies after being tested for outliers was 191 company samples.

In this study, data testing was carried out separately using 4 (four) regression models so that there was no multicollinearity between the account receivable period, inventory period, account payable period, and cash conversion cycle variables.

Based on the results of the F test for the four regression models, the F value for each regression model is 13.940, 13.925, 13.916 and 15.001. The significance value of each regression model is 0.000, 0.000, 0.000, and 0.000. Because the four models have a significance value smaller than 0.05, it can be said that the four regression models can be used to predict the ROA variable. The F test results for the four regression models are presented in the table below:

**Table 1**
F Test Results for Four Regression Models

| Model | Variabel | F | Sig. | Keterangan |
|---|---|---|---|---|
| Pertama | ROA | 13.9403 | 0.0000 | Signifikan |
| Kedua | ROA | 13.9254 | 0.0000 | Signifikan |
| Ketiga | ROA | 13.9161 | 0.0000 | Signifikan |
| Keempat | ROA | 15.0081 | 0.0000 | Signifikan |

**Source:** Secondary data processed (2023).

Based on the results of the t test on the first regression model, it shows that the t value for the SIZE variable is 5.3043 with a significance level of 0.0000. The t value for the LEV variable is -4.7402 with a significance level of 0.0000. The significance level of these variables is smaller than 0.05. This shows that SIZE and LEV have a significant effect on ROA.

The results also show that the t value for the ARP variable is -1.6566 with a significance level of 0.0925. The t value for the GROWTH variable is 1.1742 with a significance level of 0.2110. The t value for the CATURN variable is 1.2315 with a significance level of 0.2164. The t value for the CATA variable is 1.5150 with a significance level of 0.1260. The t value for the CLTA variable is 0.0167 with a significance level of 0.9843. The significance level of these variables is greater than 0.0500. This shows that ARP, GROWTH, CATURN, CATA, and CLTA have no significant effect on ROA.

**Table 2**
First Regression Model t Test Results

| Variabel | Unstandardized | | t | Sig. | Keterangan | |
|---|---|---|---|---|---|---|
| | B | Std. Error | | | | |
| (Constant) | -0.0621 | 0.0353 | -1.7869 | 0.0756 | | |
| ARP | -0.0003 | 0.0001 | -1.6566 | 0.0925 | Tidak Signifikan | (H₁ ditolak) |
| SIZE | 0.0276 | 0.0052 | 5.3043 | 0.0000 | Signifikan | |
| GROWTH | 0.0170 | 0.0159 | 1.1742 | 0.2110 | Tidak Signifikan | |
| LEV | -0.1262 | 0.0259 | -4.7402 | 0.0000 | Signifikan | |
| CATURN | 0.0051 | 0.0043 | 1.2315 | 0.2164 | Tidak Signifikan | |
| CATA | 0.0286 | 0.0187 | 1.5150 | 0.1260 | Tidak Signifikan | |
| CLTA | 0.0004 | 0.0332 | 0.0167 | 0.9843 | Tidak Signifikan | |
| Dependent variable: ROA | | | | | | |

**Source:** Secondary data processed (2023).

The regression equation formed based on the t test results in the table for the first regression model is as follows:

**ROA = - 0.0621 - 0.0002 ARP + 0.0276 SIZE + 0.0170 GROWTH - 0.1262 LEV + 0.0051 CATURN + 0.0286 CATA + 0.0004 CLTA + e**

The results also show that the t value for the APP variable is 1.5200 with a significance level of 0.1036. The t value for the GROWTH variable is 0.9231 with a significance level of 0.3436. The t value for the CATA variable is 1.4578 with a significance level of 0.1443. The t value for the CLTA variable is -0.2052 with a significance level of 0.8427. The significance level of these variables is greater than 0.05. This shows that APP, GROWTH, CATA, and CLTA have no significant effect on ROA. The t-test results for the second regression model are presented in the table below:

**Table 3**
Second Regression Model t Test Results

| Variabel | Unstandardized | | t | Sig. | Keterangan | |
|---|---|---|---|---|---|---|
| | B | Std. Error | | | | |
| (Constant) | -0.1036 | 0.0321 | -3.2567 | 0.0008 | | |
| APP | 0.0003 | 0.0004 | 1.5200 | 0.1036 | Tidak Signifikan | (H₂ ditol. |
| SIZE | 0.0202 | 0.0032 | 6.1045 | 0.0000 | Signifikan | |
| GROWTH | 0.0137 | 0.0147 | 0.9231 | 0.3436 | Tidak Signifikan | |
| LEV | -0.1201 | 0.0346 | -5.1014 | 0.0000 | Signifikan | |
| CATURN | 0.0083 | 0.0032 | 2.1276 | 0.0374 | Signifikan | |
| CATA | 0.0257 | 0.0174 | 1.4578 | 0.1443 | Tidak Signifikan | |
| CLTA | -0.0063 | 0.0232 | -0.2052 | 0.8427 | Tidak Signifikan | |
| *Dependent variable:* ROA | | | | | | |

**Source:** Secondary data processed (2023).

The regression equation formed based on the t test results in the table for the second regression model is as follows:

**ROA = - 0.1036 + 0.0003 APP + 0.0202 SIZE + 0.0137 GROWTH - 0.1201 LEV + 0.0083 CATURN + 0.0257 CATA - 0.0063 CLTA+ e**

The t-test results for the third regression model are presented in the table below:

**Table 4**
Third Regression Model t Test Results

| Variabel | Unstandardized | | t | Sig. | Keterangan | |
|---|---|---|---|---|---|---|
| | B | Std. Error | | | | |
| (Constant) | -0.0554 | 0.0370 | -1.4771 | 0.1471 | | |
| IP | -0.0003 | 0.0002 | -1.6284 | 0.1083 | Tidak Signifikan | (H₃ ditolak) |
| SIZE | 0.0277 | 0.0054 | 5.6717 | 0.0000 | Signifikan | |
| GROWTH | 0.0166 | 0.0157 | 0.9897 | 0.3301 | Tidak Signifikan | |
| LEV | -0.1443 | 0.0281 | -5.5605 | 0.0000 | Signifikan | |
| CATURN | 0.0026 | 0.0050 | 0.5321 | 0.5834 | Tidak Signifikan | |
| CATA | 0.0183 | 0.0180 | 0.9041 | 0.3647 | Tidak Signifikan | |
| CLTA | 0.0239 | 0.0326 | 0.6843 | 0.5007 | Tidak Signifikan | |
| *Dependent variable:* ROA | | | | | | |

**Source:** Secondary data processed (2023).

The regression equation formed based on the t test results in the table for the third regression model is as follows:
**ROA = - 0, 0554 - 0.0003 IP + 0.0277 SIZE + 0.0166 GROWTH - 0.1443 LEV + 0.0026 CATURN + 0.0183 CATA + 0.0239 CLTA + e**
The t-test results for the fourth regression model are presented in the table below:

**Table 5**
Fourth Regression Model t Test Results

| Variabel | Unstandardized | | t | Sig. | Keterangan | |
|---|---|---|---|---|---|---|
| | B | Std. Error | | | | |
| (Constant) | -0.0285 | 0.0371 | -0.7128 | 0.4815 | | |
| CCC | -0.0003 | 0.0003 | -2.7573 | 0.0067 | Signifikan | (H₄ diterima) |
| SIZE | 0.0268 | 0.0053 | 4.9214 | 0.0000 | Signifikan | (H₅ diterima) |
| GROWTH | 0.0160 | 0.0157 | 0.9668 | 0.3283 | Tidak Signifikan | (H₆ ditolak) |
| LEV | -0.1383 | 0.0253 | -5.5137 | 0.0000 | Signifikan | (H₇ diterima) |
| CATURN | 0.0008 | 0.0049 | 0.1854 | 0.8329 | Tidak Signifikan | (H₈ ditolak) |
| CATA | 0.0202 | 0.0172 | 1.1073 | 0.2707 | Tidak Signifikan | (H₉ ditolak) |
| CLTA | 0.0080 | 0.0314 | 0.2668 | 0.7716 | Tidak Signifikan | (H₁₀ ditolak) |
| *Dependent variable:* ROA | | | | | | |

**Source:** Secondary data processed (2023).

The regression equation formed based on the t test results in the table for the fourth regression model is as follows:

**ROA = - 0.0285 - 0.0003 CCC + 0.0268 SIZE + 0.0160 GROWTH - 0.1383 LEV + 0.0008 CATURN + 0.0202 CATA + 0.0080 CLTA + e**

Of the seven independent variables included in the fourth regression model, CCC, SIZE and LEV have a significant effect.

The results of testing the correlation coefficient and the coefficient of determination are presented in the table below:

**Table 6**
Correlation Coefficient and Determination Coefficient Test Results

| Model | Variabel | R | Adjusted $R^2$ | Std. Error of Estimate |
|---|---|---|---|---|
| Pertama | ROA | 0.584 | 0.3148 | 0.0424 |
| Kedua | ROA | 0.584 | 0.3238 | 0.0425 |
| Ketiga | ROA | 0.584 | 0.3237 | 0.0425 |
| Keempat | ROA | 0.617 | 0.3416 | 0.0406 |

**Source:** Secondary data processed (2023).

From the adjusted $R^2$ results in each research model above, it can be seen that the fourth model has the highest adjusted $R^2$ value. The significance value of the influence of each independent variable SIZE, LEV, GROWTH, CATURN, CATA, and CLTA on the dependent variable ROA can be seen based on the t test results in the fourth regression model.

## 4. CONCLUSIONS

Based on the research findings, cash conversion cycle has a significant negative effect on profitability. This is in accordance with previous research conducted by various scientists including Samiloglu and Demirgunes (2008), Padachi (2006), Uyar (2009), Ramachandran and Janakiraman (2009), and Zariyawati, Taufiq, and Rahim (2009). By shortening the turnover of operational activities from purchasing raw materials to collecting receivables, the company will have more opportunities to improve its performance in the form of profitability. Leverage also has a significant negative impact on profitability, this contradicts several previous studies. Meanwhile, company size has a significant positive effect on profitability. Other factors such as account receivable period, account payable period, inventory period, sales growth, gross working capital turnover, current assets to total assets, and current liabilities to total assets have no significant impact on profitability. The limitations of this study include the short time span of the research data, so further research is needed with a broader scope and adding to the review of previous research literature.

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