# THE EFFECT OF MANAGEMENT AND WORKING CAPITAL POLICIES ON THE PROFITABILITY OF MANUFACTURING COMPANIES LISTED IN INDONESIA STOCK EXCHANGE

# PENGARUH MANAJEMEN DAN KEBIJAKAN MODAL KERJA TERHADAP PROFITABILITAS PERUSAHAAN MANUFAKTUR YANG TERDAFTAR DI BURSA EFEK INDONESIA

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## ABSTRACT

The purpose of this study was to determine the effect of the receivable period, the debt period, cash turnover, investment policies, and financing policies on profitability. This study used linear regression analysis with 30 manufacturing sector companies listed on the Indonesia Stock Exchange in 2015-2017used as a sample. The results showed that there was a statistical significance between profitability, measured through the receivable period, the working capital investment policy, and the working capital financing policy. Extension of the credit period to customers is a cost for the company. Following a conservative investment policy by having high-level short-term investments has a negative effect on profitability and firm value. While working capital financing policies have a significant positive effect on profitability, following a conservative financing policy by using more long-term debt to fund the company's operating activities has a positive effect on company profitability.

**Keywords :** Account Receivable Period, Working Investment Policy, Working Financing Policy, Profitability

### **ABSTRAK**

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh periode piutang, periode hutang, perputaran kas, kebijakan investasi, dan kebijakan pembiayaan terhadap profitabilitas. Penelitian ini menggunakan analisis regresi linier dengan 30 perusahaan sektor manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2015-2017 sebagai sampel. Hasil penelitian menunjukkan bahwa terdapat signifikansi statistik antara profitabilitas yang diukur melalui periode piutang, kebijakan penanaman modal kerja, dan kebijakan pembiayaan modal kerja. Perpanjangan masa kredit kepada pelanggan merupakan biaya bagi perusahaan. Mengikuti kebijakan investasi konservatif dengan memiliki investasi jangka pendek tingkat tinggi memiliki efek negatif pada profitabilitas dan nilai perusahaan. Sedangkan kebijakan pembiayaan modal kerja berpengaruh positif signifikan terhadap profitabilitas, mengikuti kebijakan pembiayaan konservatif dengan menggunakan lebih banyak hutang jangka panjang untuk mendanai aktivitas operasi perusahaan berpengaruh positif terhadap profitabilitas perusahaan.

Kata Kunci: Periode Piutang, Kebijakan Investasi Kerja, Kebijakan Pembiayaan Kerja, Profitabilitas

## 1. INTRODUCTION

Working Capital Management is one of the crucial solutions towards short-term financial problems faced by companies. Companies of all sizes demonstrate profit efficiency toward their effective management of working capital (Afeef, 2011). Working capital management plays an important role in the profitability and risk of the company and its value. It is needed by companies to maintain liquidity, solvency and profitability. The importance of managing the working capital of a business efficiently cannot be denied.

On the other hand, if a company invests heavily in fixed assets to make a profit while ignoring its short-term capital needs, it is very likely that it may have to face bankruptcy due to lack of funds. Especially profitability and an adequate level of liquidity are needed to maintain businesses's continuity (Mokeira Nyabuti, 2014). This field of finance has been approached in various ways by many academics in many countries in the world. But in developing countries like Indonesia, this research has not been widely reviewed.

In a study conducted by Mokeira Nyabuti (2014) using the company's financial performance variables measured by ROA as the dependent variable, while working capital policy as an independent variable. Research conducted by Charitou, Lois, & Santoso (2012) to examine the relationship between working capital management and company profitability. The results show that the Cash Conversion Cycle and the Net Sales Cycle are positively related to company profitability.

According to Quayyum (2011) the results of this study explain that working capital management has a significant relationship with corporate profitability in Bangladesh. Among all components, the cash conversion cycle is the most significant of the total capital. Research by Akoto (2013)examine the relationship between working capital management practices and manufacturing profitability found in Ghana. This study found that there is a positive relationship between working capital management and profitability.

Vahid, Mohsen, & Mohammadreza (2012) found different results when investigating the effects of aggressive working capital investment and aggressive financing working capital policies on profitability and firm value. This study found that aggressive financing policies using long-term debt and aggressive investment policies using current assets have an effect on profitability and firm value.

Research conducted by Uwaoma & David (2017) examines the relationship between Working Capital Management (WCM) in addition to the financial performance of oil companies in Nigeria. The results of data analysis show a progressive and substantially perfect relationship between investment and funding rules and Return on Assets (ROA). Lazaridis & Tryfonidis (2006) investigated the traditional relationship of companies and working capital management to profitability. The results show a significant relationship between company profitability and cash conversion cycle (CCC).

In a study conducted Sadeghkhani & Jamshidinavid (2014) investigated the relationship between working capital management and profitability in capital intensive and labor intensive companies on the Tehran Stock Exchange. The results showed that the profitability of labor-intensive companies with the Average Payment Period and the profitability of capital-intensive companies with the Average Payment Period The average collection period had a significant inverse relationship.

However, the object of this study is different from previous studies. This study uses manufacturing companies because manufacturing companies are one sector that is currently receiving much attention from the government in its efforts to reduce social inequality. In addition to the large number of manufacturing companies in Indonesia, the sample in this study can be fulfilled.

The purpose of this study focuses on the influence between management and working capital policies on the profitability of manufacturing companies in Indonesia. This study is expected to provide investors with an overview of the working capital performance of the companies they invest in and to link the expected returns on their investments. This study shows the level of dependence of the profitability ratio on the components of the company's working capital.

## 2. LITERATURE REVIEW

# **Agency Theory**

Specifically, Jensen & Meckling (1976) defines agency relationships as contracts where one or more people (principal) involve another person (agent) to perform several services on their behalf that involve the delegation of decision-making authority to the agent. In this case, as a result of this agency relationship, agency problems might appear. Agency problems is when the agency will strive to maximize its own interests while ignoring the interests of the principal. Even though the main goal of a company is to maximize the welfare of capital owners. Therefore, we need a form of control to control the actions of the agent.

An important factor that can influence decisions originating from possible differences in interests between shareholders (principal) and managers (agents) of the company. The elimination of the contemporary business brings a conflict of interests between disciplinary instruments on management values.

## **Operating Cycle Theory**

The operating cycle is the length of time between cash outflows for the purchase of input resources and cash inflows from sales. In contrast to the static view, which only focuses on balance sheet activities, the operating cycle theory combines the steps of the balance sheet activities and the income statement. However, unlike the cash conversion cycle, the operating cycle does not include debt from a liquidity analysis. As a result, the operating cycle does not provide a cycle of net working capital (Richards & Laughlin, 2012).

## **Working Capital Management**

The purpose of working capital management is to manage the company's current account so that it can achieve a balance between profitability and risk (Mathuva, 2010). Dong & Su (2010) also mentioned the same thing, that the fundamental purpose of working capital management is managing current assets and current liabilities of the company. In other words, working capital must be maintained at an appropriate level, neither too high nor too low. Therefore the company must streamline its working capital management. Efficient working capital management is an integral component of the overall corporate strategy to create value for shareholders.

#### **Account Receivable Period**

The collection period for accounts receivable or the number of days for accounts receivable is the duration of time it takes for the seller to collect cash from the debtor. The number of days receivable is calculated by dividing trade receivables by credit sales per day (Muturi, Kinyariro, & Maina, 2016).

## **Account Payable Period**

Debt is considered as a source of income that comes from supplier loans, when debt is paid, cash is used (Nwude & Agbo, 2018). The accounts payable turnover ratio is used to see how quickly the company is able to pay off its business debt to suppliers. A good business debt turnover ratio is the ratio whose value is getting bigger. The greater the value of this ratio, it means the faster the period of time the company pays debt to its suppliers.

### **Cash Conversion Cycle**

Cash Conversion Cycle is the amount of the receivable period plus the inventory period minus the debt period (Mathuva, 2014). The level of cash turnover illustrates a company's ability to generate profits related to the rate of return on investment.

## **Working Capital Policy**

Working capital management policies regarding investment decisions and financing of current assets of the company and policies adopted by the company can determine the magnitude of its effect on company performance as suggested by Nazir & Afza, (2009). Investment decisions and current asset financing can be approached in three ways, such as conservative, moderate and aggressive. These strategies are mutually exclusive and the company chooses one based on its relative benefits (Adam, Quansah, & Kawor, 2017).

## **Investment policy**

Investment policies are financial decisions about which assets a company must buy. Investment policy ratio measures the proportion of current assets (CA) to total assets (TA) (Green et al., 2013).

#### **Financing Policy**

The financing policy ratio is the proportion of current liabilities to total assets (Green et al., 2013). Short-term liabilities are the desired source of financing because short-term debt is cheaper than long-term liabilities. The funding decision is closely related to the capital structure that will be formed and has implications for the cost of capital which is the most important part in shaping company value (Jumono, Abdurrahman, & Amalia, 2013).

#### **Profitability (ROA)**

Profitability according to Brusov, Filatova, Orekhova, dan Eskindarov (2015)is a picture of a company's ability to generate profits using all of the company's capital. Profitability Ratios are ratios to measure a company's ability to make a profit, for example Return On Assets (ROA). Return On Assets (ROA) is used to measure the effectiveness of companies in utilizing existing economic resources, in order to create profits. In theory, this ratio compares net income with total assets (Nurhasanah, 2013).

#### 3. HYPOTHESIS DEVELOPMENT

#### Effect of Receivable Periods on Profitability

One of the most important components of working capital is receivables, where effective management of receivables helps one increase the size of business activities by increasing total sales, thereby increasing the turnover of funds and generating higher income (Nwude, E. Chuke & Agbo, 2018). The results of the study (Mathuva, 2014), states that companies can increase their profitability by reducing the number of days of outstanding receivables. Their results can also be interpreted as the less time it takes for customers to pay their bills, the more cash available to fill inventory so that higher sales are realized which leads to higher company profitability.

H<sub>1</sub>: The receivable period has a negative effect on profitability.

## **Effect of Debt Periods on Profitability**

Debt can increase or decrease a company's profitability, there are two main ways that impact debt on a company's profitability which are the company's relationship with its suppliers and the company's cash flow. Effective debt management has a direct impact on profitability when there are appropriate controls such as scheduled payments (Nwude & Agbo, 2018). Debt as the cheapest source of short-term financing (Marttonen, Monto, & Kärri, 2013).

The study by Lazaridis dan Tryfonidis (2006), emphasizes surprises regarding the results of previous studies. According to Lazaridis dan Tryfonidis (2006), "this result is very significant and makes no economic sense, because the longer a company delays repayment, the higher the level of working capital it reserves and is used to increase profitability". The views of Lazaridis dan Tryfonidis (2006) are consistent with working capital management theories, especially those related to debt management.

H<sub>2</sub> : Debt period has a positive effect on profitability

## **Effect of Cash Turnover on Profitability**

Both liquidity and profitability are the main concerns of company management. In addition, profitability is expected to have a significant impact on the company's cash conversion cycle. The cash conversion cycle may have positive and negative effects on company profitability, for example a company with a long cash conversion cycle might have higher sales because long credit periods are given to credit customers, high investment costs in working capital might reduce profitability too (Deloof, 2003). According Napompech (2012), there is a relationship between cash turnover and profitability.

H<sub>3</sub> : Cash turnover has a positive effect on profitability

## The Effect of Working Capital Investment Policies on Profitability

According to Horne dan John M. Wachowicz (2013) the excessive amount of current assets in a company can have a negative impact on company profitability, while a low level of current assets can reduce liquidity so that the company experiences difficulties in maintaining operational activities. Companies with conservative working capital policies make large investments in current assets to avoid the risk of running out of stock and loss of income (Bei & Wijewardana, 2012).

Agent problems occur when management denies its obligation to maximize the company's profitability. Management acts according to their interests (Elim, 2019). If companies with conservative working capital policies are slow in turning inventory and accounts receivable into cash, they are more likely to have a long cash turnover and little potential for profit (Mokeira

Nyabuti, 2014). According to Mokeira Nyabuti (2014), there is a relationship between working capital investment policies and profitability.

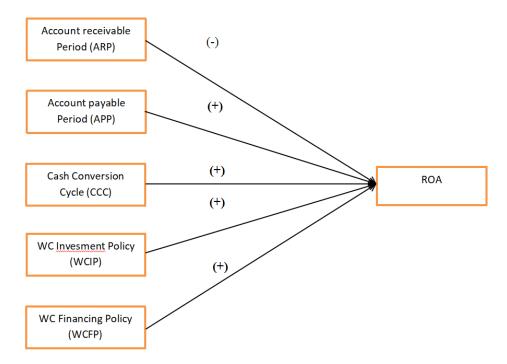
H<sub>4</sub> : The influence of aggressive investment policies has a positive effect on profitability

## The Effect of Working Capital Financing Policies on Profitability

If you look at the company's financing policy, the company can use current or long-term debt to finance its operations. By using long-term debt to finance its operations, the company follows a conservative financing policy, whereas if the company uses more current liabilities to finance its operations then the company follows an aggressive financing policy (Vahid et al., 2012).

The results of research by Vahid et al (2012), following a conservative financing policy by using more long-term debt to finance the company's operations has a positive effect on profitability and firm value. This is due to the fact that even though the risk of having a long-term loan increases, it allows the company for a longer period to meet its financial obligations which are positively reflected in value and profitability.

H<sub>5</sub> : The influence of conservative financing policies has a positive effect on profitability



**Picture 1.** Research Framework for Thinking

## 4. METHODOLOGY

## **Account Receivable Period**

The account receivable period (ARP) is the average ratio of receivables to sales multiplied by 365 days (Richards & Laughlin, 2012). ARP expresses the average number of days the company expects to collect their receivables from each debtor (Mathuva, 2014). ARP measures the time needed to collect sales from customers because accounts receivable depends on sales volume, the denominator in the formula is total sales (Gill & Biger, 2013).

$$ARP = \frac{Average\ Account\ Receivable}{Sales} \times 365$$

#### **Account Payable Period**

Debt period (APP) is the ratio of average debt for the year cost of goods sold multiplied by the number of days in a year (Mathuva, 2014). The shorter APP reflects that the company retained its short-term obligations and took advantage of trade discounts (Abuzayed, 2012).

$$APP = \frac{Average\ Account\ Payable}{COGS} \times 365$$

## **Cash Conversion Cycle**

CCC is a composite measure of working capital management (WCM) (Richards & Laughlin, 2012). CCC is the sum of ARP plus INP minus APP (Mathuva, 2014). An efficient WCM can produce a shorter CCC, which leads to higher profitability (Richards & Laughlin, 2012).

Cash Conversion Cycle, 
$$CCC = ARP + INP - APP$$

## **Investment policy**

Vahid et al. (2012) conducted a policy gauge on a company's investment activities by comparing total current assets to total assets. Investments in companies can be made on current assets and fixed assets, but in this case Vahid et al. (2012) uses total current assets as a proxy to measure the policies used by companies in deciding aggressive investment activities. An increase in the level of investment in current assets shows that the company follows conservative policies in managing current assets, however, investing a smaller amount in current assets shows an aggressive policy. This policy is best measured by dividing Total Current Assets (TCA) / Total Assets (TA), the lower ratio indicates a relatively aggressive policy.  $WCIP = \frac{Current\ Assets}{Total\ Assets}$ 

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## **Financing Policy**

To see financing policies, Vahid et al. (2012) compared the total current liabilities to the total assets of the company to assess the level of aggressive financing policies. If you look at the company's financing policy, the company can use current or long-term debt to finance its operations. By using long-term debt to finance its operations, the company follows a conservative financing policy, whereas if the company uses more current liabilities to finance its operations then the company follows an aggressive financing policy, the following ratio is used as a proxy to measure the Policy Financing. Financing Policy = Total Current Liabilities (TCL) / Total Assets. Where a higher ratio means a relatively aggressive policy.  $WCFP = \frac{Current\ Liabilities}{Total\ Assets}$ 

$$WCFP = \frac{Current\ Liabilities}{Total\ Assets}$$

## **Profitability**

In this study, the profitability of manufacturing companies is proxied by ROA. Return On Assets (ROA) is the ratio of net income to total assets and is perhaps the single most useful ratio to assess overall operating performance of management (Baños-Caballero, García-Teruel, & Martínez-Solano, 2012).

$$ROA = \frac{Net\ Profit}{Total\ Assets}$$

#### **Population and Sample**

The qualitative data in this study is a list of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2017 period. Quantitative data in this study are financial statements of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2015-2017 period. The population of this study is 142 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2017 period. The number of samples in this study were 30 manufacturing companies listed on the Indonesia Stock Exchange for the period of 2015-2017 using the purposive sampling method, which is the sampling method based on the determination of certain characteristics and criteria that have been determined.

Research uses a simple random probability sampling technique for two reasons. First, probability sampling reduces the possibility of selection bias and minimizes the potential for skewed results (Green et al., 2013).

## **Linear Regression Analysis**

The object of this research is profitability which is affected by the receivable period, the debt period, cash turnover, working capital investment policy and working capital financing policy for manufacturing companies listed on the Indonesia Stock Exchange in the period 2015-2017. The dependent variable in this study is profitability while the independent variables used in this study

include: the receivable period, the debt period, cash turnover, working capital investment policy and working capital financing policy.

Multiple linear regression analysis in this study was used to determine the effect of the receivable period (X1), the debt period (X2), cash turnover (X3), working capital investment policy (X4) and working capital financing policy (X5) on the company's profitability (Y) manufacturers listed on the Indonesia Stock Exchange for the period 2015-2017.

The multiple linear regression equation in this study:

 $ROA_{it} = \alpha + \beta 1 ARP_{it} + \beta 2 APP_{it} + \beta 3 CCC_{it} + \beta 4 WCIP_{it} + \beta 5 WCFP_{it} + e$ 

Keterangan:

ROA = Profitability $\alpha = Konstanta$ 

ARP = Account Receivable Period APP = Account Payable Period CCC = Cash Conversion Cycle

WCIP = Working capital investment policy WCFP = Working capital financing policy β1, β2, β3, β4, β5, = Regression Coefficient

 $egin{array}{ll} e & = error \\ i & = Emiten \\ t & = Period \end{array}$ 

#### 5. RESULTS

In this research, 30 manufacturing companies were listed on the Indonesia Stock Exchange from 2015 to 2017. Descriptive analysis was used to provide an overview or description of the studied variables consisting of the receivable period, the debt period, cash turnover, working capital investment policy, working capital financing policies, and profitability are presented in Table 1 below.

**Table 1.** Descriptive statistics

Variabel	Min	Max	Mean
ARP	8	73	31
APP	7	178	59
CCC	-71	236	56
WCIP	0.19	0.86	0.54
WCFP	0.06	0.97	0.35
ROA	-3	38	10

Source: Output SPSS.

Table 1 above provides descriptive statistics of the variables collected from a total of 30 company observations. The profitability (ROA) of manufacturing companies that became the research sample has the highest value of 38%, the lowest value of -3% and an average value of 10%. The highest accounts receivable turnover is 72 days, the lowest is 8 days, and the average is around 31 days. While payment to suppliers is as high as 178 days, as low as 7 days, and on average they pay suppliers within 59 days. Overall, the average cash conversion cycle is around 56 days, the highest is 236 days, the lowest is -71 days.

Table 1 shows that the average value of the Investment Policy measure (WCIP) with a ratio (TCA / TA) is 54%, implying that manufacturing companies in Indonesia adopt a conservative Investment Policy, because they invest more in current assets. The average value for the Financing Policy (WCFP) ratio (TCL / TA) is 35%, implying that manufacturing companies in Indonesia adopt a conservative financing policy by using more long-term debt than short-term debt to finance total assets. The results of the regression analysis of the dependent variable dividend policy can be seen in Table 2 below.

**Table 2.** Regression Analysis

	Coefficients		
Independen Variabel	<b>Undstandardized B</b>	Sig	
ARP	-0.352	0.012*	
APP	0.139	0.064	
CCC	0.009	0.789	
WCIP	-46.854	0.001*	
WCFP	32.508	0.000*	

Note: \* Significant in 5%

Based on the test results table above, the regression model is used:

 $Y = \alpha + \beta 1ARP + \beta 2APP + \beta 3CCC + \beta 4WCIP + \beta 5WCFP + e$ 

ROA = 26,648 + (-0,352) ARP + 0,139 APP + 0,009 CCC + (-46,854) WCIP + 32,508 WCFP + e

Based on table 2 above shows that the coefficient on Receivable Period (ARP) of -0.352, Conservative Investment Policy (WCIP) of -46,854, both have a significant negative effect on profitability (ROA) with a probability < 0.05. Significant positive effect was seen in the Conservative Financing Policy (WCFP) variable with a coefficient value of 32.508 with a probability < 0.05. For the Debt Period (APP) variable with a coefficient value of 0.139 and Cash Turnover (CCC) with a coefficient of 0.009 has a positive but not significant effect on company profitability.

**Table 3.** Determination Coefficient Test

-	Model	Adj R Square	Durbin Watson
1		0.537	1.707

Source: Output SPSS

From the data display above, the magnitude of Adjusted R2 is 0.537, which means that 53.7% of the dependent variable variation can be explained by the variable variation of the independent variable. Therefore, it can be concluded that 53.7% of profitability that is proxied by the value of ROA is influenced by variables of accounts receivable, debt periods, cash turnover, investment policies, and working capital financing policies. While the remaining 46.3% is influenced by other variables besides the variables used in this study.

Table 4. Hypothesis Test Results

	Hypothesis	Test Results
$H_1$	The receivable period has a negative effect on profitability	Supported
$H_2$	Debt period has a positive effect on profitability	Rejected
$H_3$	Cash turnover has a positive effect on profitability	Rejected
$H_4$	The influence of aggressive investment policies has a positive effect on profitability	Supported
H <sub>5</sub>	The influence of conservative financing policies has a positive effect on profitability	Supported

#### 6. DISCUSSION

## **Effect of Receivable Periods on Profitability**

The receivable period has a negative and significant effect on profitability. The finding that ARP has a statistically significant and negative relationship with company profitability shows that extending the credit period to customers is a cost to the company, therefore it can reduce the company's profitability. I confirm that ARP is a key factor that leads to an increase in company profitability. I confirm that the accounts receivable period is a key factor that leads to an increase in the profitability of manufacturing companies because manufacturing companies really need working capital for their production activities. That way the faster the collection of accounts receivable, the cash can be reused for the company's operational activities, so that it has an impact on sales activities and will increase profitability.

This result is consistent with previous research by Lazaridis & Tryfonidis (2006), Afrifa (2013), Falavi & Abdoli (2015) who have examined the relationship between ARP and company

profitability. There are a number of possible reasons why the relationship between the receivable period and the ROA of manufacturing companies listed on the IDX is negative. In the first example, reducing the receivable period will minimize or eliminate the prospect of bad loans that occur (Cheng & Pike, 2003), which will help increase ROA.

Afrifa (2013) concluded that less profitable companies waited longer to pay their bills. Because ARP comes from selling credit to customers, the findings of this study imply that publicly traded manufacturing companies in Indonesia must build and maintain strong relationships with customers to increase long-term profits. Afrifa (2013) states that such a relationship will help companies to reduce the incidence of bad loans arising from credit sales.

## **Effect of Debt Periods on Profitability**

Debt period has no effect on profitability. The debt period (APP) shows a positive but not statistically significant relationship with profitability (ROA). This shows that, although a long debt period is good to explain the financial success of manufacturing companies registered in Indonesia, but it is not an important factor to consider when making decisions to increase profitability. This observation supports Gill & Biger (2013) who also found no statistically significant relationship between profitability and the debt period of several manufacturing companies in America.

These results also support Akoto (2013) study which states that a positive and insignificant relationship between the period of debt and profitability implies that managers must concentrate more on other aspects of working capital management (WCM) rather than the debt period in their consideration to increase company profitability. Dong & Su (2010) found a positive relationship between the period of debt repayment and profitability, this shows that more profitable companies wait longer to pay their bills.

Mathuva (2010) says these results make economic sense because the longer a company delays payments to its creditors, the higher the level of working capital used and used to increase profitability. This finding is in line with working capital management rules that companies should try to delay their payments to creditors as much as possible, and be careful not to damage business relations with them. This result is inversely proportional to the research of Napompech (2012) who found an inverse but insignificant relationship between the period of debt and profitability, which may be the result of less profitable companies taking longer to pay their suppliers.

## Effect of Cash Turnover on Profitability

Cash velocity does not affect profitability. These results support previous studies that showed a significant or insignificant positive relationship between the cash conversion cycle and ROA (Gill & Biger, 2013). There is another study which also found a statistically insignificant and negative relationship between the cash conversion cycle and ROA. For example, Deloof (2003) reports a statistically insignificant and negative relationship between the cash conversion cycle and ROA, using a sample of 1009 companies during the 1992-1996 period.

The lack of a significant relationship between cash conversion cycle (CCC) and company profitability shows that the company's main focus is not to achieve the specified CCC, but rather to focus on optimizing ARP, APP, WCIP, and WCFP that applies in market and organizational conditions. For example, a company should not reject a favorable credit offer from a supplier even if it affects the CCC. This finding brings new insight into the working capital literature where business leaders should not only rely on CCC as a combined measure of the effectiveness of working capital (Bhunia & Das, 2015).

Falavi & Abdoli (2015) found that changes in CCC had no significant effect on profitability, changes in APP seemed to eliminate the combined impact of changes in ARP and INP. An insignificant relationship between the cash conversion cycle and ROA is expected due to the fact that the three components of WCM have a negative influence on profitability. This is because the cash conversion cycle is obtained by reducing the debt period from the inventory saving period and the receivable period (Afrifa, 2013).

Falope & Ajilore (2009) also observed that the cash conversion cycle (CCC) significantly affected the profitability of manufacturing companies registered in Ghana. It is interesting that in reality, the enactment of local laws that protect indigenous companies and limit the activities of

importers is very important to promote increased demand for local manufactured goods both in the short and long term in Ghana. Generally speaking, short CCCs are ideal for increasing profitability and creating value for shareholders.

## The Effect of Working Capital Investment Policies on Profitability

Investment policy has a significant negative effect on profitability, indicating that the relationship between conservative investment policy and company profitability is negative. Therefore, choosing to follow conservative investment policies will have a negative impact on company profitability (ROA). However, companies that follow aggressive investment policies by using long-term investments can positively influence company profitability (ROA).

Result study by Vahid et al.(2012) showed that following a conservative investment policy by having high-level short-term investment has a negative effect on profitability and firm value, while following an aggressive investment policy using long-term investment has a positive effect on profitability and firm value. Bei & Wijewardana (2012) found that working capital investment policy (WCIP) leads to profitability because companies with minimum investment in current assets are highly dependent on current obligations to finance their working capital.

## The Effect of Working Capital Financing Policies on Profitability

Financing policies have a significant positive effect on profitability. Following an aggressive financing policy by using more current liabilities to finance company activities will have a negative impact on profitability, while following a conservative financing policy by using more long-term debt to finance the company's operations has a positive effect on profitability and firm value.

This is due to the fact that even though the risk of having a long-term loan increases, it allows the company to have a longer period to fulfill its financial obligations which is positively reflected in the company's profitability. Empirical results are the same as the results of research conducted by Vahid et al.(2012) which has proven that conservative financing policies have a positive and significant effect on profitability.

Iqbal, Ahmad, & Riaz(2014) found that WCIP and WCFP lead to profitability because companies with large investments in current assets do not take the risk of using current liabilities as a source of funding for their working capital. The findings of this study that WCIP and WCFP affect the market value of public companies indicate that investors provide more value to companies in accordance with their working capital policies with organizational and market requirements.

## 7. CONCLUSION

The main objective of the research is to find evidence of the relationship between working capital management, working capital policy, and company profitability. This study examines the ability of ARP, APP, CCC, WCIP, and WCFP to predict ROA, using annual data on 30 manufacturing companies listed on the Indonesia Stock Exchange in the 2015-2017 period. This study found that the period of receivables and working capital investment policies had a significant negative effect on company profitability.

Manufacturing companies in Indonesia should be able to estimate receivables that may not be collectible properly and companies be able to minimize bad credit so that the accounts receivable period is not disrupted and the company can still make a profit. If the company manages the accounts receivable period effectively, it will have a positive impact on profitability because the faster the accounts receivable period, the better because the number of uncollectible accounts is less and there is no over investment in receivables.

The results show that following conservative investment policies by having high-level short-term investments has a negative effect on profitability and firm value. While working capital financing policies have a significant positive effect on profitability, following a conservative financing policy by using more long-term debt to finance the company's operations has a positive effect on company profitability.

The positive and insignificant relationship between the debt period and profitability implies that managers must concentrate more on other aspects of WCM than the debt period in their consideration to increase the profitability of manufacturing companies listed on the IDX.

Researchers also observed that the cash conversion cycle (CCC) did not significantly influence the profitability of manufacturing companies listed on the IDX.

However, several limitations are found, future researchers must focus on small and large companies from different industries, quantitative and qualitative data, and experimental designs. The finding that ARP, WCIP, and WCFP are significant predictors of profitability can be applied to influence better business practices and positive social change.

This research tries to provide managerial implications for several parties. Implications for positive social change include the potential to provide business leaders with a better understanding of the relationship between aspects of working capital and company profitability. The findings of this study confirm that the WCM component of ARP is a significant predictor of profitability.

Therefore, there is the potential to provide business leaders with the tools needed to identify and prioritize WCM and WCP practices that are essential for profitability. Potential also exists to provide business leaders with information to help them align their WCM and WCP components with changing business requirements. The fact that ARP as a predictor of profitability, is the result of business interactions with customers has important implications for social change.

Another major implication for social change comes from the finding that WCIP and WCFP are significant predictors of company profitability. Increased knowledge about the effects of WCIP and WCFP on company profitability can help business leaders find the optimal combination of current assets and current liabilities (Obradovich, Gill, & Biger, 2014).

Thus, the main implication for social change is the potential to reduce the rate of business failure and to increase profitability through integrated working capital management and working capital policy. In other words, a successful business has the potential to offer community goods at lower prices and job opportunities. The public can also benefit because profitable publicly traded companies are attractive to public investment through the purchase of shares.

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