

WORKING CAPITAL MANAGEMENT BEFORE AND DURING THE COVID-19 PANDEMIC AND THEIR EFFECT ON PROFITABILITY IN MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstract: This study aims to examine differences in the company's working capital management before and during the Covid-19 pandemic and to test the effect of working capital management variables on profitability. Working capital management variables used are inventory turnover, accounts receivable turnover, cash turnover, and net working capital. The study was conducted on manufacturing companies listed on the Indonesia Stock Exchange for the period 2017 to 2021. The research period was divided into 2, namely the period before the Covid-19 pandemic in 2017, 2018, and 2019, and the period during the 2020 and 2021 pandemic. The samples used were selected by purposive sampling criteria and obtained from 143 companies as samples. The results showed that there were differences in inventory turnover and receivables turnover before and during the Covid-19 pandemic. Meanwhile, cash turnover and net working capital showed no difference before and during the pandemic. The results of the influence test show that there is a significant positive effect of receivables turnover and cash turnover on profitability, while inventory turnover and net working capital do not show a significant effect on profitability.

Keywords: *working capital management, profitability, Covid-19 pandemic*

1. Introduction

Working capital is an important factor in a company's ability to carry out its operational activities. Working capital is also needed by the company to be able to meet its short-term obligations and operating expenses that may arise in its operating activities. Working capital is a company investment in the form of short-term assets such as cash, securities, trade receivables, and inventories (Brigham and Houston, 2010: 131), and in the form of funds invested in current assets to finance the company's daily operations (Winarni and Sugiyarso, 2015:17). Companies are required to have the ability to manage their working capital so that they can have a capital structure that can support the smooth running of the company's activities.

Companies need to manage working capital so that current assets and current liabilities as components of working capital can be managed properly and can ensure the availability of net capital to obtain company profitability. Good working capital management can be measured by the working capital turnover rate which shows the efficiency of the use of cash, starting from the money being invested until it returns to cash (Kasmir, 2015).

The Covid-19 pandemic has had a significant impact on companies in various sectors. Many companies are experiencing a decline in profits and working capital continues to deteriorate. The difficulty of companies to obtain capital to maintain their operational activities, makes many companies go bankrupt. This will get worse if the company initially does not have good working capital management.

This study aims to re-examine the effect of working capital management on profitability by taking the object of manufacturing companies listed on the Indonesia Stock Exchange. The choice of the object of this manufacturing company is because this sector is quite affected by the Covid-19 pandemic. In addition, it will also be tested whether there are differences in working capital management in the period before and during the Covid-19 pandemic. It is hoped that from this research, the effects of the covid pandemic on the company's survival will be known.

2. Research Method

The population in this study are manufacturing companies listed on the Indonesia Stock Exchange for the period 2017 to 2021. This study separates the data into 2 periods, namely the period before the Covid-19 pandemic (in 2017, 2018, 2019), and the period during the COVID-19 pandemic (in 2020 and 2021). The sampling technique used the *purposive sampling technique*, which obtained 143 sample companies that met the research criteria.

The variables used in this study consisted of the dependent variable, namely Return on Sales (ROS) as a proxy for the Profitability Ratio, and four Working Capital Management variables as independent variables, namely: Inventory Turnover, Accounts Receivable Turnover, Cash Turnover, and Net Working Capital. The test was carried out using the *Mann-Whitney average difference test* to test differences in working capital management before and during the Covid-19 pandemic and the multiple regression analysis methods to test the effect of working capital management variables on profitability. *The Mann-Whitney test* was used because based on the normality test it was concluded that the four working capital management variables do not meet the normality assumption

3. Results and Discussion

3.1. Results

Testing Result for Differences in Working Capital Management Before and During the COVID-19 Pandemic

The results of testing the differences of working capital management before and during Covid-19 pandemic using Mann Whitney test are shown in table 1 below:

Table 1.
Mann-Whitney Test Results

Variable	Mean Statistics		Z	Sig.
	Before	Time		
Inventory Turnover	0.376	0.291	-3.079	0.002
Accounts Receivable Turnover	1,362	0.631	-5.051	0.000
Cash Turnover	0.3977	0.337	-1,579	0.114
Net Working Capital	-0.000392	-0.000382	-1.915	0.055

Based on table 1, the results show that there are differences in inventory turnover, and receivables turnover in the period before and during the Covid-19 pandemic which was

shown to be of less than 5% significance. While cash turnover and net working capital did not show any difference in the period before and during the Covid-19 pandemic.

Results of Testing the Effect of Working Capital Management on Profitability

The results of testing the effect of working capital management on profitability are shown in table 2 below:

Table 2
Multiple Linear Regression Test Results

	Unstandardized		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	-86,685	53,286		-1,627	.104
Turnover	-.006	.014	-.019	1,077	.661
Accounts Receivable Turnover	1.191	.035	.271	-.438	.000
Cash Turnover	.924	.035	-.120	5.005	.024
Net Working Capital	-.028	.042	-.024	-.661	.509

Based on the results of the multiple linear regression analysis in table 2, the regression equation is obtained as follows:

$$Y = -86,685 - 0.006 X_1 + 1.191 X_2 + 0.924 X_3 - 0.028 X_4$$

The test results show that accounts receivable turnover (0.000) and cash turnover (0.024) have a significant positive effect on profitability as indicated by the t significance value which is smaller than 5%. While cash turnover (0.661) and net working capital have a significance level of t greater than 5% it is concluded that there is no effect of cash turnover and net working capital on profitability.

3.2. Discussion

Differences in Working Capital Management Before and During the Covid-19 Pandemic

The results showed that there were differences in inventory turnover and receivables turnover before and during the covid-19 pandemic. Based on the test results, it appears that the average value of inventory turnover in the pre-Covid-19 period was higher than the inventory turnover during the Covid-19 pandemic. This decrease in turnover could be due to reduced sales of the company due to the declining purchasing power of the people. In addition, the government's policy during the Covid-19 pandemic where the government issued a large-scale restriction policy to prevent the spread of Covid-19 caused delays in the delivery of goods by the company so the company's inventory turnover was slow.

Accounts receivable turnover shows the difference before and during the covid-19 pandemic. Judging from the average value of receivables turnover before the pandemic, it showed a greater value than during the pandemic. The decrease in receivables turnover can be caused by the increasing number of uncollectible receivables as a result of the decline in the community's economy during the pandemic. According to Munawir (2014: 75), a decrease in receivables turnover can be caused by a decrease in sales accompanied by an increase in receivables, a decrease in receivables accompanied by a large decrease in sales, a

decrease in sales without a change in receivables, and an increase in receivables without a change in sales.

Cash turnover and net working capital did not show significant differences in the period before and during the pandemic. However, from the average value of cash turnover, it appears that cash turnover has decreased during the pandemic. This decrease was due to a decrease in sales, thereby reducing the company's cash during the covid pandemic. This decrease in cash receipts causes cash turnover to also decrease due to the lack of cash held. In net working capital, there appears to be an increase in working capital during the covid pandemic, although it does not show a significant difference. This increase was possible due to the relaxation of credit sales policies during the pandemic which led to an increase in net working capital requirements.

Effect of Working Capital Management on Profitability

The test results show that there is an effect of receivables turnover and cash turnover on profitability, while inventory turnover and net working capital do not affect profitability. Accounts receivable turnover has a positive effect on profitability, indicating that the faster the receivables turnover, the profitability will increase, and vice versa. Receivables arise from credit sales. Credit sales are one of the company's strategies to increase sales. Thus, the more credit sales are made, the receivables will increase and will increase profitability. During the COVID-19 pandemic, the credit sales policy offered by the company can attract consumers to make purchases in conditions of declining purchasing power. This strategy can also help companies in their efforts to increase sales and profitability so that they can survive during the pandemic. The results of this study support the research of Wirasari and Sari (2016) and Fuziyati, Wibawa, and Jaelani (2022) which prove that accounts receivable turnover has a positive effect on profitability.

Cash turnover shows a significant positive effect on profitability. This means that the faster the cash turnover, the higher the profitability, and vice versa. With a certain amount of cash owned by the company, it will support sales activities carried out by the company. High sales will lead to high profitability According to Riyanto (2011:346), a decrease in cash turnover can be caused by several factors such as a decrease in current assets other than cash without being followed by an increase in sales, a decrease in fixed assets without an increase in sales, a loss that causes an increase in sales. a decrease in cash availability followed by a decrease in sales. The results of this study support the research of Anwar (2018) and Rinofah and Sari (2022) which prove that cash turnover affects profitability.

Inventory turnover and working capital do not affect profitability. During a pandemic, inventory turnover will slow down due to declining demand for the company's products. This slowdown in the decline in turnover will also increase the costs to be borne. However, in this study, inventory turnover does not affect the company's profitability. The results of this study support the research of Hamid (2020) which states that inventory turnover does not affect profitability.

Net working capital has no significant effect on profitability. This can be caused because the rise and fall of net working capital do not always guarantee the company's profitability. In other words, the greater the funds placed to meet the company's liquidity, it does not support the company in generating additional profits, because the management of working capital does not run effectively and efficiently. This can result in profit growth due to less than optimal capital management. This research is in line with the research of Reimienda (2106) and Sasmita and Syaiful (2022).

4. Conclusion

The results of this study indicate that there are differences in working capital management before and during the Covid-19 pandemic, which is indicated by differences in inventory turnover and receivables turnover. In addition, accounts receivable turnover and cash turnover have a positive effect on profitability, but inventory turnover and net working capital do not show any effect on profitability. From the results of this study, it appears that working capital management has an important influence on companies, especially during the Covid-19 pandemic. Companies need to make efforts so that working capital management can be carried out effectively to increase profitability.

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