## DETERMINANTS WORKING CAPITAL ON PROFITABILTY OF COMPANIES IN THE FOOD AND BEVERAGE INDUSTRY SECTOR ON THE INDONESIA STOCK EXCHANGE FOR THE PERIOD OF 2017-2020

# A THESIS

### Presented as Partial Fulfillment of the Requirements to Obtain the Bachelor

Degree in Accounting Study Program

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2022

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2022

### **DECLARATION OF AUTHETICITY**

Herein I declare the originality of the thesis; I have not presented anyone else's work to obtain my university degree, nor have I presented anyone else's words, ideas or expression without acknowledgment. All quotations are cited and listed in the bibliography of the thesis.

If in the future this statement is proven to be false, I am willing to accept any sanction complying with the determined regulation or its consequence.



### THESIS APPROVAL PAGE

# DETERMINANTS WORKING CAPITAL ON PROFITABILTY OF COMPANIES IN THE FOOD AND BEVERAGE INDUSTRY SECTOR ON THE INDONESIA STOCK EXCHANGE FOR THE PERIOD OF 2017-2020



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# DETERMINANTS WORKING CAPITAL ON PROFITABILTY OF COMPANIES IN THE FOOD AND BEVERAGE INDUSTRY SECTOR ON THE INDONESIA STOCK EXCHANGE FOR THE PERIOD OF 2017-2020

### A BACHELOR DEGREE THESIS

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Patria Dani Wijaya

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### ABSTRACT

This study aims to determine the effect of the company's profitability by using the Cash Conversion Cycle (CCC), Accounts Receivable Turnover, and Inventory Turnover. The study consisted of 13 companies that are still active in conducting trading transactions on the Indonesia Stock Exchange. Research period for 4 years (2017-2020)

The results of this study indicate that the Cash Conversion Cycle (CCC) has no effect on the profitability (ROA) of the Food and Beverage manufacturing subsector listed on the IDX. This means that the duration of cash has no effect on increasing the company's profitability. While the receivable cycle and inventory turnover have a significant effect on profitability (ROA). This means that the shorter the conversion of receivables or the higher the receivables turnover, the greater the profitability of the company. And the shorter the inventory conversion or the faster the inventory turnover, the greater the company's profitability.



### ABSTRAK

Penelitian ini bertujuan untuk mengetahui informasi pengaruh profitabilitas perusahaan dengan menggunakan Cash Conversuin Cycle (CCC), Putaran Piutang, dan Inventory Turnover. Penelitian terdiri dari 13 perusahaan yang masih aktif dalam melakukan transaksi perdagangan di Bursa Efek Indonesia. Periode penelitian selama 4 tahun (2017-2020)

Hasil penelitian ini menunjukan bahwa Cash Conversion Cycle (CCC) tidak berpengaruh terhadap profitabilitas (ROA) subsektor manufaktur Makanan dan minuman yang terdaftar di BEI. Artinya durasi kas tidak berpengaruh terhadap peningkatan profitabilitas perusahaan. Sedangkan siklus piutang dan perputaran persediaan berpengaruh signifikan terhadap profitabilitas (ROA). Artinya semakin pendek konversi piutang atau semakin tinggi perputaran piutang maka semakin besar profitabilitas perusahaan dan semakin pendek konversi persediaan atau semakin cepat perputaran persediaan maka semakin besar profitabilitas perusahaan.



#### **CHAPTER 1**

#### INTRODUCTION

#### **1.1. Research Background**

In this era of globalization, more and more companies are growing and developing along with the rapid economic development in Indonesia. This can be seen from the intense competition in the business world, both trade and industry. The increasingly fierce competition requires companies to manage all the resources they have as optimally as possible. Companies are required to always be one step ahead of its competitors in order to achieve the company's goals, namely to generate the maximum profit in order to maintain its survival by enlarging its business scale. In order for a company to grow bigger, it must grow to be able to keep up with and meet changing market needs. With the increase in size, companies are required to be more careful in managing the available funds to carry out the company's operational activities. Funds that are invested to carry out daily operational activities are called working capital (Tnius, 2018).

In addition, companies must be able to choose good sources of funds and be able to allocate these funds efficiently. The sources of funds can be obtained by the company through its own capital, profit, short-term debt and long-term debt. The management of the company must seek and maintain a balance in regulating the working capital turnover cycle, because in the management of working capital itself there are several contradictions experienced by the company, namely between working capital which focuses on efforts to maintain liquidity and working capital which focuses on efforts to gain profits. Profitability is the company's ability to generate profits in relation to sales, total assets and own capital which are often used to measure the efficiency of a company's use of capital by comparing profits with the capital used in operations. Therefore, large profits do not guarantee or are not a measure that the company can carry on its life continuously.

For a company to get as much profit as possible, it can be done by increasing the amount of production that can be sold. One of the most important factors of production is working capital used by the company to finance the company's operations in order to ensure the survival of the company. Therefore, financial managers must be able to plan well the amount of working capital that is effective and efficient in the future (Sariyana et al., 2016)

Working capital is a company's investment in short-term assets, such as cash, marketable securities, accounts receivable and inventories. Riyanto (2018) said that working capital is the value of assets or assets that can be immediately turned into cash and used by the company for daily needs, for example to pay employee salaries, purchase raw materials, pay transportation costs, pay debts and so on.

Working capital management is the responsibility of every manager or company leader. Managers must supervise working capital so that working capital sources can be used effectively in the future. Managers also need to know the working capital turnover rate in order to better plan for the coming period. Shortterm creditors also need to know the level of working capital turnover of a company in order to obtain certainty when the company's debt will be paid immediately.

Working capital management in a company is needed to find out the optimal amount of working capital needed by the company. Working capital management is an activity that includes all fund management functions in generating income, where only the amount of funds used during the accounting period is intended to generate short-term income, namely in the form of cash, inventories, receivables (after deducting profit margins), depreciation and fixed assets (Yani dan Martha, 2019). The target to be achieved from working capital management is to maximize the value of the company by managing current assets so that the level of marginal investment management is equal to or greater than the cost of capital used to finance these assets. This is done by minimizing in the long term the cost of capital used to finance assets and supervision of the flow of funds in current assets.

Several previous studies that examined the relationship between working capital and profitability, including Tnius (2018) and Yani & Martha (2019) that found working capital had a positive effect on profitability. Meanwhile Haedar (2019) found that working capital turnover had a positive and insignificant effect on profitability at PT Waskita Karya (Persero) Tbk. In contrast to the research of Diana & Santoso (2016), cash turnover has a significant positive effect on profitability, while accounts receivable turnover and inventory turnover have no significant effect on profitability. According to Faishol & Efendi (2020), Working Capital Turnover has no partial significant effect on Profitability.

The effect of working capital on profitability is due to good working capital management in the company. Working capital management is an activity that includes all management functions of the company's current assets and short-term liabilities. The purpose of working capital management is to manage current assets and current liabilities so that a decent net working capital is obtained and ensures the company's level of profitability (Sawir, 2016). Working capital management has an interest in investment decisions in current assets and current liabilities, especially regarding how the use and composition of both will affect risk. Working capital is needed by the company to finance the company's operational activities (Sartono, 2016). Working capital managements used in this research are cash turnover, inventory turnover and working capital turnover.

Cash turnover is used to measure the level of cash availability to pay bills (debts) and costs related to sales (Kasmir, 2016: 256). Cash has the highest level of liquidity and the level of liquidity reduces the risk of loss to the company. If the cash is smaller than the company, it is threatened not to be able to meet the company's financial obligations (Riyanto, 2018). The higher the cash turnover rate, the faster the return of cash coming in to the company. Thus, that it will increase the company's profitability. According to Nurafika & Almadany (2018), cash is one part of assets that has the most fluid nature (the most liquid) and is the easiest to change hands in one transaction. The results of research by Diana & Santoso (2016) stated that cash turnover has a positive and significant effect on profitability. This is different from research of Lestari & Sukirno (2017) which consistently found cash turnover has a negative effect on company profitability. Even in the research of Fadrul & Pratama (2017), they found that cash turnover has no effect on profitability. This shows that there is still a gap to the findings of previous research which shows that cash turnover can have a positive and negative effect on company profitability, even in other results there is no significant relationship.

The second factor of working capital that affects profitability is inventory turnover. Inventory turnover is an increase in inventory caused by increased activity, or due to changes in inventory policies. If there is an increase in inventory that is disproportionate to the increase in activity, it means that there is waste in inventory management. According to Nurafika & Almadany (2018), they stated that inventory turnover is the number of times goods are sold and held back during a certain period. The higher the inventory turnover rate, the shorter or better the average time between investment in inventory and sales transactions. The results of the study of Nurafika & Almadany (2018) found that inventory turnover had a significant positive effect on profitability in the company. The results of the research of Canizio (2017) found that inventory turnover had a positive effect on profitability.

The third dimension of working capital is receivable turnover. Receivable Turnover is a number that shows how many times a company makes a bill for its receivables in a certain period. This figure is obtained based on the relationship among the average receivable balance with sales. Thus, it will increase the company's profitability. The results of the research of Canizio (2017) found that receivables turnover had a positive and significant effect on company profitability. Meanwhile, the research of Nurafika & Almadany (2018) found that receivable turnover had no significant effect on profitability.

This research is a replication of a research done by Diana & Santoso (2016) by differentiating how to measure cash turnover with different methods. If the previous research mostly used Cash Turnover, in this research it is through the Cash Conversion Cycle approach or abbreviated as CCC. This consideration is based that CCC is an increasingly popular method for evaluating effective company working capital management using the approach that the company's goal is to minimize working capital which is vulnerable to the constraint that the company has sufficient working capital to support its operations. Minimum working capital is achieved by rapidly collecting cash from sales, increasing inventory turnover, and reducing cash disbursements. We can combine all of these factors into a single measure called the cash cycle of change.

In this research, the size of the company's profitability refers to Return on Assets. The consideration is that Return on Assets (ROA) is used by company management to measure the effectiveness of the company's overall operations. The measurement of a company's financial performance with ROA has the advantage that ROA is a comprehensive measurement which all affects the financial statements as reflected in this ratio. Another advantage gained from measuring performance with ROA is that the calculation of ROA is very easy to calculate and understand. ROA is also a denominator that can be applied to every organizational unit that is responsible for profitability and business units. According to Nurafika & Almadany (2018), ROA is used to measure the financial performance of multinational companies to measure the ability of capital invested in overall assets to generate net profits.

The object of this research is a manufacturing company in the Food and Beverage industry sub-sector for the period 2017 - 2020. The reason for choosing this industrial sector is because the food and beverage industry sector has a high attractiveness for investors. Based on data from the Investment Coordinating Board (BKPM) in 2020, during the last 5 years (2015 – Quarter I 2020) the realization of investment in the manufacturing sector reached Rp1,348.9 trillion. The most attractive and promising main sector is the Food Industry, which has an investment of Rp 293.2 trillion or equivalent to US\$ 21.4 billion with a total investment percentage of 21.7%. According to the Head of BKPM Franky Sibarani, the food and leverage industry sector during the economic crisis remained at a high level, because the products were basic needs for the community. In addition, the ease of licensing from the government, also supported by the growing middle-class society makes investors interested in investing in the food and beverage sector industry in the hope of obtaining optimal returns ( www.kemenperin.go.id ).

Based on the background and inconsistency of previous research gaps, the researcher is interested in conducting a research entitled "Determinants of Working Capital on Profitability of Companies in the Food and Beverage Industry Sector on the Indonesia Stock Exchange for the period of 2017-2020"

#### **1.2.** Formulation of the problem

Based on the identification of the problems that have been put forward, the formulations of the problem are as follow:

- Does the cash conversion cycle affect profitability (ROA) manufacturing sub-sector Food and Beverage listed on the Indonesia Stock Exchange for the period of 2017-2020?
- 2. Does Receivables Turnover affect profitability (ROA) of manufacturing companies in the Food and Beverage sub-sector listed on the Indonesia Stock Exchange for the period of 2017-2020?
- 3. Does Inventory Turnover (IT) affect profitability (ROA) of manufacturing companies in the Food and Beverage sub-sector listed on the Indonesia Stock Exchange for the period of 2017-2020?

#### **1.3. Research purposes**

The objectives of this research are as follow:

- To determine the effect of the Cash Conversion Cycle on the Profitability (ROA) of manufacturing companies in the Food and Beverage sub-sector listed on the Indonesia Stock Exchange for the period of 2017-2020.
- To determine the effect of Receivables Turnover on Profitability (ROA) of manufacturing companies in the Food and Beverage sub-sector listed on the Indonesia Stock Exchange for the period of 2017-2020.
- To determine the effect of Inventory Turnover (IT) on the Profitability (ROA) of manufacturing companies in the Food and Beverage sub-sector listed on the Indonesia Stock Exchange for the period of 2017-2020.

### **1.4. Research Benefits**

This research is expected to provide benefits to various parties, namely:

1. Practical Benefits

The results of this research are expected to provide information for companies about the company's profitability, and as a consideration for managers in making decisions related to funding.

2. Academic/Theoretical Benefits

The results of this research are expected to add references and decisions for the University. The results of the research contribute to the development of knowledge in the field of accounting in general and in particular the Management Accounting course.

#### **CHAPTER 2**

#### LITERATURE REVIEW

#### 2.1. General Theory of Corporate Financial Statements

#### 2.1.1. Understanding Financial Statements

Financial statements are one source of financial information of a company regarding the financial position of whether the company's finances are in good condition or vice versa. The information in these financial statements can assist interested parties as a consideration in making decisions.

Financial statements include part of the financial reporting process. Complete financial statements usually include a balance sheet, income statement, statement of changes in equity, statement of changes in financial position (which can be presented in various ways, for example, as a statement of cash flows/statement of cash flows), notes and other reports and explanatory material that are an integral part of the financial statements (AIA, 2020). A financial statement is a report that shows the company's current financial condition or within a certain period (Kasmir, 2016).

Based on the above understanding, it can be concluded that financial statements generally include the Balance Sheet, Profit/Loss Statement, Statement of Changes in Equity, Cash Flow Statement and Notes to Financial Statements. The financial report is a form of report that describes the financial condition of the company, the development of the company and the results of operations of a company in a certain period of time.

According to Sujarweni (2017), a complete financial report includes:

a. Statement of Financial Position

Reports of profit loss is a report that is compiled systematically, the contents in the form of income that is earned the company reduced the burdens loads that occur in the company during the period specified. In a statement profit and loss outlining elements of income and the burden of the company, resulting in a profit or a loss.

b. Capital Change Report

A change in capital report is a report that contains how much the initial capital has changed, increased or even decreased over a certain period. Changes in capital that may occur because of the profit or loss of business, making personal by the owner or plain called prive, nor because addition of capital owners.

c. Cash Flow Statement

The cash flow statement contains cash and cash equivalents that enter and leave the company during a certain period. Cash means money in cash, while the equivalent of cash is an investment that nature illiquid, futures short and the fast can be used as cash. The cash flow statement must report cash flows during a certain period and be classified according to operating activities, investing activities and financing activities.

#### d. Balance Sheet

The balance sheet is a report that describes the financial position of a company which includes assets, liabilities and equity for a certain period. The balance sheet shows how rich the company is. The balance sheet itself has two forms, namely the Staffel and Scronto. The difference lies in the preparation of assets and liabilities. The forms of Staffel assets and liabilities are arranged downwards, while the forms of Scronto assets and liabilities are arranged side by side.

#### e. Notes to Financial Statements

Notes on financial statement are information and notes provided to give an explanation to the reader on a finance report. The notes to the financial statements provide assistance in explaining the calculation of certain items in the financial statements.

#### 2.1.2. Purpose of Financial Statements

At first, the financial statements for a company only function as a "testing tool" of the work of the bookkeeping function, but subsequently along with the times, the function of financial statements as a basis for determining or evaluating the company's financial position. By using the results of the analysis, the interested parties can make a decision. Through the financial statements, the company's ability to meet all of its short-term and long-term obligations, the company's capital structure, distribution of its assets, effectiveness of the use of assets, income or operating results that have been achieved, fixed expenses to be paid will also be assessed by the company and the book value of each share of the company concerned. According to Kasmir (2016), the objectives of financial statements are as follow:

- a. Provide information about the type and amount of assets currently owned by the company.
- b. Provide information about the types and amounts of liabilities and capital owned by the company at this time.
- c. Provide information about the type and amount of income earned in a certain period.
- d. Provide information about the amount of costs and types of costs incurred by the company in a certain period.
- e. Provide information about the changes that occur to the company's assets, liabilities and capital.
- f. Provide information about the company's management performance in a period.
- g. Provide information about the notes to the financial statements.
- h. Other financial information.

#### 2.2. Working Capital Theory and Concepts

#### 2.2.1. Definition of Working Capital

Every company needs to provide working capital, companies engaged in any field, both service companies and goods production companies always need working capital to finance their business activities, with the hope that the funds that have been issued can return to the company in a relatively short term.

According to Kasmir (2016: 250), working capital is "Capital used to carry out company operations. Working capital can also be interpreted as an investment invested in current assets or short-term assets such as cash, securities, receivables, inventories and other current assets". According to Yani and Martha (2019) defining working capital is part of the company's short-term spending that is in line with the company's short-term goal of increasing profitability. Secondly, based on the work function, working capital is flexible, relatively varied, and rotates quickly. Operations become smoother and the company's ultimate goal of generating profits will be achieved. The working capital turnover period, namely since cash is invested in working capital elements until it becomes cash again, is less than one year or short term. The working capital turnover period shows the level of efficiency in the use of working capital. The faster the working capital turnover period, the more efficient the use working capital, and of course investment in working capital is getting smaller. Therefore, financial managers are required to manage working capital properly so as to increase working capital efficiency.

According to Kasmir (2016:250), working capital is "Capital used to carry out company operations. Working capital can also be interpreted as an investment invested in current assets or short-term assets such as cash, securities, receivables, inventories and other current assets". In relation to working capital above, there are three concepts of working capital according to Lutfia (2016) including:

1. Quantitative Concept or Gross Working Capital

According to this concept, working capital is the total amount of current assets. Means the amount of cash / bank + securities that can be traded + receivables + inventory.

2. Qualitative Concept or Net Working Capital

According to this concept, working capital is the excess of current assets over current liabilities.

#### 3. Functional Concept

According to this concept, working capital is the funds used during the accounting period to generate current income in accordance with the main purpose of the establishment of the company.

#### 2.2.2. Working Capital Component

In this research, the intended working capital is working capital according to the quantitative concept or gross working capital, namely the total current assets owned by the company or the funds that must be available to finance the company's operations. The elements of gross working capital consist of cash, receivables and inventories (Canizio, 2017). Each element of working capital must be managed in order to be in optimal condition.

1) Cash

Cash is the value of cash in the company along with other items which in the near future can be cashed as a means of payment financial needs, which has the highest level of profitability. Cash turnover is the ability of cash to generate income so that it can be seen how many times the cash rotates in a certain period. The higher the cash turnover rate means the more efficient the level of cash use and conversely the lower the turnover the more inefficient, because the more money stops or is not used (Kasmir, 2016: 256).

The comparison between sales and the average amount of cash illustrates the level of cash turnover. The formula for cash turnover according to Nurafika & Almadany (2018) is as follows:

Cash Turnover =  $\frac{\text{Sales}}{\text{Average Sales}}$ 

According to Telly and Ansori (2017), the Cash Conversion Cycle is one of the measurements of WCM (Working Capital Management) which is the period of time required by the company from the time purchased raw materials are paid to accounts receivable from the sale of collectible goods. The Cash Conversion Cycle can be said to be sufficient to strengthen short-term funding decisions, especially to find out how the company's policies are in order to meet the cash gap, whether by withholding its debt payments or by accelerating the collection period of its receivables. The cash conversion cycle formula can be calculated as follows (Telly & Ansori, 2017):

$$CCC = AAI + ACP - APP$$

Description:

CCC = Cash conversion cycle

- AAI = Average age of inventory (period of inventory turnover in days)
- ACP = Average collection period (average period of collection of accounts receivable)
- APP = Average payment period (the average payment period for trade payables)

Where:

$$AAI = \frac{360}{Cost of good sold / average inventory}$$
$$ACP = \frac{360}{Sales / Average account receivables}$$
$$APP = \frac{360}{Cost of good sold / Average account payable}$$

#### 2) Receivables

Receivables are company assets or assets arising from the implementation of credit sales policies. Receivables as an element of working capital are always in a state of rotation. The rotating period or the period of tied up capital in receivables is dependent on the terms of payment, meaning the longer the capital is tied up in receivables, this means that the turnover rate during a certain period is getting lower. The level of receivables turnover can be determined by dividing the number of sales credits during a certain period by the average amount of receivables, if made in the form of a formula according to Nurafika and Almadany (2018) is as follows:

> Accounts Receivable Turnover = <u>Sales</u> Average Account Receivables

3) Inventory

Sartono (2016) argued about the notion of inventory, namely, inventory as the main element of working capital is an asset that is always in a state of rotation, which is constantly changing. Mamduh and Halim (2016) argued about inventory, namely: the higher the turnover rate means the shorter the level of funds in inventory. Thus, relatively small funds are needed and vice versa, the lower the turnover rate means the longer the funds are tied up in inventory. In this case, it will also affect the fulfillment of funds originating from outside the company who must bear interest costs, and the amount of interest will be determined by the length of the loan repayment.

Inventory turnover is calculated by comparing cost of goods sold with the average inventory owned by each company in units of times. The formula used in this study is as follows (Nurafika & Almadany, 2018):

Inventory Turnover <u>— Cost of Goods Sold</u> Average Inventory

#### 2.3. Profitability Theory

#### **2.3.1. Definition of Profitability**

According to Nurafika and Almadany (2018), profitability is the company's ability to earn profits in relation to sales, total assets and own working capital

According to Munawir (2018), the definition of profitability is as follows: "Profitability is showing the company's ability to generate profits during a certain period. The profitability of a company is measured by the success of the company and the ability to use its assets productively, thus, the profitability of a company can be known by comparing the profits earned in a period with the total assets or total capital of the company."

According to Canizio (2017), profitability is a profit ratio used to measure how much profit the company can get, whereas the greater the level of profit indicates the better management is in managing. Based on the above definition, it can be seen that profitability is the company's ability to earn profits during a certain period with the capital or assets owned by the company. Meanwhile, Lutfia (2016) stated that profitability is a ratio to assess the company's ability to seek profit. This ratio also provides a measure of the level of effectiveness of a company's management.

Based on the definitions from various sources above, it can be seen that the profitability ratio is a ratio that can indicate the company's success in generating profits and can be used by companies in assessing the rate of return on investment and sales based on the amount of profit earned by the company.

#### 2.3.2. Profitability Ratio Measurement

Profitability ratios can be measured in several ways. According to Lutfia (2016) the following ratios can be used to measure a company's profitability:

*a*. Return on Assets (ROA)

b. Return on Equity (ROE)

- c. Profit Margin Ratio
- d. Basic Earning Power

The explanation is as follows:

a). Return on Assets (ROA)

ROA shows the company's ability to use all of its assets to generate after-tax profits. This ratio is important for management to evaluate the effectiveness and efficiency of company management in managing all company assets. The greater the ROA, the more efficient the use of company assets or in other words, with the same number of assets, greater profits can be generated, and vice versa. ROA can be calculated using the following formula (Lutfia, 2016):

Return on Assets (ROA) = Earnings After Tax

Total Asset

b) Return on Equity (ROE)

ROE shows the company's ability to generate after-tax profits by using the company's own capital. This ratio is important for shareholders to determine the effectiveness and efficiency of the management of the company's own capital. The higher this ratio means the more efficient the use of own capital by the company's management. ROE can be calculated using the following formula (Lutfia, 2016):

Return on Equity (*ROE*) = <u>Earnings After Tax</u>

### Total Equity

c) Profit Margin Ratio

Profit margin ratio measures the company's ability to generate profits by using the sales achieved by the company. The higher the ratio indicates that the company is more efficient in carrying out its operations. NPM can be calculated using the following formula (Lutfia, 2016):

*Net Profit Margin (NPM)* = <u>Earnings After Tax</u> Total Sales

d)Basic Earning Power

This ratio measures the company's ability to generate profits before interest and taxes by using the total assets of the company. In other words, this ratio reflects the effectiveness and efficiency of managing all investments made by the company. The higher this ratio means the more effective and efficient the management of all assets owned by the company to generate profits before interest and taxes. Earning Power can be calculated using the following formula (Lutfia, 2016):

Earning Power (EP) = Earnings Before Interest and Tax

**Total Assets** 

# 2.4. Previous Research

The following are previous studies:

### Table 2.1

No.	Researcher	Researched	Indicator	Analysis Techniques and
1,01		variables	indicator	Research Results
1	(Diana & Santoso, 2016) Influence of Cash Turnover, Accounts Receivable, Inventory on Profitability of a Cement Company in Bei	Independent: Cash Turnover Inventory Turnover Accounts Receivable Turnover Dependent: Profitability	Sales per cash average COGS per inventory average Sales per accounts receivable average Return on Asset	The object of this research was the cement industry sub-sector manufacturing companies for the period 2009-2013. The data used was secondary data. The analytical method used was multiple linear regression, F test and t test. The results showed that cash turnover had a significant effect on profitability, while accounts receivable turnover and inventory turnover had no significant effect on profitability.
2	(Tnius, 2018) The Effect of Working Capital on Profitability at PT. Hanjaya Mandala Sampoerna TBK	Independent: Working capital Dependent: Profitability	Difference between current assets and current liabilities Return on Investment	The sample of this research was PT. Hanjaya Mandala Sampoerna TBK 2012-2016. The data used was secondary data. The analytical method used was simple linear regression. The results of the research showed that there was a positive and significant relationship between the X variable (working capital ) and the Y variable (profitability). The coefficient of determination was 58.83%, which means that there was a significant effect of working capital on profitability.
3	(Yani & Martha, 2019)	<b>Independent:</b> Working capital <b>Dependent:</b>	Independent: Working capital Dependent:	The object of this research was the cosmetics sub-sector manufacturing company for the period 2006-2015. The data used

### **Previous Research**

No.	Researcher	Researched	Indicator	Analysis Techniques and
		variables		<b>Research Results</b>
	The Effect of Working Capital on Profitability in Cosmetic Companies Listed on the Indonesia Stock Exchange	Profitability	Profitability	was secondary data. The analytical method used was simple linear regression and t test. The results of the research found that working capital had a positive and significant effect on profitability. Based on R2, it showed that the profitability of cosmetic companies listed in Indonesian stock was 43.62% which can be explained by the independent variable.
4	(Telly & Ansori, 2017) Effect of Size and Cash Conversion Cycle on Company Profitability	Independent: Company size Cash Conversion Cycle Dependent: Profitability	Asset log CCC Return on Asset	The population of this research were manufacturing companies listed on the Indonesia Stock Exchange during 2013 - 2015. The sample was determined using the purposive sampling method and the samples obtained were 261 companies. The hypothesis in this research was tested using multiple regression analysis. The results of the analysis showed that the first hypothesis was that company size had no effect on company profitability. The second hypothesis was that the Cash Conversion Cycle had an effect on profitability
5	(Wibowo & Rohyati, 2018) The Effect of Working Capital Turnover and Profitability of Inventory Turnover Manufacturing Companies Listed in Indonesia Stock Exchange	Independent:Workingcapitalturnoverandinventory turnoverDependent:Profitability	Turnover Working Capital Inventory Turnover Return on Asset	Secondary data used financial statements on the Indonesia Stock Exchange on 30 samples of manufacturing companies for the period of 2012-2014. Data analysis used multiple linear regression, t-test, and coefficient of determination test. The results of this research and discussion can be concluded that the negative working capital turnover indicator had a positive effect on profitability while the inventory turnover indicator had a positive effect on the profitability of

No.	Researcher	Researched	Indicator	Analysis Techniques and Research Results
		variabits		manufacturing companies in
6	(Daryanto & Rachmanto, 2018) The Effect of Working Capital Turnover and Receivable Turnover on Profitability: Case Study on PT. Merck Tbk	Independent: Working capital turnover and accounts receivable turnover Dependent: Profitability	Sales per working capital Credit sales per receivable Return on Investment	The data used in this research was secondary data sourced from the financial statements of PT. Merck Tbk for the period of 2009-2013. The results of multiple linear regression test showed that simultaneously receivables turnover and working capital turnover had no significant effect on company profitability. Partially, accounts receivable turnover had no significant effect on company profitability and working capital turnover had no significant effect on company profitability.
7	(Nelly & Toni, 2020) The effect of treasury turnover, receivable turnover, working capital turnover and current ratio against profitability registered food and beverage companies in Indonesia Stock Exchange for the period of 2013–2018	Independent: Cash Turnover Accounts Payable Turnover Working capital turnover Current Ratio Dependent: Profitability	Sales per treasury Credit sales per receivable Sales per working capital Current assets per current debt Return on Asset	The number of samples taken was 22 food and beverage companies listed on the Indonesia Stock Exchange in 2013-2018 period. The method used was multiple regression analysis. The results of the hypothesis showed that partial cash turnover and accounts receivable turnover does not affect profitability, but capital turnover and current ratios affect profitability.
8	(Makatutu & Arsyad, 2021) Pengaruh Perputaran Kas, Piutang dan Persediaan Terhadap Profitabilitas Perusahaan Sektor Aneka Industri yang Terdaftar di BEI	Independen: cash turnover, stock turnover and accounts receivable turnover. Dependen: Profitability	Sales per treasury Credit sales per receivable Sales per working capital Current assets per current debt Return on Asset	The number of samples taken was 15 companies in various industrial sectors in 2010 - 2014. The method used was multiple regression analysis. The results of the hypothesis show that partial cash turnover and accounts receivable turnover did not affect profitability, but capital turnover and current ratios affect profitability.

Source: https://scholar.google.com/

This research was a replication of the research of Diana and Santoso (2016) by differentiating how to measure cash turnover with different methods. If the previous research mostly used Cash Turnover, in this research it is through the Cash Conversion Cycle approach or abbreviated as CCC. This consideration is based that CCC is an increasingly popular method for evaluating effective company working capital management using the approach that the company's goal is to minimize working capital which is vulnerable to the constraint that the company has sufficient working capital to support its operations. Minimum working capital is achieved by rapidly collecting cash from sales, increasing inventory turnover, and reducing cash disbursements. We can combine all of these factors into a single measure called the cash cycle of change.

In this research, the size of the company's profitability still refers to Nurafika and Almadany (2018) research, which uses Return on Assets. The consideration is that Return on Assets (ROA) is used by company management to measure the effectiveness of the company's overall operations. The measurement of a company's financial performance with ROA has the advantage that ROA is a comprehensive measurement which all affects the financial statements as reflected in this ratio. Another advantage gained from measuring performance with ROA is that the calculation of ROA is very easy to calculate and understand. ROA is also a denominator that can be applied to every organizational unit that is responsible for profitability and business units. According to Lutfia (2016), Return on Assets (ROA) is used to measure the financial performance of multinational companies in generating profits with all assets owned by the company.

While the object of this research is a manufacturing company sub-sector of the Food and Beverage industry for the period of 2017 - 2020. The reason for choosing this industrial sector is because considering that one of the industries that
is experiencing a fairly high development is the food and beverage industry (public consumption). Almost half of Indonesian people's income is spent on food and beverages, it is not surprising that competition in the food and beverages category industry in Indonesia is very tight. With the continued increase in consumer demand for food and beverage products, every company needs to have good management skills so that the company being run is able to compete with existing companies. Every company must have a strategy to increase sales, so that the products produced are able to attract consumer interest in order to increase product sales. By increasing product sales, the company's profitability will also increase. Increasing profitability can reflect the success of management in running a company.

### 2.5. Hypotheses Formulation

### 2.5.1. The Effect of Cash Conversion Cycle on Profitability

The cash conversion cycle (CCC) is definitively the time interval between cash disbursements for the purchase of raw materials to the time when cash is collected from the sale of finished goods (Telly & Ansori, 2017). A low cash conversion cycle means that the engagement in current assets is low. Thus, cash turnover is high. On the other hand, if the high cash conversion cycle indicates that the period of attachment of funds is relatively long, it can reduce the company's cash availability which can lead to the company's inability to fund daily operational needs, hampering the production process and finally production capability. Based on this explanation, theoretically it can be concluded that the cash conversion cycle has a positive effect on company profitability; the faster the cash conversion cycle, the higher the profitability; while the slower cash conversion cycle, the lower the profitability. The results of Telly & Ansori (2017) which found that there was an influence between the Cash Conversion Cycle on profitability as measured by Return on Assets.

Based on this theory and the findings of previous researchers, the first hypothesis of this researcg is as follows:

H1: Cash conversion cycle has a positive effect on profitability (ROA).

## 2.5.2. The Effect of Receivable Turnover on Profitability

Low Receivable Turnover (RTO) shows the time of collection of receivables is not efficient. This inefficiency can be a limiting factor for the company's operational activities because the longer it takes money to enter the treasury, results in a decrease in profitability. If there are too few receivables in the company, it indicates that the company is not efficient in managing accounts receivable. This depresses the company's profitability. This is because the company does not have much investment in its current assets. If the Receivable Turn Over is very high, it indicates a very fast collection time of receivables. In addition, if the receivables turnover ratio is very high, above 20%, the company can lose sales because of the large amount of cash that comes out so that the funds used for production are limited. The unintended consequence is reduced sales and profitability. The results of research by Canizio (2017) and Makatutu and Arsyad (2021) showed that receivables turnover has a positive and significant effect on profitability (ROA).

Based on this theory and the findings of previous researchers, the second hypothesis of this research is as follows:

H2: Receivable Turnover has a positive effect on Profitability (ROA).

## 2.5.3 The Influence of Inventory Turnover on Profitability

If Inventory Turnover (ITO) is low, two undesirable things can happen. First, if there is too much inventory in the warehouse, it indicates that the company is not efficient in managing inventory. This will suppress profitability. In addition, if Inventory Turn Over is low, the risk of damage to goods is high or vice versa. The company must carry out inventory maintenance; thus, the company must incur maintenance costs to maintain inventory in the warehouse. If the inventory is damaged or obsolete, the number of current assets consisting of inventory and which as a whole is an indicator of liquidity, will experience a decrease. If the inventory turnover ratio is high compared to the industry average, the company may lose sales due to a shortage of inventory in the warehouse. The unintended consequence is that it will reduce the sale and the use of fixed assets. The results of research by Canizio (2017) and Makatutu and Arsyad (2021) found that inventory turnover had a positive and significant effect on profitability (ROA).

Based on this theory and the findings of previous researchers, the third hypothesis of this research is as follows:

H3: Inventory Turnover (ITO) has a positive effect on Profitability (ROA).



## 2.6. Research Framework

In order to know the flow of influence among the variables to be studied based on the theoretical basis as well as from previous research, it can be described through a framework of thought in the form of a chart as follows:



## **CHAPTER 3**

#### **RESEARCH METHODS**

#### 3.1. Types of Research

According to Creswell (2016) qualitative research is a type of research that explores and understands meaning in a number of individuals or groups of people originating from social problems. Qualitative research in general can be used for research on people's lives, history, behavior, concepts or phenomena, social problems, and others. The type of qualitative research used by researchers in this research is a case study. A case study is a study that explores a case in depth, collecting complete information using various data collection procedures based on a predetermined time. This case can be an event, activity, process, and program (Creswell, 2016). This type of case study research is appropriate as a method to answer questions in this research, namely to determine the effect of cash turnover, receivables turnover and inventory turnover on profitability in the case of the Food and Beverage industrial sector company.

#### **3.2.** Population and Sample

The object of research is something that is of concern in a study, the object of this research is the target in research to get answers and solutions to problems that occur. The population of this research is manufacturing companies in Food and Beverages industry sub-sector which was listed on the Indonesia Stock Exchange in 2017-2020. The data obtained were taken from the official website (<u>www.idx.co.id</u>). This research was conducted on food and beverage companies on the Indonesia Stock Exchange. This research unit used secondary data in the form of financial statements. While the scope of this research explained the effect

of working capital (Cash Conversion Cycle, Receivable Turn Over and Inventory Turn Over) on profitability as measured by Return on Assets.

## 3.3. Types and Sources of Research Data

The type of data used in this research was secondary data, namely studies made by other parties for themselves, in the form of financial statements of Food and Beverage companies that have *gone public* on the IDX. Secondary data sources were obtained from the annual reports of manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) in 2017-2020 by accessing the IDX website, namely www.idx.co.id.

### 3.4. Operational Definition of Variables

In this research, the research variables consisted of independent variables and dependent variables. The independent variable was working capital which consisted of Cash Conversion Cycle (X1), Receivable Turn Over (X2) and Inventory Turn Over (X3), while the dependent variable was profitability as measured by ROA.

No.	Variables	Operational	Measurement Indicators	Scale
		definition		
1	Cash	Cash conversion		Ratio
	Conversion	cycle shows the	CCC = AAI + ACP - APP	
	Cycle (X <sub>1</sub> )	company's ability to	CCC = Cash conversion cycle (cash conversion	
		convert the cash	cycle)	
		they have into	AAI = Average age of inventory (period of	
		goods/inventory to	inventory turnover in days)	
		be sold or converted	ACP = Average collection period (average period	
		into cash back.	of collection of accounts receivable)	
			APP = Average payment period (the average	
			payment period for trade payables)	
			Where:	

Table 3.1. Variable Operational Definition

No.	Variables	Operational definition	Measurement Indicators	Scale
		ISL/	$AAI = \frac{360}{Cost of good sold / average inventory}$ $ACP = \frac{360}{Sales / Average account receivabel}$ $APP = \frac{360}{Cost of good sold / Average account payable}$ $(Telly and Ansori 2017)$	
2	Receivable Turn Over (X <sub>2</sub> )	Accounts receivable turnover shows the company's ability to collect receivables. The higher the receivables turnover, the better the condition of the company.	Accounts Receivable Turnover = Sales Average Account Receivables (Nurafika & Almadany, 2018)	Ratio
3	Inventory Turn Over (X <sub>3</sub> )	Inventory turnover, shows the efficiency of the company in utilizing its inventory. This ratio is a simple measuring tool that shows how many times the inventory turnover (change) each year.	Inventory Turnover <u>= Cost of Goods Sold</u> Average Inventory (Nurafika & Almadany, 2018)	Ratio
4	Profitability (Y)	Return on Assets (ROA) is one of the profitability ratios that can measure the company's ability to generate profits from the assets used.	Return on Assets (ROA) = <u>Earnings After Taxes</u> Total Asset (Nurafika & Almadany, 2018)	Ratio

### 3.5. Sampling Method

The population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and conclusions can be drawn (Sugiyono, 2018). The population in this research were all companies in the Food and Beverage industry sub-sector on the Indonesia Stock Exchange until 2020, as many as 30 companies.

The sample is part of the number and characteristics possessed by the population (Sugiyono, 2018). The method used in this research in determining the sampling is by using the purposive sampling method, namely the sample was chosen intentionally from the population studied, and can represent the population, of course with the following criteria:

- 1. The company is included in the Food and Beverage sub-industry category which is listed on the Indonesia Stock Exchange in 2017-2020.
- 2. The company did not experience a loss during the period of 2017-2020

#### **3.6.** Data Collection Method

This research data collection method came from literature study and documentation. Literature study is a data collection technique that is carried out using print media or various other written sources. Literature studies can come from journals, books, articles or thesis related to research. The documentation itself is a collection of data that is documented by the company, such financial statements (annual report) from the company obtained from the official website www.idx.co.id . This data will then be referred to as secondary data which can be obtained by downloading it from the official website of the company concerned or other sites that provide information about the documentation data.

#### 3.7. Data Analysis

The data that has been collected will be analyzed descriptively through financial ratio analysis which will then be reprocessed using the Multiple Linear Regression statistical test tool. The calculation is not done manually, because of the large number of samples. Then it will be calculated using a computer program made specifically to assist statistical data processing, namely Statistical Product and Service (SPSS) 25 for Windows.

## **3.7.1.** Descriptive Analysis

Descriptive analysis is a statistic used to analyze data by describing the data that has been collected as it is without intending to make conclusions that apply to the public or generalizations (Sugiyono, 2018). Descriptive analysis in this research described the research variables measured by the minimum value, maximum value, average and standard deviation.

## 3.7.2. Multiple Regression Analysis

Regression analysis was conducted to determine the magnitude of the effect of the independent variable on the dependent variable. The independent variables in working capital consist of Cash Conversion Cycle (CCC), Receivable Turn Over (RTO), and Inventory Turn Over (ITO). While the dependent variable is Profitability as measured by ROA.

The Multiple Linear Regression formula used is as follows:

 $Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$ 

Whereas:

Y = Profitability (ROA)

a = Constant  $X_1 = Cash Change Cycle$   $X_2 = Accounts Receivable Turnover$   $X_3 = Inventory Turnover$   $b_{1s}/d b_3 = Parameters estimated for X_1 s/dX_3$  e = Error terms

## 3.7.3. Classical Assumption Tests

The classical assumption tests are statistical requirements that must be met in multiple linear regression analysis which includes:

1. Normality test

The normality test aims to test whether in the regression model, the dependent variable and the independent variable have a normal data distribution or not by using the Normal P- *Plot*. A good regression model is one that has a normal distribution or is close to normal. Normality test is carried out by graphical analysis, with the basis for making decisions as follows:

- a. If the data spreads around the diagonal line and follows the direction of the diagonal line, the regression model fulfills the assumption of normality.
- b. If the data spreads far from the diagonal line and/or does not follow the direction of the diagonal line, the regression model does not fulfill the assumption of normality.

In addition to graphical analysis, normality tests can also be performed using the Kolmogorov Smirnov statistical test. The test criteria used a two-way test (two tailed test), namely by comparing the probabilities obtained with a significance level ( $\alpha$ ) of 0.05. If the p-value > 0.05, the data is normally distributed (Ghozali, 2018).

#### 2. Multicollinearity Test

The multicollinearity test aims to test whether there is a correlation among the independent variables in the regression model (Ghozali, 2018). If there is a correlation, there is a multicollinearity problem. A good regression model should not have a correlation among the independent variables. The presence or absence of multicollinearity in the regression model can be seen from the amount of VIF (Variance Inflation Factor) and tolerance. Regression that is free from multicollinearity problems if the VIF value is < 10 and the tolerance value is > 0.10, the data does not have multicollinearity (Ghozali, 2018).

#### 3. Autocorrelation Test

Testing autocorrelation in a model aims to determine whether there is a correlation between the confounding variable in a certain period and the previous variable. For time series data, autocorrelation often occurs. But for the sample data, cross-section rarely occurs because one confounding variable is different from another.

To detect autocorrelation, the researcher used Durbin Watson values compared to Durbin Watson tables (di and du). Criteria if du < d and count < 4 – du, there is no autocorrelation (Ghozali, 2018).

#### 4. Heteroscedasticity test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals or other observations using a scatterplot graph. A good regression model is that there is no heteroscedasticity (Ghozali, 2018).

The basis for making the decision, if there is a certain pattern such as dots that form a certain regular pattern (wavy, widened, then narrowed), it indicates that heteroscedasticity has occurred. If there is no clear pattern, and the points spread above and below the number 0 on the Y axis, there is no heteroscedasticity (Ghozali, 2018).

#### 3.7.4. Hypotheses testing

Hypotheses testing in this research are conducted to test whether or not positive effects exist between cash turnover, receivables turnover, and inventory turnover on profitability that is proxied by ROA. To test the effect of the independent variables on the dependent variable, the t-test, coefficient of determination test (R2) and F-test were conducted.

## 1. F-test

The F-test is used to test the linear relationship of all independent variables together (simultaneously) on the dependent variable (Ghozali, 2018)

$$H_0 = b_1 \cdot b_2 \cdot b_3 = 0$$

(There is no jointly significant effect of all independent variables on the dependent variable).

$$H_0=b_1.b_2.b_3\neq 0$$

(there is a jointly significant effect of all independent variables on the dependent variable).

With the following test criteria:

- a. If the probability > 0.05, the decision is accepted which means that Cash Conversion Cycle (CCC), Receivable Turn Over (RTO), and Inventory Turn Over (ITO) do not have a significant effect on the profitability variable (ROA).
- b. If profitability < 0.05, the decision is rejected, which means Cash Conversion Cycle (CCC), Receivable Turn Over (RTO), and Inventory Turn Over (ITO) have a significant effect on the profitability variable (ROA).</li>

## 2. Coefficient of Determination

According to Ghozali (2018), the correlation coefficient is used to measure how far the model's ability to explain variations in the dependent variable. The value of the coefficient of determination / R2 is in the range of zero (0) and one (1). If the coefficient of determination is close to zero (0), it means that the model's ability to explain the dependent variable is very limited. Conversely, if the value of the coefficient of determination of the variable is close to one (1), it means that the ability of the independent variable to cause the existence of the dependent variable is getting stronger.

## 3. t-test

Partial test or to test whether there is a significant effect of each independent variable on the dependent variable, the t-test is used. The purpose of this t-test is to partially test the effect of the independent variable on the dependent variable. The analysis steps are as follows:

 $H_0 = b_1 = 0$  (there is no significant effect between the CCC variable and Profitability)

 $b_2 = 0$  (there is no significant effect between the RTO variable and Profitability)  $b_3 = 0$  (there is no significant effect between the ITO variable and Profitability)  $H_A = > 0$  (there is a significant effect between the CCC variable and profitability)  $b_2 > 0$  (there is a significant effect between the RTO variable and profitability)  $b_3 > 0$  (there is a significant effect between the ITO variable and profitability) Decision making is done by:

- a. If Profitability > 0.05, the decision is accepted which means the Cash Conversion Cycle (CCC), Receivable Turn Over (RTO), and Inventory Turn Over (ITO) variables individually do not have a significant effect on Return on Assets.
- b. If Profitability 0.05, the decision is rejected, which means that the Cash Conversion Cycle (CCC), Receivable Turn Over (RTO) and Inventory Turn Over (ITO) variables individually have a significant influence on Return on Assets.

## **CHAPTER IV**

## DATA ANALYSIS AND DISCUSSION

## 4.1. Company data

The data that had been collected is in the form of financial reports for 13 Food and Beverage companies for the period 2017 to 2020. The results of the sample criteria are shown in Table 4.1 and Table 4.2.

No.	Criteria	Amount
1	Companies in the Food and Beverage industry listed on the	30
	Indonesia Stock Exchange until 2020	
2	Companies listed on the IDX after 2017	(10)
3	The company suffered a loss during the period of 2017 - 2020	7
	Total Sample	13

Table 4.1. Sample Selection Results	3
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## 4.2. Descriptive Statistics of Research Variables

Descriptive statistical data describes the data description of all variables to be included in the research model, which shows the minimum value, maximum value, and average value of all variables. For more details can be seen in Table 4.2 below:

Table 4.2	Tuble 4.2. Descriptive Results of Rescuren variable Statistics					
	n	Minimum	Maximum	mean	Std. Deviation	
ССС	52	-7.918	442,668	96.75293	94.790652	
Receivables	52	.750	19,529	8.76793	3.609285	
Supply	52	.911	81,238	9.93245	11.709248	
ROA	52	.001	.526	.11911	.110810	
Valid N (listwise)	52					

 Table 4.2. Descriptive Results of Research Variable Statistics

Source: SPSS data processing results, 2021

The Cash Conversion Cycle variable had an average value (mean) of 96.75293 days, a maximum value of 442.668 days, a minimum value of -7.918 days and a standard deviation of 94.79 days. This means that their cash conversion cycle from the number of days payable, the number of days receivable, and the number of days inventory was quite long, which was an average of about 97 days. Thus, the company's ability to convert the cash they had into goods/inventory to be sold or converted into cash back was quite fast, which took 97 days.

The Receivables Turnover variable had an average value (mean) of 8,76793 times, a maximum value of 19.529 times, a minimum value of 0.75 times and a standard deviation of 3.609 times. This means that the turnover of receivables to produce 1 sale was 8.7697 times in one year. The higher the receivables turnover, the better the condition of the company, so the faster the company's receivables rotate to increase company sales.

The Inventory Turnover variable had an average value (mean) of 9.93245 times, a maximum value of 81,238 times, a minimum value of 0.911 times and a standard deviation of 11.709. This means that the average annual turnover (turnover) of inventory was 9.93 times. Thus, the time required for the company to process the company's inventory into selling expenses on average was quite short, so that the inventory rotates quite quickly.

The return on assets variable had an average value (mean) of 0.11911, a maximum value of 0.526, a minimum value of 0.001 and a standard deviation of 0.110810. This means that the company's ability to generate net income on asset management was an average of 11.91%.

#### 4.3. Classical Assumption Tests

Classical assumption test is used to determine valid and unbiased research results. This classical assumption test included data normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. In this research, the classical assumption test had been carried out as follows:

#### 4.3.1. Data Normality Test

The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. In this normality test there are 2 ways to detect whether the residuals are normally distributed or not, namely by graphical analysis and statistical tests (Ghozali, 2018). To test the normally distributed data, the Kolmogorov Smirnov One Sample test was used. The results of the normality test can be shown in the following table:

Variable	Kolmogorov Smirnov (KS)	Probability	Description
Unstandardized Residual	1.109	0.171	Normal

Table 4.3. Normality test

Source: Secondary Data processed, 2021

In Table 4.3, the Kolmogorov Smirnov value for the regression model as measured by Unstandardized Residual was 1.109 with a significant level of 0.171>0.05. Significant value > 0.05 can be concluded that the data was normally distributed.

#### 4.3.2. Multicollinearity Test

Multicollinearity arises from the existence of a strong correlation (correlation) among independent variables. If there is multicollinearity, especially perfect multicollinearity among the independent variables, the estimator (regression coefficient) is not certain and the standard error becomes infinite. A good regression model should not have a strong correlation between the independent variables.

Table 4.4. Multiconnearity Test Results						
Independent	Multicollinea	rity Indicator	Description			
Variable	ble Tolerance VIF					
CCC	.902 1.109		No multicollinearity			
Receivables	.927	1.079	No multicollinearity			
Supply	.958	1.043	No multicollinearity			

Table 4.4. Multicollinearity Test Results

Source: Secondary Data processed, 2021

It can be seen from Table 4.4 above that the tolerance value of each independent variable was Cash Conversion Cycle (0.902), Receivables Turnover (0.927), and Inventory Turnover (0.958) which were all above 0.1 and the VIF value did not exceed 10. This was according to the theory previously stated. If each independent variable is close to one, the VIF value does not exceed 10.

#### 4.3.3. Autocorrelation Test

The autocorrelation test was carried out with the aim of knowing whether there was a correlation between sample members. If a regression model contains autocorrelation deviations, the impact is that the sample variance cannot describe the population variance. To diagnose the presence of autocorrelation in a regression model, a test is carried out on the value of the Durbin Watson Test (DW Test) as shown in the following table:

DW Statistic	Durbin W	atson Table	Position	Description
	Du	( <b>4-Du</b> )		_
1.974	1.674	2.326	Du <dw<(4-du)< td=""><td>No Autocorrelation</td></dw<(4-du)<>	No Autocorrelation

Table 4.5. Durbin Watson Test Variable ROA

Source: Secondary Data processed, 2021

From Table 4.5, the value of Durbin Watson was 9.974 and seen from the value of Durbin Watson's table the value of 2.127 lied between the values of Du = 1.674 and (4-Du) = 2.326, which was an area that did not have autocorrelation so that it can be concluded that the regression equation did not have autocorrelation.

## 4.3.4. Heteroscedasticity Test

Heteroscedasticity testing is carried out to test whether there is a disturbance in the linear function where all disturbance factors do not have a constant variance from one observation to another. Heteroscedasticity test can be tested with Spearman Rank correlation, graph method test or Pearson Correlation. The scatterplot graph is used in this research to detect the presence or absence of heteroscedasticity. If there are certain patterns, such as the existing dots forming a certain regular pattern such as wavy, widening and then narrowing, it is suspected that heteroscedasticity has occurred. If there is no clear pattern and the points spread above and below the number 0 on the Y axis, there is no heteroscedasticity (Ghozali, 2018).



Based on Figure 4.1, where there is no clear pattern, and the points spread above and below the number 0 on the y-axis, it can be concluded that there is no heteroscedasticity.

In addition to using the Scatterplot, Heteroscedasticity testing is also supported by statistical tests, through the Glacier test. The test was carried out by regression analysis with the independent variable on the absolute residual as the dependent variable. If the probability value is above 0.05, the regression model does not occur heteroscedasticity, and conversely if the probability value is less than 0.05 then the regression model has symptoms of heteroscedasticity. The results of the Geljser test can be shown in Table 4.6.

	Table 4.0. Glejser rest						
Independent	Glesjer I	ndicator	Description				
Variable	T statistics p-value						
CCC	0.362 0.719		No Heteroscedasticity				
Receivables	1.692	0.097	No Heteroscedasticity				
Supply	1.420	0.162	No Heteroscedasticity				

Table 4.6. Glejser Test

Source: Secondary Data processed, 2021

The results of the Glejser test found that the probability value for all independent variables was above 0.05, which means that all independent variables had no effect on the absolute residual (error terms). Therefore, the regression model does not have symptoms of heteroscedasticity.

#### 4.4. Multiple Regression Analysis

Multiple linear regression analysis in the research explained the influence of Cash Conversion Cycle, Receivables Turnover and Inventory Turnover (I) partially or jointly on the Profitability (ROA) of manufacturing companies in the Food and Beverage sub-sector listed on the IDX for the period of 2017-2020.

Turnover on Profitability							
Variable	Regression Coefficient	T Count	Probability	Description			
Constant	-0.053	-1.161	0.251				
CCC	0.0002	1.359	0.181	Not Significant			
Receivables	0.013	3.388	0.001	Significant			
Inventory	0.004	3,200	0.002	Significant			

 Table 4.7 Multiple Regression Results Effect of Working Capital

Source: Processed secondary data, 2021

From the above table, the following regression equation can be obtained:

## ROA = -0.053 + 0.0002CCC + 0.013RTO + 0.004ITO

Based on the multiple regression equation, it can be interpreted for each variable as follows:

- The constant value of the above equation was -0.053. This figure showed that if there were no working capital variables, Cash Conversion Cycle, Receivables Turnover, and Inventory Turnover or independent variables = 0, the amount of Return on Asset was -0.053.
- 2. The Cash Conversion Cycle variable had a negative regression coefficient value of 0.0002. The probability value (Sig.) > 0.05 indicated that the Cash Conversion Cycle had no effect on Return on Assets. This illustrates that if there was an increase in the Cash Conversion Cycle of 1 day, the Return on Assets or the company's profitability would increase by 0.0002 with the assumption that other independent variables were held constant.
- 3. The Receipts Turnover variable had a positive regression coefficient value of 0.013. A positive coefficient value indicated that Receivables Turnover had a significant positive effect on Return On Assets or the level of company profitability (sig < 0.05). This illustrated that if there was an increase in Receivables Turnover by 1 time, Return on Assets or the company's profitability would increase by 0.013 times assuming other independent variables were held constant.
- 4. The Inventory Turnover variable had a positive regression coefficient value of 0.004. The probability value (sig) <0.05 indicated that Inventory Turnover had a positive effect on the level of company profitability. This illustrated that if there was an increase in Inventory Turnover by 1 time, the Return On Assets or the company's profitability level would increase by 0.004 assuming other independent variables were held constant.

#### 4.4.1. Coefficient of Determination

The coefficient of determination explains how much the independent variable is able to explain the dependent variable. The results of the coefficient of determination can be shown in Table 4.8.

R	R Squared	Adjusted R Squared	Description		
0.539	0.290	0.246	24,6%		

Table 4.8.	The Re	sult of the	Coefficient	of I	Determination
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Source: Processed secondary data, 2021

Table 4.8 showed the degree of relationship between the independent variable and the dependent variable. From the results obtained multiple regression value of R  $^2$  of 0.246, which means that the variable profitability as the dependent variable was able to be explained by the independent variable which were the Cash Conversion Cycle (CCC), Receivables Turnover (RTO), and Inventory Turnover (ITO) by 24.6% and the remaining 75.4% was explained by other variables not being investigated in this research.

#### 4.4.2. Hypothesis Testing

In the formulation of the problem mentioned earlier, this research aimed to determine the effect of Cash Conversion Cycle, Receivables Turnover and Inventory Turnover (IT) partially or jointly against profitability (ROA) manufacturing sub-sectors of Food and Beverage listed on the IDX for the period of 2017-2020.

## 4.4.2.1 T Test

No.	Hypotheses	T count	р-	Description
			value	
1	H1: Cash Conversion Cycle has a positive	1.359	0.181	H1 is not
	effect on the profitability (ROA) of			supported by
	manufacturing companies in the Food and			the data.
	Beverage sub-sector listed on the	A		
	Indonesia Stock Exchange for the period			
	2017-2020.			
2	H2: Revenue Turnover has a positive	3.388	0.001	H2 is supported
	effect on the Profitability (ROA) of			by the data.
	manufacturing companies in the Food and			
	Beverage sub-sector listed on the IDX for			
	the 2017-2020 period			
3	H3: Inventory Turnover (IT) has a	3.200	0.002	H3 is supported
	positive effect on Profitability (ROA) of			by the data.
	manufacturing companies in the Food and			
	Beverage sub-sector listed on the IDX for		U	
	the 2017-2020 period			

#### Table 4.9 T Test Results

The results of the t-test on the variable component of the capital turnover Value of Cash Conversion Cycle (CCC) obtained t-count of 1.359, the probability was 0.181 or 0.181> 0.05, which means that H0 was supported by the data. This result was supported by the value of t count < t table ( $\pm 2.010$ ), it can be concluded that the Cash Conversion Cycle (CCC) had no effect on the level of profitability of the company in other words the Cash Conversion Cycle variable had no influence in determining changes in the profitability variable partially. Thus, the first hypothesis (H1) which stated that Cash Conversion Cycle has a positive effect on the Profitability (ROA) was not supported by the data.

The t-count value of Receipts Turnover (RTO) was 3.388, the probability was 0.001 or 0.001 <0.05, which means that H0 was rejected. This result was supported by the value of t-count > t table ( $\pm$  2.010). Therefore, it can be concluded that Receivables Turnover had a significant positive effect on the company's profitability. In other words, Receivables Turnover variable had a significant

influence in determining changes in profitability variables partially. Thus, the second hypothesis H2 which stated that there is an effect of Receivables Turnover on the Profitability (ROA) is supported by the data.

The t-count value of Inventory Turnover (ITO) was 3.200 and the probability was 0.002 or 0.002 < 0.05, which means that H0 was rejected. This result was supported by the value of t arithmetic > t-table (±2.010). Thus, it can be concluded that Inventory Turnover had a significant positive effect on the level of company profitability. These results can be interpreted that the third hypothesis of the research which stated: "H3: There is an effect of Inventory Turnover (IT) on Profitability (ROA)" was supported by the data.

## 4.4.2.2. F-Test

This analysis is employed in this research to determine whether or not the independent variables have an effect on the dependent variable. The results of testing the effect of independent variables on Return on Investment or the level of company profitability are presented in the table below:

Table 4.10.    F-Test Results										
F	Probability (Sig.)	Results								
6.543	0.001	Goodness of Fit								

Source: Processed secondary data, 2021

Table 4.9 showed that the calculated F was 6.543 and the probability was 0.001 at a significance level of  $(\hat{I}\pm)$  5%. Thus, the probability value of 0.001 < 0.05. It can be concluded that simultaneously the independent variables, namely Cash Conversion Cycle (CCC), Receipts Turnover (RTO), and Inventory

Turnover (ITO) were significant to the company's profitability. Thus, the regression model in this research had met the goodness of fit criteria.

## 4.5. Discussions

The results of the first hypothesis testing found that the Cash Conversion Cycle (CCC) had no effect on the level of company profitability. The higher Cash Conversion Cycle had no effect on the company's profitability. It implies that high idle cash will reduce the level of company profitability because cash is not used to produce any products that will affect the company's profitability if the level of product sales is high. In this research, the companies used as samples have not been able to manage working capital as efficiently as possible, which is marked by an average cash conversion cycle that is too long which will have an impact on the company's profitability. The company should shorten the cash conversion cycle time. The results of this research are similar with findings by Pratama (2019), and Daryanto and Rachmanto (2018) who found that working capital turnover had no effect on profitability.

The results of second hypothesis demonstrate that the Receivables Turnover has a significant and positive effect on the company's profitability level. This means the shorter time needed to collect receivables, the more positive the company's profitability will be. Otherwise, it will be detrimental to the company if cash is held in the receivables since it will hamper the production process and have an impact on the company's profitability. The company should shorten the number of days receivable collection to increase the company's profitability. The results of this research were similar to findings from Canizio (2017), and Makatutu and Arsyad (2021) who found that accounts receivable turnover had a positive and significant effect on profitability (ROA).

Other results found that Inventory Turnover proved to have a negative and significant effect on the level of company profitability. The results of this research were in accordance with the research of Raheman et al. (2010) who found

that Inventory Turnover in Days had an effect on profitability, while in this research found that ITO also had an effect on company profitability. One of the indicators in assessing the company's performance is the inventory turnover ratio. If Inventory Turn Over is low, the risk of damage to goods is high or vice versa. The company must carry out inventory maintenance, so the company must incur maintenance costs to maintain inventory in the warehouse. If the inventory is damaged or obsolete, the number of current assets consisting of inventory and which as a whole is an indicator of liquidity, will experience a decrease. If the inventory turnover ratio is high compared to the industry average, the company may lose sales due to a shortage of inventory in the warehouse. The unintended consequence is that it will reduce the sale and use of fixed assets. The results of the research were in accordance with Canizio (2017), Wibowo and Rohyati (2018), and Makatutu and Arsyad (2021) who found that inventory turnover had a positive and significant effect on profitability (ROA).



### **CHAPTER V**

#### CONCLUSIONS

#### 5.1 Conclusion

Based on the results of data processing, the following conclusions can be drawn:

- Cash Conversion Cycle has no effect on profitability (ROA) manufacturing sub-sector Food and Beverage listed on the IDX for the period of 2017 to 2020. This means that the duration of cash conversion did not affect the increase in company profitability
- 2. Receivables Turnover has a positive and significant effect on profitability (ROA) of manufacturing companies in the Food and Beverage sub-sector listed on the IDX for the period of 2017-2020. This means that the shorter the conversion of receivables or the higher the turnover of receivables, the greater the profitability of the company.
- **3.** Inventory Turnover has a positive and significant effect on profitability (ROA) of manufacturing companies in the Food and Beverage sub-sector listed on the IDX for the period of 2017-2020. This means that the shorter the inventory conversion or the faster the inventory turnover, the greater the company's profitability.

## **5.2 Suggestions**

## **1. For Investors**

- a. Investors should invest in a company that manages its working capital as effectively and efficiently as possible.
- b. Investors can see the efficiency of a company's working capital using the cash conversion cycle method.

## 2. For Listed Companies

- a. It is recommended for companies to shorten the cash conversion cycle time so that the company's operational activities can run effectively and efficiently.
- b. Companies should pay more attention to the source and use of working capital so that if a problem arises regarding the use of working capital it can be addressed immediately.

## 3. For Future Research

- a. Further research is recommended to add other variables that affect the company's profitability and liquidity as well as other working capital variables so that they can build a better research model.
- b. Further research is recommended to increase the sample of companies from sectors other than retail companies and extend the research period in order to obtain better results and broaden knowledge, especially about working capital.

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## APPENDIX 1. RECAPITULATION OF DATA CALCULATION OF CCC

		Cost of Gold Sold Average Inventory								AA	AAI (Average age of				
No	Kode	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020		
1	CEKA	3,973,458	3,354,976	2,755,574	3,299,157	485,921	374,011	297,418	294,127	44	40	39	32		
2	DLTA	203,039	241,721	2,430,440	179,156	181,366	192,130	206,428	196,691	322	286	31	395		
3	ICBP	24,547,757	26,147,857	27,892,690	29,416,673	3,185,776	3,631,456	3,920,984	4,213,815	47	50	51	52		
4	INDF	50,318,096	53,182,723	53,876,594	54,979,425	9,080,401	10,667,569	10,651,431	10,404,569	65	72	71	68		
5	MLBI	3,389,736	1,364,750	1,426,351	1,044,783	154,879	171,919	168,925	168,335	16	45	43	58		
6	MYOR	15,841,619	17,664,148	17,109,498	17,177,831	1,974,472	2,588,532	3,071,215	2,797,873	45	53	65	59		
7	ROTI	1,183,169	1,274,332	1,487,586	1,409,871	50,505	57,696	74,363	47,147	15	16	18	12		
8	SKBM	1,655,321	1,254,525	1,206,826	1,409,871	265,705	153,501	14,586	13,013	58	44	4	3		
9	SKLT	677,184	777,714	957,200	920,111	105,554	137,817	158,372	154,300	56	64	60	60		
10	STTP	2,211,949	2,207,268	2,559,476	2,776,101	289,517	306,185	315,059	304,102	47	50	44	39		
11	ULTJ	3,056,681	3,516,606	3,891,701	3,738,835	721,579	695,699	848,350	506,283	85	71	78	49		
12	CAMP	363,167	380,496	426,417	439,656	139,338	159,342	168,953	154,660	138	151	143	127		
13	HOKI	1,044,272	1,228,387	1,412,510	1,029,660	61,329	107,044	149,121	151,328	21	31	38	53		

## (Cash conversion cycle)

No	Kode		Sa	les			Average R	eceivable		ACP (	Avera per	ge coll iod)	ectior
		2017	2018	2019	2020	2020 2017 2018 201			2020	2017	2018	2019	2020
1	CEKA	4,257,738	3,629,327	3,120,937	3,634,297	286,133	289,926	324,205	387,529	24	29	37	38
2	DLTA	777,308	893,006	827,136	546,336	258,808	264,818	211,777	166,352	120	107	92	110
3	ICBP	35,606,593	38,413,407	42,296,703	46,641,048	4,010,182	3,698,898	3,701,653	4,702,683	41	35	32	36
4	INDF	70,186,618	73,394,728	76,592,955	81,731,469	6,028,716	6,712,796	6,268,543	6,196,770	31	33	29	27
5	MLBI	3,389,736	3,574,801	3,711,405	1,985,009	430,989	589,020	733,147	598,712	46	59	71	109
6	MYOR	20,816,673	24,060,802	25,026,739	24,476,953	3,801,932	4,704,726	4,691,284	2,704,919	66	70	67	40
7	ROTI	2,491,100	276,654	3,337,022	3,212,035	302,649	368,933	447,261	413,675	44	480	48	46
8	SKBM	1,841,487	1,413,675	1,396,324	3,212,035	179,304	223,113	226,461	276,493	35	57	58	31
9	SKLT	914,188	1,045,029	1,281,116	1,253,701	115,077	144,665	175,586	169,961	45	50	49	49
10	STTP	2,825,409	2,826,957	3,512,509	3,846,300	365,718	396,335	482,093	494,703	47	50	49	46
11	ULTJ	4,879,559	5,472,882	6,241,419	5,967,362	483,526	517,564	571,872	588,345	36	34	33	35
12	CAMP	944,837	961,136	1,028,952	956,634	167,919	183,824	190,215	154,589	64	69	67	58
13	HOKI	1,209,215	1,430,785	1,653,031	1,173,189	131,278	254,015	256,127	247,004	39	64	56	76
											T ( A		aof
										AA	I (Aver	age age	0.01
No	Kode		Cost of C	old Sold			Account	Payable		AA	inven	age age tory )	01
No	Kode	2017	Cost of C 2018	old Sold 2019	2020	2017	Account 2018	Payable 2019	2020	2017	inven 2018	age age tory ) 2019	2020
No 1	Kode CEKA	2017 3,973,458	Cost of C 2018 3,354,976	old Sold 2019 2,755,574	2020 3,299,157	2017 129,935	Account 2018 70,573	Payable 2019 127,277	2020 185,779	2017 12	inven 2018 8	age age tory) 2019 17	2020 20
No 1 2	Kode CEKA DLTA	2017 3,973,458 203,039	Cost of C 2018 3,354,976 241,721	old Sold 2019 2,755,574 2,430,440	2020 3,299,157 179,156	2017 129,935 34,997	Account 2018 70,573 54,115	Payable 2019 127,277 31,940	2020 185,779 35,706	2017 12 62	inven 2018 8 81	age age tory) 2019 17 5	2020 20 72
No 1 2 3	Kode CEKA DLTA ICBP	2017 3,973,458 203,039 24,547,757	Cost of C 2018 3,354,976 241,721 26,147,857	old Sold 2019 2,755,574 2,430,440 27,892,690	2020 3,299,157 179,156 29,416,673	2017 129,935 34,997 2,904,233	Account 2018 70,573 54,115 2,956,189	Payable 2019 127,277 31,940 2,635,433	2020 185,779 35,706 3,045,111	2017 12 62 43	inven 2018 8 81 41	tory) 2019 17 5 34	2020 20 72 37
No 1 2 3 4	Kode CEKA DLTA ICBP INDF	2017 3,973,458 203,039 24,547,757 50,318,096	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723	old Sold 2019 2,755,574 2,430,440 27,892,690 53,876,594	2020 3,299,157 179,156 29,416,673 54,979,425	2017 129,935 34,997 2,904,233 4,075,987	Account 2018 70,573 54,115 2,956,189 4,028,945	Payable 2019 127,277 31,940 2,635,433 4,521,883	2020 185,779 35,706 3,045,111 4,407,555	2017 12 62 43 29	inven 2018 8 81 41 27	tory) 2019 17 5 34 30	2020 20 72 37 29
No 1 2 3 4 5	Kode CEKA DLTA ICBP INDF MLBI	2017 3,973,458 203,039 24,547,757 50,318,096 3,389,736	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723 1,364,750	old Sold 2019 2,755,574 2,430,440 27,892,690 53,876,594 1,426,351	2020 3,299,157 179,156 29,416,673 54,979,425 1,044,783	2017 129,935 34,997 2,904,233 4,075,987 193,283	Account 2018 70,573 54,115 2,956,189 4,028,945 148,386	Payable 2019 127,277 31,940 2,635,433 4,521,883 139,043	2020 185,779 35,706 3,045,111 4,407,555 174,251	AA 2017 12 62 43 29 21	inven 2018 8 81 41 27 39	age age tory ) 2019 17 5 34 30 35	2020 20 72 37 29 60
No 1 1 2 3 4 5 6	Kode CEKA DLTA ICBP INDF MLBI MYOR	2017 3,973,458 203,039 24,547,757 50,318,096 3,389,736 15,841,619	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723 1,364,750 17,664,148	old Sold 2019 2,755,574 2,430,440 27,892,690 53,876,594 1,426,351 17,109,498	2020 3,299,157 179,156 29,416,673 54,979,425 1,044,783 17,177,831	2017 129,935 34,997 2,904,233 4,075,987 193,283 1,717,217	Account 2018 70,573 54,115 2,956,189 4,028,945 148,386 1,551,170	Payable 2019 127,277 31,940 2,635,433 4,521,883 139,043 1,312,182	2020 185,779 35,706 3,045,111 4,407,555 174,251 1,591,797	2017 12 62 43 29 21 39	inven 2018 8 81 41 27 39 32	age age tory ) 2019 17 5 34 30 35 28	2020 20 72 37 29 60 33
No 1 1 2 3 4 5 6 7	Kode CEKA DLTA ICBP INDF MLBI MYOR ROTI	2017 3,973,458 203,039 24,547,757 50,318,096 3,389,736 15,841,619 1,183,169	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723 1,364,750 17,664,148 1,274,332	2019 2,755,574 2,430,440 27,892,690 53,876,594 1,426,351 17,109,498 1,487,586	2020 3,299,157 179,156 29,416,673 54,979,425 1,044,783 17,177,831 1,409,871	2017 129,935 34,997 2,904,233 4,075,987 193,283 1,717,217 150,070	Account 2018 70,573 54,115 2,956,189 4,028,945 148,386 1,551,170 190,126	Payable 2019 127,277 31,940 2,635,433 4,521,883 139,043 1,312,182 170,075	2020 185,779 35,706 3,045,111 4,407,555 174,251 1,591,797 165,385	2017 12 62 43 29 21 39 46	inven 2018 8 81 41 27 39 32 54	2019           17           5           34           30           35           28           41	2020 200 72 37 29 60 33 42
No 1 1 2 3 4 5 6 7 8	Kode CEKA DLTA ICBP INDF MLBI MYOR ROTI SKBM	2017 3,973,458 203,039 24,547,757 50,318,096 3,389,736 15,841,619 1,183,169 1,655,321	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723 1,364,750 17,664,148 1,274,332 1,254,525	old Sold 2019 2,755,574 2,430,440 27,892,690 53,876,594 1,426,351 17,109,498 1,487,586 1,206,826	2020 3,299,157 179,156 29,416,673 54,979,425 1,044,783 17,177,831 1,409,871 1,409,871	2017 129,935 34,997 2,904,233 4,075,987 193,283 1,717,217 150,070 139,824	Account 2018 70,573 54,115 2,956,189 4,028,945 148,386 1,551,170 190,126 109,862	Payable 2019 127,277 31,940 2,635,433 4,521,883 139,043 1,312,182 170,075 134,336	2020 185,779 35,706 3,045,111 4,407,555 174,251 1,591,797 165,385 165,385	2017 12 62 43 29 21 39 46 30	inven 2018 8 81 41 27 39 32 54 32	tory) 2019 17 5 34 30 35 28 41 40	2020 20 72 37 29 60 33 42 42
No 1 1 2 3 4 5 6 7 8 9	Kode CEKA DLTA ICBP INDF MLBI MYOR ROTI SKBM SKLT	2017 3,973,458 203,039 24,547,757 50,318,096 3,389,736 15,841,619 1,183,169 1,655,321 677,184	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723 1,364,750 17,664,148 1,274,332 1,254,525 777,714	old Sold 2019 2,755,574 2,430,440 27,892,690 53,876,594 1,426,351 17,109,498 1,487,586 1,206,826 957,200	2020 3,299,157 179,156 29,416,673 54,979,425 1,044,783 17,177,831 1,409,871 1,409,871 920,111	2017 129,935 34,997 2,904,233 4,075,987 193,283 1,717,217 150,070 139,824 67,459	Account 2018 70,573 54,115 2,956,189 4,028,945 148,386 1,551,170 190,126 109,862 101,427	Payable 2019 127,277 31,940 2,635,433 4,521,883 139,043 1,312,182 170,075 134,336 101,065	2020 185,779 35,706 3,045,111 4,407,555 174,251 1,591,797 165,385 165,385 72,511	2017 12 62 43 29 21 39 46 30 36	inven 2018 8 81 41 27 39 32 54 32 54 32 47	age age           tory )           2019           17           5           34           30           35           28           41           40           38	2020 200 72 37 29 60 33 42 42 42 28
No 1 1 2 3 4 5 6 7 8 9 10	Kode CEKA DLTA ICBP INDF MLBI MYOR ROTI SKBM SKLT STTP	2017 3,973,458 203,039 24,547,757 50,318,096 3,389,736 15,841,619 1,183,169 1,655,321 677,184 2,211,949	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723 1,364,750 17,664,148 1,274,332 1,254,525 777,714 2,207,268	old Sold 2019 2,755,574 2,430,440 27,892,690 53,876,594 1,426,351 17,109,498 1,487,586 1,206,826 957,200 2,559,476	2020 3,299,157 179,156 29,416,673 54,979,425 1,044,783 17,177,831 1,409,871 1,409,871 920,111 2,776,101	2017 129,935 34,997 2,904,233 4,075,987 193,283 1,717,217 150,070 139,824 67,459 191,057	Account 2018 70,573 54,115 2,956,189 4,028,945 148,386 1,551,170 190,126 109,862 101,427 232,453	Payable 2019 127,277 31,940 2,635,433 4,521,883 139,043 1,312,182 170,075 134,336 101,065 203,738	2020 185,779 35,706 3,045,111 4,407,555 174,251 1,591,797 165,385 165,385 72,511 255,488	2017 12 62 43 29 21 39 46 30 36 31	(Aver           inven           2018           8           81           41           27           39           32           54           32           47           38	tory) 2019 17 5 34 30 35 28 41 40 38 29	202( 20) 72 37 29 60 33 42 42 42 28 33
No 1 1 2 3 4 5 6 7 7 8 9 10 11	Kode CEKA DLTA ICBP INDF MLBI MYOR ROTI SKBM SKLT STTP ULTJ	2017 3,973,458 203,039 24,547,757 50,318,096 3,389,736 15,841,619 1,183,169 1,655,321 677,184 2,211,949 3,056,681	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723 1,364,750 17,664,148 1,274,332 1,254,525 777,714 2,207,268 3,516,606	old Sold 2019 2,755,574 2,430,440 27,892,690 53,876,594 1,426,351 17,109,498 1,487,586 1,206,826 957,200 2,559,476 3,891,701	2020 3,299,157 179,156 29,416,673 54,979,425 1,044,783 17,177,831 1,409,871 1,409,871 920,111 2,776,101 3,738,835	2017 129,935 34,997 2,904,233 4,075,987 193,283 1,717,217 150,070 139,824 67,459 191,057 534,492	Account 2018 70,573 54,115 2,956,189 4,028,945 148,386 1,551,170 190,126 109,862 101,427 232,453 302,403	Payable 2019 127,277 31,940 2,635,433 4,521,883 139,043 1,312,182 170,075 134,336 101,065 203,738 451,990	2020 185,779 35,706 3,045,111 4,407,555 174,251 1,591,797 165,385 165,385 72,511 255,488 370,306	2017 12 62 43 29 21 39 46 30 36 31 63	(Aver           inven           2018           8           81           41           27           39           32           54           32           47           38           31	tory) 2019 17 5 34 30 35 28 41 40 38 29 42	2020 200 72 37 29 60 33 42 42 42 28 33 36
No 1 1 2 3 4 5 6 7 8 9 10 11 12	Kode CEKA DLTA ICBP INDF MLBI MYOR ROTI SKBM SKLT STTP ULTJ CAMP	2017 3,973,458 203,039 24,547,757 50,318,096 3,389,736 15,841,619 1,183,169 1,655,321 677,184 2,211,949 3,056,681 363,167	Cost of C 2018 3,354,976 241,721 26,147,857 53,182,723 1,364,750 17,664,148 1,274,332 1,254,525 777,714 2,207,268 3,516,606 380,496	old Sold 2019 2,755,574 2,430,440 27,892,690 53,876,594 1,426,351 17,109,498 1,487,586 1,206,826 957,200 2,559,476 3,891,701 426,417	2020 3,299,157 179,156 29,416,673 54,979,425 1,044,783 17,177,831 1,409,871 1,409,871 920,111 2,776,101 3,738,835 439,656	2017 129,935 34,997 2,904,233 4,075,987 193,283 1,717,217 150,070 139,824 67,459 191,057 534,492 40,732	Account 2018 70,573 54,115 2,956,189 4,028,945 148,386 1,551,170 190,126 109,862 101,427 232,453 302,403 42,317	Payable           2019           127,277           31,940           2,635,433           4,521,883           139,043           1,312,182           170,075           134,336           101,065           203,738           451,990           38,733	2020 185,779 35,706 3,045,111 4,407,555 174,251 1,591,797 165,385 165,385 72,511 255,488 370,306 37,919	2017 12 62 43 29 21 39 46 30 36 31 63 40	(Aver           inven           2018           8           81           41           27           39           32           54           32           54           32           54           32           54           32           54           32           54           32           47           38           31           40	tory) 2019 17 5 34 30 35 28 41 40 38 29 42 33	2020 200 72 37 29 60 33 42 42 42 28 33 36 31

		CC	CC = Cash co	nversion cyc	le
No	Kode	2017	2018	2019	2020
1	CEKA	56	61	60	50
2	DLTA	379	312	118	433
3	ICBP	45	44	48	51
4	INDF	67	78	70	67
5	MLBI	42	66	79	107
6	MYOR	72	92	104	65
7	ROTI	13	443	25	16
8	SKBM	62	69	23	(8)
9	SKLT	66	67	71	81
10	STTP	63	62	65	53
11	ULTJ	58	74	70	49
12	CAMP	162	180	176	154
13	HOKI	59	94	93	128

# APPENDIX 2. RECAPITULATION OF INVENTORY TURNOVER

# CALCULATION DATA

			Harga Pokol	k Penjualan		Rata-rata Persediaan				Perputaran Persediaan				
No	Kode	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	
1	CEKA	3,973,458	3,354,976	2,755,574	3,299,157	485,921	374,011	297,418	294,127	8.177	8.970	9.265	11.217	
2	DLTA	203,039	241,721	2,430,440	179,156	181,366	192,130	206,428	196,691	1.120	1.258	11.774	0.911	
3	ICBP	24,547,757	26,147,857	27,892,690	29,416,673	3,185,776	3,631,456	3,920,984	4,213,815	7.705	7.200	7.114	6.981	
4	INDF	50,318,096	53,182,723	53,876,594	54,979,425	9,080,401	10,667,569	10,651,431	10,404,569	5.541	4.985	5.058	5.284	
5	MLBI	3,389,736	1,364,750	1,426,351	1,044,783	154,879	171,919	168,925	168,335	21.886	7.938	8.444	6.207	
6	MYOR	15,841,619	17,664,148	17,109,498	17,177,831	1,974,472	2,588,532	3,071,215	2,797,873	8.023	6.824	5.571	6.140	
7	ROTI	1,183,169	1,274,332	1,487,586	1,409,871	50,505	57,696	74,363	47,147	23.427	22.087	20.004	29.904	
8	SKBM	1,655,321	1,254,525	1,206,826	1,409,871	265,705	153,501	72,928	130,125	6.230	8.173	16.548	10.835	
9	SKLT	677,184	777,714	957,200	920,111	105,554	137,817	158,372	154,300	6.416	5.643	6.044	5.963	
10	STTP	2,211,949	2,207,268	2,559,476	2,776,101	289,517	306,185	31,506	304,102	7.640	7.209	81.238	9.129	
11	ULTJ	3,056,681	3,516,606	3,891,701	3,738,835	721,579	695,699	848,350	506,283	4.236	5.055	4.587	7.385	
12	CAMP	363,167	380,496	426,417	439,656	139,338	159,342	168,953	154,660	2.606	2.388	2.524	2.843	
13	HOKI	1,044,272	1,228,387	1,412,510	1,029,660	61,329	107,044	149,121	151,328	17.028	11.476	9.472	6.804	



# APPENDIX 3. RECAPITULATION OF DATA CALCULATION OF

No	Kode		Penju	ıalan		Rata-rata Piutang					Perputaran Piutang			
		2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	
1	CEKA	4,257,738	3,629,327	3,120,937	3,634,297	286,133	289,926	324,205	387,529	14.880	12.518	9.626	9.378	
2	DLTA	777,308	893,006	827,136	546,336	258,808	52,964	42,355	55,451	3.003	16.861	19.528	9.853	
3	ICBP	35,606,593	38,413,407	42,296,703	46,641,048	4,010,182	3,698,898	3,701,653	4,702,683	8.879	10.385	11.426	9.918	
4	INDF	70,186,618	73,394,728	76,592,955	81,731,469	6,028,716	6,712,796	6,268,543	6,196,770	11.642	10.934	12.219	13.189	
5	MLBI	3,389,736	3,574,801	3,711,405	1,985,009	215,494	294,510	366,574	598,712	15.730	12.138	10.125	3.315	
6	MYOR	20,816,673	24,060,802	25,026,739	24,476,953	3,801,932	4,704,726	4,691,284	2,704,919	5.475	5.114	5.335	9.049	
7	ROTI	2,491,100	276,654	3,337,022	3,212,035	302,649	368,933	447,261	413,675	8.231	0.750	7.461	7.765	
8	SKBM	1,841,487	1,413,675	1,396,324	3,212,035	179,304	446,226	226,461	276,493	10.270	3.168	6.166	11.617	
9	SKLT	914,188	1,045,029	1,281,116	1,253,701	115,077	144,665	175,586	169,961	7.944	7.224	7.296	7.376	
10	STTP	2,825,409	2,826,957	3,512,509	3,846,300	365,718	396,335	482,093	494,703	7.726	7.133	7.286	7.775	
11	ULTJ	4,879,559	5,472,882	6,241,419	5,967,362	483,526	517,564	571,872	588,345	10.092	10.574	10.914	10.143	
12	CAMP	944,837	961,136	1,028,952	956,634	167,919	183,824	190,215	154,589	5.627	5.229	5.409	6.188	
13	HOKI	1,209,215	1,430,785	1,653,031	1,173,189	131,278	254,015	256,127	247,004	9.211	5.633	6.454	4.750	

## **RECEIVABLE TURNOVER**



# APPENDIX 4. PROFITABILITY CALCULATION DATA

No	Kode		Laba 1	Bersih		Total Aktiva				Return on Assets (ROA)			
		2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
1	CEKA	104,374	100,378	214,147	188,920	1,392,636	1,168,956	1,393,079	1,566,674	0.075	0.086	0.154	0.121
2	DLTA	276,390	347,689	312,114	118,593	1,340,842	1,523,517	1,425,983	1,225,580	0.206	0.228	0.219	0.097
3	ICBP	3,531,220	5,206,867	5,736,489	7,421,643	31,619,514	34,367,153	38,709,314	103,588,325	0.112	0.152	0.148	0.072
4	INDF	5,039,068	6,350,788	6,588,662	9,241,113	87,939,488	96,537,796	96,198,559	163,136,516	0.057	0.066	0.068	0.057
5	MLBI	1,320,897	1,228,041	1,207,074	288,642	2,510,078	2,889,501	2,896,950	2,907,425	0.526	0.425	0.417	0.099
6	MYOR	1,570,140	1,804,748	2,020,050	2,044,604	14,915,849	17,591,706	19,037,918	19,777,500	0.105	0.103	0.106	0.103
7	ROTI	124,467	136,301	221,853	145,493	4,559,573	4,393,810	4,682,083	4,452,167	0.027	0.031	0.047	0.033
8	SKBM	24,053	15,404	843	145,493	1,623,027	1,771,365	1,769,430	4,452,167	0.015	0.009	0.000	0.033
9	SKLT	14,526	36,017	46,740	35,898	636,284	747,293	790,845	773,863	0.023	0.048	0.059	0.046
10	STTP	215,838	258,245	486,438	625,247	2,342,432	1,250,806	1,165,406	3,448,995	0.092	0.206	0.417	0.181
11	ULTJ	694,642	702,345	1,030,191	1,136,327	5,186,940	5,555,871	6,608,422	8,754,116	0.134	0.126	0.156	0.130
12	CAMP	41,408	65,166	74,981	44,723	1,211,184	1,004,275	1,057,529	1,086,874	0.034	0.065	0.071	0.041
13	HOKI	47,056	92,570	103,273	37,438	576,963	758,846	848,676	906,924	0.082	0.122	0.122	0.041

# RECAPITULATION


## APPENDIX 5. DESCRIPTION ANALYSIS

# Descriptive

Descriptive Statistics									
	N	Minimum	Maximum	mean	Std. Deviation				
CCC	52	-7.918	442,668	96.75293	94.790652				
Receivables	52	.750	19,529	8.76793	3.609285				
Supply	52	.911	81,238	9.93245	11.709248				
ROA	52	.001	.526	.11911	.110810				
Valid N	52			-					
(listwise)									



### APPENDIX 6. TEST OF CLASSIC ASSUMPTIONS MULTICOLLINEARITY TEST

	Coefficients <sup>a</sup>									
		Unstandardized Coefficients		Standardized Coefficients			Colline Statis	earity tics		
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF		
1	(Constant)	053	.046	$\mathbf{N}$	-1.161	.251				
	CCC	.0002	.0001	.174	1.359	.181	.902	1.109		
	Receivables	.013	.004	.428	3.388	.001	.927	1.079		
	Supply	.004	.001	.398	3,200	.002	.958	1.043		

a. Dependent Variable: ROA

#### NORMALITY TEST

One-Sample Kolmogorov-Smirnov Test					
Ш		Unstandardized Residual			
N		52			
Normal Parameters <sup>a,b</sup>	mean	.0000000			
	Std. Deviation	.09335448			
Most Extreme	Absolute	.154			
Differences	Positive	.154			
	negative	083			
Kolmogorov-Smirnov	Z	1.109			
asymp. Sig. (2-tailed)		171			
a. Test distribution is N	lormal.				

b. Calculated from data.

The value of p = 0.171 > 0.05 means that the data is normally distributed

## Charts





			Coefficients	-		
Unstandardized Coefficients		Standardized Coefficients				
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.012	.031		.405	.687
	CCC	3.645E-5	.000	.053	.362	.719
	Receivables	.004	.003	.243	1,692	.097
	Supply	.001	.001	.200	1,420	.162

a. Dependent Variable: abs\_res

The value of p(sig) > 0.05 on all variables indicates that there is no

heteroscedasticity

#### **AUTOCORRELATION TEST**

## Model Summary <sup>b</sup>

			Adjusted R	Std. Error of	
Model	R	R Square	Square	the Estimate	Durbin-Watson
1	.539 <sup>a</sup>	.290	.246	.096228	1974

a. Predictors: (Constant), Inventory, Accounts Receivable, CCC

b. Dependent Variable: ROA

Constraints For Durbin Watson Tables Du=1.674 and (4-Du) = 2.326

The value of Durbin Watson (DW) = 1.974 is between Du = 1.674 and (4-Du) =2.326 then there is no autocorrelation

#### **APPENDIX 7. MULTIPLE LINEAR REGRESSION ANALYSIS**

#### Regression

Variables Entered/Removed <sup>b</sup>								
Model	Variables Entered	Variables Removed	Method					
1	Inventory,		Enter					
	Accounts							
	Receivable,							
	CCC							

a. All requested variables entered.

b. Dependent Variable: ROA

## Model Summary <sup>b</sup>

			Adjusted R	Std. Error of	
Model	R	R Square	Square	the Estimate	Durbin-Watson
1	.539 <sup>a</sup>	.290	.246	.096228	1974

a. Predictors: (Constant), Inventory, Accounts Receivable, CCC b. Dependent Variable: ROA

ANOVA <sup>b</sup>
--------------------

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.182	3	.061	6,543	.001 <sup>a</sup>
	Residual	.444	48	.009		
	Total	.626	51			

a. Predictors: (Constant), Inventory, Accounts Receivable, CCC

b. Dependent Variable: ROA

(	Coefficients <sup>a</sup>	

	Unstandardized	Standardized			Collinearity
Model	Coefficients	Coefficients	t	Sig.	Statistics

		В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	053	.046		-1.161	.251		
	CCC	.0002	.0001	.174	1.359	.181	.902	1.109
	Receivables	.013	.004	.428	3.388	.001	.927	1.079
	Supply	.004	.001	.398	3,200	.002	.958	1.043

a. Dependent Variable: ROA

