

## The effect of cash conversion cycle, leverage, sales growth, and firm size on profitability in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange (IDX)

Zhafira Haura Putri Tomewi<sup>1</sup>, Yolandafitri Zulvia<sup>1\*</sup>

Department of Management, Faculty of Economics, Universitas Negeri Padang, Padang, Indonesia

### INFO ARTIKEL

Received DD Month 2023  
Approved DD Month 2023  
Published DD Month 2023

#### Keywords:

return on asset; cash conversion cycle; leverage; sales growth; firm size

### ABSTRACT

This study aims to analyze the effect of (1) cash conversion cycle on company profitability, (2) leverage on company profitability, (3) sales growth on profitability, (4) firm size on profitability of manufacturing companies in the consumer goods industry sector listed on the Stock Exchange Indonesia in 2018-2021. The population in this study are manufacturing companies in the consumer goods industry sector which are listed on the Indonesia Stock Exchange. Meanwhile, the sample in this study was determined using the purposive sampling method, namely manufacturing companies in the consumer goods industry sector for four consecutive years from 2018-2021 so that a total sample of 52 companies was obtained with 186 observation data. The analytical method used is multiple linear regression method using the IBM SPSS Statistics 22 program. The results of this study conclude that (1) the cash conversion cycle has a negative and not significant effect on company profitability, (2) leverage has a negative and significant effect on company profitability, (3) sales growth has a positive and significant effect on company profitability, (4) firm size has a positive and significant effect on company profitability.

<https://doi.org/10.24036/jkkmk.xxxxxxxx>

Howtote: Tomewi, ZHP & Zulvia, Y. (2023) The effect of cash conversion cycle, leverage, sales growth, and firm size on profitability in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange (IDX). *Financial Management Studies*, Vol (No), xx-xx. DOI: <https://doi.org/10.24036/jkkmk.xxxxxxxx>



This is an open access article distributed under the Creative Commons 4.0 Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ©2021 by author.

\* Corresponding author: [zhafirahaura23@gmail.com](mailto:zhafirahaura23@gmail.com)

## INTRODUCTION

With the rapid development of the business world, it is necessary to acquire a competitive advantage in order to survive and develop in the fierce competition between companies. Intense competition between companies requires management to act effectively and efficiently in order to be able to manage and adjust to changes. Generally the main goal of a company is to make a profit. Company profits are needed to maintain the viability of a company. One of the things that can affect the survival of the company is the

profitability of the company. The company's ability to obtain profits related to all assets, own capital and sales is called profitability.

The manufacturing industry is an industry that plays an important role in the economy in Indonesia. The consumer goods industry is one sector in the manufacturing industry. Investment in the consumer goods industry is a promising investment in Indonesia. This is because the population of Indonesia is increasing which can lead to higher demand for consumer goods. High demand affects a company's ability to generate optimal profits.

The ability of a company to generate profits in a certain period is called profitability. The profitability ratio is a ratio to assess a company's ability to make a profit and also provides a measure of the effectiveness of a company's management. In this study, return is measured by return on investment (ROA). Khrawis (2011) states that ROA is important in explaining a company's profitability because it usually reflects operating efficiency based on the use of assets.

**Table 1 ROA of Several Manufacturing Companies in the Consumer Goods Industry Sector Listed on the Indonesia Stock Exchange in 2018-2021**

Nama Perusahaan	ROA (%)			
	2018	2019	2020	2021
Akasha Wira International Tbk	6,01	10,20	14,16	20,38
Hanjaya Mandala Sampoerna Tbk	29,05	26,96	17,28	13,44
Hartadinata Abadi Tbk	8,03	6,49	6,04	5,59
Nippon Indosari Corpindo Tbk	2,89	5,05	3,79	6,71
Ultra Jaya Milk Industry Tbk	12,63	15,67	12,68	17,24
<b>Rata-rata</b>	11,72	12,87	10,79	12,67

Source: idx.co.id (data processed)

Table 1 shows that Akasha Wira International Tbk is growing year by year. The increase suggests the company is managing its assets more effectively, thereby generating profits. ROA shows how effectively a company's assets are used to generate profits, and higher ROA indicates higher earnings and better company performance. However, in a company called Hanjaya Mandala Sampoerna Tbk, ROA is declining year by year. This decline indicates that companies are managing their assets less efficiently and are profitable as a result.

Companies are required to be able to increase company profits so as to increase profitability in the long run. Therefore, in order to achieve business goals, it is necessary to analyze the factors that can affect profitability. Profitability is influenced by several factors. According to Elfitra and Agung (2020), the cash conversion cycle is the factor that affects profitability, and the faster the cash conversion cycle, the higher the profitability of the firm. Apart from that, according to Nasir (2021) he explains that leverage, sales growth, and firm size can affect the level of profitability.

The first factor that can affect profitability is the conversion cycle. The cash conversion cycle refers to the differences regarding situations when a company pays its accounts payable and collects receivables that arise from selling goods to customers. In business operations, cash with accounts receivable, inventories and other current assets is required to pay obligations. A longer cash conversion cycle means a longer gap between cash disbursement and cash recovery. Shorter cash conversion cycles can be associated with high profitability. The cash conversion cycle has components consisting of the inventory conversion period, the accounts receivable collection period, and the accounts payable suspension period.

The second factor that can affect profitability is leverage. Leverage is the use of assets or funds for which a company must pay a fixed fee for its use. Leverage increases a company's profitability by increasing

the funds used to fund corporate activities aimed at increasing profits. Leverage is an important factor affecting profitability as it can increase a company's capital and increase profits.

The third factor that can affect profitability is sales growth. Sales growth is defined as an increase in sales from year to year or from time to time that occurs in a business. The higher the sales growth, the better the sales growth of the company and the higher the profit of the company. According to Nasir (2021) to assess the profitability of sales growth is an important criterion and is the main indicator in company activities. The company's income will increase if sales and profits increase, conversely the company's income will decrease if sales and profits decrease. This will be a consideration for investors when investing in a company.

The fourth factor that can affect profitability is firm size. According to Sunarto and Budi (2009), firm size is a measure of the amount of assets owned by the firm, with larger firms generally having larger total assets. Firm size can be seen from total sales, total assets, number of employees, and market capitalization. In this study, firm size is determined based on the company's total assets. The reason researchers use total assets is because according to Santoso and Junaeni (2022) total assets are considered more stable and can reflect firm size.

Based on the above explanation, researchers are interested in further studying the effects of cash conversion cycle, leverage, sales growth and firm size on company profitability.

## **Literature Review**

### **Trade-off Theory**

Trade-off between profitability and risk will always arise. Profitability in this context is measured by the level of profit, and risk is measured by the likelihood of a company going into technical bankruptcy (the inability to meet its obligations when due). According to Ningsih (2017) determining the proportion of long-term and short-term funding requirements is an important decision regarding the trade-off between profitability and risk for investing in current assets. When compared to using short-term funds, the use of long-term funds is more flexible, but there are consequences. In other words, the cost of using long-term funds is higher than using short-term funds.

### **Signaling Theory**

Michael Spence (1973) first developed the theory of signals in a study entitled JobMarket Signaling. In signaling theory he has two parties: internal and external. In this case, management plays the role of providing the signal, and external parties such as investors receive the signal. According to Michael Spence (1973), signal theory helps him explain the behavior of two parties when they access different information. By providing signals, management seeks to make relevant information available to investors. Investors then react according to the signals given.

### **Pecking Order Theory**

This theory further suggests that when firms need external funding, they prefer to use internal funding and debt rather than common equity (Myers and Majluf, 1984). Companies that have relatively high profitability tend to use retained earnings from sales because they are reluctant to borrow funds from outside. The pecking order theory recommends that companies maintain a high level of cash reserves and a large proportion of liquid assets ensuring that obligations are met as they arise and avoiding the use of external funds (Chen, 2004). Pecking order theory explains why profitable firms have little debt. This is because the company does not need funds from external parties.

### **Cash Conversion Cycle Theory**

Developed by Richards and Laughlin (1980), the cash conversion cycle theory explains how companies can shorten operating cycles to mitigate the effects of poor working capital management. Therefore, it measures the time from when a company purchases inventory to when cash is received from accounts receivable. To predict how long the company's cash remains tied up in its operations, company management can use the theory of the Cash Conversion Cycle.

### **Agency Theory**

According to Jensen and Meckling (1976), agency theory describes the relationships and contracts between various stakeholders (principals) and managers (agents) that exist within a firm. Jensen and Meckling (1976) describe the agency relationship in their agency theory, which states that a firm is a web of contracts between investors and managers that govern the use and management of the firm's resources.

### **Cash Conversion Cycle**

Cash Conversion Cycle is the length of time it takes a company to sell inventory and collect receivables less than the time it takes to pay debts. The cash conversion cycle shows the number of days needed by the company to pay for purchases of a number of raw material inventories until receivables from sales are collected based on predetermined terms of payment or indicate the length of time between payment of the company's raw materials until payment is collected from customers (Jaffe et al. , 2015).

### **Leverage**

Leverage is the use of assets or funds where when a company uses it, the company has to pay a fixed fee. By using leverage, it is possible to increase the resources for corporate activities aimed at increasing profits, and to increase corporate profitability. Leverage is one of the important factors that can affect profitability because it can increase company capital with the aim of increasing profits. In this study, leverage is measured using the Debt-to-Asset Ratio (DAR). This is a leverage ratio that indicates how much of a company's assets are financed by liabilities.

### **Sales Growth**

Sales growth is the variable used to describe the level of sales from year to year. Sales growth is defined as an increase in sales from year to year or from time to time that occurs in a business. The higher the sales growth number, the better the company's sales growth and will increase the company's income.

### **Firm Size**

According to Sunarto and Budi (2009), firm size is a measure of the amount of assets owned by the firm, with larger firms generally having larger total assets. Firm can be seen from total sales, total assets, number of employees, and market capitalization. In this study, firm size is determined based on the company's total assets. The reason researchers use total assets is because according to Santoso and Junaeni (2022) total assets are considered more stable and can reflect firm size.

### **Profitability**

Murthy and Sree (2003) define firm profitability as the ability to use operational and investment decisions and strategies to achieve firm financial stability. Business profitability is a measure of organizational performance. Thus, the profitability of the company measures organizational benchmarks and financial goals. In this study, profitability is measured by return on assets (ROA). Khrawish (2011) states that ROA is important in explaining a company's profitability because it usually provides insight into operating efficiency based on asset usage.

### **The Effect of the Cash Conversion Cycle on Profitability**

The cash conversion cycle corresponds to the period between the company's actual cash outlays to pay for production resources (materials and labor) and the company's own cash receipts from the sale of its products. The cash conversion cycle should be as short as possible without disrupting operations. Short cash conversion cycle will increase profits. The longer the cash conversion cycle, the greater the need for external financing, and the more expensive it is to raise it. You can shorten the cash conversion cycle by accelerating product sales to shorten the inventory conversion period, accelerating sales collection to shorten the accounts receivable period, and deferring debt repayment to extend the debt repayment period.

**H1: The cash conversion cycle has a negative and significant effect on profitability in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange.**

### **Effect of Leverage on Profitability**

To finance the company's operational activities, companies with high growth certainly need a lot of funds. External funding sources such as debt can be used for funding needs in financing company activities. Large debt can cause profitability to decrease because the company's attention is diverted from increasing productivity to the need to generate cash flow to pay off company debt (Putra and Badjra, 2015).

**H2: Leverage has a negative and significant effect on profitability in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange.**

### **Effect of Sales Growth on Profitability**

High sales growth indicates that there is an increase in income derived from product sales. According to Swatha and Handoko (2011) stated that an important indicator of market acceptance of a product or service is sales growth. Sales growth has a strategic impact on a company, as it is characterized by an increase in market share, affects the company's sales growth, and increases the company's profitability (Putra and Badjara, 2015).

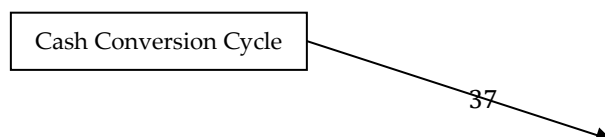
**H3: Sales Growth has a positive and significant effect on profitability in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange.**

### **Effect of Firm Size on Profitability**

According to Eljelly (2004) in obtaining raw materials, large companies get privileges compared to small companies, because large companies buy raw materials in large quantities so that they get discounts from suppliers. The greater the value generated by a company which is reflected in the assets it owns, it will affect the company's prospects in the future. Larger company size indicates better operating conditions and efficiency so that it will have an impact on financial performance .

**H4: Firm size has a positive and significant effect on profitability in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange.**

## **Conceptual Framework**



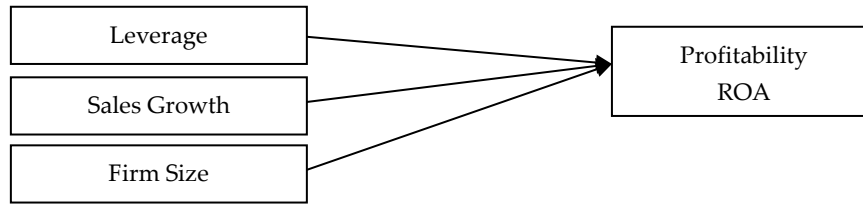


Figure 1. Conceptual Framework

## RESEARCH METHODS

### Types of research

This study uses an explanatory study design with a deductive approach. This design aims to establish causal relationships between variables. A deductive approach consists of formulating narrow hypotheses, analyzing theories, and gathering data to support or refute them (Bryman and Cramer, 2012).

### Object of research

The research objects used in this study are manufacturing companies in the consumer goods industry sector which are listed on the Indonesia Stock Exchange in 2018-2021.

### Population

The population is all the objects studied. In this study, the population is all manufacturing companies in the consumer goods industry sector that are listed on the Indonesia Stock Exchange in 2018-2021.

### Sample

The selection of the research sample was taken using the purposive sampling method, which is a sampling method based on an assessment of some of the characteristics of the sample members according to the research intent. The sampling criteria in this study were manufacturing companies in the consumer goods industry sector which were listed on the Indonesia Stock Exchange during the 2018-2021 period. Following are the sampling criteria in this study.

- a. Go Public company listed on the Indonesia Stock Exchange.
- b. Have audited company financial statements in 2018-2021.
- c. Companies that present data related to research variables and have complete data according to research needs.

Based on the criteria above, the sample of this study were 52 manufacturing companies in the consumer goods industry sector which were listed on the Indonesia Stock Exchange.

### Operational Definition and Sample Measurement

In this study, the independent variables were used, namely the cash conversion cycle, leverage, sales growth, and firm size, while the dependent variable in this study was profitability, which was measured using the ROA ratio. The following is a table of operational definitions and variable measurements in this study:

Table 2 Operational Definition and Variable Measurement

Variabel	Indicator	Formulas	Scale
Dependent	Return on Asset	$ROA = \frac{\text{Earning after tax}}{\text{Total assets}}$	Ratio

	Cash Conversion Cycle	$CCC = (AR + INV) - AP$	Ratio
	Firm Size	$Size = \ln \text{ total asset}$	Ratio
Independent	Leverage	$DAR = \frac{\text{Total debt}}{\text{Total assets}}$	Ratio
	Sales Growth	$SG = \frac{\text{Sales this year} - \text{Last year's sales}}{\text{Last year's sales}}$	Ratio

### Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the direction and how much influence the independent variables have on the dependent variable. The regression equation model to be tested is as follows.

$$ROA = \alpha + \beta_1 CCC + \beta_2 LEV + \beta_3 SG + \beta_4 FS + e$$

## RESULTS AND DISCUSSION

### Descriptive statistics

Data processing was performed by the IBM SPSS version 22 program. After going through the data collection and processing process, statistical descriptions are provided for an easy overview of each study variable, as shown in the table below:

**Table 3 Table of Descriptive Statistics**

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	186	-0.11	0.24	0.0585	0.06646
CCC	186	-738	392	9.16	135.290
SIZE	186	23.15	32.82	28.2943	1.73243
LEV	186	0.11	0.93	0.4194	0.18026
SG	186	-1.00	2.47	0.0927	0.30157

Source: SPSS 22

Table 3 shows that the average ROA for consumer goods manufacturing companies listed on the Indonesian Stock Exchange is 0.0585, the lowest ROA value is -0.11 for the companies Martina Berto Tbk in 2019 and Prasadha Aneka Niaga Tbk in 2021 and the highest ROA value is 0.24 in the company PT Industri Jamu and Farmasi Sido Muncul Tbk in 2020 and the standard deviation value is 0.06646. The ROA standard deviation value of 0.06646 is greater than the average, which illustrates that the data in the study sample for the ROA variable have varied.

The average CCC for consumer goods manufacturing companies listed on the Indonesian Stock Exchange is -9.16, the lowest CCC value is -738 at PT Palma Serasih Tbk company in 2018 and the highest CCC value is 392 at Kedaung Indah Can Tbk company 2020. A negative CCC value indicates that the company's debt age is greater than its receivable age. The CCC standard deviation value of 135.290 is greater than the average, which illustrates that the data in the study sample for the CCC variable have varied.

The average firm size of consumer goods manufacturing companies listed on the Indonesian Stock Exchange is 28.2943, the lowest firm size value is 23.15 at the Kimia Farma Tbk company in 2018 and the highest firm size value is 32.82 at the Indofood company Sukses Makmur Tbk in 2021. The standard deviation value of company size is 1.73243 which is smaller than the average, which illustrates that the data in the research sample for the company size variable is still less varied.

The average leverage for companies listed on the LQ45 Index of the Indonesia Stock Exchange is 0.4194, the lowest leverage value is 0.11 for Campina Ice Cream Industry Tbk in 2021 and the highest leverage is 0.93 for Prasadha Aneka Niaga Tbk. 2021. The standard deviation value of leverage is 0.18026 which is smaller than the average, which illustrates that the data in the study sample for the leverage variable is still less varied .

The average sales growth for companies listed on the LQ45 Index of the Indonesia Stock Exchange is 0.0927, the lowest sales growth value is -1.00 at Kimia Farma Tbk in 2018 and the highest sales growth value is 2.47 at PT Prima. Cakrawala Abadi Tbk in 2021. The standard deviation value of sales growth is 0.30157 which is greater than the average, which illustrates that the data in the research sample for the variable sales growth has varied.

### Classic assumption test

According to Ghozali (2018), determining the accuracy of a model requires testing several classical assumptions: normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. A normality test aims to test whether the dependent and independent variables are normally distributed. The Kolmogorov-Smirnov statistical test was used in this study. In order for the research to be normally distributed, the outlier data must be removed. Outliers are extreme observational data that differ greatly from other observations. The way to detect outlier data is by casewise diagnostic. If the standardized residual value is  $\geq 2.5$ , the data can be categorized as outlier data (Mangeka and Rahayu, 2020). Outlier detection results found as many as 26 outlier data so that the sample used was 186. The following are the results of the normality test.

**Table 4 Normality Test Results**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		186
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.04779760
Most Extreme Differences	Absolute	.050
	Positive	.050
	Negative	-.033
Test Statistic		.050
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

Source: SPSS 22

From Table 4 we can see that the magnitude of the significance value is 0.200. Since this value is greater than 0.05, the data are considered normally distributed.

The multicollinearity test aims to test whether a regression model finds correlations between independent (independent) variables. A regression model is considered good if there is no correlation between the independent variables. Detecting the presence or absence of multicollinearity can be determined using tolerance and variance inflation factor (VIF) values. The cutoff value that is generally used to indicate the absence of multicollinearity is the tolerance value (T)  $> 0.10$  or the variance inflation factor (VIF) value  $< 10$  (Ghozali, 2018). The following are the results of the multicollinearity test.

**Table 5 Multicollinearity Test Results**

Coefficients <sup>a</sup>		
Model	Collinearity Statistics	
	Tolerance	VIF



1	CCC	.799	1.251
	SIZE	.947	1.056
	LEV	.776	1.288
	SG	.985	1.015

Source: SPSS 22

Based on Table 5 it can be seen that the tolerance (T) is more than 0.10 and the variance inflation factor (VIF) is less than 10. So it can be concluded that for the regression model with ROA as the dependent variable there is no multicollinearity between all independent variables.

The heteroscedasticity test aims to test whether there is inequality of variance from one residual observation to another in a regression model. According to Ghozali (2018), a good regression model is one that exhibits homoscedasticity or one that does not exhibit heteroscedasticity. To detect the presence or absence of heteroscedasticity is to do a test using a Scatter Plot. Below are the results of the heteroscedasticity test.

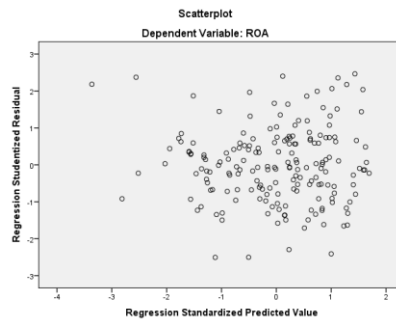


Figure 1. Scatterplot Graph

To ensure whether there are symptoms of heteroscedasticity, you can do the white test. The White test is performed by regression of the squared residuals of the independent variables, the squares of the independent variables, and the multiplication of the interactions between the independent variables (Ghozali, 2018). The decision making criterion is to look at the value of  $c^2$ . If  $c^2$  count  $<$   $c^2$  table then it can be said that there is no heteroscedasticity but if  $c^2$  count  $>$   $c^2$  table then it can be said that there is heteroscedasticity. Here are the results of the white test.

Table 6 White Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.437 <sup>a</sup>	.191	.125	.00296

Source: SPSS 22

Based on Table 6, it can be seen that the R square value is 0.191 and the research sample in model 1 is 186, so the calculated  $c^2$  value =  $186 \times 0.191 = 35.526$ . The df value in model 1 is  $df = 186 - 1 = 185$ , based on the chi square table, the value of  $c^2$  table with df 185 is 217.734981. From this we can conclude that there is no symptom of heteroscedasticity because it fulfills the requirements  $35.526$  ( $c^2$  count)  $<$   $217.734981$  ( $c^2$  table).

The autocorrelation test is used in linear regression models to test whether there is a correlation between a spurious error in period t and a spurious error in (previous) period t-1. The Durbin Watson test (DW) is a method that can be used to detect the presence or absence of autocorrelation. If  $dU < DW < 4 - dU$ , it can be said that there is no autocorrelation. The following are the results of the autocorrelation test.

**Table 7 Autocorrelation Test Results**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.695	0.483	0.471	0.04832	1.084

Source: SPSS 22

From Table 7 we can see that the DW value is 1.084 with a dL value of 1.7163 and a dU value of 1.8041. The results show  $0 < DW < dL$ , namely  $0 < 1.084 < 1.7163$ . So it can be concluded that in model 1 there is a positive autocorrelation.

Therefore, to find out whether there is autocorrelation, we proceed with the Cochrane Orcutt test. According to Ade Aprianto et al. (2020) the Cochrane Orcutt test can overcome autocorrelation in the regression model. The following are the results of the Cochrane Orcutt test.

**Table 8 Orcutt's Cochrane Test Results**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.623	0.388	0.374	0.04249	1.768

Source: SPSS 22

From Table 7 we can see that the DW value is 1.768 with a dL value of 1.7163 and a dU value of 1.8041. The results show  $dU < DW < 4 - dU$  ie  $1.7163 < 1.768 < 2.1959$ . So it can be concluded that there is no autocorrelation symptom.

### Multiple Linear Regression Method

Multiple linear regression analysis is used to determine the direction and how much influence the independent variables have on the dependent variable. The following are the results of multiple linear regression analysis tests.

**Table 9 Multiple Regression Analysis Test**

Variabel	Unstandarized B	t	Sig.
(Constant)	-0.067	-1.077	0.283
CCC	-0.000032	-1.090	0.277
SIZE	0.008	3.746	0.000
LEV	-0.238	-10.643	0.000
SG	0.028	2.375	0.019
Adjusted R <sup>2</sup>	0.471		
F	42.241		
Sig	0.000		

Source: SPSS 22

Based on the results of the processed data in Table 9, the linear regression equation can be formulated as follows.

$$ROA = -0.067 - 0.000032CCC - 0.238LEV + 0.028 + 0.008FS$$

Based on the above formula, we find that the constant coefficient value is -0.067. This is because if the factors that affect profitability determined by ROA, i.e. cash conversion cycle (CCC), company size (SIZE), leverage (LEV), and sales growth rate (SG) are zero, the ROA score will be It means we reached -

0.067. A Cash Conversion Cycle Coefficient (CCC) value of -0.000032 indicates a negative value. This shows that for every 1% increase in CCC, the ROA value decreases by -0.000032. The leverage factor (LEV) value is -0.238, indicating a negative value. This shows that for every 1% increase in LEV, the ROA value decreases by -0.238. A Sales Growth Coefficient (SG) value of 0.028 indicates a positive value. This shows that for every 1% increase in SG, the ROA value increases by 0.028. A firm size factor (SIZE) of 0.008 indicates a positive value. This shows that for every 1% increase in size, the ROA value increases by 0.008.

### **Determination Coefficient Test ( $R^2$ )**

Based on Table 9, we find that the adjusted R-squared value ( $R^2$ ) is 0.471. This is because the independent variables namely cash conversion cycle, leverage, sales growth and firm size impact company profitability as a proxy for ROA of 47.1%, with the remaining 52.9% being determined by other variables. implied to be affected, but these were not analyzed in this study.

### **Statistical F Test**

Based on Table 9 it is known that the ROA variable as the dependent variable has a significance value of 0.000 where the value of  $0.000 < 0.05$ . This means that the combination of all independent variables has a large effect on the dependent variable. It can be concluded that this study can test.

### **Hypothesis Test (T Test)**

The first hypothesis of this study is that the cash conversion cycle has a negative and significant impact on the profitability of IDX-listed consumer goods manufacturers. Based on Table 9, we can see that the CCC coefficient is negative. That is, -0.000032 with a tcount of -1.090, which corresponds to a significance of  $0.277 > 0.05$ . This indicates that the cash conversion cycle has not significantly impacted the company's profitability. From this we can conclude that the H1 hypothesis is rejected.

The second hypothesis of this study is that leverage has a negative and significant impact on the profitability of IDX-listed consumer goods manufacturers. Based on Table 9, we can see that the leverage factor is negative. That is, -0.238 when tcount is -10.643. This corresponds to a significance of  $0.000 < 0.05$ . This shows that leverage has a negative and significant impact on a company's profitability. From this we can conclude that the H2 hypothesis is acceptable.

The study's third hypothesis is that sales growth has a negative and significant impact on the profitability of IDX-listed consumer goods manufacturers. Based on Table 9, we can see that the sales growth factor is positive. That is, 0.028 with a tcount of 2.375, which corresponds to a significance of  $0.019 < 0.05$ . This indicates that the sales growth has a positive and significant impact on the company's profitability. From this we can conclude that the H3 hypothesis is accepted.

The study's fourth hypothesis is that sales growth has a negative and significant impact on the profitability of IDX-listed consumer goods manufacturers. Based on Table 9, we find that the firm size coefficient is positive. That is, 0.008 with a tcount of 3.746, corresponding to a significance of  $0.000 < 0.05$ . This indicates that firm size has a significant positive impact on firm profitability. From this we can conclude that the H4 hypothesis is accepted.

## **The Effect of the Cash Conversion Cycle on Profitability in Manufacturing Companies in the Consumer Goods Industry Sector**

The findings of the study indicate that the inventory fluctuation cycle has not had a material negative impact on the profitability of consumer goods manufacturers listed on the Indonesian Stock Exchange. From this we can conclude that the H1 hypothesis is rejected. A negative coefficient indicates

that profitability decreases as CCC increases. Insignificant effect indicates that CCC is not the main factor that can affect company profitability.

The results of this study are in contrast to research conducted by Kwatiah (2020) that the cash conversion cycle has a positive effect on company profitability. In addition, this study is also contrary to research conducted by Malik and Mahum (2014) that the cash conversion cycle has a positive and significant effect on company profitability. However, this research is in line with research conducted by Dita (2016) that the cash conversion cycle has no effect on profitability. In addition, this research is also in line with research conducted by Teresa et al. (2023) that the cash conversion cycle has no effect on profitability. The cash conversion cycle that has no effect on profitability means that the length or shortness of the cash conversion cycle does not affect the increase in profitability of the company.

### **The Effect of Leverage on Profitability in Manufacturing Companies in the Consumer Goods Industry Sector**

The findings show that leverage has a negative and significant impact on the profitability of manufacturing companies in the consumer goods sector listed on the Indonesian Stock Exchange. From this we can conclude that the H2 hypothesis is accepted. The findings of this study contrast with a study by Ray and Sri (2021), which stated that leverage has a positive and significant impact on firm profitability. However, this study is consistent with research conducted by Ayuningtyas and Prasetiono (2021) and Nainggolan et al. (2022) which states that leverage has a negative and significant effect on company profitability. This means that the company is able to optimize internal funding to finance its operational activities .

### **The Effect of Sales Growth on Profitability in Manufacturing Companies in the Consumer Goods Industry Sector**

The results show that sales growth has a positive and significant impact on the profitability of manufacturing companies in the consumer goods sector listed on the Indonesian Stock Exchange. So it can be concluded that the H3 hypothesis is accepted. The results of this study are in contrast to the results of research conducted by Ayuningtyas and Prasetiono (2021) which state that sales growth has a positive and insignificant effect on company profitability and is in contrast to research conducted by Nasir (2021) which states that sales growth has a negative effect and significant to the company's profitability. However, the study is consistent with that of Widhi and Suarmanayasa (2021), who stated that sales growth has a significant positive impact on firm profitability. This means that the higher the company's turnover, the higher the company's profit, which affects the company's profitability.

### **The Effect of Firm Size on Profitability in Manufacturing Companies in the Consumer Goods Industry Sector**

The survey results show that firm size has a positive and significant impact on the profitability of manufacturing companies in the consumer goods sector listed on the Indonesian Stock Exchange. From this we can conclude that the H4 hypothesis is accepted. This research result contrasts with the study by Telly and Ansori (2017), which finds that firm size does not significantly affect firm profitability. However, this study is consistent with studies by Ayuningtyas and Prasetioni (2021) and Nasir (2021), who state that firm size has a positive and significant impact on firm profitability. This means that the firm size affects the profitability of a company.

## **CONCLUSION**

The study explores whether cash conversion cycle, leverage, sales growth and firm size may affect the profitability of Indonesian Stock Exchange-listed manufacturing companies in the consumer goods sector over the period 2018-2021. was carried out to find out. This study uses his ROA to measure

profitability. Several conclusions are drawn based on the analysis and discussion of the hypothesis testing results. The cash conversion cycle has a negative impact on profitability, but the impact is not significant. Leverage has a significant negative impact on profitability. Sales Growth has a positive and significant impact. Firm size has a positive impact on profitability and determines profitability.

## REFERENCES

- Amponsah-Kwatiah, K dan Asiamah, M. (2020), "Working capital management and profitability of listed manufacturing firms in Ghana", *International Journal of Productivity and Performance Management*.
- Aprianto, A., Debatara, N. N., & Imro'ah, N. (2020). Metode Cochran-Orcutt untuk Mengatasi Autokorelasi pada Estimasi Parameter Ordinary Least Squares. *Bimaster: Buletin Ilmiah Matematika, Statistika dan Terapannya*, 9(1).
- Ayuningtyas, G. S., & Prasetiono, P. (2021). Pengaruh Working Capital Management Terhadap Profitabilitas dengan Firm Size Sebagai Variabel Moderasi dan Leverage, Current Ratio serta Sales Growth Sebagai Variabel Kontrol (Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2015-2019). *Diponegoro Journal of Management*, 10(3), 25-34.
- Bryman, A. and Cramer, D. (2012), *Quantitative Data Analysis with IBM SPSS 17, 18 & 19: A Guide for Social Scientists*, Routledge, London.
- Chen, J. J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business research*, 57(12), 1341-1351.
- Eljelly, M. A. (2004). "Liquidity – Profitability Tradeoff: An Empirical Investigation in an Emerging Market". *International Journal of Commerce and Management*. Vol. 14 No.2 hal. 48-61.
- Ghozali, Imam. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25*. Badan Penerbit Universitas Diponegoro: Semarang.
- Helfiardi, R. D., & Suhartini, S. (2021). Pengaruh leverage dan ukuran perusahaan terhadap profitabilitas pada perusahaan sub sektor barang makanan dan minuman yang terdaftar di bursa efek indonesia tahun 2015-2020. *AKUNTABEL*, 18(3), 516-523.
- Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.
- Khrawish, H.A. (2011), "Determinants of commercial banks performance: evidence from Jordan", *International Research Journal of Finance and Economics*, Vol. 5 No. 5, pp. 19-45.
- Malik, M.S., & Bukhari, M.S. (2014). The impact of working capital management on corporate performance: A study of firms in cement, chemical and engineering sectors of Pakistan.
- Mangeka, D. P., & Rahayu, Y. (2020). Pengaruh Fraud Triangle Dalam Mendeteksi Financial Statement Fraud. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, 9(2).
- Murthy, Y. and Sree, R. (2003), "A study on financial ratios of major commercial banks", *Research Studies, College of Banking and Financial Studies, Sultanate of Oman*, Vol. 3 No. 2, pp. 490-505.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221.
- Nainggolan, M. N., Sirait, A., Nasution, O. N., & Astuty, F. (2022). Pengaruh Ukuran Perusahaan, Pertumbuhan penjualan, dan leverage terhadap profitabilitas melalui rasio Roa pada sektor Food & Beverage dalam BEI periode 2015-2019. *Owner: Riset Dan Jurnal Akuntansi*, 6(1), 948-963.

- Nasir, M. J. A. (2021). Pengaruh Leverage, Pertumbuhan Penjualan, Dan Ukuran Perusahaan Terhadap Profitabilitas. *Buletin Ekonomi: Manajemen, Ekonomi Pembangunan, Akuntansi*, 18(2), 261-286.
- Ningsih, Sri. (2017). Pengaruh Manajemen Modal Kerja Terhadap Profitabilitas Dan Risiko. Liquidity. 6. 95-102. 10.32546/lq.v6i2.24.
- Putra, A. W. Y., & Badjra, I. B. (2015). *Pengaruh leverage, pertumbuhan penjualan dan ukuran perusahaan terhadap profitabilitas* (Doctoral dissertation, Udayana University).
- Rahmantika, E., & Juliarto, A. (2020). Siklus Konversi Kas, Profitabilitas dan Nilai Perusahaan Pada Perusahaan Manufaktur di BEI. *Diponegoro Journal of Accounting*, 9(4).
- Richards, V. D., & Laughlin, E. J. (1980). A cash conversion cycle approach to liquidity analysis. *Financial management*, 32-38.
- Ross, Westerfield, Jaffe. (2015). *Corporate Finance. Tenth Edition*. New York: The MC Graw Hill Companies.
- Santoso, B. A., & Junaeni, I. (2022). Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan, Likuiditas, dan Pertumbuhan Perusahaan Terhadap Nilai Perusahaan. *Owner: Riset dan Jurnal Akuntansi*, 6(2), 1597-1609.
- Sunarto & Budi, A. P. (2009). Pengaruh Leverage, Ukuran dan Pertumbuhan Perusahaan Terhadap Profitabilitas. *Jurnal Ilmiah Telaah Manajemen*, 6(1), 86-103.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355.
- Swastha, B. dan T.H. Handoko. 2011. *Prinsip-Prinsip Pemasaran*. Gramedia. Jakarta.
- Tansir, D. (2016). PENGARUH SIKLUS KONVERSI KAS TERHADAP RASIO PROFITABILITAS PERUSAHAAN SEKTOR INDUSTRI MANUFAKTUR YANG TERDAFTAR DI BURSA EFEK INDONESIA PERIODE 2010-2013. *CALYPTRA*, 5(1), 1-16.
- Telly, B. R., & Ansori, M. (2017). Pengaruh ukuran dan cash conversion cycle terhadap profitabilitas perusahaan. *Journal of Applied Managerial Accounting*, 1(2), 179-189.
- Widhi, N. N., & Suarmanayasa, I. N. (2021). Pengaruh leverage dan pertumbuhan penjualan terhadap profitabilitas pada perusahaan subsektor tekstil dan garmen. *Jurnal Ilmiah Akuntansi Dan Humanika*, 11(2), 267-275.
- WINATA, A., & YASIN, T. V. (2023). Working Capital Management and Leverage to Profitability: Case of Manufacturing Firms in Indonesia. *International Journal of Organizational Behavior and Policy*, 2(1), 55-66.