

The Effect of Current Ratio, Working Capital Turnover and Debt to Equity Ratio on Profitability in Manufacturing Companies

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Abstract

This study aims to determine whether there is an effect of Current Ratio, Working Capital Turnover and DER on profitability using ROA proxy in manufacturing companies in the various industrial and chemical sectors with a period of 5 years, namely 2015-2019. The method used is descriptive quantitative and the nature of causal relationship research. This sector on the IDX has a population of 71 companies and only 30 companies can be sampled based on purposive sampling technique. For data processing using the SPSS version 21 application with multiple linear regression analysis techniques. The results of data processing partially show that only DER has an influence on profitability in a negative and significant direction, while the Current Ratio and working capital turnover have no implications at all on profitability. Simultaneously the three variables affect the profitability with the magnitude of the influence seen from the value of the coefficient of determination is 10%.

Keywords: Current Ratio, Working Capital Turnover, Debt to Equity Ratio and Profitability.

1. Introduction

In Indonesia, the role of the capital market is the Indonesia Stock Exchange (IDX). The development of the IDX is so fast that it becomes an alternative for companies to seek additional funds. The development of the stock exchange can be seen in addition to the increasing number of stock exchange members, it can also be seen from changes in the price of the shares traded. Financial statements can be used as a reference in order to assess the company's performance through the efficiency of activities in generating profits. If the information is presented correctly, the information is very useful for the company in making decisions and to determine the company's performance. To measure how much the company's success in obtaining the rate of return on profits, it is necessary to do a financial analysis with Profitability ratios. Profitability ratio is the company's ability to generate profits in a certain period. In this study using Return On Assets (ROA). The higher the ROA of a company, the better the profitability of the company. Profitability here is the company's ability to generate profits, the higher the ratio in the company, the better it will be for investors to invest in the company. There are several factors that affect profitability, including the current ratio, working capital turnover and debt to equity ratio.

The liquidity of a company can be measured using the Current Ratio. The higher the Current Ratio level, it indicates the company is able to pay off its current debt when billed by the supplier. Thus the company can increase its profitability because every amount of the company's request will be provided by the supplier. A company experiencing a lack of liquidity will also have an impact on decreasing the ability to finance the company's operations, resulting in a decrease in sales volume, thus affecting a decrease in profitability. A high working capital turnover rate will please short-term creditors. They will have the assurance that working capital rotates at a high speed and debts will be repaid even in difficult operating conditions thereby increasing the company's profitability. A company is said to have high profitability, meaning that large capital, effectiveness will also be high. But big capital not necessarily the company gets high profitability. This depends on whether the use of working capital is effective and efficient or not.

The decision in selecting the source of funds is important for every company because it will affect the company's financial structure which will ultimately affect profitability. A high DER level indicates a high risk, which means that funding from own capital used as collateral for debt is low. Additional debt on the balance sheet will result in high interest costs that are deducted from pre-tax profit. Thus, the higher the use of debt, the higher the interest expense that must be borne by the company which will have an impact on decreasing profitability. For more details, it can be seen from the data collected by researchers from the financial statements of manufacturing companies in the various industrial and chemical sectors.

Based on these data, it can be seen that the condition of the financial data is contrary to the existing theory, namely at PT. Alakasa Industrindo, Tbk current assets in 2015-2016 decreased by 18.74% but net profit increased by 143.9%. At PT. Betonjaya Manunggal, Tbk sales in 2018-2019 increased by 4.11% but net profit decreased significantly by 95.08%. While at PT. Steel Pipe Industry of Indonesia, Tbk debt increased by 4.38% in 2017-2018 but its net profit also increased by 464.52%. The background of the problem above makes researchers interested in conducting a study entitled: The Effect of Current Ratio, Working Capital Turnover and Debt to Equity Ratio on Profitability in Manufacturing Companies in the Basic and Chemical Industry Sector Listed on the Indonesia Stock Exchange (IDX) for the 2015-2019 Period

2. Literature Review

Effect of Current Ratio on Profitability

According to Hantoto (2015: 2), a low current ratio is usually considered to indicate a problem in liquidation, on the other hand a current ratio that is too high is also not good, because it shows a large number of idle funds which can ultimately reduce the company's profitability

Effect of Working Capital Turnover on Profitability

According to Maming (2018:37) The working capital turnover rate measures how many current assets are able to rotate to generate sales. The faster the working capital rotates; the more sales are created. With the increase in sales, it is expected that there will be an increase in profitability.

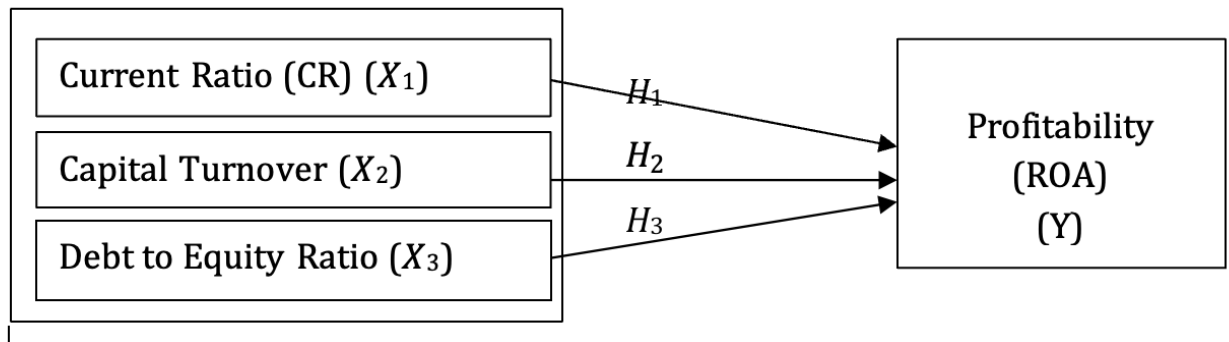
Effect of Debt-to-Equity Ratio on Profitability

Wahyuni, et al (2018) The bigger this ratio means the smaller the own capital in guaranteeing the debt, so the company will be riskier. On the other hand, a lower debt ratio indicates better performance, because it causes a higher rate of return. According to Hasmirati and Akuba (2019: 33) Basically, if the company increases the amount of debt as a source of funds it can increase financial risk. company profitability. Conversely, if the debt can be managed properly and used for productive

investment projects, it can have a positive influence and have an impact on increasing company profitability.

Conceptual Framework

Based on the theory of influence from previous research, the researchers drew up a conceptual framework that shows the relationship between the independent and dependent variables as follows:



The hypotheses to be proposed consist of:

H1 : Current Ratio has a partial effect on the profitability of manufacturing companies in the various industrial and chemical sectors for the 2015-2019 period

H2 : Working capital turnover has a partial effect on the profitability of manufacturing companies in the various industrial and chemical sectors for the 2015-2019 period

H3 : DER has a partial effect on the profitability of manufacturing companies in the various industrial and chemical sectors for the 2015-2019 period

H4 : Current Ratio, PMK and DER simultaneously affect the profitability of manufacturing companies in the various industrial and chemical sectors for the 2015-2019 period

3. Methods

The object of this research is the basic and chemical industrial sector companies that have gone public on the IDX. The research was conducted from February 2021 to December 2021.

Research Approach

The research approach used in this research is quantitative research methods. According to Sugiyono (2017:8) Quantitative research can be interpreted as a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, quantitative/statistical data analysis with the aim of testing predetermined hypotheses.

Types of Research

This type of research is a type of quantitative descriptive research. According to Sanusi (2014:14) for descriptive-quantitative research, the data analysis tool used is descriptive statistics. Researchers explain these facts by using the processed data.

Nature of Research

The nature of this research is a causal relationship. Causal relationship research is a causal relationship (Sugiyono, 2017:37). So here there are independent variables (influenced variables) and dependent variables (influenced).

Population and Sample

According to Nizamuddin (2020:17), the population is a collection of variables that are the focus of research that have different characteristics, can be measured and have different variants. The number of manufacturing companies in the basic and chemical industrial sectors that have gone public are 71 companies. According to Nizamuddin (2020:19), the sample is a subset of the population or part of the population that has the same characteristics as the population, this is because the sample is part of the population. To get a sample that meets the criteria, it will be selected using a purposive sampling technique, namely:

1. Manufacturing companies in the basic and chemical industry sectors on the IDX are listed until 2019
2. Manufacturing companies in the basic and chemical industry sectors registered from 2015-2019 and publishing complete financial reports from 2015-2019
3. Manufacturing companies in the basic and chemical industry sectors that earn profits for the 2015-2019 period.

Data Collection Technique

The technique of collecting data used a documentation study, namely by collecting the financial statements of companies in the basic and chemical industry sectors which were downloaded from the IDX website for 2015-2019.

Types and Sources of Research Data

This research is secondary data taken from the website www.idx.co.id in the form of registered financial statements of companies in the basic and chemical industry sectors.

Classical Assumption Test

The classic assumption is that the absolute statistical requirements are carried out on multiple regression. If these conditions are met, then the linear regression model is said to be the Best Linear Unbiased Estimation. The classical assumption tests in this study are normality test, multicollinearity test, auto correlation test and heteroscedasticity test.

Normality Test

This test is to see whether the residual value is normally distributed or not. A good regression model is to have a normally distributed residual value. The normality test in this study used the histogram test, the P Plot normal test, and the Kolmogorov Smirnov test.

Multicollinearity Test

This test is to see whether or not there is a high correlation between the independent variables in a multiple linear regression model. To detect the absence of multicollinearity in the regression model, it can be seen from the tolerance value > 0.10 or equal to the VIF value < 10 .

Correlation Auto Test

This test is to see whether there is a correlation between a period t and the previous period ($t - 1$). The autocorrelation test in this study used a run test. Decision making is done by looking at the Asymp value. Sig (2-tailed) test Run Test. If the Asymp.Sig (2-tailed) value is greater than the 0.05 significance level, it can be concluded that there is no autocorrelation.

Heteroscedasticity Test

This test is to see if there is an inequality of variance from the residuals of one observation to another observation. Detection of heteroscedasticity can be done using the scatterplot method by plotting the ZPRED value (prediction value) with SRESID (prediction value). residuals). In addition to using the heteroscedasticity test graph, this study also uses the Glejser test where if the significant value of the SPSS calculation is greater than 0.05, it can be concluded that there is no heteroscedasticity.

Research Model

This study uses multiple linear regression analysis techniques. The equations used are:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Information:

- Y = Profitability
- a = Constant
- X1-X3 = Current Ratio, PMK, DER
- b1-b3 = Variable coefficient
- e = fault tolerance limit

Coefficient of Determination

The coefficient of determination in this study is to determine how much the ability of all independent variables to explain the variance of the dependent variable. In this study, the coefficient of determination is seen in the Adjusted R Square value.

T Test

The t test is to test how the effect of each independent variable partially on the dependent variable. This test can be done by comparing t count with t table or by looking at the significance value of each t count. the criteria as guidelines for the t-test are as follows: H_0 is accepted if $-t_{count} < -t_{table}$ and significant > 0.05 H_a is accepted if $-t_{count} < -t_{table}$ or $t_{count} > t_{table}$ and significant < 0.05

F Test

The F test is a test to see whether all of the independent variables simultaneously affect the dependent variable. The F test can be done by comparing the calculated F with the F table with the following criteria: H_0 is accepted if $F_{count} < F_{table}$ and significant > 0.05 H_a is accepted if $F_{count} > F_{table}$ and significant < 0.05 .

4. Results and Discussion

Coefficient of Determination Test

Table 1. Coefficient of Determination Test Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.343 ^a	.118	.100	.040196

a. Predictors: (Constant), DER, PMK, CR

Source: Data processed by SPSS, 2021

From Table 1 the adjusted R square (R^2) value of the coefficient of determination is 0.100 (10%). The independent variable affects the dependent by 10% while the remaining 90% is influenced by other variables.

F Test (Simultaneous)

Table 2. F Test Results ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.031	3	.010	6.494	.000 ^b
	Residual	.236	146	.002		
	Total	.267	149			

a. Dependent Variable: Profitabilitas

b. Predictors: (Constant), DER, PMK, CR

Source: Data processed by SPSS, 2021

The joint test obtained results that were smaller than 0.05 and F_{count} of 6.494. $F_{table} = n - k - 1$ ($150 - 3 - 1 = 146$), and the value of f_{table} is 2.67, thus $F_{count} > F_{table}$ (6,494 > 2.67). Then H_a is accepted meaning that simultaneously Current Ratio, working capital turnover and DER have a significant effect on profitability in the various industrial and chemical sub-sectors for the 2015-2019 period.

T-Test (Partial)

Table 3. T Test Results ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.031	3	.010	6.494	.000 ^b
	Residual	.236	146	.002		
	Total	.267	149			

a. Dependent Variable: Profitabilitas

b. Predictors: (Constant), DER, PMK, CR

Source: Data processed by SPSS, 2021

Table 3 above shows the value of t table (0.025/0.05), df 146 is 1.97635. Thus the results of the t-test in this study can be explained one by one as follows: Current Ratio has a significant value of 0.721 > 0.05 and a tcount of -0.358, then the value of -tcount > -ttable (-0.358 > -1.97635) which means that CR has no effect on the profitability of the various industrial and chemical sub-sectors for the 2015 – 2019 period. The significant value of working capital turnover is 0.668 > 0.05 and the value of tcount is 0.430, then the value of tcount < ttable (0.430 < 1.97635) which means that working capital turnover has no effect on the profitability of the various industrial and chemical sub-sectors for the 2015 – 2019 period. DER significant value 0.000 < 0.05. And the value of tcount is -3.968, then the value of -tcount < -ttable (-3.968 < -1.97635) which means that DER has a significant negative effect on the profitability of the various industrial and chemical sub-sectors for the 2015 – 2019 period.

Effect of Current Ratio on Profit (ROA)

The results of this study indicate that CR partially does not affect the profitability of the various industrial and chemical sub-sectors for the 2015 - 2019 period. The results of this study are in line with the results of Supardi et al. (2016) where the Current Ratio has no effect on ROA. The current ratio does not affect the current research due to the high value of CR where the average is 2.7. The excess of current assets shows that the company is less effective in utilizing the current assets so that it is less profitable for the company.

Effect of Working Capital Turnover on Profit (ROA)

The results of this study indicate that working capital turnover does not partially affect the profitability of the various industrial and chemical sub-sectors for the 2015 – 2019 period. The results of this study are in line with the results of Putri and Kusumawati's research (2020), namely that working capital turnover does not affect the profits of food and beverage companies. There are several companies that have a PMK that has a minus value, this proves that the existing sales cannot be fully converted into cash immediately, this hampers the existing working capital turnover and cannot bring profits to the company.

Effect of DER on Profit (ROA)

The results of this study indicate that DER partially negatively and significantly affects the profitability of the various industrial and chemical sub-sectors for the 2015 - 2019 period. The results of this study are in line with the results of Saputro's research (2019), namely DER has a negative and significant effect on profitability. Most of this sector is supported by a fairly high debt where the

average DER reaches 0.939 where a good debt level is 0.5 of its equity value. This indicates that the high use of debt can burden the company with a high interest expense, which ultimately results in a non-maximum profit.

5. Conclusion

Based on the results of the research above, the following conclusions are obtained: The partial test results show that the Current Ratio has no effect on the profitability of the various industrial and chemical sub-sector companies for the 2015–2019 period. The partial test results show that working capital turnover has no effect on the profitability of the various industrial and chemical sub-sector companies for the 2015–2019 period. The partial test results show that DER has a significant and negative effect on the profitability of various industrial and chemical sub-sector companies for the 2015–2019 period. Simultaneous test results show that CR, PMK and DER have a significant effect on the profitability of various industrial and chemical sub-sector companies for the 2015–2019 period.

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