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The Significance of Accounts Receivable Turnover, Debt to Equity Ratio, Current Ratio to The Probability of Manufacturing Companies

Arni Agustina Manullang[1], Delima Togatorop[2], Priscilia Rani Devita Purba[3], Elfriede Aturma Yanti Manik[4], Enda Noviyanti Simorangkir[5], Rolina Kristiani Lase[6]

[1,2,3,4,5] *Universitas Prima Indonesia Medan, Indonesia*

A R T I C L E I N F O

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A B S T R A C T

The very rapid economic development is one aspect that affects the progress of a country, both developed and developing countries. Including in a developing country of Indonesia, with a rapid economic development, it is very costly or quite large to advance the Indonesian state. This study aims to analyze the influence of accounts receivable turnover, debt to equity ratio, current ratio to profitability (Return on Asset) in basic industrial and chemical manufacturing companies listed on the IDX in 2016-2018. The research method used in this research is descriptive method and multiple linear analysis method. The data used are annual financial reports published on the Indonesia Stock Exchange which provide data on financial reports. The variables related to this research are accounts receivable turnover, debt to equity ratio and current ratio. The data source used is secondary data. The population of this study were 66 companies with a sample of 36 companies. The results of this study indicate that accounts receivable turnover has no and insignificant effect on profitability (Return on Asset), debt to equity ratio has no and insignificant effect on profitability (Return on Asset), current ratio has significant and significant effect on profitability (Return on Asset).

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*Corresponding author.
E-mail addresses: manullangagus89@gmail.com[1] (Arni Agustina Manullang), delima678@gmail.com[2] (Delima Togatorop), ranidevita99@gmail.com[3] (Priscilia Rani Devita Purba), aturmamanikyanti90@gmail.com[4] (Elfriede Aturma Yanti Manik), noviyantienda2140@gmail.com[5] (Enda Noviyanti Simorangkir)

1. Introduction

The very rapid economic development is one aspect that affects the progress of a country, both developed and developing countries. Including in a developing country of Indonesia, with a rapid economic development, it is very costly or sufficiently large to advance the Indonesian state (Afriyanti & Chabachib, 2011). In this case the funds can be obtained through own capital or through loans. In terms of usage, funds can also be allocated as investments in a country or company. Investment in this case is investing a number of funds in a company by maintaining and increasing the amount in the long and short term with positive expectations (Diana & Santoso, 2016; Kusumo & Darmawan, 2018).

One of the companies listed on the IDX is a manufacturing company that processes raw materials into finished or ready-to-use goods that are needed by humans, including companies. One of them is a company that is in the basic and chemical industry sector, where the results of the company are very much needed. The basic and chemical industry sector is divided into eight sub-sectors in Indonesia which report their financial position each period to the IDX (Rahmawati & Asiah, 2020; Suminar, 2015).

Indicators that can be used to measure the level of financial soundness of companies in the basic and chemical industrial sector use financial ratio analysis of Accounts Receivable Turnover, Debt to Equity Ratio (DER), and Current Ratio, to ROA (Return on Asset). Current Ratio is useful for measuring the ability of the company to be obliged in the form of funds in the short term using current aktiva (Diana & Santoso, 2016). ROA is the company's ability to show net profit after tax calculation of the company's total assets. Accounts receivable turnover is useful for assessing the company's ability to win credit sales into cash, in other words, accounts receivable turnover can be used to assess the company's receivables management ability. Debt to Equity Ratio is used to find out the funds provided by borrowers or creditors with company owners. In other words, this ratio also functions to find out each rupiah of own capital that is used as debt collateral. Financial ratio analysis can help business people as well as government and companies in assessing the financial status of a company (Saragih et al., 2015; Thamrin, 2012).

Accounts Receivable Turnover is defined as a related period in which the receivables occur until they can be collected in cash and money until finally the cash and money can be bought back into inventory then sold on credit so that it becomes debt back (Kasmir, 2010; Thoyib et al., 2018). According to (Harahap, 2009), the ratio of debt to equity (debt to equity ratio) is the ratio between debt owned by a company and its own capital. If the higher the existing ratio, the capital itself will be less than the debt owned by the company. For a company, it is better if the amount of debt does not exceed its own capital so that the fixed burden is not too high.

According to (Kasmir, 2010), current assets are assets of a company that can be turned into money in a short time (a maximum of one year). The parts of current assets are cash, bank, marketable securities, receivables, supplies, prepaid expenses, accrued income, loans, and other current assets.

Based on the results of previous researchers, namely (Diana & Santoso, 2016; Suarnami et al., 2014; Tiong, 2017) prove the influence and strong ties to Debt To Equity, Current Ratio, and Accounts Receivable Turnover, which have a positive effect on ROA, the company can determine the effect of analysis on ROA and can also predict the company's life going forward for the prosperity of the company.

Based on the above background, this study aims to analyse the effect of Accounts Receivable Turnover, Debt to Equity, Current Ratio on Profitability (ROA) in industrial and chemical sector manufacturing companies listed on the IDX for the 2016-2018 period.

2. Methods

The research method is a way of obtaining valid data and objectives that can be proven, discovered, developed, so that it can be used to anticipate, solve, and understand problems (Sugiyono, 2014). The research method used is the verification method with a quantitative research approach. The conceptual framework of this research can be seen in Figure 1.

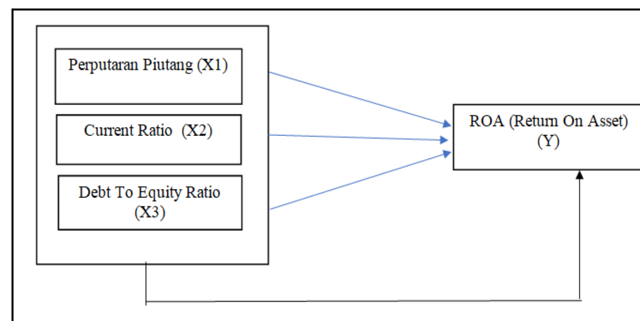

Figure 1. Research Concept Framework

Research object is an object that must be analyzed and researched in a company. Population is an area consisting of objects or subjects that have characteristics and qualities that researchers use to understand and draw conclusions. The sample is part of the characteristics and numbers of the population, which is because the researcher is not possible to study or discuss all the population in the company (Sugiyono, 2014). The samples used in this study were manufacturing companies in the basic industrial sector and chemicals listed on the Indonesia Stock Exchange.

The technique of collecting data is carried out by means of library research in order to obtain a theoretical basis which is interrelated with the problem under study. The data source used in this study is the financial statements of manufacturing companies in the basic industrial sector and chemicals which are listed on the IDX. The data is sourced from the Indonesia Stock Exchange. In addition, the data were collected through literature study.

Data analysis is a research activity starting from the process of compiling and processing data in order to obtain accurate data. The data in this study were analyzed using descriptive statistical analysis methods and classical assumption tests. Hypothesis testing is done using t-test and f-test. The t-test functions to show how much influence one variable has individually or independently in explaining the variation in the dependent variable. The f test is useful for knowing simultaneously the independent variable has a significant or no effect on the dependent variable.

3. Results and Discussions

Result

Descriptive Statistics Test Results

Descriptive Statistical Testing provides an overview of the minimum value, maximum value, and average value of the standard deviation used in the study. The test results can be seen in Table 1.

Table 1. Descriptive Statistics Test Results

Variable	N	Minimum Value	Maximum Value	Mean	Deviation Std.
Accounts Receivable Turnover	105	.73	4.00	2.1971	.72426
Debt to Equity Ratio	105	.86	3.95	1.4923	.56469
Current Ratio	105	.33	2.33	1.0149	.41434
Profitability of ROA	105	.03	.46	.2166	.08722

Based on the data in Table 1, the variable accounts receivable turnover, debt to equity ratio current ratio and profitability ROA have a sample of 105.Where accounts receivable turnover has a minimum value of 0.73 at PT IGAR in 2017 and a maximum value of 4.00 at PT TPIA in 2016 The debt to equity ratio has a minimum value of 0.86 at PT FASW in 2017 and a maximum value of 3.95 at PT INAI in 2018. The current ratio has a minimum value of 0.33 at PT INCI in 2016 and a maximum value of 2.33 at PT ALKA. 2018. Profitability (ROA) has a minimum value of 0.03 at PT MLIA in 2016 and a maximum value of 0.46 at PT AKPI in 2018.

Normality Test Results

The normality test is useful for testing regression models, confounding variables or residuals that have a normal distribution. The results of the normality test can be seen in Figure 2.

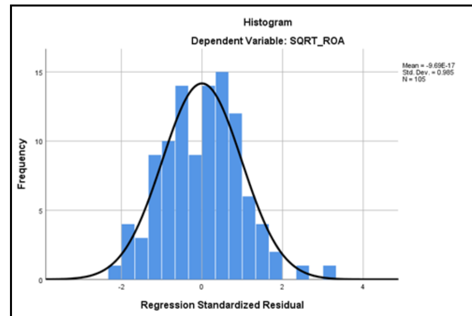

Figure 2. Normality Test Results

From the histogram graph in Figure 2 above, the curve shows a bell shape and has an almost equal slope. Based on this, it can be interpreted that the analyzed data is normally distributed.

Multicollinearity Test Results

Multicollinearity test aims to determine whether there is a relationship between several independent variables in the regression. The multicollinearity test results can be seen in Table 2.

Table 2. Multicollinearity Test Results

Variable	Tolerance	VIF
Accounts Receivable Turnover	.960	1.041
Debt to Equity Ratio	.922	1.084
Current Ratio	.930	1.076

From the table above, VIF <10 and tolerance> 0.1, which indicates that there is no multicollinearity and no problems. It is concluded that this study does not occur multicollinearity or is free from multicollinearity problems.

Heteroscedasticity Test Results

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another.

Table 3. Heteroscedasticity Test Results

Variable	*Unstandarized Coefficients*		*Standarized Coefficients*		
	B	Std. Error	B	T	Sig
Accounts Receivable Turnover	.001	.007	.009	.087	.931
Debt to Equity Ratio	.006	.009	-.071	-.686	.495
Current Ratio	-.004	.012	.038	.374	.709
Constant	.070	.025	0	2.734	.007

Based on Table 3, it can be concluded that the data are normally distributed and do not experience heteroscedasticity problems. This can be seen from the value of Sig> 0.05, so it can be said that this study is free from heteroscedasticity problems.

Multiple Linear Regression Test Results

Multiple linear regression serves to test the effect of 2 or more independent variables with 1 dependent variable. The results of multiple linear regression tests can be seen in Table 4.

Table 4. Multiple Linear Regression Test Results

Variable	Unstandarized Coefficients		Standarized Coefficients		
	B	**Std. Error**	**B**	**T**	**Sig**
Constant	.172	.044	0	3.944	.000
Accounts Receivable Turnover	.020	.012	.169	1.765	.081
Debt to Equity Ratio	.030	.015	.194	1.982	.050
Current Ratio	-.044	.021	-.211	-2.164	.033

Based on Table 4, the unstandardized coefficients obtained the following multiple linear regression equation.

$$Y = 0.172 + 0.020X1 + 0.030\ X2 - 0.44\ X3 + e$$

Information:
Y : ROA
X1 : Accounts receivable turnover variable
X2 : Debt to equity ratio variable
X3 : Variable current ratio
E : Term of error or error clearance rate

Hypothesis Test Results

The t-test functions to show how much influence one variable has individually or independently in explaining the variation in the dependent variable. The t-test results can be seen in Table 5.

Table 5. t-test results

Variable	Unstandarized Coefficients		Standarized Coefficients		
	B	**Std. Error**	**B**	**t**	**Sig**
Constant	.172	.044	0	3.944	.000
Accounts Receivable Turnover	.020	.012	.169	1.765	.081
Debt to Equity Ratio	.030	.015	.194	1.982	.050
Current Ratio	-.044	.021	-.211	-2.164	.033
	t-table			**1.983**	

Effect of Accounts Receivable Turnover on Profitability (ROA)

Based on Table 5, it is known that Sig. Accounts Receivable Turnover 0.81> 0.05 and tcount < ttable (1.765 <1.983), so it can be concluded that there is no significant effect of receivables turnover on profitability (ROA).

Effect of Debt to Equity Ratio on Profitability (ROA)

Based on Table 5, it is known that Sig. Debt To Equity Ratio 0.50> 0.05 and tcount < ttable (1.982 <1.983) so it can be concluded that there is no significant effect of Debt to equity ratio on profitability (ROA).

Effect of Current Ratio on Profitability (ROA)

Based on Table 5, it is known that Sig. Current Ratio 0.033 <0.05 and tcount < ttable (2.164 <1.983) so it can be concluded that there is a significant effect of the current ratio on profitability (ROA).

Furthermore, the f-test is useful for knowing simultaneously the independent variable has a significant or no effect on the dependent variable. The results of the f-test are presented in Table 6.

Table 6. f-test results

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.086	3	.029	4.126	.008
Residual	.705	101	.007		
Total	.791	104			

Based on the table above, it can be concluded that the value of Sig is 0.008 <0.05 and Fcount 4.126> Ftable 2.69, so it can be concluded that there is a significant influence on the turnover of accounts receivable, debt to equity ratio, current ratio to profitability (ROA).

Discussion

Effect of Accounts Receivable Turnover on Profitability (ROA)

Based on the research results, accounts receivable turnover has no significant effect on profitability. The results of this study are in line with previous research conducted by (Diana & Santoso, 2016; Garcia et al., 2019) which states that accounts receivable turnover has no effect on profitability. This is because if the accounts receivable turnover rate is low, it means that accounts receivable takes longer to collect in cash or shows working capital invested in large receivables. Conceptually, accounts receivable turnover states that the turning period shows the faster the company's receivables will return to cash (Puspita, 2018). Accounts receivable managers must be able to increase credit sales and keep average accounts receivable low so that turnover increases (Fahrunnisa, 2018). The increase in credit sales is expected to increase profits, so that profitability will also increase. Most large companies sell their products on credit, so that later it will cause receivables. This is to maintain existing subscriptions and to attract new ones. Accounts receivable have a higher level of liquidity than inventory, because turnover from accounts receivable to cash requires one step. Accounts receivable management is very important for companies that sell their products on credit (Nuryani et al., 2018).

Effect of Debt to Equity Ratio on Profitability (ROA)

Based on the research results, the debt to equity ratio does not have a significant effect on profitability. The results of this study are in line with research conducted by (Hermawati, 2013) that the debt to equity ratio has no significant effect on profitability. This proves that the debt-to-equity ratio does not play a direct role in supporting the increase in profitability of companies listed on the Indonesia Stock Exchange. An increase or decrease in the ratio of debt to equity has no effect on increasing or decreasing profitability.

The ratio of debt to equity (debt to equity ratio) is the ratio between debt owned by a company with its own capital. If the higher the existing ratio, the capital itself will be less than the debt owned by the company (Harahap, 2009). For a company, it is better if the amount of debt does not exceed its own capital so that the fixed burden is not too high. The smaller the ratio, the better.

Effect of Current Ratio on Profitability (ROA)

Based on the research results, the current ratio has a significant effect on profitability. The results of this study are in line with research conducted by (Nugroho, 2011) which states that the current ratio has a significant effect on profitability. This shows that the higher the liquidity, the higher the company's profitability.

Current Ratio has a positive and significant effect on Return On Assets (ROA). The effect in question is that any increase in the Current Ratio will always be followed by an increase in Return On Assets (ROA) and vice versa. And if the Current Ratio has decreased, it will be followed by a decrease in Return On Assets (ROA) (Kridasusila & Rachmawati, 2017).

4. Conclusion

Based on the research results, it can be concluded that accounts receivable turnover partially has no effect and is not significant towards profitability (ROA). Debt to equity ratio partially has no effect and is not significant on profitability (ROA). Current Ratio partially and significantly affects profitability (ROA). Accounts receivable turnover, debt to equity ratio, current ratio simultaneously has a significant effect on profitability (ROA) in basic industrial and chemical manufacturing companies listed on the IDX in 2016-2018. Based on the results of the analysis and conclusions, it is suggested that companies pay attention to variables, accounts receivable turnover, debt-to-equity ratio, current ratio because they are used to increase profits in the company. It is also expected that the company will manage its receivables effectively and efficiently so that profits can increase each year. It is hoped that the next researchers will add variables and increase the period of the year.

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