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ANALYSIS OF THE INFLUENCE OF CT, RT, WCT AND DR ON PROFITABILITY IN BASIC AND CHEMICAL INDUSTRY COMPANIES

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Abstract

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Basic industry and chemical companies are one of the sectors that are in the branch of the manufacturing industry (non-oil and gas). This company plays an important role in driving the Indonesian economy. Based on data obtained from www.idx.co.id it can be seen that PT Arwana Citramulia Tbk (ARNA), which is a company engaged in the glass and porcelain industry, earned Rp. 2.15 trillion in revenue in 2019. This amount increased by 9.15% from 2018 which amounted to IDR 1.97 trillion. ARNA also recorded an increase in net profit of up to 37.61% yoy, from IDR 156.62 billion in 2018 to IDR 215.53 billion in 2019. On a yearly basis, ARNA's shares have corrected 19.72% to IDR 350 per share. Based on the test results Partially, cash turnover has no effect on profitability in companies in the Basic Industry and Chemical sectors for the 2018-2021 period listed on the IDX. 5. Based on the results of simultaneous testing of cash turnover, accounts receivable turnover, working capital turnover and debt ratios have an influence on profitability in companies in the Basic Industry in the Basic Industry and Chemical sectors for the 2018-2021 period listed on the IDX. 5. Based on the results of simultaneous testing of cash turnover, accounts receivable turnover, working capital turnover and debt ratios have an influence on profitability in companies in the Basic Industry and Chemical sectors for the 2018-2021 period listed on the IDX.

Keywords: Receivables, Ratio, Debt, Turnover, Profitability.

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INTRODUCTION

Basic industry and chemical companies are one of the sectors that are in the branch of the manufacturing industry (non-oil and gas). This company plays an important role in driving the Indonesian economy. Contributions and products produced from basic and chemical industries are part of people's daily needs. So it can be said that this sector is growing because of the demands or needs of the community that change every year. The development of basic industrial and chemical companies in Indonesia is quite rapid, this can be seen from the growing number of sub-sector companies listed on the Indonesia Stock Exchange (IDX). Cash turnover is an important part that can assist management in estimating the amount of cash funds in the future. Cash turnover contains a comparison between sales and the average cash amount which is illustrated by the number of times cash can be rotated in one period in order to make a profit, the faster cash rotates and generates profits, the better impact on company profitability 109). 2014: Meanwhile, (Harmono according to other researchers, Cash Turnover is a period of cash circulation that starts when cash is invested until it returns to cash. Cash turnover is useful for knowing how effective a company is in managing its cash funds to generate income or sales (Ayu Eka Pangesti 2013). Receivable turnover is used as a measuring tool used to determine how long it takes to

tool used to determine how long it takes to collect receivables during one period against customers. Receivables turnover must be done as much as possible in order to be effective and efficient, receivables that spin for too long will have a high risk of loss, conversely if the turnover rate is fast it will have an impact on increasing profitability (Purnamasari 2014: 7) . Meanwhile, according to other researchers, accounts receivable turnover shows the bound period of working capital in accounts receivable where the faster the rotation period indicates the faster the company gets profits from the sale of these credits, so that the company's profitability also increases. The higher the level of receivables turnover of a company, the better the management (Rivanto 2013: 85). Based on researchers (Suminnar, 2015) that cash turnover has a significant influence on profitability, because cash is an important element of working capital to achieve maximum profitability. Cash turnover shows the ability of cash to generate income, if cash turnover is in a slow condition then there will be no more cash that can be used to provide loans so that receivables cannot be refinanced with cash, of course this will also affect profitability. However, the results above are in contrast to the results conducted by researchers (Febriani Surya et al., 2017) which show that the results of the cash turnover variable study have no significant effect on profitability. According to Syamsuddin's research (2016: 227) that the greater the net working capital, the greater the profit or profitability obtained by the company. The amount of working capital will determine the size of the company's sales and profits. The higher the working capital, the number of products produced will increase. This has also been proven in several previous studies which have been described previously that working capital has a positive effect on profitability. According to other researchers (Noor and Lestari 2012), the higher the working capital turnover, the faster the funds or

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cash invested in working capital returns to cash, which means that company profits can be received more quickly.

RESEARCH METHODS

Type research used _ is study quantitative . According to Sugiyono (2018; 13) research quantitative is method research based on concrete data form numbers, data collection using instrument research. data analysis is statistics with objective For test hypothesis that has set For produce something conclusion . According to Sugiyono (2017: 80) The population is a generalized area consisting of objects/subjects a certain that have capacity set by the researcher to study and then conclusions are drawn. In this report, the total population used is all companies registered in the Basic Industry and Chemical sectors. Based on these data, the research population in this report is 80 companies. According to Sugiyono (2013: 116) The sample is an element of the total population as a source of data that is examined. In this study a purposive sampling method was used, which aims to obtain samples according to the criteria set out in this study, the criteria used in this study are as follows:

No	Criteria	Amount Company
1	Company field Industry Base An Chemistry Which registered on the IDX period 2018-2021	nd 80
2	Company Which No publish refinances in a manner routine on the IDX pe 2018-2021	eport his (6) eriod
3	Companies in Basic Ind and Chemicals experience loss in period 2018-20	dustry (31) 121

Total Sample	43
Total Whole Sample Study (43x4 year)	172

 Table 1. Selection Criteria Sample

RESULTS AND DISCUSSION

Descriptive statistics have the function of providing an overview of a data or variable by producing data that includes minimum, maximum, average and standard deviation values. Observe the results below:

Descriptive Statistics								
	Ν	Minim	umMaximu	mMeans	std.			
					Deviation			
SQRT_X1	172	1.00	14.17	10.9357	1.25808			
SQRT_X2	172	.92	5.37	2.7275	.82590			
SQRT_X3	172	.31	5.97	1.4033	.79201			
SQRT_X4	172	.26	.92	.6231	.15825			
SQRT_Y	172	.02	.62	.2239	.10471			
Valid N (172							
listwise)	172							

Table 2. Descriptive Statistics

Based on from results processed data in table above is known :

- 1. On variable x1 has minimum value is 1.00, maximum value is 14.17, mean value is 10.9357 and mark standard deviation 1.25808
- 2. On variable x2 has minimum value 0.92, maximum value 5.37, mean value 2.7275 and mark standard deviation 0.82590
- 3. On variable x3 has minimum value 0.31, maximum value 5.97, mean value 1.4033 and mark standard deviation 0.79201
- 4. On variable x4 has minimum value 0.26, maximum value 0.92, mean value 0.6231 and mark standard deviation 0.15825
- On variable y has minimum value 0.02
 maximum value 0.62
 mean value 0.2239 and mark standard deviation 0.10471

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One-Sample Kolmogorov-S	mirnov Test	
· ·		Unstandardized
		Residuals
Ν		172
N ID (a,b	Means	0E-7
Normal Parameters	std. Deviation	.09987399
	absolute	081
Most Extreme Differences	Positive	081
	Negative	048
Kolmogorov-Smirnov Z	•	1,060
Asymp . Sig. (2-tailed)		.211
a. Test distribution is Norma	ıl.	
b. Calculated from data.		
Table 3. One-Sampl	e Kolmogorov-Si	mirnov Test

Table 3. One-Sample Kolmogorov-Smirnov Test

Based on the results of the data in the table above, it is known that the significant value generated using Kolmogorov-Simirnov is 0.211> 0.05. Therefore the test results are normally distributed. This explanation is also supported by the histogram and normal P-plot graphs below.



Figure 1. Histograms



Figure 2. PP Plots



Figure 3. Scatter Plots

Based on the results of the data in the table above it is known that the significant value generated using Kolmogorov-Simirnov is 0.211 > 0.05. Therefore the test results are normally distributed. This explanation is also supported by the histogram and normal P-plot results. The multicollinearity test was carried out to ascertain whether there is intercorrelation between the independent variables in the regression model which can be seen using the variance inflation factor (VIP) and tolerance if the VIF value is < 10 and tolerance > 0.1.

Model	Unsta	ndardize	edStandardi	zedQ	Sig. Colline	earity	
	Coeff	icients	Coefficie	Coefficients		Statistics	
В		std.	Betas		toleranceV		
		Error					
(Constan	nt).212	088		2,40	9.017		
SQRT_2	X1010	007	.122	1,56	50.121.890	1,124	
SQRT_2	X2.000	010	003	04	4 .965.884	1,131	
SQRT_2	X3.015	012	.112	1,22	27.222.659	1,519	
SQRT_2	X4191	061	289	- 3,14	41 ⁰⁰² .645	1,550	

Table 4. Coefficients

Data above is results are processed in SPSS, then is known For variable tolerance value x1 0.890, x2 0.884, x3 0.659 and x4 0.645 where results the own value > 0.1 for mark vif from variable x1 1.124, x2 1.131, x3 1.519 and x4 1.550 where results the own value < 10. of

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results	the o	can is	known	that No	happen
correla	tion l	betwee	en varia	ble free .	

Co	efficients ^a			
Mo	del Unstan	Unstandardized		izedt Sig.
	Coeffic	cients	Coefficie	ents
	В	std. Err	or Betas	
	(Constant).212	088		2,409 .017
	SQRT_X1010	007	.122	1,560 .121
1	SQRT_X2.000	010	003	044 .965
	SQRT_X3.015	012	.112	1,227 .222
	SQRT_X4191	061	289	-3,141 002
a. I	Dependent Variable:	SQRT_Y		

 Table 5. Testing Multiple Linear Analysis

1. The constant value (a) has a positive value of 0.212, this means that if all the independent variables x1, x2, x3, x4 have no effect on y then the value of y is 0.212. 2. The value of the regression coefficient of the variable x1 is positive 0.010, this means that if x1 increases by 1% then y will increase by 0.212 provided that the other variables are constant. 3. The value of the regression coefficient of the variable x2 has a value of 0.00, this means that if x2 increases by 1% then y will not decrease or increase provided that the other variables are constant. 4. The value of the regression coefficient of the variable x3 is positive 0.015, this means that if x3 increases by 1% then y will increase by 0.015 provided that the other variables are constant. 5. The value of the regression coefficient of the variable x4 is negative -0.191 where this value indicates a negative (opposite) effect between variables. This means that if x4 increases by 1% then y will decrease by 0.191 provided that the other variables are constant. The negative coefficient will affect the independent variable on the dependent variable, the lower the value of the independent variable, the lower the dependent variable will also decrease.

AN	IOVA ^a					
Model		Sum of	df	MeanSc	MeanSquareF	
		Squares		-	-	-
	Regressio	n.169	4	042	4,144	.003 ^b
1	residual	1,706	167	010		
	Total	1875	171			
a. I	Dependent V	ariable: SQ	RT_Y			
b. I	Predictors: (Constant), S	SQRT_2	K4, SQRT	X2, SQRT	Г_Х1,
SQ	RT_X3		-	-	-	

Table 6. Statistical test F

conducted to test between independent variables that have the same effect as the dependent variable simultaneously. This test is carried out using a significant level $(\alpha = 5\%)$ or 0.05 or using the basis for taking fcount <ftable, where if the sig test value f > 0.05 then Ho is accepted and Ha is rejected then there is no influence between variables, and vice versa. The ftable values in this study are df1 = 5(k)-1=4, df2=172(n)-5(k) = 167 which has a value of 2,426 coming from column (4&167). Based on the results of the data above, it is known that the calculated f value is 4,144 > 2,466 and the sig value is 0.003 where the sig value of 0.003 < 0.05means that Ho is rejected and Ha is accepted. Therefore it can be concluded that the multiple regression model used in study can be used this and the independent variable is x1, x2, x3 and x4 are stated to have a simultaneous effect on variable y.

CONCLUSION

Based on the partial test results, cash turnover has no effect on profitability in companies in the Basic Industry and Chemical sectors for the 2018-2021 period listed on the IDX. Based on the partial test results, receivables turnover has no effect on profitability in companies in the Basic Industry and Chemical sectors for the

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2018-2021 period listed on the IDX. Based on the partial test results, working capital turnover has no effect on profitability in companies in the Basic Industry and Chemical sectors for the 2018-2021 period listed on the IDX. Based on the results of partial testing, the debt ratio has an influence on profitability in companies in the Basic Industry and Chemical sectors for the 2018-2021 period listed on the IDX. Based on the results of simultaneous testing of cash turnover, accounts receivable turnover. working capital turnover and debt ratios have an influence on profitability in companies in the Basic Industry and Chemical sectors for the 2018-2021 period listed on the IDX.

BIBLIOGRAPHY

- Sugiyono. (2016). *Quantitative Research Methods, Qualitative And R&D*. Bandung: Pt Alphabet.
- Cashmere. 2018. Analysis of Financial Statements . 4th Printing. Jakarta: Raja Grafindo Persada.
- Sugiyono (2015). Combination Research Methods (Mix Methods) . Bandung: Alphabet
- Harmono. 2014. Balanced Scored Based Financial Management . Jakarta: Pt Bumi Aksara.
- Ayu Eka Pangesti. 2013. Effect of Cash Turnover, Receivables and Inventory on Profitability and Liquidity.
- Purnamasari, Diah Ayu and Astri Fitria. *Effect of Accounts Receivable Turnover and Company Size on Profitability of Chemical Companies*.
- Yulia Eka Pratiwi. 2021. The Effect of Working Capital Management,

Liquidity, Leverage and Company Size on the Profitability of Pharmaceutical Companies Listed on the Indonesian Stock Exchange for the 2015 – 2019 Period.

- Jesica Martha Butar Butar, S. Saryadi. 2020. Effects of Cash Turnover, Accounts Receivable Turnover, and Inventory Turnover on Profitability (Studies of Pharmaceutical Sub-Sector Companies on the Indonesia Stock Exchange for the 2014-2019 Period.
- M. Firza Alpi. 2018. The Effect of Debt To Equity Ratio, Inventory Turn Over, and Current Ratio on Return On Equity in Pharmaceutical Sector Companies Listed on the Indonesia Stock Exchange.
- Pratiwy Divine Grace. 2019. The Effect of Accounts Receivable Turnover and Inventory Turnover on Profitability in Food and Beverage Manufacturing Companies Listed on the Indonesia Stock Exchange.
- Mahardhika PA, Marbun, DP 2016. Effect of Current Ratio and Debt To Equity Ratio on Return on Assets.
- Devi Faradilah, Tifania Agitha Brother Tarigan. 2022. The Effect of Company Size, Profitability, Liquidity, and Solvency on Audit Delay with Cap Reputation as a Moderating Variable in Manufacturing Companies Listed on Bei in 2017-2020

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