

## The Effect Of Liquidity And Solvency Ratios On Profitability At PT Indocement Tunggal Prakarsa Tbk Period 2011-2019

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### *Abstract*

The existence of the Industrial Revolution 4.0 era where the speed of information on technology is very much needed, especially to increase the profitability of a company, it is very necessary for the sustainability of the company, especially manufacturing companies that are engaged in creating products and then selling them to get the profitability of the company. Profit is also an indicator to measure the company's performance in managing financial management that is good, efficient, and effective. The purpose of the study is to find out whether there is a partial and simultaneous influence between the Independent variable and the dependent variable, namely Liquidity which is proxied by the Current Ratio (CR) with Variable Profitability is proxied by Return On Assets (ROA), Solvency variables are proxied by Debt to Assets Ratio (DAR) to Return On Assets (ROA) and to determine whether there is a simultaneous or joint effect on all dependent variables, namely Current Ratio (CR), Debt to Assets Ratio (DAR), Against Return On Assets (ROA). The population taken in this research is all the financial statements of PT Indocement Tunggal Prakarsa which are listed on the Indocement website and the sample studied is the Balance Sheet and Income Statement from PT Indocement Tunggal Prakarsa which is listed on the Indocement website. namely by collecting secondary data using a series of many tests, namely there is a classic assumption test (normality test, multicollinearity, heteroscedasticity, and autocorrelation), Multiple Regression Analysis Test, Coefficient of Determination Test, namely Adjusted R square, hypothesis test, namely there is a partial test and Simultaneous Test, and. The results of this study prove that the Current Ratio to Return on Assets is said to have a significant effect, and also the joint test of the Current Ratio and Debt to Assets Ratio variables has a significant effect on Return on Assets. But it is necessary to pay attention to the Debt to Assets Ratio variable (DAR) has no significant effect on Return on Assets.

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## INTRODUCTION

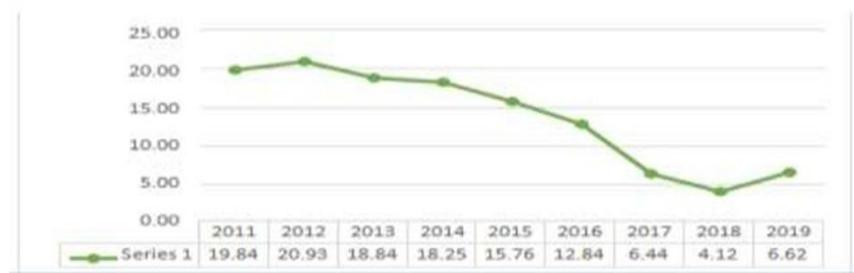
Economic developments are currently experiencing growth in a positive direction before the Covid 19 in 2019, namely manufacturing companies are companies engaged in manufacturing products and then selling them for large profits. Financial problems that usually occur in companies are problems of effectiveness in getting profits or profits, especially during the COVID-19 pandemic, this is a difficult time for manufacturing companies to develop.

Profitability is the company's ability to earn a profit which is used to assess how much the company's ability to earn a profit or profit. The amount of profit is used to measure the company's performance which is useful and very important for investors as a determinant of investment value.

Liquidity the company's ability to meet financial obligations when billed. In this liquidity ratio used is the Current Ratio (CR). Current Ratio (CR) is a ratio that shows the extent to which current assets cover current liabilities, the greater the ratio of current assets to current liabilities, the higher the company's ability to cover short-term liabilities according to Sofyan Syafri Harahap (2011:301).

Solvency is the company's ability to meet all of its obligations. Solvency shows the company's ability to pay off all existing debts. In this Solvency ratio used is the Debt to Asset Ratio (DAR).

**Figure 1.** Graph of Return on Assets at PT. Indocement Tunggal Prakarsa Tbk



From figure 1, it fluctuates every year where in 2011 it was 19.84%. Then it increased in 2012 by 1.09% to 20.93%. Then it decreased in 2013 by 2.09% to 18.84%. Then it decreased in 2014 by 0.59% to 18.25%. Then it decreased in 2015 by 7.75% to 15.76%. Then it decreased in 2016 by 2.92% to 12.84%. Then it decreased in 2017 by 6.4% to 6.44%. Then it decreased in 2018 by 2.32% to 4.12%. Then it increased in 2019 by 2.5% to 6.62%. Based on the facts and theories above, the hypotheses to be tested in this study are as follows:

H1: It is suspected that there is an effect of Current Ratio on Return on Asset

H2: It is suspected that there is an effect of Debt to Asset Ratio on Return on Assets

H3: It is suspected that there is an influence of Current Ratio, Debt to Asset Ratio and Debt to Asset Ratio on Return on Assets.

## METHOD

The method used in this study is to use quantitative or statistical data analysis with the aim of testing the hypothesis that has been set. The secondary data used in this research object is the financial statements of PT. Indocement Tunggal Prakarsa Tbk, namely <http://www.indocement.co.id/>. The sample is part of the number of characteristics possessed by the population. So the sample is part of the existing population. The sample in this study is the financial statements of PT. Indocement Tunggal Prakarsa Tbk. 2011-2019 Data analysis techniques in quantitative research use statistics using SPSS

statistic 20 software. with several tests carried out are: Classical Assumption Test, Normality Test (Kolmogorov Smirnov One Sample Test), Multicollinearity Test (Tolerance Value and VIF Value), Heteroscedasticity Test (Scatter plot test), Autocorrelation Test (Durbin Watson Test), Multiple Regression Analysis Test, Adjusted R Square Determination Test, Hypothesis Test, T Test (Partial Test), F Test ( Simultaneous Test ).

## RESULTS AND DISCUSSION

Table 1 after this explanation is the result of the normality test using the Kolmogorov-Smirnov test in the table above it can be seen that the significance value for the Current Ratio variable is  $0.992 > 0.05$ , then the distribution of the regression model is normal, for the Debt to Asset Ratio variable of  $0.959 > 0.05$  then the distribution of the regression model is normal, and for the Return on Assets variable  $0.892 > 0.05$  then the distribution of the regression model is normal. Because the significance for all variables is greater than 0.05, it can be concluded that the data on the variables Current Ratio, Debt to Asset Ratio variables, and Return on Assets are normally distributed.

**Table 1.** Normality Test on SPSS 20 One-Sample Kolmogorov-Smirnov Test

		CR	DAR	ROA
N		9	9	9
Normal Parameters <sup>a,b</sup>	Mean	485.0622	14.5433	14.3222
	Std. Deviation	133.90986	1.36650	7.14788
Most Extreme Differences	Absolute	.144	.169	.193
	Positive	.142	.169	.193
	Negative	-.144	-.139	-.181
Kolmogorov-Smirnov Z		.431	.508	.578
Asymp. Sig. (2-tailed)		.992	.959	.892

Table 2 shows the results of the Multicollinearity test, it can be seen that the Current Ratio variable and the Debt to Asset Ratio variable both have a VIF of  $2.230 < 10$  so there is no multicollinearity problem. The Current Ratio variable and the Debt to Asset Ratio variable both have a tolerance level of  $0.448 > 0.10$  so that there is no multicollinearity problem. From the results of the multicollinearity test as shown in the table above, it can be concluded that there is no multicollinearity between the independent variables on the dependent variable in the regression model because the VIF value  $< 10$ .

**Table 2.** Multicollinearity Test on SPSS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
	(Constant)	-1.746	31.793				
	Current Ratio	.040	.015	.814	2.690	.031	.448
1	Debt to Asset Ratio	-23.807	179.422	-.040	-.133	.898	.448

Figure 2 shows the results of the Heteroscedasticity test with the image after this explanation by using the ScatterPlot test, it can be seen that the data (dots) spread evenly above and below the zero line, do not gather

in one place, do not form a certain pattern so it can be concluded that on test regresi ini tidak terjadi heterokedastisitas.

**Figure 2.** Heteroscedasticity Test with Scatterplot Test method on SPSS 20

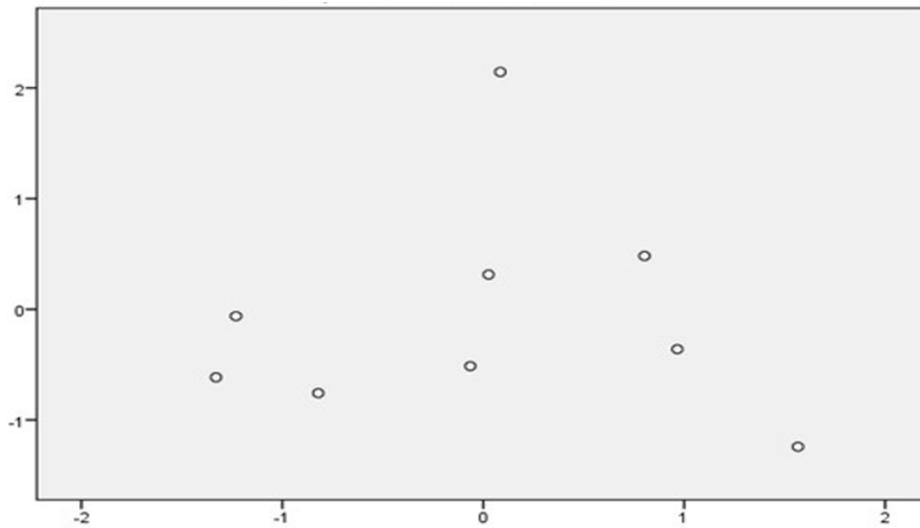


Table 3 shows the results of the Autocorrelation test that exist after this explanation using the Durbin Watson test, the Durbin Watson (DW) value is obtained at 1.888 using a significance of 0.05 and because the value of DW = 1.888 is between -2 and +2, i.e.  $-2 < 1.888 < 2$  then there is no autocorrelation. According to Ghozali (2016:107).

**Table 3.** Autocorrelation Test with Durbin Watson Model Summary

Model	R	R Square	Adjusted R Square	Std. Error Estimate	Durbin-Watson
1	.852 <sup>a</sup>	.727	.636	4.31527	1.888

Table 4 shows the results of the Multiple Regression Analysis test that exist after this explanation. From the results of the multiple linear regression equation, each variable can be interpreted as having an effect on Return on Assets (ROA) as follows:

Constant ( $\alpha$ ). The constant value is 0.912 which indicates that if the Current Ratio (CR) and Debt to Asset Ratio (DAR) variables are constant or there is no change or (CR and DAR = 0) then the Return on Assets (ROA) value is 0.912. It can be concluded that the

Return on Assets value which is positive and (CR and DAR = 0) means that the Return on Assets (ROA) value is 0.912. Current Ratio (X1) to Return on Assets (Y). This value is a regression coefficient which indicates that if the Current Ratio continues to increase by 1%, the Return on Assets (ROA) will increase by 0.042 assuming a constant value of 0.912. Debt to Asset Ratio (X2) to Return on Assets(Y). This value is a regression coefficient which indicates that if the Debt to Asset Ratio increases every 1%, the Return on Assets (ROA) will decrease by 0.479 with the assumption of a constant value of 0.912.

**Table 4.** Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics Tolerance
	B	Std. Error	Beta			
(Constant)	.912	27.972		.033	.975	
ICR	.042	.016	.787	2.695	.036	.534
DAR	-.479	1.528	-.092	-.314	.764	.534

Table 5 shows the results of the coefficient of determination of the Adjusted R square that exist after this explanation the value of the Adjusted R square is 0.636, it can be concluded that the Current Ratio and Debt to Asset Ratio variables contribute to the Return on Assets (ROA) variable of 63.6% while the rest of 36.4% influenced by other factors.

**Table 5.** Coefficient of Determination Test Adjusted R square

Model	R	R Square	Adjusted R Square	Std. Error Estimate	Durbin-Watson
1	.852 <sup>a</sup>	.727	.636	4.31527	1.888

Table 6 shows the results of the T statistical test that exist after this explanation to test the first hypothesis, the value of tcount on the Current Ratio variable is 2,695 while ttable with a significance level of 5% and degrees of freedom (dk) = nk-1 = 9-2-1 = 6 is 2.44691. By doing a comparison, namely tcount 2.695 > ttable 2.44691 so that it falls in the rejection area of Ho. And it can also be seen that the significance number is 0.036 < 0.05 so that Ha1 is accepted, it can be concluded that partially there is a significant influence between the Current Ratio on Return on Assets (ROA).

To test the second hypothesis, the tcount value for the Debt to Asset Ratio variable is obtained, the tcount is -0.314. By doing a comparison that is tcount 0.314 < t table 2.44691 so that it falls in the area of acceptance of Ho. And it can also be seen that the significance number is 0.764 > 0.05 so that Ho2 is accepted, it can be concluded that partially there is no significant effect between Debt to Asset Ratio on Return on Assets (ROA).

**Table 6.** Partial Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.912	27.972		.033	.975
CR	.042	.016	.787	2.695	.036
DAR	-.479	1.528	-.092	-.314	.764

Table 7 shows the results of the F test or Annova test after this explanation, the Fcount value of 7.975 is greater than Ftable 5.14 with a significant 0.020 less than 0.05 or (Fcount > Ftable) and Fsignificant < 0.05). So it can be concluded that simultaneously Current Ratio (CR) and Debt to Asset Ratio (DAR) together have an effect on Return on Assets (ROA).

**Table 7.** Simultaneous Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	297.008	2	148.504	7.975	.020 <sup>b</sup>
Residual	111.729	6	18.622		
Total	408.737	8			

## CONCLUSION

The conclusion of this study from several tests carried out resulted in the first hypothesis testing, namely the Liquidity variable proxied by the Current Ratio (CR) variable partially proving that there is a significant and significant effect on the profitability variable proxied by Return on Assets (ROA). Testing the second hypothesis, namely the solvency variable proxied by the Debt to Asset Ratio (DAR) variable partially proves that there is no significant and significant effect on the profitability variable proxied by Return on Assets (ROA).

Testing the third hypothesis, namely the Liquidity variable which is proxied by the Current Ratio (CR) variable and the Solvency variable which is proxied by the Debt to Asset Ratio (DAR) variable simultaneously proves that there is a significant and significant effect on the profitability variable which is proxied by Return on Assets (ROA). However, the Solvency variable which is proxied by the Debt to Asset Ratio (DAR) variable does not influence the company should control the level of Solvency properly, because if the company uses more debt than its own capital, the solvency level will decrease because the interest expense that must be borne also increases. And the company seeks to maintain a good level of liquidity, because with the company's liquidity, it will be easy for the company to obtain loans from investors and creditors, and these loans are expected to be managed properly with the aim of increasing profits (Profitability) and In addition, if the company cannot manage funds obtained from debt to the maximum to empower its assets, this will have an impact on decreasing profitability.

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