

Analysis Of The Effect Of Current Ratio And Profit Growth On Return On Assets In Cement Sub-Sector Companies Listed On The Indonesia Stock Exchange For The 2012-2021 Period

Nurismalatri,
Faculty of Economics and Business at Pamulang University
dosen00996@unpam.ac.id
Nufzatutsaniah,
Faculty of Economics and Business at Pamulang University
dosen01011@unpam.ac.id
Tuti Widianingsih
Faculty of Economics and Business at Pamulang University

Abstract

This study aims to determine the effect of the current ratio and profit growth on return on assets in cement sub-sector companies listed on the Indonesia Stock Exchange. The method used in this research is a quantitative method. Data collection techniques used are library research and internet research. The data analysis technique used is panel data regression with a 10 (ten) year time series, namely the period 2012-2021 and 3 (three) cement sub-sector companies. Based on the results of the partial test Current Ratio (X1) has a positive and significant effect on Return On Assets (Y) with a significant value of $0.0000 < 0.05$. Meanwhile, profit growth (X2) has no effect on return on assets with a significant value of $0.7042 > 0.05$.

Keywords: Current Ratio, Profit Growth, Return On Assets.

1. Introduction

Profit is an important indicator for a company to determine financial performance. Profit performance can be used as a measure of management success in managing the company's resources effectively and efficiently. Profitable companies generate much higher returns than unprofitable companies. Controlling profitability automatically improves the performance of the company's value strategy, especially among the largest and most liquid stocks (Novy-Marx, 2013). A high level of profitability according to Rumelt (1982) indicates a company has a diversification strategy by implementing innovation and creativity skills, while a low level of profitability indicates a diversification strategy into unrelated businesses.

Return On Assets is a ratio that can be used to measure the effectiveness of a company in generating profits by utilizing its total assets. If ROA increases, it means that the company's profitability increases so that the final impact is an increase in profitability. There have been many studies related to factors that influence earnings performance including using financial ratios, macroeconomic indicators and financial structures, among others Subandi & Ghozali (2013), Zaccacheus & Ajuwon (2019), Incekara & Cetinkaya (2019), Siregar & Coal (2017).

Table 1.
Development of CR, Profit growth and ROA
In cement sub-sector companies listed on the IDX for the 2012-2021 period

COMPANY	YEAR	CR (%)	PL (%)	ROA (%)
Indocement Tunggak Prakarsa Tbk. (INTP)	2012	602.76	32.26	20.93
	2013	614.81	5.22	18.84
	2014	493.37	5.22	18.25
	2015	488.66	-17.39	15.76
	2016	452.50	-11.16	12.83
	2017	370.31	-51.94	6.44
	2018	313.73	-38.38	4.12
	2019	331.21	60.15	6.62
	2020	291.73	-1.57	6.60
	2021	243.98	-0.99	6.84
Build Solutions Indonesia Tbk. (SMCB)	2012	140.46	27.00	11.1
	2013	63.92	-29.50	6.39
	2014	60.17	-29.76	3.89
	2015	65.67	-73.81	1.01
	2016	45.94	-262.50	-1.44
	2017	54.23	166.36	-3.86
	2018	26.67	9.22	-4.44
	2019	108.21	-160.27	2.55
	2020	101.81	30.44	3.14
	2021	134.34	10.74	3.35
Semen Indonesia Tbk. (SMGR)	2012	170.59	24.55	18.54
	2013	188.24	8.68	17.39
	2014	220.90	4.09	16.24
	2015	159.70	-18.80	11.86
	2016	127.25	0.21	10.25
	2017	156.78	-63.61	3.36
	2018	195.15	87.01	6.03
	2019	136.10	-99.92	2.97
	2020	135.27	12.78	3.43
	2021	107.46	-22.13	2.72

Source: www.idx.co.id processed data (2022)

Table 1.1 above shows that the Current Ratio (CR) and Profit Growth in cement sub-sector companies in 2012-2021 were unstable or there were decreases and increases (fluctuated). At PT. Indocement Tunggak Prakarsa Tbk. The current ratio has decreased by 358.78% in 2012-2021, this shows that the company is unable to cover its current debt obligations. While profit growth has also decreased starting from 2012-2021 so that it occupies the lowest profit growth in 2017, namely -51.94%, this shows that the company's ability to generate profits (net profit) has decreased, making the company's financial condition not good.

At PT. Solusi Bangun Indonesia Tbk company experienced the lowest Current Ratio decrease in 2016 of 45.94%, in 2017 of 54.23%, and in 2018 of 26.67%, while profit growth decreased significantly in 2016 with a value of -262.5%. At PT. Semen Indonesia Tbk. The company experienced an increase in the current ratio in 2014 and a decrease in the current ratio in 2015. This was due to the fluctuations in current assets and current liabilities every year. In more detail, the increase in the current ratio from 2013 to 2014 was due to a decrease in current liabilities from Rp.5,273,269,122.

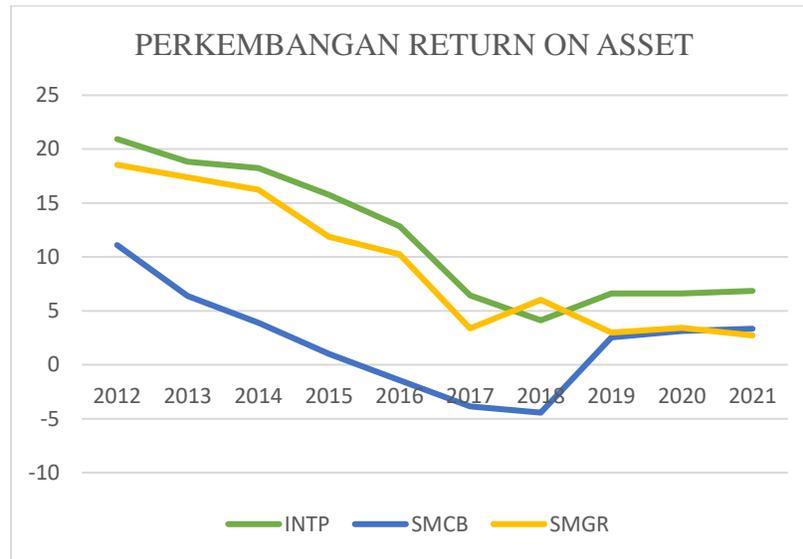


Figure 1.
Graph of Return On Asset Development

From graph 1.1 above it can be seen the progress *Return On Assets* (ROA) 3 (three) cement sub-sector companies for the 2012-2021 period. In 2012-2017 the three companies experienced a decrease in Return on Assets. If this happens continuously, it will have a bad impact on the company, which can lead to a worsening of the company's position in terms of asset use. From 2012 to 2021 of the three companies the lowest Return On Assets (ROA) is SMCB with the lowest figure in 2016-2018 indicating that the company has been in a minus (loss) condition for 3 consecutive years. This indication occurred because the working capital owned by the company in 2016-2018 was in a negative number as a result of the company's total liability burden being higher than its total assets. Besides that,

When the Covid-19 cases in Indonesia decreased in early 2022, there were constraints on the availability of coal for the cement industry due to rising coal prices. Many things affect the rise and fall of cement prices, one of which is excessive oversupply. The unstable financial condition of the company is of course very influential on the company's financial performance. So it is necessary to measure performance to find out the strengths and weaknesses of the company, because to see the strengths, the company must create large sales in accordance with the reality of the current condition of manufacturing companies. Against the background of the above problems,

2. Literature Review

Financial management takes what kinds of actions managers can take to maximize shareholder wealth by determining firm value (Brigham & Ehrhardt, 2013). In this case, financial management looks at the company's ability to generate cash flows now and in the future. Return On Assets is a company's financial ratios related to profitability measuring a company's ability to generate profits or profit (profitability) at a certain level of income, assets and share capital (Hanafi and Halim, 2003: 27). ROA is used to measure management's ability to obtain overall profitability and managerial efficiency.

The current ratio or current ratio according to Hanafi (2016) can measure a company's ability to meet its short-term debt by using its current assets (assets that will turn into cash within one year or one business cycle). The current ratio can be said as a form to measure the level of safety (margin of safety) of a company. Comparison between current assets and short-term liabilities (current liabilities).

Information regarding profits according to Hery (2016), can be used to estimate a company's ability to generate profits in the future, predict risks in making investments, and so on. So it can be concluded that profit is information related to the achievement of company revenue above stable expenses and can increase or decrease from one period to the next, and reflects the rate of return to equity holders. According to Harahap (2015), profit growth is a ratio that can describe the extent to which a company's ability to increase net income compared to the previous year.

3. Methods

The research method used in this study is a quantitative approach, which means providing an orderly description of an event to be discussed in analyzing quantitative data data that are numerical in nature. The population of this study is the financial statements of Cement Sub Sector companies listed on the Indonesia Stock Exchange for the period 2012-2021, while the sample used is Cement Sub Sector companies which were selected based on the purposive sampling method.

The sample selection criteria are companies engaged in Cement Sub Sector Companies listed on the Indonesia Stock Exchange (IDX), namely INTP companies (Indocement Tunggal Prakarsa Tbk), SMBR (Semen Baturaja Tbk), SMCB (Solusi Bangun Indonesia Tbk), SMGR (Cement Indonesia Tbk, WSBP (Waskita Beton Precast Tbk) and WTON (Wijaya Karya Beton Tbk); included in the LQ45 Index and consistent for 10 years; and published complete financial statements for 10 consecutive years, namely the period 2012-2021. Selected companies samples are INTP, SMCB and SMGR

The data analysis technique used is panel data regression. According to Ghozali (2016) Panel data is a combination of time series and cross section, panel data can be defined as a collection of data (data sheet) where the behavior of cross-sectional units is observed all the time. Time series data is data consisting of one or more variables that will be observed in one observation unit at a certain time. Meanwhile, cross data is observation data from several observation units at one point in time. Panel data regression models:

$$Y_{it} = \alpha + \beta X_{1it} + \beta X_{2it} + \varepsilon_{it}$$

Information :

Y_{it} = Return On Assets (ROA); α = Constant; β = coefficient; X_{1i} = Current Ratio (CR); X_{2it} = Profit Growth; ε_{it} = Error

4. Data Collection

Data collection in cement sub-sector companies listed on the IDX for the 2012-2021 periode. Inducement Tunggal Prakarsa Tbk, Build Solutions Indonesia Tbk and Semen Indonesia Tbk.

5. Results and Discussion

The results of the panel data regression model selection test in this study were first carried out by the Chow test to compare the common effect model with the fixed effect. The hypothesis formed in this Chow Test is as follows:

H0: Common Effect Model

H1: Fixed Effect Models

The results show that the probability value (p-value) F_{count} is 0.0008 where this value is smaller than the significant

value predetermined at the beginning of 0.05, in short it can be written $0.0008 < 0.05$, then H1 is accepted. So the fixed effect model is more appropriate than the common effect model.

Table 2. Chow test

Redundant Fixed Effects Tests

Equation: MODEL_FEM

Test cross-section fixed effects

Effect Test	Statistics	df	Prob.
Cross-section F	7.559675	(2,25)	0.0027
Chi-square cross-sections	14.189488	2	0.0008

Followed by the Hausman test to determine whether the Fixed Effect or Random Effect model is the most appropriate to use. In this test the hypothesis is:

H0: Random Effects Model

H1: Fixed effect models

Table 4.10 shows that the probability value (prob) of Cross-section Random is $0.0005 < 0.05$, then H1 is accepted. So the fixed effect model is more appropriate than the random effect model. The final result of selecting the panel regression model is using the Fixed Effect Model (FEM).

Table 3. Hausman Test

Correlated Random Effects - Hausman Test

Equation: MODEL_REM

Test cross-section random effects

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-sections	15.119350	2	0.0005

Classical Assumption Test Results

The normality test results seen from the value of the probability is 0.546596. This shows that the probability is > 0.05 , from these results it can be stated that the data is normally distributed

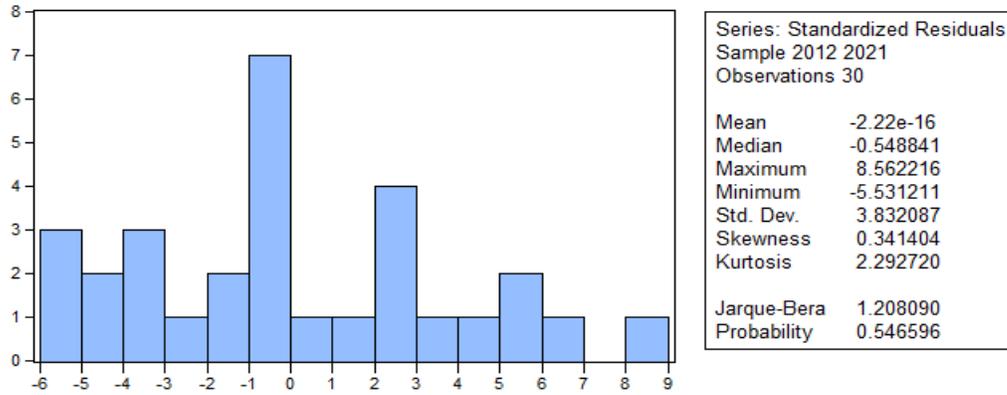


Figure 2.
Normality Test Histogram Graph

On the results of the multicollinearity test, it was found that the correlation coefficient between the independent variables in this study had a value of less than 0.8, which means that it can be concluded that the data used in this study were free from multicollinearity elements.

Table 4
Multicollinearity Test Results

	CR	PL
CR	1.000000	0.176834
PL	0.176834	1.000000

In the heteroscedasticity test results, the probability value F is 0.1232, the probability value is greater than the significant value (alpha), which is 0.05, it can be concluded that the processed data is free from heteroscedasticity

Table 5
Heteroscedasticity Test Results
Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistics	2.264736	Prob. F(2,27)	0.1232
Obs*R-squared	4.309751	Prob. Chi-Square(2)	0.1159
Scaled explained SS	3.818287	Prob. Chi-Square(2)	0.1482

On the results of the autocorrelation test, the Durbin-Watson value obtained was 2.024726, while from the DW table with a significance of 0.05 and $n = 30$ and $k = 3$. The Durbin-Watson value is in the range $dL=1.2138$ to dU of 1.6498. The Durbin-Watson value of 2.024726 is greater than the upper limit (dU), which is 1.6498 and less than $4-dU = 4 -$

1.6498 = 2.3502, from this explanation it can be written as the following equation $dU < DW < (4 - dU) = 1.6498 < 2.024726 < 2.3502$, so it can be concluded that there is no autocorrelation either positively or negatively.

Hypothesis Test Results

Table 6.
Estimation Results with the Fixed Effect Method

Dependent Variable: ROA
Method: Panel Least Squares
Date: 04/07/22 Time: 15:36
Sample: 2012 2021
Period included: 10
Cross-sections included: 3
Total panel (balanced) observations: 30

Variables	coefficient	std. Error	t-Statistics	Prob.
C	-3.818411	2.327303	-1.640702	0.1134
CR	0.052694	0.009911	5.316958	0.0000
PL	0.004071	0.010601	0.384003	0.7042
R-squared	0.699617	Mean dependent var		7.723667
Adjusted R-squared	0.651556	SD dependent var		6.991942
SE of regression	4.127284	Akaike info criterion		5.824128
Sum squared residue	425.8618	Schwarz criterion		6.057661
Likelihood logs	-82.36192	Hannan-Quinn criter.		5.898837
F-statistics	14.55679	Durbin-Watson stat		2.024726
Prob(F-statistic)	0.000003			

The panel data regression equation obtained from the results of the analysis is:

$$Y_{it} = -3.818411 + 0.052694X_{1it} + 0.004071X_{2it}$$

The CR value shows the number 0.052694 meaning that if the CR increases by one unit, the return on assets will increase by 0.052694 and the profit growth value indicates the number 0.004071 meaning that if the profit growth increases by one unit, then the return on assets will increase by 0.004071.

Results of the t test and F test

The test results for the influence of Current Ratio on Return On Assets obtained tcount (5.316958) > ttable (2.05183) with a significant value of 0.0000 < 0.05, which means that partially Current Ratio has a positive and significant effect on Return On Assets. These results indicate that if there is an increase in CR then ROA will increase and if there is a decrease in CR then ROA will decrease. Influence test results

Profit Growth on Return On Assets obtained tcount (0.384003) < ttable (2.05183) with a significant value of 0.7042 > 0.05, which means that partially Profit Growth has no significant positive effect on Return On Assets. Good profit growth, illustrates that the company has good finances, which will increase the value of the company, because the dividends paid in the future are very dependent on the condition of the company. However, based on the results of this study, it shows that the increase or decrease in profit has no impact on ROA.

The test results show that the value of Fcount (14.55679) > Ftable (3.35) with a significance of 0.000003 < 0.05 means that simultaneously Current Ratio and Profit Growth have a positive and significant effect on Return On Assets. The

results of the measurement of the coefficient of determination are carried out to determine the percentage of influence of the independent variables, namely Current Ratio and Profit Growth on changes in the dependent variable Return On Assets. The value of the influence of the independent variables is indicated by the value of $R^2 = 0.699617$, so the contribution of Current Ratio and Profit Growth to Return On Assets has an effect of 69.9617% while the remaining 30.0383% is influenced by variables other than Current Ratio and Profit Growth.

Comparison of Statistical Tests Between Companies

Table 7.
Table of Comparison of Statistical Tests between Companies

No	Company	Probability		R2
		CR	PL	
1	INTP	0.0002	0.3512	0.894231
		Sig	No	
2	SMCB	0.0253	0.7607	0.534093
		Sig	No	
3	SMGR	0.119	0.7668	0.404345
		No	No	

From the table above it can be concluded that the company that has the greatest influence on return on assets is INTP of 89.42% with an average value of 1172.3%. From the research results, it is the CR variable that most influences ROA, so it can be understood that INTP contributes the most compared to the other 2 companies. The company that has the lowest effect on return on assets is SMGR of 40.43% because the use of debt funds exceeds the ability limit reaching an average of 927.9%.

6. Conclusion

Current Ratio(CR) has a positive and significant effect, while profit growth has no effect on Return On Assets (ROA) in Cement Sub Sector Companies Listed on the Indonesia Stock Exchange in 2012-2021.

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