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Are the Profitability of Companies Influenced by Working Capital and Liquidity?

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ABSTRACT

The purpose of our study is to examine and analyze: (1) the effect of working capital on profitability, (2) the effect of liquidity on profitability, and (3) the effect of working capital and liquidity simultaneously to profitability. This research was conducted at the ceramics, glass, and porcelain of manufacturing companies that listed on the Indonesia Stock Exchange (IDX) 2012-2016. The companies analyzed amounted to 6 companies determined based on sampling criteria. The analysis method used is panel data analysis by using Eviews 10 programming computer. The results of this study found that working capital has an insignificant relationship with profitability. The liquidity has an insignificant with profitability. The working capital and liquidity have no significant effect on profitability, simultaneous.

Keywords: Working Capital, Liquidity, Profitability, Manufacturing Companies, Indonesia Stock Exchange

I. INTRODUCTION

In general, each company will do various ways to achieve the stated goals. Almost all companies have a goal to earn profits. The company's ability to earn profits is called profitability. Profitability is used to measure the level of profits generated by the company. The profitability of a company will influence investors' policies on investments made. The company's ability to generate profits is one of the attractions for investors to invest their funds, which is useful for expanding the business. A low level of profitability will cause investors to withdraw their funds. Profitability can also be used by companies as an evaluation of the effectiveness of company management. A financial manager must know the factors that influence profitability to maximize company profits.

Profitability is closely related to the working capital of a company. If the working capital turnover goes smoothly, the company will automatically benefit. There are several types of ratios used to measure a company's profitability, namely: Return On Assets (ROA), Return On Equity (ROE), Net Profit Margin (NPM), Gross Profit Margin (GPM).

Every business carried out by the company always requires funds, both funds to finance daily operations and to finance long-term investments. The funds used to carry out daily operational activities are called working capital. Every working capital issued is expected to return, even providing benefits that can be used for other operational activities. Working capital will continue to revolve around the company's operational activities. Working capital turnover rate measures the number of times a current asset is able to spin to generate sales. If working capital rotates smoothly, more sales will be created. Working capital is an important part of the company, if there is no working capital, the operations of a company will not run at all, because it needs to manage working capital properly so that it is available sufficiently to enable the company to operate economically and not experience financial difficulties, for example can cover losses and overcome crisis situations without endangering the financial situation of the company. The need for working capital is not the same from time to time in one period, this is due to the projected volume of production produced by the company changes. These changes are likely due to unequal requests from time to time.

Profitability can be achieved if the company is efficient in using working capital as well as the level of company liquidity (Horne and Wachowicz 2009). Good management of management greatly determines the activities of the company will run efficiently and effectively in the aim of gaining profits by using existing working capital.

The phenomenon of the decline in the level of profitability that has the potential to harm the company occurs in manufacturing companies, especially the ceramics, porcelain and glass sub-sectors. The average percentage of profitability that is proxied by the return on assets (ROA) ratio of manufacturing companies in the ceramic, porcelain and glass sub-sector from 2013 to 2016 continued to decline. The level of profitability of PT. Surya Toto Indonesia Tbk (TOTO) in 2013 to 2016 experienced an average decline of 17%. Likewise, PT. Asahimas Citra Mulia Tbk (AMFG), experienced an average decline of 16%. Whereas PT. Arwana Citra Mulia Tbk (ARNA) experienced a decrease in the average level of profitability by 9%.

Table 1. Development of Profitability (ROA) of Some Manufacturing Companies Sub-Sector Ceramics, Porcelain and Glass in 2012-2016

COMPANY CODE	YEAR					
	2012	2013	2014	2015	2016	Average
AMFG	11.13	9.56	11.70	7.99	4.73	9.02
Growth		-14%	22%	-32%	-41%	-16%
ARNA	16.93	20.94	20.78	4.98	5.92	13.91
Growth		24%	-1%	-76%	19%	-9%
TOTO	15.50	13.55	14.49	11.69	6.52	12.35
Growth		-13%	7%	-19%	-44%	-17%

Source: idx.go.id (2018)

The impact of the decline in profitability of the company from year to year can cause a lack of investor confidence in the company which can result in the company's financial condition is unstable because it will affect investment decisions. This will also have an impact on working capital that is used to fulfill the company's operational activities in the current and future periods.

Some studies that have been carried out state that the results are contradictory and there are also results that are in line. The study by Syafitri and Wibowo (2016), Saputra (2017), Warrad (2013), said that Working Capital Turnover (WCT) had an effect on profitability (ROA). Different research results obtained by Meidiyustiani (2016) and Octavianty and Syahputra (2015) state that Working Capital (WCT) does not affect profitability (ROA).

In addition, the study of Octavianty and Syahputra (2015), and Meidiyustiani (2016) found that liquidity had an effect on ROA, whereas Abdullah and Jahan (2014) found that liquidity had no effect on profitability.

The purpose of the study was to find out: (1) whether working capital affects the profitability of manufacturing companies, (2) whether liquidity affects the profitability of manufacturing companies, (3) whether working capital and liquidity simultaneously affect the profitability of manufacturing companies.

II. LITERATURE REVIEW

Profitability

Profitability is a ratio to assess a company's ability to make a profit. Profitability is often also used to measure the level of management effectiveness of a company. This is indicated by profits generated from

sales and investment income. The point is that the use of this ratio shows the efficiency of the company (Margareta, 2011).

Profitability can be proxied in several ways, namely:

- Profit Margin on Sales, is one of the ratios used to measure profit on sales margins. The way to measure it is by comparing net income after tax with net sales.
- Return On Equity (ROE), is the ratio between net income after tax and equity. This ratio shows the efficiency of the use of own capital. The higher the ratio, the better. This means that the position of the company owner is getting stronger, and vice versa.
- Earning per Share of Common Stock, is a ratio that measures the success of a company.
- Return on Assets (ROA), is a ratio that shows the return on the amount of assets used in the company. ROA is also used as a measure of management effectiveness in managing its investment. ROA is a ratio that looks at the extent to which the investment that has been invested is able to provide returns as expected. The investment is actually the same as the company's assets that are invested or placed (Fahmi, 2015).

ROA shows the company's ability to generate profits from assets used. ROA is the most important ratio among existing profitability ratios. ROA is obtained by comparing net income after tax to total assets. ROA has several benefits, among others: 1) If the company has carried out accounting practices well with ROA analysis, it can be measured the overall efficiency of capital use and sensitivity to every thing that affects the financial condition of the company. 2) Can be compared with industry ratios so that the company's position can be known for the industry. This is one step in strategy planning. 3) Besides being useful for the sake of control, ROA analysis is also useful for planning purposes. (Munawir, 2002).

Other benefits of ROA according to Halim and Supomo (2009) are: 1) Management's attention is focused on maximizing profits on invested capital. 2) ROA can be used to measure the efficiency of the actions carried out by its division. 3) Analysis of ROA can also be used to measure the profitability of each production produced by the company.

According to Halim and Supomo (2009), ROA has several weaknesses, namely: 1) ROA is more focused on maximizing profit ratios compared to the absolute amount of profit. 2) Division managers are reluctant to add investments that produce low ROA in the long run. 3) Division managers may take investments that benefit their divisions in the short term but in the long run conflict with company decisions. 4) Less encouraging the division to increase investment, if the expected ROA for the division is too high.

Factors that influence profitability according to Kasmir (2015), namely: 1) Net profit margin, 2) Total assets turnover, 3) Net profit, 4) Sales, 5) Total assets, 6) Fixed assets, 7) Current assets, 8) Total Costs

According to Bringham and Houston (2012) the profitability ratio shows the combined effect of liquidity, asset management, and debt on operating results. In addition, net profit margins, total assets turnover, company growth and company size can influence profitability.

Working capital

Working capital is very important and very influential on the survival of the company because the company in all its activities requires working capital, such as to buy equipment for the production process, pay labor wages, employee salaries and so on, where every fund that has been spent is expected to return short period of time through the proceeds of the sale.

Kasmir (2015) states that working capital is defined as investment invested in current assets or short-term assets such as cash, banks, securities, inventory receivables and other current assets. Meanwhile, according to Ambarwati (2010), working capital is capital that should remain in the company so

that the company's operations become smoother and the company's final goal to generate profits will be achieved.

So, working capital is capital that is used for all daily company activities whose cash turnover is expected to be returned in the short term through the sale of products. Working capital is the excess of current assets against current liabilities of a company.

According to Kasmir (2015), sources of funds for working capital can be obtained from a decrease in the number of assets and increase in liabilities. There are several sources of working capital that can be used, namely: the results of the company's operations, profits from selling securities, selling shares, selling fixed assets, selling bonds, obtaining loans, grants, and other sources.

The working capital needed by the company must be fulfilled immediately according to the needs of the company. But to meet working capital requirements as desired is not always available. This is due to the fulfillment of whether or not working capital needs depend on several factors that fulfill them. Therefore, management in carrying out company operations, especially policies in an effort to fulfill working capital must always pay attention to these factors.

According to Pratiwi (2010), Working capital has functions such as: (1) Working capital accommodates the worst possibility caused by the existence of current asset values such as the impairment of doubtful and uncollectible receivables or a decrease in inventory value, (2) Adequate working capital allow the company to pay for all its current debt in time, (3) allow the company to provide credit terms to the buyer, (4) enable the company leader to make the company more efficient by avoiding delays in obtaining materials, services, and tools caused credit difficulties.

Working capital is always in a state of spinning or operating within the company as long as the company concerned is in a business condition. The period of working capital turnover (WCT period) starts when cash is invested in the component of working capital until the time when cash returns again into cash. The shorter the period means the faster the rotation or the higher turnover rate. The length of the working capital turnover period depends on how long the rotation period of each component of the working capital. To begin the effectiveness of working capital can be used the ratio between total sales and the amount of working capital turnover. According to Munawir (2002), the working capital turnover ratio shows the relationship between working capital and sales will show the number of sales that can be obtained by the company (in the amount of rupiah) for each rupiah working capital.

Liquidity

One way to measure the success of a company is the liquidity ratio. Where this ratio measures how smoothly a company can fulfill all its short-term debt. Liquidity describes the value of a company that influences financial decisions and the value of investment.

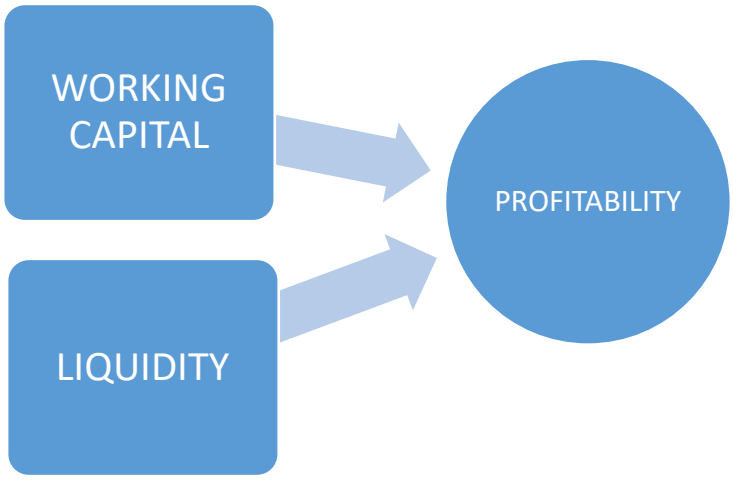
Liquidity is used by companies and investors to see the level of a company's ability to fulfill its obligations. Where the obligation is short term. Short-term liabilities such as paying employee salaries, paying electricity bills, or debts that are due.

According to Mardiyanto (2009), liquidity measures a company's ability to repay short-term debt on time, including paying off the long-term debt that is due in the year.

Liquidity can be measured by several ratios, namely: (1) Quick Ratio, a ratio that shows the ability of the most liquid current assets to cover debt. The bigger the ratio, the better, (2) Cash Ratio, the component of current assets that is really ready to be cashed is only cash and short-term securities. So, the cash ratio measures the liquidity of current assets which can certainly be disbursed into cash, (3) Current Ratio, a ratio that shows the extent to which current assets cover current liabilities. The higher the amount of current assets, the higher the current ratio, which also means the higher the level of liquidity of the company. However, the higher the current ratio, the higher the amount of cash that is not used, eventually reducing the level of profitability.

The following schematic picture is a framework that contains the relationship between working capital and liquidity with profitability.

Figure 1. Research Conceptual Framework



Hypothesis

H0: Working capital has no significant effect on profitability
H1: Working capital has a significant effect on profitability

H0: Liquidity has no significant effect on profitability
H2: Liquidity has a significant effect on profitability

III. RESEARCH METHODS

This research is a type of quantitative research with associative methods to examine the relationship between variables of working capital and liquidity with profitability. The Dependent variable in this study is profitability, which is proxied by ROA, to find out how quickly the company recovers capital from its current asset policy, and calculates the cash adequacy ratio.

Return on Assets (ROA) is a ratio that shows the return on the amount of assets used in the company. ROA is also a measure of management effectiveness in managing its investment.

$$\text{Return On Assets} = \frac{\text{Earning After Interest and Tax}}{\text{Total Assets}}$$

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The independent variables in this study are working capital and liquidity. Working capital is proxied by a working capital turnover (WCT)

$$\text{WCT} = \frac{\text{Sell}}{\text{Current Asset} - \text{Current Liabilities}}$$

Liquidity is proxied by the current asset ratio, to measure the ability of a company to meet current liabilities.

This ratio shows the extent to which current assets cover current liabilities. The higher the amount of current assets, the higher the current ratio, which means the higher the level of liquidity of the company. However, the higher the current ratio, the higher the amount of cash that is not used, eventually reducing the level of profitability.

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

The population in this study is the manufacturing company of the ceramics, glass and porcelain sub-sectors listed on the Indonesia Stock Exchange in 2012-2016.

The sampling technique uses purposive sampling method, based on the following criteria:

a) Manufacturing companies listed on the Indonesia Stock Exchange in 2012-2016.
b) Companies that are consistently listed on the Indonesia Stock Exchange in 2012-2016.
c) Publish in full and consistent annual financial statements for 2012-2016 and have data on variables that will be used in the study.

From the number of seven manufacturing companies in the ceramic, glass and porcelain sub-sector there is one company that does not fulfill one of the sampling criteria, namely the Mark Dynamics Indonesia Tbk (MARK) company that has not consistently published financial statements from 2012-2016. Based on the specified criteria, there are six manufacturing companies that meet the criteria of this study, namely: AMFG, ARNA, IKAI, KIAS, MLIA, TOTO.

The data used in this study is secondary data from annual reports of Manufacturing Companies listed on the Stock Exchange. The financial statements used are financial statements for 2012-2016.

The analysis used in this study is panel data analysis that combines time series data and cross section. Panel data analysis is used to observe the effect of one dependent variable with one or more independent variables. Data processing is done by using computer programs eviews 9. This research was conducted from January to April 2018, using financial statements of manufacturing companies listed on the Indonesia Stock Exchange

IV. RESULTS AND DISCUSSION

Descriptive Analysis

Table 2. Descriptive statistics

	ROA	WCT	CR
Mean	6.133667	5.659667	233.4347
Maximum	65.30000	38.18000	586.0600
Minimum	-27.92000	-25.14000	20.11000

Observations	30	30	30
Cross Sections	6	6	6

Source: Data processed with Eviews 9 (2018)

From table 2 above can be seen research using 6 companies with observations as much as 30. Based on data that has been processed the company which became the study sample has an average value for ROA of 6.133667%. The average ROA states that the company that is the sample of the study has a good average profitability. The minimum value of ROA is -27.92000% and the maximum value is 65.30000%. Expenditures in company activities are expected to be able to return by obtaining maximum profit through the efforts made. The greater or better the ROA indicates that management is more efficient in managing the company's finances in its operational activities in generating profits. Conversely, if a small ROA indicates that the company gets less profit. Thus in practice the company cannot reach the target, or even the company experiences a loss. The lowest value of ROA is owned by the MLIA company (Mulia Industrindo Tbk) in 2012 and the highest value is owned by the company ARNA (Arwana Citramulia Tbk) in 2013.

For the working capital variable (WCT), the average sample company has managerial ownership of 5.659667%. While the minimum value is -25.14000% and the maximum is WCT 38.18000%. The highest value of working capital turnover or working capital is owned by the MLIA company (Mulia Industrindo) in 2014 and the lowest is in the IKAI (Intikamik Alamasri Indsutri) company in 2016. The amount of working capital is sufficient, in other words, no more can give performance good for operations. If it has a large amount of operations, it can result in unemployed funds. The idle fund cannot produce both profits and losses because it is not used at all. So the right allocation of funds on working capital is an important thing to note, if arranged and adjusted to the conditions and needs of the company.

For the variable liquidity (CR) the average for the company that is the sample of the study is 233.4347%. The minimum value of CR20.11000% and the maximum value is 586.0600%. The lowest liquidity was in the IKAI company (Intikeramik Alam Asri Industri Tbk) in 2016 and highest by KIAS (Keramika Indonesia Association Tbk) in 2012. The health of the company is seen from how smoothly or liquidly a company fulfills its obligations to pay its debts at maturity. One of the things that investors see is the liquidity of a company that greatly affects the value of investment.

Hypothesis Testing

Table 3. Random Effect Model Test Results

Variabel	Random Effect Model						t-statistic
	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob	
C	5.988753	0.3123	3.347497	0.6688	3.854729	0.6005	0.531317
WCT	0.025605	0.8842	-	-	0.020846	0.9086	0.116127
CR	-	-	0.011936	0.6056	0.009257	0.7586	0.311167
f-statistic	0.135030						

Source: Data processed with Eviews 9 (2018)

Test t

This test was conducted to determine the effect of working capital (WCT) and liquidity (CR) on profitability (ROA) at a significant level α = 0.05 (5%) by using random effect models.

a) Working Capital on profitability

Based on table 3 above, it can be seen that the probability value for the working capital variable (WCT) is 0.9086 where the value is greater than α = 0.05 or 5% so that H0 is accepted and H1 is rejected. So, working

capital does not have a significant effect on profitability costs or in other words working capital is not a significant explanatory variable on profitability. Increasing working capital will not affect the rise / fall of profitability.

b) Liquidity on profitability

Based on table 3 it can be seen that the variable probability value of liquidity (CR) is 0.7586 greater than α = 0.05 or 5% (0.7586> 0.05) so that H0 is accepted and rejects H1, with this value indicating that liquidity has no significant effect on profitability. Liquidity is not yet a significant explanatory variable on profitability, the higher liquidity in a company will not affect the decline or increase in profitability.

Test F

This test is conducted to find out how the simultaneous effects of capital employment and liquidity variables on profitability at a significant level α = 0.05 or 5% by using random effect models.

Working Capital and Liquidity Against Profitability

From table 3 it can be seen that the f-statistic probability value is 0.135030. This value is below the significant level α = 0.05 or 5% which is 0.135030 <0.05 so that according to the testing criteria then H0 is accepted and H1 is accepted. This indicates that together the working capital and liquidity variables have no significant effect on profitability. With the increasing amount of working capital and liquidity there will be no effect on rising or falling profitability.

Discussion

Effect of Working Capital on Profitability

Working capital is capital that is used for all daily company activities whose cash turnover is expected to return in the short term through the sale of products. With the word as capital used every day working capital must always be available in cash. Without costs for operations, the company activities will not work.

The results of the study found that working capital did not have a positive and significant effect on profitability. These results indicate that the size of the amount of working capital has no significant effect on corporate profits. But this does not merely say that the use of working capital has no effect or is not needed in operations as one of the supporting factors to gain profits, but there are a number of things that can cause the capital used to be ineffective so that it does not reach the desired target. Appropriate allocation of funds and proper management are the keys to the success of management in managing such funds so that they can obtain the expected results.

The effect of working capital on profitability is not significant because the value of working capital in manufacturing companies in the ceramic, glass and porcelain sub-sector which is the study sample has different values. The Alamasri Industri Tbk (IKAI) core company in 2014-2016 and Mulia Industrindo (MLIA) in 2015-2016 had a negative working capital value, while the other two companies had positive values in the other year as well as other companies had positive working capital value.

This research is in line with Meidiyustiani (2016), Octavianty and Syahputra (2015) which states that partially working capital turnover does not have a positive effect on profitability. In contrast to the results of research found by Syafitri and Wibowo (2016), Saputra (2017), Warrad (2013) states that the working capital variable (WCT) has a positive and significant effect on profitability (ROA).

Effect of Liquidity on Profitability

Liquidity is a measure used to see the level of a company's ability to fulfill its short-term obligations, such as: paying electricity bills, paying wages for employees, and others. The higher the amount of current assets, the higher the current ratio, which also means the higher the level of liquidity of the company.

The results of the study found that partially liquidity (current ratio) did not affect profitability. This means that the size of the amount of available liquid cash does not have a significant effect on profitability. This could be because assets in cash are not used appropriately so that the responsibility to meet the company's short-term needs cannot be met. In this case the manager is responsible for each asset management.

This research is in line with Abdullah and Jahan (2014) which states that the variable liquidity (current ratio) does not affect profitability. However, different results are stated by Octavianty and Syahputra (2015), and Meidiyustiani (2016) which states that the liquidity variable affects profitability.

Effect of Working Capital and Liquidity on Profitability

The results of the study simultaneously on both variables, namely working capital (WCT) and liquidity (CR) did not affect profitability (ROA). This shows that the availability of working capital and cash liquid is fulfilling and stable so it does not affect the company's income. The key lies in the right management according to each allocation by the manager.

V. CONCLUSIONS AND SUGGESTIONS

Based on the results of research and discussion, it is concluded that: (1) Working capital does not affect profitability. Working capital is not an explanatory variable on profitability. Thus the results of the study state that the value of working capital does not significantly influence the acquisition of profitability. (2) Liquidity does not affect profitability. Liquidity is not an explanatory variable for profitability. Thus the results of this study state that the amount of liquidity does not have a large influence on the acquisition of profitability. (3) Simultaneously or together working capital and liquidity do not affect profitability. Thus in this study the results stated that working capital and liquidity would not affect the profitability of manufacturing companies in the ceramics, glass and porcelain sub-sectors listed on the Indonesia Stock Exchange in 2012-2016.

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