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An Analysis on the Impact of Cash Conversion Cycle Dimension toward Return on Assets (ROA) (Studies in Food and Beverages Company Listed in Indonesia Stock Exchange (IDX) Year Period 2010-2012)

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Abstract- This study aimed to examine the effect of dimensional analysis of the cash conversion cycle *Return on Assets* (ROA) (studies on *food and beverages* companies listed in Indonesia Stock Exchange (IDX) year period from 2010 to 2012). The independent variable in this study used the inventory conversion period, receivables collection period, and the period of suspension of debt, control variables in this study were the *current ratio, laverage,* and *size*, and the dependent variable in this study is ROA. This study used purposive sampling method in determining the number of samples used and acquired 20 companies were used as samples. This study uses regression analysis using the classical assumption pand using the software SPSS 17.00. The test results obtained with SPSS for the variable X1 (Inventory Conversion Period) that the inventory conversion period negative effect on ROA obtained t value = -6.588 with a significance level of 0.000. The test results obtained with SPSS for the variable X2 (Receivables Collection Period) that the Accounts receivable collection periods negatively affect ROA obtained t value = -9.761 with a significance level of 0.000. The test results obtained with SPSS for variable X3 (Debt Suspension Period) that the Debt deferral period has positive effect on ROA obtained t value = 3.949 with a significance level of 0.000. The test results obtained with SPSS for the variable X4 (*Current Ratio*) while the current ratio has a positive effect on ROA obtained t value of 2.571 with a significance level of 0.014. The test results obtained with SPSS for the variable X5 (*Laverage*) that the laverage negative effect on ROA obtained t value of -11.681 with a significance level of 0.000. The test results obtained with SPSS for variable X6 (*Size*) that the size has a positive effect on ROA obtained t value of 231.693 with a significance level of 0.000.

Keywords: Conversion Period Inventory, Accounts Receivable Collection Period, Suspension Period payable, *Current Ratio, Laverage, Size.*

1. Introduction

Food and Beverages Company is one that is included in the consumer goods industry. This sector is one sector that can survive in the midst of the Indonesian economy in mid-1998 and the company's food and beverages is one of the companies that are not significantly affected by the impact of the global crisis, in addition to the rate of consumption of goods produced in the industry has become a necessity and relatively unchanged, either improving or deteriorating economic conditions (nurul aini, 2011).

One purpose of a company is to get the maximum profit. To achieve these objectives, the necessary management with a high level of effectiveness. Measurement of the effectiveness of management shown by the profit generated from the sale and from investment income, can be done by knowing how much profitability ratios owned (Weston and Brigham, 1991:64). By knowing the profitability ratios owned, companies can monitor the progress of the company from time to time.

The journey can be called the cash conversion cycle cash (cash conversion cycle). According to Brigham & Houston (2006:135) that the longer the cash conversion cycle, the higher the need for funding. The greater the amount of cash will cause the unemployed so money will minimize profits.

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Therefore, the company should be able to shorten the cash conversion cycle to increase profits, so as to minimize the length of the funds released as a result of cash turnover mentioned.

Company in managing its cash by using cash conversion cycle requires or formulate comprising the steps of: inventory conversion period, receivables period, and the period of suspension of debt. The longer the time taken by the company to do the production, the greater the cost to be incurred by the company either for maintenance or production costs. The length of the rotation period of several existing factors, will affect the operational costs to be incurred by the company.

2. Theoretical Framework

Weston and Copeland (1999:379) states that the components of working capital is required to finance the company's operations based on policies and plans that have been set by the company. Therefore, the error in managing working capital operations can result in stunted or stopped altogether. Working capital management is an important component of the company's financial management as it directly affects the profitability of the company.

According Kieso (2002), Cash is the most liquid assets, a medium of exchange and a standard of measurement and the basis of accounting for all other items. Cash consists of coins, paper money, and the funds are available on bank deposits, negotiable instruments such as money order (money order), check the approved (certified check), cashier's check (cashier check), personal checks, and money orders bank (bank draft) is also viewed as cash.

Company in managing its cash by using cash conversion cycle requires or formulate comprising the steps of: inventory conversion period, receivables period, and the period of suspension of debt. The longer the time taken by the company to do the production, the greater the cost to be incurred by the company either for maintenance or production costs. The length of the rotation period of several existing factors, will affect the operational costs to be incurred by the company. Inventory conversion period (inventory conversion period) is the average time required to convert raw materials into finished goods and then sell the goods. Inventory conversion period is calculated by dividing inventory by the number of sales per day. Brigham & Houston (2006:133) states the longer the inventory conversion period, the more costs to be incurred by the company. It is therefore necessary to have a low rate of conversion of inventory to reduce costs associated with excess inventory so as not to reduce earnings.

Period of collecting receivables (receivables conversion period) is the average time it takes to convert receivables into cash, which is to receive cash after the sale. Accounts receivable arises when a sale occurs, but the company has not received the cash. Thus the use of the receivables is expected to increase sales and profits. But on the other hand is the risk that arises unpaid receivables, so the greater the longer the period of collection of accounts receivable or it will hinder the company makes a profit. Brigham & Houston (2006:134) states The longer accounts receivable collection period means the revenue to be received by the company pending, the impact will hamper the company makes a profit quickly so that the profit for the year has decreased.

Debt deferral period (the federal payables period) is the average time needed to purchase raw materials and labor payment. Brigham & Houston (2006:134) declared payable may yield additional capitalization, payment of accounts payable if prolonged, then additional capital owned can be used to make an investment. With the investment, the company can carry out production activities more effectively. So with slowing trade payables increase its profit.

Brigham & Houston (2006:136) states that in order to shorten the cash conversion cycle can be done in three ways: first, the conversion of inventory to shorten the period of speeding up the process of production and sale of goods. Both by accelerating accounts receivable collection periods with road shorten billing. Third, extend the period of suspension of trade payables period by slowing payments to suppliers and employees. This business can be done so far do not raise costs or disrupt the sales process.

Profitability is the ability of a company to make a profit (profit) in a given period. Same sense conveyed by Husnan (2001) that Profitability is the ability of a company to generate profit (profit) on the level of sales, assets, and certain share capital. Meanwhile, According to Michelle and Megawati

(2005), Profitability is the company's ability to generate profits (profit) that will be the basis of dividend distribution company.

Syamsudin (2004) says that the Return on Assets (ROA) is a measure of the overall company's ability to generate profits in the total amount of assets available within the company, this means that the higher the ratio the better the state of a company.

ROA is part and profitability ratios in analyzing financial statements on a company's financial performance report. ROA can be used as an indicator to determine the degree to which the company makes a profit of optimal views and position assets. ROA is a measure of the effectiveness of management in generating profits with available assets. The higher the rate of return generated the level of profitability of the company, the better.

3. Methods

This research includes descriptive explanatory quantitative research which is a form of research that is proposed to describe the phenomena that exist, both natural phenomena and man-made phenomena, descriptive research is research that seeks to describe and interpret something, such conditions or relationships that exist, opinions evolving, ongoing process, results or effects, or about the ongoing trends.

3.1 Research Variables and Operational Definitions

Research variables are materials that have a variation of value. In this study using three variables:

1. Dependent variable (Dependent Variable).
   The dependent variable is the variable that is affected by the independent variables that are not able to stand alone as well as a major concern of researchers. In this study, the dependent variable is Return on Assets (ROA).
2. Variable-free (Independent Variable).
   The independent variable is the variable that affects the dependent variable, either positively or negatively, and can stand alone nature. this study, the independent variable is the Conversion Period Inventory, Accounts Receivable Collection Period, Debt Suspension Period.
3. Variables are control variables that are controlled or held constant so that the relationship between the independent variable and the dependent variable is not influenced by external factors not examined. Control variable in this study is the *Current Ratio, Laverage, Size*.

3.2 Population

The population is a mix of all the elements in the form of events, things, or people who have similar characteristics who became the center of attention of researchers, because it is seen as a research universe. The population in this study is a company engaged in the field of Food and Beverages listed on the Indonesia Stock Exchange (IDX) 2010-2012.

3.3 Sample

The sample is part of the population to be studied. Sampling was carried out in this study using purposive sampling technique, where companies are selected based on certain criteria and then selected based on certain considerations that are tailored to the purpose of the study. Criteria for sampling in this study are as follows:

1. Companies Food and Beverages listed on the Indonesia Stock Exchange (IDX) is published and publish the complete annual financial statements as of December 31 of the year 2010 through 2012.
2. Companies that always provide complete data on financial ratios over the period of observation.
3. Companies that have a positive ROA for 3 years in a row. This meant that the average ROA not be 0 (zero).

3.4 Data Collection Method

Methods of data collection in this study is the use of library research methods and documentation. Studies Library, which is derived from the theory of literature, articles, journals, and

previous researchers. This method is used to study and understand the literature contains discussion related to research. Documentation, that the data collected by documenting the data from the Indonesian Capital Market Directory (ICMD) for the period 2010-2012 were carried out by taking the data from the financial statements of the Food and Beverages company registered in ICMD 2010-2012.

3.5 Data Analysis Techniques

Data analysis techniques in this study is the first to use multiple linear regression to study the magnitude and direction of the influence of several variables. Multiple linear regression model can be regarded as a good model if the model meets the assumptions of classical assumption called the level of significance level of 5%. There are three classical assumption made is the normality test, multicollinearity test, and test heterokedastisitas.

Multiple linear regression equations in this study using the model are as follows:
Y = a + b1X1 + b2 + x2 + b3X3 b5X5 b4X4 + + e + BX6

The second data analysis technique for testing this hypothesis is the t-test to see the effect of the independent variables and control variables on the dependent variable and Analysis of Multiple Determination Adjustments (Adjusted R2) is used to measure how far away the ability of the independent variables and control variables on the dependent variable.

4. Results and Discussion

4.1 Normality Test

Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.00147506
Most Extreme Differences	Absolute	.070
	Positive	.056
	Negative	-.070
Kolmogorov-Smirnov Z		.477
Asymp. Sig. (2-tailed)		.977

a. Test distribution is Normal.

b. Calculated from data.

It can be seen that the sample is entered, all the samples can be used to perform a test of the table above obtained value of p = 0.977, for p> 0.05 the regression model to meet the assumption of normality.

Testing normality of the data can be seen from the spread of the data (dots) on the diagonal axis of the graph Normal P_Plot. P_Plot normality test chart will form a straight diagonal line, then plotting the data will be compared with the diagonal lines. If the normal distribution of the line that describes the real data will follow the diagonal lines.

4.2 Multicollinearity Test

Multicollinearity Test

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	X1	.652	1.533
	X2	.455	2.196
	X3	.772	1.296
	X4	.822	1.217
	X5	.764	1.308
	X6	.342	2.920

a. Dependent Variable: Y

Sources: ICMD 2013, the data is processed

Such data can be seen that in each variable multicollinearity does not happen becauseit has more tolerance of 0, 10 and VIF value less than 10.

4.3 Autocorrelation Test

Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.9999[a]	.9997	.9997	.0015845	1.839

a. Predictors: (Constant), X6, X4, X5, X3, X1, X2

b. Dependent Variable: Y

Sources: ICMD 2013, the data is processed

The test results showed that the Durbin Watson value of 1.839 was obtained, which means the null hypothesis is accepted, so it can be concluded that the residual random, or does not happen autocorrelation.

4.4 Heteroskidastity Test

Heteroskidastity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.003	.002		1.293	.204
	X1	-1.4E-008	.000	-.272	-1.442	.157
	X2	2.13E-009	.000	.032	.143	.887
	X3	-1.4E-006	.000	-.161	-.927	.359
	X4	-1.2E-005	.000	-.137	-.813	.421
	X5	.000	.000	-.216	-1.238	.223
	X6	.000	.000	-.161	-.619	.539

a. Dependent Variable: AbsUn

Sources: ICMD 2013, the data is processed

SPSS output display results clearly show that none of the independent variables are statistically significant influence Absolute value of the dependent variable Un (AbsUn). This is evident from the above probability of significance 5% confidence level. So we can conclude the existence of the regression model does not contain heterocedastisity.

4.5 Regression Analysis

Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.648	.004		373.796	.000
	X1	-1.2E-007	.000	-.021	-6.588	.000
	X2	-2.6E-007	.000	-.037	-9.761	.000
	X3	1.12E-005	.000	.011	3.949	.000
	X4	7.15E-005	.000	.007	2.571	.014
	X5	-.004	.000	-.034	-11.681	.000
	X6	.071	.000	1.003	231.693	.000

a. Dependent Variable: Y

5. Discussion

5.1 Test Results Variable Conversion Period Inventory

The test results obtained with SPSS for the variable X1 (Conversion Period Inventory) is obtained t value = -6.588 with a significance level of 0.000. The faster the production process to increase profitability as production costs will decrease. So the longer the period of conversion of inventory can reduce profitability. Thus, the alternative hypothesis 1 stating whether the inventory conversion period negative effect on ROA is received.

5.2 Test Results Accounts Receivable Collection Period Variables

The test results obtained with SPSS for the variable X2 (receivables collection period) was obtained t value = -9.761 with a significance level of 0.000. The faster the receivables collection period can improve profitability. So the longer the period of collection of accounts receivable decreased profitability. Thus, the alternative hypothesis 2 which states whether the receivable collection period received a negative effect on ROA.

5.3 Test Results Variable Suspension Period Debt

The test results obtained with SPSS for variable X3 (Debt Suspension Period) obtained t value = 3.949 with a significance level of 0.000. Delay or slow payment of debts to suppliers either labor or raw materials will increase the company's capital, so the longer the deferral period or later than the debt it can improve profitability. Thus, the alternative hypothesis 3 which states whether a debt moratorium period has a positive effect on ROA is received.

5.4 Variable Current Ratio Test Results

The test results obtained with SPSS for the variable X4 (Current Ratio) as a control variable obtained t value = 2.571 with a significance level of 0.014. So the higher the current ratio, the more liquid the company and will more easily obtain funding from creditors and investors to facilitate their operations, so that earnings growth will also increase. Thus, the alternative hypothesis 4 which states whether the current ratio has a positive effect on ROA is received.

5.5 Test Results Variable Laverage

The test results obtained with SPSS for the variable X5 (Laverage) as control variables obtained t value = -11.681 with a significance level of 0.000. So that profitable companies tend to have little leverage ratio because the company can meet the needs of the fund using funds from internal sources. Thus, the alternative hypothesis 5 which states whether laverage negative effect on ROA is received.

5.6 Test Results Variable Size

The test results obtained with SPSS for variable X6 (Size) as control variables obtained t value = 231.693 with a significance level of 0.000. With the ever-increasing sales, the company can recoup the costs that went into the production process. By doing so, the company's profit will increase. Thus, the alternative hypothesis 6 stating whether the size has a positive effect on ROA is received. Based on the explanation of the results described in the above discussion, it is found that the current ratio and variable size and a significant positive effect on ROA. As for the variable laverage significant negative effect on ROA, so that these variables cannot be the controller of the variable ROA.

6. Conclusion and Recommendation

6.1 Conclusion

Based on the results of the testing and analysis of the hypotheses that have been described in the next chapter, it can be concluded that can be drawn from this study are:

1. Order to increase profits, food and beverages companies should reduce the inventory turnover period, so it does not cause the accumulation of goods that result in increased costs.
2. Generally companies would prefer the sales in cash rather than on credit, but competitive pressures have forced most companies to offer credit. In order to increase profits, food and beverages company should further reduce receivables collection period. So the sooner the company earned cash therefore the company can invest to increase profitability. Therefore, the company can raise capital and invest, to increase profitability.
3. Findings in this study state that a debt moratorium period has a positive effect on ROA. In order to enhance the company's ROA should ask for new credit terms to suppliers, because the period of suspension of existing debt, the effect is inversely proportional to its profitability. Besides the costs of debt will arise as a result of giving up a rebate on the purchase of some types of requirements. For that the company should be able to pay close attention to the conditional rebates that lost opportunity costs are not discounted happen.
4. Shows the current ratio was positively related to ROA. If the company can effectively and efficiently use its current assets to pay short-term obligations, then it can have an impact on cost reduction and profit can experience growth or improvement. Because the higher the current ratio, the more liquid the company and will more easily obtain funding from creditors and investors to facilitate their operations, so that earnings growth will also increase.
5. Leverage ratio in this study showed a negative relationship with ROA. We recommend that companies minimize laverage, and utilize the excess internal funds, rather than doing debt. So the cost relatively less.
6. Directly proportional to the size of company profitability. Therefore, companies need to increase total assets as a proxy of the size of the company in order to ROA increased due to an increase in total assets of the company can maximize its resources, so that the company's ROA will increase.

6.2 Suggestion

Advice can be given with regard to the results of research and the limitations of this study are;

1. Using a sample of companies that not only the company's food and beverages alone, but can be developed using samples from a group of other companies listed on the Indonesia Stock Exchange.
2. Adding variables such deserves to be variable in future research studies.
3. Objects using the company and the period of the company other than food and beverages in the period 2010-2012.

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