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THE EFFECT OF PROFITABILITY AT CONSUMER GOODS COMPANIES LISTED IN STOCK EXCHANGE

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ABSTRACT

The purpose of this research is to prove and analyze the effect of profitability at consumer goods companies listed in Stock exchange in period 2011 – 2015. The population in this research including all consumer goods companies. Sample is taken using purposive sampling technique with the amount of 38 companies. The data used in this research is secondary data, by gathering neccessary information from IDX such as financial report year 2011 – 2015. The method used to analyze the relationship between independent variable and dependent variable is double regression method and assumption method. The result shows that simultaneously, variable – independent variable; current ratio, working capital turn over, debt to equity ratio towards the effort of profitability. Partial result, variable of current ratio, working capital turn over, debt to equity ratio towards the effort of profitability.

Keywords: *current ratio, working capital turn over, debt to equity ratio, profitability*

1. INTRODUCTION

According to ACCA Global (2017), the key objectives of working capital is to ensure liquidity and profitability of a company. Working capital consist of current assets and current liabilities. The Consumer Goods Industry Index contains all listed companies that are engaged in Indonesia's consumer goods sector. This sector is further subdivided into: foods and drinks, tobacco, pharmaceuticals, cosmetics and household products, and household appliances.

latest update Consumer Goods Industry Index: [345783] - 2014/11/25
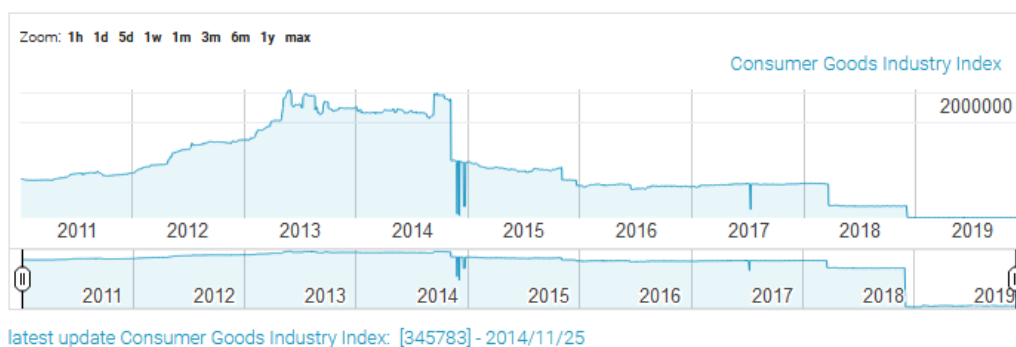
Factors that have a positive boost on the consumer goods markets are better economic growth and the infrastructure developments that are anticipated to enhance the distribution of consumer products. Currently, the middle-income population is growing in size and is expected to double to 141 million by 2020. This fact goes hand in hand with increasing buying power, forming the new backbone and creating great income opportunities in the consumer goods sector (https://www.cekindo.com/sectors/consumer-goods-in-indonesia).

2. LITERATURE REVIEW

Current Ratio. According to Hery (2015:166), liquidity ratio describes a company ability to pay its short term debts when due. According to Rambe et al., (2015:49), liquidity ratio represents a measurement ability of a company to repay its short term financial obligations with relation to total cash amount and current assets with short term obligations can be used to measure its liquidity. According to Hantono (2018), current ratio indicates to the extent which current assets could cover the current liabilities. The greater the comparison of current asset and current liabilities then the higher the company's capabilities to cover the short term liabilities. Low current ratio is usually considered to indicate the occurrence of problems in liquidation, whereas the current ratio that is too high also considered not good. Because it shows the amount of unemployed funds which in turn could reduce the profitability of companies. Current Ratio is used to measure the ability of company to meet the short term obligations, assuming that all current assets convert into cash, the indicator that use to calculate the current ratio is by the formula, as follows:

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

Working Capital Ratio. According to Harahap (2009:299), working capital is an exess of current assets in running daily business operations starting from raw material, manufacture and selling a product to customer either in cash or credit and operation expenses. To produce a raw material, a company need to buy raw material from supplier and not make a payment directly called creditor. In operation cycle, a company need to pay salaries, wages, electricity bills, rent spaces, marketing expenses, and etc. In short, working capital is the excess amount of assets subtract with liabilities. Working capital measures the creditor security in financial obligations. Therefore, it is required by each company to manage working capital effectively to not get interrupted. According to Khan et al., (2011:26), to achieve an objectives, there has a good management in it. Working capital management is concern on the problem that usually arises in the relationship between current assets and current liabilities in one year operating cycle. Current assets or assets can be converted into cash within one year will not reducing the value and disrupting an operations. The major current assets consist of cash and cash equivalents, inventory and account receivables. Furthermore, current liabilities consist of overdraft and account payables within a year. The goal of working capital management is to maintain a profitability in satisfying level of working capital and insolvency will not be happened. According to Kasmir (2016:250), working capital represents a capital used to operates company activity. Working capital can in form of short term investments such as cash and cash equivalents, account receivable, inventory, prepaid and etc.

According to Kasmir (2012 : 131), formula of working capital turn over is obtained by:

$$\text{Working of Capital Turn Over} = \frac{\text{Net Sales}}{\text{current asset - current liabilities}}$$

Debt to Equity Ratio. According to Rudianto (2013:194), debt to equity ratio is a ratio that describes how much the owner's capital can cover debt to creditors. According to Murhadi (2013:61), debt to equity ratio can also show the comparison between debt and equity of companies. In other words, a lower debt to equity ratio usually implies a more financially stable business. Companies with a higher debt to equity ratio are considered more risky to creditors and investors than companies with a lower ratio. According to Hery (2017:23), debt to equity ratio aims to find out how each part of the capital was made rupiah as collateral for debt and give general instructions about the creditworthiness and financial risk of the debtor.

According to Murhadi (2013:57), formula of debt to equity ratio is obtained by:

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Profitability. According to Margaretha (2007),profitability ratios describe interested parties about the ability of service industry management to generate profits for a certain period.

According to Sugiono (2008),the profitability ratio aims to measure the efficiency of corporate activity and the company's ability to make a profit. According to Gnadneyuniarti (2013) defined profitability is the ability of a company to earn profit (profit) in a certain period. Profitability is the ability of a company to generate profits (profit) at the level of sales, assets, and capital stock. (Profitability) is the ability of a company to generate profits (profit) that will be the basis of divison. The result of the division of assets is a ratio that shows how much the asset contributes to creating net income (Hery, 2015).

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

Current ratio towards profitability. The relationship between the liquidity and the profitability by Lartey V., et al. (2013), the study concluded that there was weak positive relationship between the liquidity and the profitability of the listed banks in Ghana. According by Madushanka and Jathurika (2019), overall this research can give a recommendation for the Manufacturing Companies in Sri Lanka that, pay more attention on the liquidity ratios as they have the significant impact on the profitability of the firms. According to Sartono (2010:116), the higher the current ratio means the greater the company's ability to meet short term obligation.

Working to Capital Turn Over Towards Profitability. According to Munawir (2014:114), excessive working capital indicates the existence of unproductive funds, and this will cause losses for the company because the opportunity to make a profit has been wasted. According to Syamsuddin (2011:200), efficiency in working capital management is needed to ensure long-term sustainability or success and to achieve overall company goals which in this case increase wealth for the owners. According to Hery (2015:218), low capital turnover means the company currently has excess working capital. This might be due to the low inventory turnover of merchandise or trade receivables, or it could be because of the large cash balance. Conversely, high working capital turnover may be due to high inventory turnover of merchandise or trade receivables, or it could be due to the cash balance being too small.

Debt to Equity Ratio Towards Profitability. According to Mulyawan (2015:247), companies with a high level of profitability, tend to have a low level of debt. According to Hery (2017:301), the higher the debt to equity ratio means the smaller the amount of owner's capital

that can be used as debt collateral.According to Sumarsan (2013:47), the higher the debt ratio, the more creditor money the company uses to generate profits.

3. RESEARCH METHOD

3.1 Data

The data collection technique carried out in this study was a study of documentation. According to Sugiyono (2011: 240), documentation is data collection carried out by studying documents in the form of writing, pictures or monumental works from someone. For this study, data collection was obtained from the financial statements of consumer goods companies listed in Stock exchange in period 2011 – 2015. which were published on www.idx.co.id. The types and sources of data used in this study are secondary data. Secondary data is processed information data obtained from the financial statements of consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015 which are published on www.idx.co.id.

3.2 Sample

Sugiyono (2011: 80), population is a region of generalization consisting of objects or subjects that have certain qualities and characteristics set by researchers to be studied and then conclusions drawn. The population used for this study is consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015 totaling 38 companies. The sampling technique is to use the purposive sampling method. According to Sugiyono (2011: 85), purposive sampling is a technique of determining samples with certain considerations. Table 1 presents the sample of this study with criteria as follow:

1. Consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015.
2. Consumer goods companies that publish financial reports on the Indonesia Stock Exchange for the period 2011-2015.
3. Consumer goods companies that have positive cash flows listed on the Indonesia Stock Exchange in the period 2011-2015.

Table 1. Sample

No	Criteria	Firms
1	Consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015.	38
2	Consumer goods companies doesn't publish financial reports on the Indonesia Stock Exchange for the period 2011-2015.	-12
3	Consumer goods companies that have negative cash flows listed on the Indonesia Stock Exchange in the period 2011-2015.	-6
Total Sample		**20**

3.3 Method of analysis

To find out the effect of independent variables and dependent variables multiple linear regression analysis formula is used to determine the magnitude of the relationship and the effect

of independent variables which number 3 (three) or more (X_1, X_2, X_3) on the dependent variable (Y). With the following formulations:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

where Y is Profitability, α is constant, β is regression coefficient of each independent variables, X_1 = Current ratio, X_2 = Working Capital Turn Over, X_3 = Debt to equity ratio and ε is percentage error (0.05).

4. Results and Discussion

4.1 Results

The sample in this study consisted of 20 companies with a research period from 2011-2015 so that as many as 100 research data were obtained. Table 2 presents the results of data processing for descriptive statistics.

Table 2. Summary of Descriptive Statistics

	N	Minimum	Maximum	Mean	Std.Deviation
CR	100	0.51	11.74	2.5985	1.78597
WCTO	100	1.15	7.56	2.7231	1.54597
DER	100	0.11	15.88	1.4186	3.02718
ROA	100	0.02	0.66	0.1557	0.12388
Valid	100				

Source: Results of Data Processing

Normality test. The normality test aims to test whether in the regression model, the residual confounding variable has a normal distribution. The results of the normality test can be in the form of a Kolmogorov Smirnov statistical table. In this test, the guidelines used in decision making are: (1) if the significance value is greater than 0.05 then the data is normally distributed; and (2) if the significance value is smaller than 0.05 then the data is not normally distributed. Table 3 presents the summary of the results of the normality test using the Kolmogorov Smirnov.

Table 3. The results of the normality test using the Kolmogorov-Smirnov test

			Unstandardized Residual
N			100
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		.10027046
Most Extreme Differences	Absolute		.120
	Positive		.120
	Negative		-.083
Test Statistic			.120
Asymp. Sig. (2-tailed)			.001[c]
Monte Carlo Sig. (2-tailed)	Sig.		.105[d]
	99% Confidence Interval	Lower Bound	.097
		Upper Bound	.113

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Based on 10000 sampled tables with starting seed 2000000.

The results of the normality test using Kolmogrof-Smirnov statistics indicate that the variables of current ratio (X_1), working capital turn over (X_2), debt to equity ratio (X_3), and return on assets (Y) have the significance value [Sig. (2-tailed)] 0.105. It is clear that 0.105 > 0.05 and this means that the data of all variables in this study are normally distributed.

Multicollinearity test. Multicollinearity test aims to test whether in the regression model there is a correlation between independent variables. In a good regression model there should be no correlation between independent variables. To determine whether or not there is a multicollinearity problem can be done by looking at the Variance Inflation Factor (VIP) between independent variables. The cut off value commonly used to indicate the presence of multicollinearity is: (1) value of *tolerance* 0.10; or (2) value of VIP 10. Table 4 presents the results of multicollinearity testing of this study

Table 4. Multicollinearity Test

Variables	Colliearity Statistics	
	Tolerance	VIF
Constant		
CR	0.819	1.222
WCTO	0.447	2.237
DER	0.482	2.074

Source: Results of Data Processing

The test results show that the tolerance value of the variables of Current ratio (X_1), Working Capital Turn Over (X_2), and Debt to Equity Ratio (X_3) are all greater than 0.10, and therefore it can be concluded that multicollinearity does not occur. VIF values obtained for of Current ratio (X_1), Working Capital Turn Over (X_2), and Debt to Equity Ratio $(X_3)$are all smaller than 10 and this indicates that there is no multicollinearity between independent variables.

Autocorrelation test. This study uses the Durbin-Watson test in autocorrelation testing. The Durbin-Watson statistic is used to see whether or not residual data occurs randomly. The Durbin-Watson testing criteria are as follows: (a) if the DW-value < - 2 means that there is positive autocorrelation; (b) if the DW-value is between - 2 and + 2, there is no autocorrelation; and (c) if the DW-value > + 2 means that there is negative autocorrelation. Table 5 shows the autocorrelation test results of this study. Based on table 5 above, it can be seen that the dW-value of the Durbin-Watson test is 0.738 which is in the interval between -2 to + 2, which is -2 < 0.738 < +2. This shows that in the regression model there is no autocorrelation.

Table 5. A Summary of Results of the Durbin-Watson Autocorrelation Test R

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.587[a]	0.345	0.324	0.10183	0.738

Source: Results of Data Processing

Heteroscedasticity test. Heteroscedasticity test is useful to test whether in the regression model there are differences in the variance of the residuals of one observation with the other

observations. The glejser test is used to detect the presence or absence of heteroscedasticity in this study. Table 6 shows that the significance values for the variables of of Current ratio (X_1) and Debt to Equity Ratio (X_3) greater than 0.05, Working Capital Turn Over (X_2), are small than 0.05.

Table 6. Heteroscedasticity Test Results by the Glejser Method

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Std.Error	Beta		
Constant	-3.107	0.263		-11.813	0.000
LnCR	0.389	0.206	0.318	1.886	0.062
LnWCTO	0.763	0.229	0.466	3.330	0.001
LnDER	0.010	0.163	0.012	0.059	0.953

Source: Results of Data Processing

Coefficient of determination. The coefficient of determination is intended to find out how much the model's ability to explain the dependent variable. If the coefficient of determination (R^2) is greater or closer to 1, it can be said that the ability of the independent variable (X) is large to explain the dependent variable (Y). Table 7 shows the result of determination coefficient for the hypothesis in this study. The results of the determination coefficient test yielded the value of adjusted R Square (R^2) of the determination coefficient of 0.324 or equal to 32,4%. Thus this means that the independent variables influence return on assets of 32.4% and the remaining 67.6% is influenced by other variables.

Table 7. Coefficient of Determination for the Hypothesis

R	R Square	Adjusted R Square	Std. Error of the Estimate
.587[a]	0.345	0.324	0.10183

Source: Results of Data Processing

Simultaneous testing of hypotheses (F test). The F test is used to show whether all the independent variables included in the model have a simultaneous influence on the dependent variable. To test this hypothesis, the F statistic is used with the following decision making criteria:

(1) if $F_{counted}$ > F_{table} or sig. < 0.05, then H_0 is rejected and H_a is accepted; and

(2) if $F_{counted}$ ≤ F_{table} or sig. ≥ 0.05, then H_a is rejected and H_0 is accepted. The hypotheses to be tested in this case are:

H_0 : current ratio, working capital turn over, debt to equity ratio, do not have an effect return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015.

H_a : current ratio, working capital turn over, debt to equity ratio, have an effect return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015.

Table 8 presents results of the simultaneous testing of this study.

Table 8. Summary of F test Results

	Sum of squares	df	Mean square	F	Sig.
Regression	8.597	3	2.866	5.526	.002[b]
Residual	49.786	96	0.519		
Total	58.383	99			

Source: Results of Data Processing

From the table above it can be seen that the value of $F_{counted}$ is 5.526 and from F_{table} is obtained the value of F_{table} is 2.46 so that $F_{counted} < F_{table}$. This means that H_0 is accepted and H_a is rejected. So the conclusion is that the independent variables (current ratio, working capital turn over, debt to equity ratio) do not have a significant simultaneous effect on the dependent variable (return on assets) in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015.

The model. Testing the hypothesis used in the study is to use multiple linear regression analysis. The regression models used are as follows:

Table 9. Regression Model

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	**Std.Error**	**Beta**		
Constant	-0.019	0.034		-0.549	0.584
CR	0.021	0.006	0.301	3.294	0.001
WCTO	0.040	0.010	0.501	4.059	0.000
DER	0.008	0.005	0.186	1.561	0.122

Source: Results of Data Processing

ROA = -0.962 – 0.021 CR + 0.040 WCTO + 0.008 DER

The meanings of the multiple linear regression equation above are:

1. Value of a is -0,019, meaning that if the variables of current ratio, working capital turn over, and debt to equity ratio are considered constant, the return on assets is -0.019.
2. The coefficient value of the current ratio is 0.021. This shows that for every 1 unit increase in current ratio, the return on assets will decrease by 0.021.
3. The coefficient of the working capital turn over is 0.040. This shows that for every 1 unit increase in working capotal turn over, the return on assets increases by 0.040.
4. The coefficient of debt to equity ratio is 0.008. This shows that for every 1 unit increase in debt to equity ratio, the return on assets decreases by 0.008.

The t test is used to show the extent to which the influence of one independent variable on the dependent variable. This test is done by comparing the significance values with the following conditions:

1. If $t_{table} \leq t_{counted} \leq +t_{table}$ or Sig. $\geq = 0.05$, then H_a is rejected and H_0 is accepted.
2. If $t_{counted} > t_{table}$ or $t_{counted} \leq t_{table}$ or Sig. $< = 0.05$, then H_0 is rejected and H_a is accepted.

The hypotheses to be tested in this case are:

H_0 : current ratio, working capital turn over and debt to equity ratio, do not have the partial effect on return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015.

H_a : current ratio, working capital turn over and debt to equity ratio have the partial effect return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015.

Table 10 presents the summary of the results of the t test of this study.

Table 10. The results summary of the t test

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	**Std.Error**	**Beta**		
Constant	-0.019	0.034		-0.549	0.584
CR	0.021	0.006	0.301	3.294	0.001
WCTO	0.040	0.010	0.501	4.059	0.000
DER	0.008	0.005	0.186	1.561	0.122

Source: Results of Data Processing

1. **Effect of current ratio on return on assets**. The current ratio has a t$_{counted}$ of 3.294 < 1.983 and a significance value of 0.001 < 0.05, then H_0 is accepted meaning that the current ratio does have a significant partial effect on return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015. The results of the present study are in line with the results of previous research by Sartono (2010:116), the higher the current ratio means the greater the company's ability to meet short term obligation.
2. **Effect of working Capital Turn Over on return on assets**. The working capital turn over has a t$_{counted}$ of 4.059 < 1.983 and a significance value of 0.000 < 0.05, then H_0 is accepted meaning that the working capital turn over does have a significant partial effect on return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015. The results of the present study are in line with the results of previous research by Hery (2015:218), low capital turnover means the company currently has excess working capital. This might be due to the low inventory turnover of merchandise or trade receivables, or it could be because of the large cash balance. Conversely, high working capital turnover may be due to high inventory turnover of merchandise or trade receivables, or it could be due to the cash balance being too small.
3. **Effect of debt to equity ratio on return on assets**. The debt to equity ratio has a t$_{counted}$ of 1.561 > 1.983 and a significance value of 0.122 > 0.05, then H_0 is not accepted meaning that the working debt to equity ratio does haven't a significant partial effect on return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015. The results of the present study are in line with the results of previous research by Mulyawan (2015:247), companies with a high level of profitability, tend to have a low level of debt. According to Hery (2017:301), the higher the debt to equity ratio means the smaller the amount of owner's capital that can be used as debt collateral. According to Sumarsan (2013:47), the higher the debt ratio, the more creditor money the company uses to generate profits.

CONCLUSIONS

The conclusions that can be drawn as a result of this study are as follow: (1) the current ratio has effect on return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015 ; (2) the working capital turn over has effect on return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015; (3) debt to equity ratio has no effect on return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015; and (4) current ratio, working capital turn over, debt to equity ratio have an effect on the return on assets in return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015, with the value of Adjusted R Square of 0.324 which means a variation of current ratio, working capital turn over, debt to equity ratio have an effect on the return on assets in return on assets in consumer goods companies listed on the Indonesia Stock Exchange for the period 2011-2015 is 32.4 %.

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