Liquidity, Solvability on Profibitality: A Study on Consumption Companies Listed at Indonesian Stock Exchange

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Abstract: This study aims to examine the effect of Liquidity and Solvency on Profitability. The sample of this study was 10 consumption companies consisting of four cigarette companies (WIIM, GGRM, HMSP, RMBA) and six cosmetics companies (ADES, KINO, MBTO, MRAT, TCID, UNVR). Thus the research sample was found to be 40. The research variable used one dependent variable, namely profitability using the return on assets and two independent variables, namely liquidity using inventory to net working capital and current ratio and solvency using debt to equity ratio. This research uses descriptive data analysis, coefficient of determination analysis, regression analysis and data analysis using the SPSS application. The results showed that the Current Ratio did not significantly influence profitability. Inventory to Net Working Capital has a significant effect on profitability. Debt to Equity ratio has a significant effect on profitability. And Current Ratio, Inventory to Net Working Capital simultaneously have a significant effect on the profitability (ROA) of Consumption Companies listed on the Indonesia Stock Exchange (BEI) for the 2015-2018 period. significant value0.002 <0.05

Keywords: Liquidity; Solvability; Profitability

1. Introduction

It is the goal of every company to maintain and increase its revenue. Many things are done by companies to increase profits to maintain the sustainability of the company. According to Hery (2015) revenue is the inflow of assets or other increases in assets or completion of the entity's obligations from the delivery of goods, service delivery, or other activities that are the main operations or central operations of the company.

One of the improvements in the company is to increase profits continuously through the main activities of the company. To increase profits, the management must be able to analyze the company's condition through the company's financial statements.

Many factors can affect the ability of a company to gain profit. According to Farrely in Puspitaningtyas (2015), high liquidity will reduce the company's profitability. Liquidity is the ability of a company to pay its short-term debt. By managing this, a company is expected to be able to maintain and fund its operations. Therefore, the company that can manage its ability to pay its short-term debt is expected to be able to gain profit.

Other factors involved here its solvability. Solvability is about the level of debt of a company. According to Hariyani (2010), solvency is an indicator used to assess a company's ability to

pay all debts. This ratio has a positive relationship with earnings changes. Companies that are not able to generate profits from operations encourage parties within the company to commit fraud, one of many things is to manipulate financial statements to keep the company's name looking good. The scandal that occurred in 2019 was the case of General Electric where the company manipulated its financial statements up to the US $ 38 billion, changing the format of its financial statements every few years to keep the figures from past periods to be compared by analysis Indrastiti (2019). This case indicates the need for strategies in the company to increase profits or revenue to maintain the company's sustainability. Based on the description above, this study intends to examine the effect of liquidity and solvency on company profitability.

2. Literature Review

2.1 Liquidity

Liquidity ratios, according to Hery (2015) liquidity are ratios that show a company’s ability to meet obligations or pay the short-term debt. In other words, liquidity ratios are ratios that can be used to measure to what extent the company's ability to pay off short-term obligations will soon mature. Sugiono (2009) also said that the liquidity ratio was aimed at measuring the company's ability to meet its short-term obligations.

Hery (2015) mentions some of the goals and benefits of the overall liquidity ratio, which is to measure the company's ability to pay obligations or debts that will be due soon, to measure the company's ability to pay short-term liabilities by using current total assets and to measure the company's ability in paying short-term obligations using assets very smoothly. Arifin (2007) said that the types of liquidity are the current ratio, cash ratio, quick ratio, working capital to total asset ratio and inventory to net working capital.

2.2 Solvency

The solvency ratio or leverage ratio according to Kasmir (2010) is the ratio used to measure the extent to which a company’s assets are financed with debt. The definition of Solvency according to Hanafi and Abdul Halim is measuring the company's ability to meet its long-term obligations. This ratio also measures the company's long-term liquidity and thus focuses on the right side of the balance sheet. Hanafi (2009). Riyanto (2010) also revealed that solvency is intended as the ability of a company to pay all its debts. According to Hery (2015) the following are the objectives and benefits of the overall solvency ratio: to determine the total position of the company’s obligations to creditors, especially when

compared to the total assets or capital owned by the company, to determine the position of the company’s long-term obligations towards the amount of capital owned by the company, to assess the ability of company assets to meet all obligations including obligations that are fixed, such as the payment of principal installments along with interest regularly, and to assess how much company assets financed by debt in meeting all obligations, both short-term obligations and long-term obligations long. Kuswadi (2006) said that the solvency ratio consists of total assets (debt to assets ratio), debt to equity ratio and long term debt to equity ratio.

2.3 Profitability

Profitability is a class of financial metrics that helps investors assess the ability of the business to generate profits compared to expenses and other relevant costs used during a certain period. If this ratio is higher than the competitor's ratio or from the company's ratio in the previous period, this is a sign that the company is running well. Guinan (2010).

Hery (2015) said the goals and benefits of the overall profitability ratio: to measure the company's ability to generate profits during a certain period, to assess the company's profit the previous year with the current year, to assess the development of earnings over time, to measure how much the amount of profit net that will be generated from every rupiah of funds embedded in total assets. to measure how much net profit will be generated from each rupiah fund that is embedded in total equity. to measure gross profit margins on net sales, to measure operating profit margins on net sales, to measure net profit margins on net sales. According to Sudana (2011) types of profitability include Gross profit margin, Net Profit Margin or Return on Sales (ROS), Cash flow margins, Return on Assets, Return on Equity.

2.4 Current Ratio and Profitability

One of the liquidity ratios is the Current Ratio. This current ratio compares current assets with current liabilities owned by the company. Mardiyanto (2009) said that a high current ratio is an indicator that company risk is low. This means that the company is safe and the possibility of failure to pay various current obligations is very small. Yusra (2016) also said that if a company's ability to pay short-term obligations is good, then the ability to produce profits is good. This is supported by previous research by Putrawan which said that there is a significant influence between liquidity and profitability partially Putrawan (2015). Even so, other studies argue there is no significant effect between liquidity and profitability Raymond (2017)

H1: There is an effect between Liquidity on Profitability

2.5 Inventory to Net Working Capital and Profitability

Inventory to net working capital is a ratio that compares the number of stocks available with the company's working capital. Kasmir (2015) said that there is a standard liquidity ratio that shows that the company is running well. Inventory to Net Working Capital must reach 12% to reflect the welfare of a company. From the standard given, it can be concluded that Inventory to Net Working capital has contributed to the increase in profitability. This is supported by previous research by Sutoro, Suryani, Adriani (2014) says that there is a significant effect between solvency and partial profitability.

H2: There is an effect between Inventory to Net Working Capital on Profitability

2.6 Debt to Equity Ratio and Profitability

Debt to Equity Ratio is a ratio that is useful for knowing the composition of debt and equity used by companies for company capital. Debt has a bad impact on company performance because the higher the level of debt means the more interest expense will be greater, which means reducing profits. The higher the DER shows the greater the company's burden on outsiders, this is very possible to reduce company performance. Eugene (2009). It can be concluded that DER has a significant effect on profitability. This is supported by previous research by Putrawan (2015) which says that there is a significant effect between solvency and partial profitability. However, there are other studies by Noor (2012) that argue there is no significant effect between liquidity and profitability.

H3: There is a significant effect between Solvencies on Profitability

3. RESEARCH METHODOLOGY

The method used in this research is descriptive expolation. As for what is used is quantitative data in the form of financial statements on the Indonesia Stock Exchange in 2018. The population conducted in this study are companies listed on the Indonesia Stock Exchange (IDX). And the sample of this research is the consumption sector companies listed on the Indonesia Stock Exchange (IDX) in 2015-2018 as many as 10 cigarette and cosmetics companies. The variables used in this study are liquidity and solvency as independent variables. Profitability as an independent variable. Analysis of the study uses statistical data

that are descriptive statistics, correlation matrix, significant tests, regression analysis for research data in the consumption sector. The regression models in this study are:

ROA = $\beta 0 + \beta 1 CR + \beta 2 INV + \beta 3 DER$

Description:

ROA = *profitability return on asset ratio*

$\beta 0$ = *constant*

$\beta 1$, $\beta 2$, $\beta 3$ = coefficient

CR = *liquidity current ratio*

INV = *Inventory to net working capital*

DER = *Debt to Equity Ratio*

Table 1. Operational Research Variables

No	Variable	Definition	Research Variabel
1.	Liquidity	used to measure a company's ability to pay for its obligations.	- Current Ratio - Inventory to Net working Capital
2.	Solvability	used to measure the extent to which a company's assets are financed with debt.	- Debt to Equity Ratio
3.	Profitability	that show a company's ability to generate profits.	- Return on Asset

Source: Researcher

4. RESEARCH RESULTS AND DISCUSSION

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Current Ratio (X1)	40	.61	6.57	2.8648	1.69364
Inventory to NWC (X2)	40	-.95	2.19	.7350	.70100
Solvability (X3)	40	-5.02	2.65	.5619	1.08580
Profitability (Y)	40	-.18	.47	.0932	.14987

Source: SPSS 21

The table above shows the characteristics of the variables used in the study of Current Ratio variables in the Cigarettes and Cosmetics sub-sectors having a minimum value of 0.61, a maximum value of 6.57 and an average (mean) of 2.8648. This shows that the ability of the Cigarettes and Cosmetics sub-sector companies to pay short-term obligations above standard

1. Variable Inventory to Net Working Capital has the following characteristics in the Cigarettes and Cosmetics sub-sector, with a minimum value of -0.95, a maximum value of 2.19 and a flat average 0.7350. The DER variable has the following characteristics in the Cigarettes and Cosmetics sub-sector, with a minimum value of -5.02 and a maximum value of 2.65 and an average of 56.19% below the government standard of 400% with a maximum DER value of 265%. This shows that the level of corporate debt is not too large, only 56.19%, far below the government standard of 400%. And the company's ability to generate profits, ROA has an average value of 9.32% above the standard of 5%. Thus it can be concluded that the company has a good financial performance because of the ability of liquidity above the standard, likewise the level of debt is below the standard and the ability to generate profits above the standard.

Table 3. Correlations Matrix

	CR	INV	DER	ROA
Current Ratio (X1)	1	-.008	-.340*	.014
Inventory to NWC (X2)	-.008	1	-.389*	-.496**
Solvability (X3)	-.340*	-.389*	1	.447**
Profitability (Y)	.014	-.496**	.447**	1

Source: SPSS 21

The table above shows the relationship between the variables in this study. Regarding multicollinearity, it was found that the correlation coefficient <0.9, which means that the test was accepted that there was no multicollinearity.

Table 4. Coefficient Determination (Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.581[a]	.337	.282	.12701

Source: SPSS 21

The table above shows that there is a strong relationship between Current Ratio, Inventory to NWC and DER to ROA seen from the value of r = 0.581.

Coefficient Determination = 0.282 x 100% = 28.2%

The table above shows the contribution of Current Asset, Inventory to NWC and Debt to Equity ratio affecting changes in Return on Assets amounted to 28.2% and 71.8% influenced by other factors.

Table 5. Significant Test (Anova[a])

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.295	3	.098	6.099	.002[b]
	Residual	.581	36	.016		
	Total	.876	39			

Source: SPSS 21

The table above shows that F-table < F-count (2.87 < 6.099) and a significant value of 0.002 < 0.05, then Ha is accepted and Ho is rejected that there is a significant effect between liquidity with proxy Current Ratio and Inventory to Net Working Capital, DER together to ROA in the subsector Cigarettes and Cosmetics in 2015-2018.

Table 6. Statistical Test Results t

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.089	.058		1.541	.132
	Current Ratio (X1)	.012	.013	.130	.892	.378
	Inventory to NWC (X2)	-.077	.032	-.358	-2.399	.022
	Solvability (X3)	.049	.022	.352	2.217	.033

Source: SPSS 21

The table above shows that a partially Current Ratio has a non-significant positive effect on ROA seen from the value of t table> t arithmetic (2.02809> 0.892) with a significant value of 0.378> 0.05. Inventory to networking capital has t table <t count (2.02809 <2.399) and significant value of 0.022 <0.05 indicates that there is a negative and significant effect on profitability. Solvability has t-table < t-count (2.02809 < 2.217) and significant value of 0.033 <0.05 indicates there is a negative and significant effect on profitability.

In this section, the results of the study will be discussed based on the hypotheses that have been made in this study.

4.1 Hypothesis 1

In the first hypothesis states that there is no significant effect between the current ratio and profitability with the results of the study seen from the t-count value of 0.892 and sig value of 0.378 above the standard 5% or 0.05. This means H1 was rejected. This is supported by research conducted by Raymond (2017) which argues there is no significant effect between liquidity and profitability. On the other hand, it was found according to Putrawan and Sinarwati who said that there was a significant influence between liquidity and profitability partially Putrawan (2015).

4.2 Hypothesis 2

In the second hypothesis it is stated that there is an influence between inventory to net working capital and profitability with the research results seen from the t-value of 2.399 and the value of sig. 0.022 below the 5% standard or 0.05. This means that H2 is accepted. This result is supported by Sutoro, Suryani, Adriani (2014) that stated that there is a significant correlation between inventory to net working capital and profitability.

4.3 Hypothesis 3

The third hypothesis states that there is a significant effect between debt to equity ratio and profitability with the results of the study seen from the t-value of 2.217 and sig value of 0.033 below the standard of 5% or 0.05. This means that H3 is accepted. This is supported by previous research by Putrawan (2015) which says that there is a significant effect between solvency and partial profitability. On the other hand, there are studies by Noor (2012) argue that there is no significant effect between liquidity and profitability.

5. Conclusions

Current Ratio partially has a significant negative effect on the profitability (ROA) of Cosmetics and Cigarette Companies listed on the Indonesia Stock Exchange (BEI) for the 2015-2018 period. Inventory to Net Working Capital has a significant effect on the profitability (ROA) of Cosmetics and Cigarette Companies listed on the Indonesia Stock Exchange. Debt to Equity ratio partially has a negative and significant effect on profitability (ROA) of Cosmetics and Cigarette Companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2018 period. Current Ratio, Inventory to Net Working Capital simultaneously has a negative and significant effect on the profitability (ROA) of Cosmetics and Cigarette Companies listed on the Indonesia Stock Exchange (BEI) for the 2015-2018 period.

6. Suggestions

For management, to obtain maximum profitability, the management needs to pay attention to the composition of the current ratio, Inventory to net working capital ratio, and Debt to Equity ratio in the company. If the proportion of these ratios is optimal, the opportunity for the company to get profits is greater. This can also attract the attention of investors to invest.

For investors, it should pay attention to companies that have good profitability. Investors must consider the value of the current ratio, inventory to net working capital and debt to equity ratio before investing in the company.

The next researchers are expected to use other companies as research samples. The next researcher is expected to expand the research sample and add other variables that can affect profitability such as stock value and capital structure.

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