

Working Capital and Debt Policy on Profitability of The Companies

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ABSTRACT

Profitability is a measure of a company's success in making a profit. The objectives of this study are: (1) to test and analyze whether profitability is affected by working capital, and (2) to test and analyze whether profitability is affected by debt policy. This research uses quantitative research methods, using a sample of 12 automotive and components companies listed on the Indonesia Stock Exchange in 2012 to 2017 with a purposive sampling technique. The analysis technique in this study uses panel data with multiple regression. The results obtained indicate that working capital has a negative and not significant effect on profitability, as well as debt policy variables have a negative but not significant effect on profitability

Keywords: Automotive, Components companies, Debt Policy, Profitability, Working Capital

INTRODUCTION

In general, every company conducts production processes in order to produce a finished product which is then sold to consumers so that from the sale of goods it is expected that the company can make a profit (Harahap, 2014). The higher the profit gained by the company, the greater the prosperity the company owner will receive. The ability of the company to generate profits will be able to attract investors to invest their funds that are useful for expanding their business, otherwise low profitability will cause investors to withdraw funds. For the company itself, profitability can be used as an evaluation of the effectiveness of the management of the business entity.

One way to measure the profitability of a company is through analysis of Return on Investment (ROI) which is a return on the results of the assets invested. Return on Investment (ROI) can be calculated by comparing the profit earned after tax to total assets. According to Fahmi (2012), Return on Investment (ROI) is a ratio that sees the extent to which investments that have been invested are able to provide a return on profits as expected. Return on Investment (ROI) in a company is theoretically influenced by many factors such as company policy, company conditions, market or consumer conditions, and economic conditions. Companies with sufficient working capital make it possible to operate economically and will not experience financial difficulties.

The effectiveness of the use of working capital can be measured by working capital turnover. According to Munawir (2004), this shows the number of times funds embedded in revolving working capital in one period, or the amount of sales that can be achieved by every rupiah of working capital, and the amount of sales automatically

influences profitability. The faster working capital turnover shows the effective use of working capital which has an impact on increasing company profits.

Research on working capital on profitability has been conducted by Tumiwa and Mamuaya (2019), Nurlaely (2010), Yulianti (2013) and Ulfah (2017) with test results showing that working capital (WCT) has a positive effect on profitability (ROI), while research conducted by Susilawati (2011), Supriadi and Puspitasari (2012), Sufiana and Purnawati (2013), Deni (2014) show different results, namely working capital (WCT) has a negative effect on profitability (ROI). Another variable that influences the level of company income is the debt ratio. This ratio shows the percentage of funds provided by shareholders to the guarantor. The higher the debt ratio, the lower the company's funding provided by shareholders. According to Brigham and Houston (2006), managers have personal goals that compete with the aim of maximizing shareholder welfare.

Profitability obtained by the company can be the funds available to make investments or shared to shareholders. Based on agency theory, companies that have high profitability utilize debt to reduce the misuse of the use of funds by managers who do not pay attention to the interests of shareholders. Debt policies are used to create desired company value. Where investors invest shares in companies to get returns. This condition causes the management to work harder to increase profits so that they can meet the obligations of the use of debt. Because the management must account for all work to shareholders. Debt policy research results on profitability carried out by Margareta and Ramadhan (2009), Metha (2012), Wiranata and Nugrahanti (2013) that debt ratio has a positive effect on profitability (ROI), while research by Waryati (2010), Yanzari (2016), and Najjar (2012) shows that debt (DR) has a negative effect on profitability (ROI).

Researchers are motivated to conduct research on working capital and debt policies affecting profitability due to research phenomena that show inconsistent results. Therefore, the researcher wants to test it by doing it on automotive companies and components listed on the Indonesia Stock Exchange.

The objectives of this study are: (1) to test and analyze whether profitability is affected by working capital, and (2) to test and analyze whether profitability is affected by debt policy

Effect of working capital on profitability

A company that has a high level of profitability means that the company also has a high level of efficiency in the use of working capital. Good management of working capital management can be seen from the efficiency of working capital. If the working capital turnover is higher, the faster the funds or cash invested in working capital return to cash, it means the company's profits can be more accepted.

Working capital turnover that occurs during a certain period can be used as a reference for investors in adding investment for companies in operational funding in the future. So, it can be said that the higher the capital turnover, the better the profitability. If the company is able to manage its cash well, the profitability that can be obtained by the company will increase. Nurlaely (2010), Yulianti (2013) and Ulfah (2017) who find working capital has a positive effect on profitability.

Hypothesis 1: Working capital has a positive effect on profitability

Effect of debt policy on profitability

From the overall capital obtained by the company, both its own capital and outside capital generated from debt, all of it is used to fulfill daily operational needs, such as buying raw materials, paying labor costs and so on. Besides being able to help companies to increase operational activities and production with a capital structure that is measured using Debt Ratio has a direction in the direction of profitability, where if the value of debt is low it will reduce the value of profitability, but if the value of debt is high then it will increase profitability. Capital structure that can improve company profitability shows that the company's financial performance is good. This can provide benefits for the company because it can attract and increase the confidence of investors to continue to invest their capital in the company. Margaretha and Ramadhan (2009), Metha (2012), Wiranata and Nugrahanti (2013) found that debt policy has a positive effect on profitability.

Hypothesis 2: Debt policy has a positive effect on profitability.

RESEARCH METHOD

This research is a type of quantitative research with an associative method that aims to determine the effect or relationship between two or more variables.

Population and Sample

The population of this research is 13 automotive companies and components listed on the Indonesia Stock Exchange. The sampling technique uses purposive sampling method. The criteria used in this study are: (1) Automotive companies and components listed on the Indonesia Stock Exchange in 2012-2017, (2) Companies that are consistently listed on the Indonesia Stock Exchange in 2012- 2017, (3) Publish completely and consistently the annual financial statements from 2012 to 2017 according to the variables used in the study. Based on these criteria, 12 companies were obtained that met the criteria.

Definition of Variable Operations

Profitability, the dependent variable which is proxied by Return on Investment is the ratio or ratio between profit after tax and total assets. The formula for calculating this ratio is:

$$ROI = \frac{\textit{Profit After Tax}}{\textit{Total Assets}} \times 100\%$$

Working Capital, this variable uses Working Capital Turnover as an independent variable, which means how much the company's working capital revolves around a certain period or in a period. This ratio is measured by comparing sales with average working capital.

The working capital turnover formula is:

$$\text{Working Capital Turnover} = \frac{\text{Net sales}}{\text{Working capital}}$$

Debt Policy, is an independent variable where the ratio between total debt to total assets. The formula for calculating the debt ratio is:

$$\text{Debt Ratio} = \frac{\text{Total debt}}{\text{Total Assets}}$$

Analysis Method

Panel data regression analysis

Panel data analysis which is a combination of cross section (cross section) and time series (time series). Testing using this analysis can not be separated from the two. Panel data analysis examines how the influence between each independent variable on the dependent variable. The research model is as follows:

$$ROI_{it} = \alpha + \beta_1 WCT_{it} + \beta_2 DR_{it} + e$$

Where:

Y = Profitability (ROI)

X1 = Working Capital (WCT)

X2 = Debt Policy (DR)

β_1, β_2 = regression coefficients respectively

i = company

t = time

α = Kostanta

e = error

RESULTS AND DISCUSSION

Descriptive statistics are used to provide an overview of the minimum mean and standard deviation of the variables studied. Based on the results of the descriptive analysis in the following table 1 the sample images will be displayed that are used in this study.

Table 1: Table 1. Descriptive statistics

	ROI?	WCT?	DR?
Mean	1.556111	3.804583	0.458889
Maximum	5.490000	19.82000	0.890000
Minimum	0.110000	0.210000	0.060000
Std. Dev.	1.223134	2.997488	0.175824

Note. ROI = Return on Investment, WTC = Working Capital Turnover, DR = Debt Ratio

From table 1 above, it can be seen that the study used 12 companies with 72 observations. Based on the data that has been processed, the companies that became the research sample have an average value for ROI of 1.5566111%. the minimum ROI value is 0.110000 and the maximum value is 5.490000%. the greater or better ROI identifies that management is more efficient in managing the company's finances in its operations in generating profits. Conversely, if a small ROI identifies that the company is getting less profit. It can be said that in practice the company cannot reach the target. In other words, the company suffers losses. The lowest value of ROI was owned by the INDS company (Indospring Tbk) in 2015 and the highest value was owned by the SMSM company (Selamat Sempurna Tbk) in 2012.

More clearly the amount of ROI for automotive companies and components during 2012-2017 can be seen in the following figure:

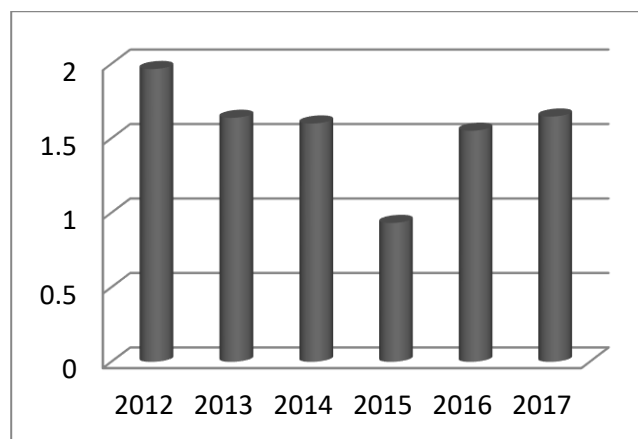


Figure 1: ROI

From Figure 1 it can be seen that the value of ROI in automotive companies and components has decreased from 2012. ROI is the ratio between operating income and operating assets so that ROI shows how much profit is derived from the use of assets. The lowest ROI value during the period is in 2015 which means that in that year the

costs incurred by the company are greater when compared with the revenue obtained or can be said in that year the company suffered losses.

Figure 1 above shows that the ROI of the company is very volatile with a high level of fluctuations so that it can be said the company's ability to generate earnings is less stable. This is because the number of sales each year is not the same. In addition, it can also be seen that during the current period the company did not always get high profits, this can be seen from the lowest ROI value, namely in 2015 of 0.9325.

This ROI becomes a comparison to determine whether a company's ability to generate profits is included in the good or bad category. A company is said to have the ability to generate good profits if the realized ROI is equal to or greater than the targeted ROI of the company. Based on Figure 4.0, it can be seen that the realized ROI in 2013, 2014 and 2015 were 1.64%, 1.6% and 0.93%, respectively. these values are smaller than the ROI targeted by the company except in 2012. So, it can be said that the company's ability to generate profits is not good.

For the working capital variable (WCT), the average research sample company has a value of 3.804583%. While the minimum value is 0.210000% and the maximum is 19.82000. The highest value of WTC or working capital is owned by BRAM company (Indo Korsa Tbk) in 2013 and the lowest in LPIN (Multi Prima Sejahtera Tbk) company in 2016. It can be seen if the higher the working capital turnover, the more effective the use of working capital of the company. On the other hand, the lower the working capital turnover, the more ineffective the use of working capital of the company, causing the company's operational activities to be hampered, which in turn will hamper the company's ability to obtain profits.

More details on the magnitude of WCT in automotive and component companies in 2012-2017 can be seen in the following figure:

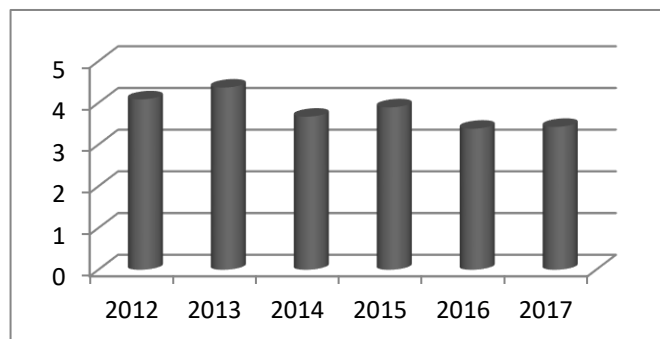


Figure 2: WCT

Figure 2 illustrates this sector experiencing rapid development and using substantial working capital. In 2012 the company experienced a decrease of 4.08%. In 2013 it increased by 4.37% which means the company's profitability increased by 6.91% from the previous year. This means that if the company's working capital rises, the company's profitability will increase and vice versa. Working capital has a low relationship with company profitability. And there are other factors that affect profitability including cash, equity investments and other assets. In 2016 to 2017 the average profitability decreased. But in 2015 increased by 3.89%, the company's profitability

increased by 5.75% from 2014. This means that if the working capital turnover is higher, the faster the funds or cash invested in working capital return to cash, it means the company's profits can be more quickly accepted. Management activities related to the efficiency of working capital turnover are able to produce maximum profit, which will benefit shareholders.

For the debt ratio variable (DR) the average company that is a research sample is 0.458889%. The minimum value of DR is 0.060000% and the maximum value is 0.890000%. The lowest DR is in the company NIPS (Nipress Tbk) in 2017 and the highest is the company LPIN (Multi Prima Sejahtera Tbk) in 2016. Healthy or not a company is seen from how smoothly a company is in fulfilling its obligations in paying its debts at maturity. One of the things that investors see is the liquidity of a company which greatly influences the investment value. More clearly the total debt (DR) of automotive companies and components in 2012-2017 can be seen in the picture below:

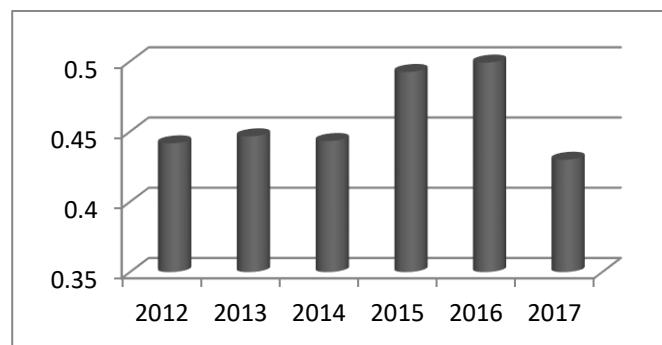


Figure 3: Debt Ratio

Viewed from Figure 3 based on the calculation of the ratio of capital and assets in 2012-2014 decreased because the ratio in 2012 did not reach 100% this means that the greater the amount of loan capital used to finance company assets. Ratio in 2012 decreased by 0.44% in 2013, rose by 0.45% and in 2014 decreased by 0.43%, this shows the ratio is low, this means the lower the collateral and long-term creditors are not guaranteed and the smaller the company's ability to find loans. In 2015 until 2016, it continued to increase by 1.35%. which means that in 2015 to 2016 the company used more funds or working capital from outside (debt). in 2017 it decreased by 0.43%. this shows a decrease in the use of long-term debt, among others, the company calculates the interest offered by creditors is high enough so that the company is unable to meet its obligations and other things can cause a decrease in the use of debt is the debt owned by the company is large enough. If the company adds to the use of debt the company will have difficulty in fulfilling its obligations that are due.

Panel Data Regression Analysis

In this research, the chow test shows that the model used is the fixed effect model. While the Hausman test shows the most appropriate model is the Random Effect model. Then the LM test is needed as the final stage to determine the most appropriate Common Effect or Random Effect model. After conducting the LM test, the most appropriate model used in this study is the Random Effect. Therefore, the right model used in this study is the Random Effect Model (REM).

Hypothesis test

Table 2: Panel data regression test results

Dependent Variable: ROI?				
Method: Pooled EGLS (Cross-section random effects)				
Sample: 2012 2017				
Included observations: 6				
Cross-sections included: 12				
Total pool (balanced) observations: 72				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.920264	0.459264	4.181178	0.0001
WCT?	-0.078665	0.044236	-1.778290	0.0798
DR?	-0.141352	0.680989	-0.207569	0.8362
Random Effects (Cross)				
_BRAM--C	0.400011			
_GDYR--C	-0.550332			
_GJTL--C	0.098712			
_AUTO--C	0.022797			
_SMSM--C	2.498426			
_ASII--C	0.474977			
_IMAS--C	-0.873254			
_INDS--C	0.010745			
_LPIN--C	0.264330			
_MASA--C	-0.972280			
_NIPS--C	-0.469656			
_PRAS--C	-0.904476			
Effects Specification				
			S.D.	Rho
Cross-section random			0.962375	0.6522
Idiosyncratic random			0.702752	0.3478
Weighted Statistics				
R-squared	0.043878	Mean dependent var	0.444564	
Adjusted R-squared	0.016165	S.D. dependent var	0.712155	
S.E. of regression	0.706376	Sum squared resid	34.42874	
F-statistic	1.583275	Durbin-Watson stat	1.649060	
Prob(F-statistic)	0.212669			
Unweighted Statistics				
R-squared	0.075729	Mean dependent var	1.556111	
Sum squared resid	98.17617	Durbin-Watson stat	0.578298	

The panel data regression equation model used in this study is the Random Effect Model.

The results showed that:

- Working Capital (WCT) on Profitability (ROI)

Based on table 2 above, it can be seen the profitability value for the working capital variable (WCT) is 0.0798 where the value is greater than $\alpha = 0.05$ or 5% so that H0 is accepted and H1 is rejected. Thus, working capital does not significantly influence the cost of profitability or in other words working capital is not a significant explanatory variable for profitability.

- Debt Policy (DR) towards Profitability (ROI).

Based on table 2 it can be seen that the value of profitability for debt policy variables is 0.8362 greater than $\alpha = 0.05$ or 5% ($0.8362 > 0.05$) so that H0 is accepted and rejects H1. With these values indicate that debt policy has no significant effect on profitability.

RESULTS AND DISCUSSION

The Effect of Working Capital on Profitability

Working capital is capital that is used for all the daily activities of a company whose cash turnover is expected to return in the short term through the sale of its products. Based on the research results it is known that working capital turnover (WCT) of -1,778 shows a negative direction to the value of ROI. High working capital, the profitability is also high, but the conditions that occur in automotive companies and components studied show an increase in working capital which is inversely proportional to the company's profitability, which has decreased. This is caused because the net profit generated also decreases due to an increase in costs. Although sales tend to increase this happens because of high operational costs and expenses that must be paid such as wages, employee salaries, purchase of raw materials and other costs. This shows that a large working capital does not necessarily produce a large profitability.

This study is in line with research by Tumiwa and Mamuya (2019) that working capital does not significantly influence the profitability or the working capital is not a significant explanatory variable for profitability. This study in line too with research by Susilawati (2011), Supriadi and Puspitasari (2012), Sufiana and Purnawati (2014) and Deni (2014), which states that working capital turnover has a negative effect on profitability. In contrast to the results of research found by Nurlaely (2010) and Wayan (2013) which states that Working Capital Turnover has a positive effect on profitability.

The Effect of Debt Policy on Profitability

Debt ratios are a good test of a company's financial strength. Based on the results of the study note the debt regression coefficient (DR) of -0.207 shows a negative direction to the value of profitability. The trade-off theory explains that the higher the company is funding using the debt, the greater the risk that will be borne by the company. This means that if the company uses more debt than its own capital, this can cause a decrease in profitability because the interest expense that must be paid to creditors also increases. If the company decides to increase the amount of debt, then the company will experience financial difficulties or decline in profits and the company is unable to cover the shortfall then the company will go bankrupt. Debt can hamper the development of a company which in turn can make shareholders think twice about

continuing to invest their capital. Increasing profits is also important because it involves the survival of a company. A company must be in a state of fortune, because without profit it will be difficult for companies to attract capital from outside.

This research is in line with research conducted by Waryati (2010), Yanzari (2016) and Najjar (2012) which states that the debt policy variable (DR) has a negative influence on profitability. But not in line with Margareta and Ramadan (2009), Metha (2012) which states that debt policy has a positive effect on profitability.

CONCLUSIONS

Based on the discussion it can be concluded: (1) Working capital has a negative effect on profitability, if an increase in the level of company working capital turnover will be followed by a decrease in profitability. (2) Debt policies negatively affect profitability. The use of large debt cannot increase company profitability. This is because if the company conducts its operations using large amounts of external funds (debt), it will adversely affect the company's financial condition because it has to pay large obligations. So, the greater the use of debt, the profitability will decrease.

Automotive and component companies are expected to pay attention to their funding or debt. Because debt has a great risk to the development of the company. For further researchers, it is advisable to increase the observation period and expand the object of research in other companies or sectors so that it can produce different research conclusions and can be used as considerations of investors and potential investors in making decisions on companies listed on the IDX.

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