Analysis On The Influence Of Current Ratio, Debt to Equity Ratio and Total Asset Turnover Toward Return On Assets On The Otomotive and Component Company That Has Been Registered In Indonesia Stock Exchange Within 2011-2017

Mimelientesa Irman [1], Astri Ayu Purwati [2], Juliyanti [3]

Abstract:

A good company can be seen from the level of return on assets invested, and it affects the interest of an investor to invest in. But the high or low level of profit can be influenced by the financial performance of one of the financial performance is the Current Ratio, Debt to Equity Ratio, and Total Asset Turnover.

Therefore, a study was conducted to find out whether the Current Ratio, Debt to Equity Ratio, and Total Asset Turnover had an effect on Return On Assets in Automotive and Component companies listed on the Indonesia Stock Exchange for the period 2011-2017. The study population consisted of 12 companies selected by purposive sampling. Financial report data is obtained from the Indonesia Stock Exchange (IDX).

The data analysis technique used is multiple linear regression analysis with SPSS 19.0 and SMART PLS 2019 application tools. The results obtained from this study are the Current Ratio which has a significant effect on Return On Assets, Debt to Equity Ratio has a not significant negative effect on Return On Assets, and Total Asset has a significant positive effect on Return On Assets.

Keywords: *Current Ratio, Debt to Equity Ratio, Total Asset Turnover, Return On Asset*

[1]*School of Business Pelita Indonesia, Dept of Accounting, teshairman@ymail.com*
[2]*School of Business Pelita Indonesia, Dept of Management, astriayu90@gmail.com*
[3]*School of Business Pelita Indonesia, Dept of Management*

1. Introduction

Transportation is one of the important human needs, namely as a tool to facilitate daily activities. The great human need for transportation makes companies aware of producing quality transportation equipped with technology that follows the needs and demands of the community, as well as the development of modern technology. This will automatically increase vehicle production and sales so that it will affect the development of the automotive industry.

Based on data from the ASEAN Automotive Federation it is known that Thailand is the country with the highest number of automotive production in ASEAN, reaching 2,457,057 in 2013, and has continued on the top in the last five years. Meanwhile, Indonesia is ranked second. But the opposite happened in terms of sales, where Indonesia ranked first with the total accumulation of automotive sales during the last 5 years reaching 1,079,534 units, with Thailand in the second position.

The large automotive sales and production value in Indonesia will certainly directly affect the financial performance of automotive companies in Indonesia, especially in terms of profitability. One of the rate of profit can be assessed by looking at the value of Return On Assets (ROA). The higher the value of ROA indicate the higher profits obtained. High or low ROA is influenced by how much assets are used to be invested, where the amount of the company's total assets can be caused by several factors and one of them is the use of assets in paying or paying off corporate obligations. The company's ability to pay its current liabilities using current assets can be measured by the Current Ratio.

Current Ratio is a ratio to measure the company's ability to pay short-term obligations or debt that will soon be due when it is collected as a whole (Kasmir, 2015). The higher the current ratio the better for the company because it shows that the company is able to pay its current debt using current assets that are not so large in number. Several studies have been conducted to analyze the effect of Current Ratio on Return On Assets whose research results are in line or contradictory, among others, according to research by Mahardika and Marbun (2016), Khidmat (2014), Rahmah, et al (2016) and Jumhana (2017)) which states that the current ratio (CR) has a significant positive effect on return on assets (ROA). But this statement contradicts the statement of Dewi, et al (2015) and Erawati (2013) proving that the current ratio (CR) does not have a significant negative effect on return on assets (ROA).

Debt to Equity Ratio is a ratio that illustrates the ratio of debt and equity in corporate funding and shows the ability of the company's own model to meet all its obligations (Sawir, 2009). research by Dewi, et al (2015), Mahardika and Marbun (2016), Khidmat (2014), and Rahmah, et al (2016) prove that debt to equity ratio (DER) has a significant negative effect on return on assets (ROA). It needs to be investigated more deeply to find out whether DER influences or not on return on assets (ROA).

Analysis On The Influence Of Current Ratio, Debt to Equity Ratio and Total Asset Turnover Toward Return On Assets On The Otomotive and Component Company That Has Been Registered In Indonesia Stock Exchange Within 2011-2017

38

One of the activity ratios used in measuring the efficient use of all company assets is to use Total Asset Turnover. According to Kasmir (2015: 185), Total Assets Turnover is a ratio used to measure the turnover of all assets owned by a company and measure how many sales are obtained from each asset rupiah. Based on the statement of the research According to Rahmah, et al (2016), and Jumah (2017) stated that Total Assets Turnover (TATO) has a significant negative effect on Return on Assets (ROA). But this statement contradicts Erawati's (2013) statement proving that Total Assets Turnover (TATO) has a significant positive effect on return on assets (ROA).

Considering Indonesia's position is one of the biggest automotive developments in ASEAN and Indonesia controls the market as the country with the highest automotive sales in ASEAN and the second-largest country after Thailand in automotive production. However, the graph of Return On Assets of the automotive sector companies and components is not directly proportional to the magnitude of the influence of the automotive industry on Indonesia.

2. Theoretical Background

2.1 Current Ratio and Return On Assets

Current Ratio (CR) measures the company's ability to pay off its short-term obligations, where it can be seen how far the company's current assets can guarantee its smooth debt. The higher the current ratio, the lower the current assets used to pay off current debts and vice versa. The amount of total assets invested will affect the level of profit to be obtained. Therefore, it proves that Current Ratio influences Return On Assets which is in line with research by Mahardika and Marbun (2016), Khidmat (2014), Rahmah, et al (2016) and Jumhana (2017) which states that the current ratio (CR) significant positive effect on return on assets (ROA). Based on this study, the first hypothesis was obtained as follows:

H1: Current Ratio affects Return On Assets in the Automotive and Component sectors listed on the Indonesia Stock Exchange in the period 2011-2017.

2.2 Debt to Equity Ratio and Return On Assets

Debt to Equity Ratio (DER) is a ratio that is often used by analysts and investors to see how much the company's debt compared to the equity owned by the company or shareholders. If the equity owned by the company is unable to pay off its debt, the company will use the assets to help cover the company's debt. The use of assets to cover debt will affect Return On Assets because the percentage of return obtained should be large, but becomes reduced because the assets invested are not as large as

they should. The theory proves that Debt to Equity Ratio influences Return on Assets which is in line with the research results of Dewi, et al (2015), Mahardika and Marbun (2016), Khidmat (2014), and Rahmah, et al (2016) proving that debt to equity ratio (DER) has a significant negative effect on return on assets (ROA). Therefore, the second hypothesis is obtained as follows:

H2: Debt to Equity Ratio affects Return On Assets in the Automotive and Component sectors listed on the Indonesia Stock Exchange for the period 2011-2017.

2.3 Total Asset Turnover and Return On Assets

Total Asset Turnover, we can assess each sale generated from each rupiah of the asset. The higher the value of Total Asset Turnover means the better the company is managing its assets. If the company's financial performance is good, the company will be able to optimize the use of assets in sales and investment while still obtaining a high Total Turnover Asset and a high Return On Asset. Based on this theory, it can be concluded that Total Assets Turnover affects Return on Assets supported empirically by the results of Erawati's research (2013) proving that Total Assets Turnover (TATO) has a significant positive effect on return on assets (ROA). Based on this, the third hypothesis is as follows:

H3: Total Assets Turnover affects the Return On Assets in the Automotive and Component sectors listed on the Indonesia Stock Exchange in the period 2011-2017.

3. Methodology

3.1 Sample and data

The population used in this study is the manufacturing companies Automotive and Components, which were listed on the Indonesia Stock Exchange in the period 2011-2017, amounting to 13 companies. The sample used in this study is the automotive sector and components listed on the Indonesia Stock Exchange (IDX) for the 2011-2017 period, amounting to 12 companies.

The type of data used in the study is secondary data, which is in the form of an annual financial statement of the company that became the sample of this study in 2010-2017.

3.2 Operational Variables

Return On Asset (ROA)

Calculation of Return On Assets uses the following formula:

Analysis On The Influence Of Current Ratio, Debt to Equity Ratio and Total Asset Turnover Toward Return On Assets On The Otomotive and Component Company That Has Been Registered In Indonesia Stock Exchange Within 2011-2017

40

$$ROA = \frac{Laba\ Bersih}{Total\ Aset} \tag{1}$$

Current Ratio (CR)

Calculation of Current Ratio uses the following formula:

$$CR = \frac{Aktiva\ Lancar}{Utang\ Lancar} \tag{2}$$

Debt to Equity Ratio (DER)

Calculation of Debt to Equity Ratio uses the following formula:

$$DER = \frac{Total\ Utang}{Ekuitas} \tag{3}$$

Total Asset Turnover Ratio (TATO)

Calculation of Total Asset Turnover Ratio uses the following formula:

$$TATO = \frac{Penjualan}{Total\ Aset} \tag{4}$$

3.2 Technique of Data Analysis

The independent variables are the current ratio, debt to equity ratio and total assets turnover ratio. The dependent variable is return on asset ratio as it was calculated previously. Therefore, the regression equation that arises has the next form:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \varepsilon \tag{5}$$

Y = the values of the dependent variable (return on asset ratio)
X_1, X_2, X_3 = the values of the independent variables (current ratio, debt to equity ratio and total assets turnover ratio)
b_0 = constant
b_1, b_2, b_3 = coefficients
ε = the error term

The next step is to run a series of regression with the Partial Least Square (PLS) method, which is based on variance created to overcome the problems caused by Covariance-based SEM.

4. Empirical Findings

4.1 R Square and Collinearity Statistics

R Square value is used to measure the overall effect of the research model. In other words, R Square is used to see how much the causal factors contained in this study (CR, DER, and TATO) can influence the effect variables (ROA). R2 values of 0.75, 0.5 and 0.25 for endogenous variables in the structural model indicate that the model is good, moderate and weak (Hair et al., 2010). Based on the results of the model test above shows that the R2 value of 0.208, which means the effect of the independent variable on the dependent variable is only 20.8%. It can be stated that the research model is weak.

Table 1. R Square & VIF Values

No	Variabel	R^2	VIF
1	CR		1,013
2	DER	0.208	1,021
3	TATO		1,034

Source: Processed Data (2019)

Meanwhile, the VIF value cutoff is must be lower than 5 (Garson, 2016). Based on table 1, it is known that none one of the colinearity statistics (VIF) values bigger than 5 (VIF>5). This indicates that the variables used in this study are free from multicollinearity problems.

4.2 Hypothesis Test Result

The following is a summary of the results of hypothesis testing:

Table 2. Summary Hypotheses Testing

No	Hyp.	Path	Coeff.	T Statistics	P Values	Decision
1	H1	CR -> ROA	0,312	2,702	0,007	Supported
2	H2	DER -> ROA	-0,05	0,576	0,565	Not Supported
3	H3	TATO -> ROA	0,358	3,416	0,001	Supported

Source: Processed Data (2019)

Debt To Equity Ratio has a negative effect on Return On Assets, which means that the higher the Debt To Equity Ratio, the lower the Return On Assets and vice versa. Debt to Equity Ratio is a comparison between debts and equity in corporate funding and shows the ability of capital, the company to fulfill all its obligations. If the equity used can cover all debts owed by the company, then the company does not need to use the assets owned to cover these debts, where the use of company assets

Analysis On The Influence Of Current Ratio, Debt to Equity Ratio and Total Asset Turnover Toward Return On Assets On The Otomotive and Component Company That Has Been Registered In Indonesia Stock Exchange Within 2011-2017

42

can affect the level of profit to be obtained. In addition to the use of assets in covering debts, the effectiveness of the use of assets in the company's operations also needs to be considered. To find out how effectively a company uses its resources in the form of assets, it can be measured using an activity ratio. The research results of Dewi, et al (2015), Mahardika and Marbun (2016), Khidmat (2014), and Rahmah, et al (2016) prove that the debt to equity ratio (DER) has a significant negative effect on return on assets (ROA).

While total Asset Turnover has a significant positive effect on Return On Assets, which means that the higher the Total Asset Turnover, the higher Return On Assets and vice versa. Total Assets Turnover measures the effective use of all assets in generating sales, the greater this ratio means the more effective management of all assets owned by the company. The better the Total Asset Turnover will reflect the better Return On Assets caused by high sales generated will affect the high profits to be obtained. Erawati (2013) research results prove that Total Assets Turnover (TATO) has a significant positive effect on return on assets (ROA). But the statement is contrary to the statement According to Rahmah, et al (2016), and Jumah (2017) states that Total Assets Turnover (TATO) has a significant negative effect on Return on Assets (ROA).

Likewise with the Current Ratio which also has a positive effect on Return On Assets. This indicates that with increasing current ratio, the return on assets will also increase, and vice versa. High Current Ratio indicates that the company is more liquid because of its ability to pay off current debts well. If the company is able to manage its finances well in covering current liabilities using current assets, asset management in generating profits will also be good so that the resulting profits will be high. Research by Mahardika and Marbun (2016), Khidmat (2014), Rahmah, et al (2016) and Jumhana (2017) states that the current ratio (CR) has a significant positive effect on return on assets (ROA). But this statement contradicts the statement of Dewi, et al (2015), Erawati (2013) proving that the current ratio (CR) does not have a significant negative effect on return on assets (ROA).

5. Conclusions

This study examines the impact of several financial ratios on the profitability of automotive companies listed on the Indonesia Stock Exchange during the 2011-2017 period. The profitability of these companies is represented by Return on Assets (ROA) which are also the dependent variable in this study. While the independent variables consist of the Current Ratio, Debt to Equity Ratio and Total Asset Turnover ratio.

The results showed that the Current Ratio and Total Asset Turnover ratio had a positive and significant effect on Return on Assets (ROA). Whereas Debt to Equity

Ratio has a negative influence on ROA, although it is not statistically significant. This has implications for automotive companies in Indonesia, if you want to increase Return On Assets, the company must improve asset management in generating profits and controlling liabilities so that they can be fulfilled by using small amounts of assets. Circular assets owned must also be maintained so that the utilization of company resources is more effective.

One more thing that is noted in this study is the weak research model to be a predictor of ROA value. It is therefore recommended for further researchers who wish to examine the same field to be able to find and use better research models.

References:

Agnes, S. (2009). Analisis Kinerja Keuangan dan Perencanaan Keuangan Perusahaan . Jakarta: PT. Gramedia Pustaka Utama .

Dewi, Wayan, & Kirya (2015). Pengaruh LDR, LAR, DER, dan CR Terhadap ROA. E-Jornal Bisma Universitas Pendidikan Ganesha Jurusan Manajemen, Volume 3.

Erawati, Nur Anita Chandra Putry Teguh. (2013). Pengaruh Current Ratio, Total Assets Turnover, dan Net Profit Margin, Terhadap Return On Assets . Jurnal Akuntansi, Vol 1, No. 2, 22-34.

Garson, G. David. 2016. Partial Least Squares (PLS-SEM): 2016 Edition. Statistical Associates Publishing, Asheboro.

Ghozali , I. (2009). Aplikasi Analisis Multivariate dengan Program SPSS . Semarang : Badan Penerbitan UNDIP.

Ghozalli, I., & Hengky Latan. (2015). Partial Least Squares Konsep Teknik dan Apilikasi Menggunakan Program SMARTPLS 3.0. Undip.

Hair, Joseph F. JR, Rolph E Anderson, Ronald L. Tatham, & William C. Black. 2010. Multivariate Data Analysis. Seventh edit. Prentice Hall Internatiional, inc.

Harahap, S. (2015). Teori Akuntansi - Ed. Revisi - Cet.14 . Jakarta: Rajawali Pers.

Jumahana, R. (2017). Pengaruh Rasio Likuiditas dan Rasio Aktivitas Terhadap Profitabilitas Pada Koperasi Karyawan PT. Surya Toto Indonesia. Jurnal Sekuritas, Vol.1, No. 2, Hal 54-73.

Kasmir. (2015). Analisis Laporan Keuangan . Jakarta : Rajawali Pers.

Khidmat, Waqas Bin (2014). Impact of Liquidity & Solvency on Profitability Chemical Sector of Pakistan. EMI, Vol 6, Issue 3, Pages 3-13.

Mahardhika & Marbun. (2016). Pengaruh Current Ratio dan Debt to Equity Ratio Terhadap Retrun On Assets . Widyakala, Volume 3, 23-28.

Rahmah, Cipta, & Yudiaatmaja. (2016). Pengaruh Likuiditas, Sovabilitas, dan Aktivitas Terhadap Profitabilitas pada Perusahaan Otomotif yang terdaftar di Bursa Efek Indonesia Periode 2012-2014. E-Jornal Bisma Universitas Pendidikan Ganesha Jurusan Manajemen, Volume 4.

Scott, W. (2012). Financial Accounting Theory Sixth Edition Toronto. Ontario: Pearson Canada Inc.

Subagyo, P. (2003). Statistik-Deskriptif. Yogyakarta: BP FE UGM.

Subramanyam, & Jhon J. Willd. (2010). Analisis Laporan Keuangan . Jakarta: Selemba Empat.

Sujarweni , V. W. (2016). Kupas Tuntas Penelitian Akuntansi dengan SPSS. Yogyakarta: Baru Press Yogyakarta.

Analysis On The Influence Of Current Ratio, Debt to Equity Ratio and Total Asset Turnover Toward Return On Assets On The Otomotive and Component Company That Has Been Registered In Indonesia Stock Exchange Within 2011-2017

44

Sujarweni , V. W. (2017). Analisis Laporan Keuangan . Yogyakarta: Batu Press.

www.finance.yahoo.com (diakses pada tanggal 9 febuary 2019)

www.idx.co.id (diakses pada bulan agustus 2017)