

# The Effect of Return On Assets, Current Ratio, Debt To Equity Ratio on Income Growth in Automotive Companies Registered in Indonesia Stock Exchange

Euodia Stefani Handiyanti

Department of Management, Faculty of Economics and Business, Narotama University, Surabaya, Indonesia

## Abstract

This study aims to examine and prove the effect of return on assets, current ratio, debt to equity ratio partially or simultaneously on profit growth in automotive companies listed on the Indonesia Stock Exchange. The data source used in this study is secondary data, which takes and quotes from financial reports obtained on the official website of the Indonesia Stock Exchange and financial reports on the official websites of each company. The sample selection used *purposive sampling method* and obtained a number of 45 automotive companies. The analysis technique used in this research is the classical assumption test and multiple regression analysis. The data in this study were processed using the SPSS version 25 program. The partial test results (t test) show that the Return on Assets and Debt to Equity Ratio have a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange for the period 2014-2018. Meanwhile, the Current Ratio has no significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange for the 2014-2018 period. Simultaneous test results (Test F) show that the variables return on assets, current ratio, debt to equity ratio together have a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange for the period 2014-2018.

*Keywords:* Return on Assets, Current Ratio, Debt To Equity Ratio, Profit Growth.

## 1. Introduction

In general, company performance can be judged by the company's success in generating high profits. Every company wants to increase profits from year to year. Companies that perform well are sure to generate positive profits every year. The following shows the profit growth data of 4 automotive sub-sector manufacturing companies for the period 2014-2018 is presented in table 1.

Table 1. Profit growth of 5 automotive sub-sector manufacturing companies

Company name	2014	2015	2016	2017	2018
PT. Indospring Tbk	-13%	-98%	2463%	129%	-3%
PT. Multistrada Arah Sarana Tbk	-84%	-5514%	-76%	22%	136%
PT. Prima Alloy Steel Universal Tbk	-14%	-43%	-142%	20%	-353%
PT. Selamat Sempurna Tbk	25%	10%	9%	11%	14%
Average	-22%	-1412%	563%	45%	-51%

Source: Data processed by the author (2020)

Table 1 shows that the profit growth of 4 automotive sub-sector manufacturing companies from 2014 to 2018 varies

\* Corresponding author.

E-mail address: euodiasfefanih@gmail.com (Euodia Stefani Handiyanti)



widely and has increased and decreased from year to year. the mean average profit growth in 2014 decreased by -22% and in 2015 has decreased drastically by -1412%, in 2016 increased by 563% and decreased in 2017 amounted to 45% and a decline in returns of -51 % in 2018. The highest profit growth occurred in the INDS company (Indospring Tbk) in 2016, amounting to 2463% and the lowest profit growth occurred in the MASA company (PT. Multistrada Arah Sarana Tbk) in 2015 amounting to -5514%

Good profit growth means that the company has a good financial condition which will ultimately increase company value. Profit growth is a ratio that shows the ability of a company to increase net income compared to the previous year. The financial ratios that are often used to assess the financial performance of a company are the solvency ratio, profitability ratio, and liquidity ratio (Panjaitan, 2018) .

Profitability ratio is a ratio that shows the overall efficiency and performance of the company, this ratio aims to determine the company's ability to generate profits during a certain period and also provides an overview of the level of effectiveness in carrying out its operational activities. The liquidity ratio is the company's ability to pay off obligations that must be paid using its current assets. In general, there are several types of liquidity ratios, namely: Current Ratio, Quick Ratio, and Cash Ratio. Companies that are able to pay their debts, the company's performance is good. The leverage ratio (solvency) shows the company's ability to fulfill all its financial obligations if the company is currently liquidated. Thus, solvency means the ability of a company to pay its debts, both long and short term (Widyatuti, 2017) .

The following are some of the results of research conducted by previous researchers. According to research Panjaitan (2018) states that Return on Assets (ROA) has a significant positive effect on profit growth. It is inversely proportional to the research results of Safitri & Mukaram (2018) which argue that Return on Assets has a negative and significant effect on earnings growth.

According to research by Tiyas et al., (2018), the current ratio has a positive and significant effect on profit growth. Meanwhile, the research results of Olfiani & Handayani (2019) show that the current ratio has no significant effect on profit growth.

According to Widiyanti (2019) states that the debt to equity ratio has a negative and insignificant effect on profit growth, this is inversely proportional to the results of Panjaitan (2018) which states that debt to equity ratio has a positive and significant effect on profit growth.

## **2. Literature Review**

### *2.1. Definition of Return On Asset (ROA)*

Return On Assets (ROA) is a ratio used to measure the company's ability to generate net profit after tax in terms of assets. This ratio shows how much rupiah is obtained from the net profit for every rupiah invested by shareholders (company owners) (Widiyanti, 2019).

### *2.2. Definition of Current Ratio (CR)*

Current Ratio (current ratio) is a ratio to measure the company's ability to pay short-term obligations or current debts that are due immediately when they are collected as a whole. Current Ratio can provide information about the margin of safety against the possible decline in the value of current assets and losses arising from unforeseen events that result in cash disbursements or cessation of the flow of funds into the company (Panjaitan, 2018) .

### *2.3. Definition of Debt To Equity Ratio (DER)*

DER is a ratio that compares total debt to equity. This ratio measures the percentage of funds provided by creditors. Total debt includes current liabilities and long-term liabilities. DER reflects a company's ability to pay or fulfill its obligations with its own capital. DER shows the relationship between the amount of loans provided by company owners (Nainggolan, 2018).

#### 2.4. Definition Of Profit Growth

The definition of profit adopted by the current accounting structure is accounting profit, which is the difference between income and cost measurements. The size and size of profit as a measure of increase in assets is highly dependent on the accuracy of measuring income and costs (Djannah, 2017).

#### 2.5. The Effect of Return on Assets on Profit Growth

According to Panjaitan (2018), Return on Asset is a ratio that shows the return on the total assets used in the company and is a measure of the effectiveness of management in managing its investment. The greater the Return on Assets of a company, the greater the level of profit achieved by the company and the better the company's position in terms of asset use. According to research by Safitri & Mukaram (2018), it is argued that Return on Assets has a significant effect on profit growth. This is inversely proportional to the results of research by Ardini (2018) showing that Return On Assets has no effect on profit growth.

#### 2.6. The Effect of Current Ratio on Profit Growth

The definition of current ratio according to Kasmir (2014) states that the current ratio is a ratio to measure the company's ability to pay short-term obligations or debt that is due immediately when collected as a whole. In other words, how many current assets are available to cover short-term liabilities that are due soon. The current ratio can also be said as a form of measuring the level of safety (margin of safety) of a company. According to research by Olfiani & Handayani (2019), the current ratio has a positive and significant effect on profit growth. This is inversely proportional to the results of research by Puspasari et al., (2017) showing that the current ratio has no significant effect on profit growth.

#### 2.7. The Effect of Debt To Equity Ratio on Profit Growth

According to Nainggolan (2018), debt to equity ratio is a ratio that compares total debt to equity. This ratio measures the percentage of funds provided by creditors. Total debt includes current liabilities and long-term liabilities. Debt to equity ratio reflects the company's ability to pay or fulfill its obligations with its own capital. Debt to equity ratio shows the relationship between the loan amount given by the owner of the company. According to Widiyanti (2019) states that the debt to equity ratio has a negative and insignificant effect on profit growth, this is inversely proportional to the results of Panjaitan (2018) research which states that debt to equity ratio has a positive and significant effect on profit growth.

#### 2.8. Hypothesis

Based on the theoretical basis and framework of thinking above, the researchers formulated several research hypotheses as follows:

- H1 : Return on assets has a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange.
- H2 : Current Ratio has a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange.
- H3 : Debt To Equity Ratio has a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange.
- H4 : Return on Asset, Current Ratio, Debt To Equity Ratio simultaneously has a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange.

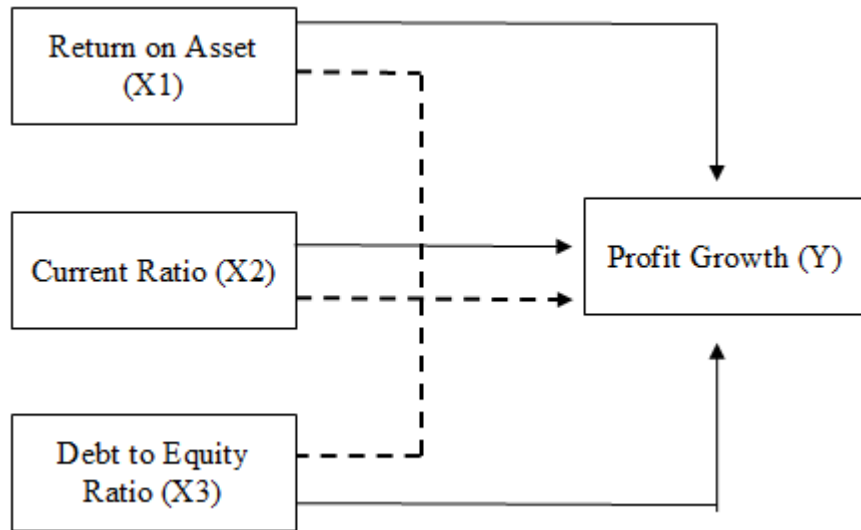


Fig. 1 Conceptual Framework

### 3. Methods

The research approach used in this research is to use an associative approach. Associative method is a method that intends to test the effect of independent variables on the dependent variable. The object of research is something that becomes the reason for conducting research, the object of research is the goal to find answers and solutions to problems that occur. The research object in this study is the Financial Statements of Automotive Companies listed on the Indonesia Stock Exchange.

The population in this study are automotive companies listed on the Indonesia Stock Exchange 2014-2018 . Sugiyono (2018: 131) states that the sample is part of the number and characteristics of the population. The method used in selecting the research sample is purposive sampling method, namely the method of collecting samples based on certain considerations and criteria.

The type of data collected in this research is quantitative data. Quantitative data is a type of data that can be measured or calculated directly in the form of automotive company financial statements (balance sheet and income statement). The data source for this research is secondary data, which takes and quotes from financial reports published in 2014-2018 on the official website of the Indonesia Stock Exchange and financial reports on the official websites of each automotive company.

The method of data collection carried out by researchers is using the documentation method based on financial reports. By paying attention to documents related to research, namely the ratio of return on assets, current ratio, debt to equity ratio and profit growth obtained from the official website of the Indonesia Stock Exchange and the official website of each automotive company for the period 2014 to 2018.

## 4. Result and Discussions

### 4.1. Classical Assumption Test

#### 4.1.1. Normality Test

Table 1 Normality Test Results 2 One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		45
Normal Parameters <sup>a,b</sup>	Mean	0.0000000
	Std. Deviation	0.82814651
Most Extreme Differences	Absolute	0.111
	Positive	0.111
	Negative	-0.065
Statistical Test		0.111
Asymp. Sig. (2-tailed)		0.200 <sup>c,d</sup>

Source: SPSS data processing (2020)

Based on the results of the second normality test in table 1 shows that the Asymp. Sig. (2-tailed) of 0.200 indicates a significant value greater than 0.05 and in accordance with the basis for the decision making used, this indicates that the data is normally distributed, so that this study has fulfilled the assumption of normality.

#### 4.1.2. Multicollinearity Test

Table 2 Multicollinearity Test Results

		Coefficients <sup>a</sup>	
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	ROA	0.813	1.230
	CR	0.603	1.658
	DER	0.711	1.406

Source: SPSS data processing (2020)

Based on table 2, the multicollinearity test results show that the tolerance value for the Return On Asset (X1) variable is 0.813 and the VIF value is 1.230. The Current Ratio (X2) variable shows a tolerance value of 0.603 and a VIF value of 1.658 and the Debt To Equity Ratio (X3) variable has a tolerance value of 0.711 and a VIF value of 1.406. This means that the three independent variables in this study meet the basis for decision making, namely having a tolerance value > 0.10 and a VIF value < 10, so it can be concluded that there is no multicollinearity in this regression model.

#### 4.1.3. Heteroscedacity Test

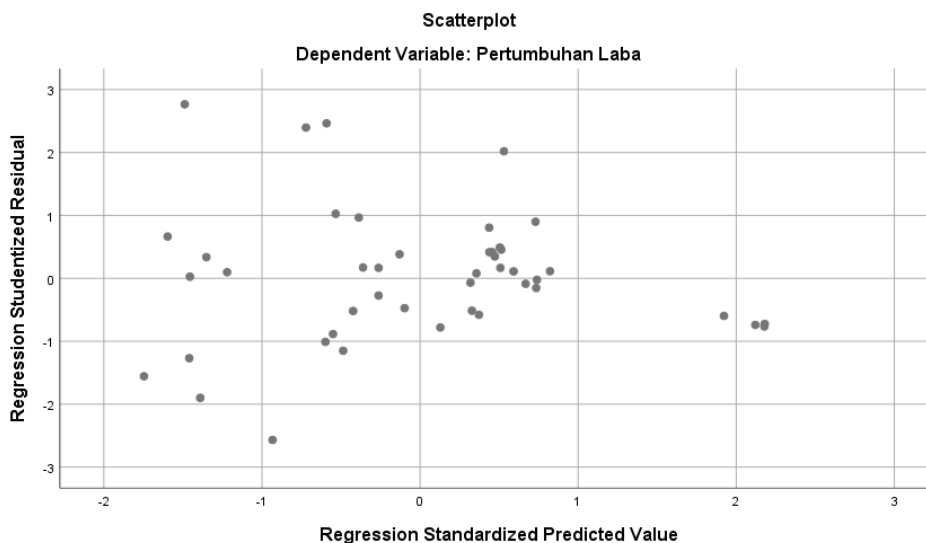


Fig. 2 Heteroscedasticity Test Results

From fig. 2, it can be seen that the dots spread randomly and are scattered both above and below the number 0 on the Y axis and the distribution of the dots does not indicate a certain regular pattern. Therefore, it can be concluded that there is no heteroscedasticity in this regression model.

#### 4.1.4. Autocorrelation Test

Table 3 Autocorrelation Test Results

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.518 <sup>a</sup>	0.268	0.215	0.85791	1.903

Source: SPSS data processing (2020)

Based on the results of the autocorrelation test in table 3 which has been carried out using the SPSS version 25 program, it shows that the Durbin-Watson value is 1.335, whose value is between -2 to 2. So that it can be ascertained that the multiple linear regression model used in this study there was no autocorrelation.

#### 4.2. Multiple Linear Regression Analysis

Based on table 4, a regression equation model can be made as follows:

$$Y = -0,142 + 4,755 X1 - 0,031 X2 - 0,377 X3 + e$$

Based on the results of the multiple linear analysis above, it can be explained as follows:

1. The constant value ( $\alpha$ ) of -0.142 states that if the Return On Assets, Current Ratio, and Debt To Equity Ratio variables are assumed to be zero or constant, then profit growth will decrease by 0.142.
2. The regression coefficient value of Return On Asset (X1) is 4.755, which states that Return On Assets has a direct relationship with profit growth (Y). This shows that for each increase in Return On Assets (X1) by one

percent, then profit growth (Y) will increase by 4.755 with the assumption that other variables are constant (fixed).

3. The regression coefficient value Current Ratio (X2) is -0.031, which states that the Current Ratio has an opposite relationship with profit growth (Y). This shows that for every one percent increase in Current Ratio (X2), profit growth (Y) will decrease by -0.031 assuming that the other variables are constant (fixed).
4. The regression coefficient value of Debt To Equity Ratio (X3) is -0.377, which states that the Debt To Equity Ratio has a relationship that is in the opposite direction to profit growth (Y). This shows that for each increase in Debt To Equity Ratio (X3) by one percent, then profit growth (Y) will decrease by -0.377 assuming that the other variables are constant (fixed).

Table 4 Test Results of Multiple Linear Regression Analysis

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.142	0.381		-0.373	0.711
	ROA	4.755	2.035	0.346	2.337	0.024
	CR	-0.031	0.156	-0.034	-0.200	0.843
	DER	-0.377	0.150	-0.398	-2.516	0.016

Source: SPSS data processing (2020)

#### 4.3. T Test

Based on table 4, it can be explained that the results of the partial test are as follows:

- 1) Effect of return on assets (X1) on profit growth (Y)

Based on table 4.15, it can be seen that the t value is 2.337 with a significance level of 0.024. This shows that the significant value is smaller than 0.05. Thus it can be concluded that Return on Assets has a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange period.

- 2) The effect of the current ratio (X2) on profit growth (Y)

Based on table 4.15, it can be seen that the t value of -0.200 with a significance level of 0.843. This shows that the significant value is greater than 0.05. Thus it can be concluded that the Current Ratio has no significant effect on profit growth.

- 3) Effect of debt to equity ratio (X3) on profit growth (Y)

Based on table 4.15, it can be seen that the t value is -2.516 with a significance level of 0.016. This shows that the significant value is smaller than 0.05. Thus it can be concluded that the Debt To Equity Ratio has a significant effect on profit growth.

#### 4.4. F Test

Based on the results of the F test in table 5, it can be seen that the F-count value is 5.012 with a significance value of 0.005. This shows that the F-count value is greater than the F-table 2.83 and the Sig. value less than 0.05. Thus  $H_0$  is rejected and  $H_a$  accepted. So it can be concluded that the Return On Asset, Current Ratio and Debt To Equity Ratio together have a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange.

Table 5 Simultaneous Test (Test F)

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.068	3	3.689	5.012	0.005 <sup>b</sup>
	Residual	30.176	41	0.736		
	Total	41.244	44			

Source: SPSS data processing (2020)

## 5. Conclusions

Based on the results and discussion of the analysis that has been carried out, the can conclude that:

- 1) Return On Asset, Current Ratio and Debt To Equity Ratio simultaneously have a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange. This is evidenced by the results of the F test which shows the F-count value of 5.012 with a significance value of 0.005. This shows that the F-count value is greater than the F-table 2.83 and the Sig. less than 0.05. Thus H<sub>0</sub> is rejected and H<sub>a</sub> is accepted. It is shown that the fourth hypothesis (H<sub>4</sub>) is “Return on Assets, Current Ratio, Debt To Equity Ratio simultaneously significant effect on profit growth in automotive companies listed in Indonesia Stock Exchange” is proven empirically.
- 2) Return On Asset has a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange for the period 2014-2018. This is evidenced by the results of the t test which shows a significance of 0.024. It is shown that the first hypothesis (H<sub>1</sub>) is “Return on Asset significant effect on profit growth in automotive companies listed in Indonesia Stock Exchange” is proven empirically.
- 3) Current Ratio has no significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange for the period 2014-2018. This is evidenced by the results of the t test which show a significance value of 0.843. It is shown that the second hypothesis (H<sub>2</sub>) that “Current Ratio significant effect on profit growth in automotive companies listed in Indonesia Stock Exchange” not proven empirically.
- 4) Debt To Equity Ratio has a significant effect on profit growth in automotive companies listed on the Indonesia Stock Exchange for the period 2014-2018. It is shown that the third hypothesis (H<sub>3</sub>) that “Debt To Equity Ratio significant effect on profit growth in automotive companies listed in Indonesia Stock Exchange” proven empirically.

## References

- Ardini, L. (2018). Pengaruh Rasio Keuangan Dan Ukuran Perusahaan Terhadap Pertumbuhan Laba Masa Mendatang. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, 7(5).
- Djannah, R. (2017). Pengaruh Kinerja Keuangan Terhadap Pertumbuhan Laba pada Perusahaan Food and Beverages. *Jurnal Ilmu dan Riset Manajemen (JIRM)*, 6(7).
- Nainggolan, M. M. L. (2018). Analisis Pengaruh Rasio Leverage, Rasio Profitabilitas dan Ukuran Perusahaan Terhadap Pertumbuhan Laba pada Perusahaan Manufaktur Sub Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia. Thesis. <http://repositori.usu.ac.id/handle/123456789/6946>
- Olfiani, M., & Handayani, M. (2019). Pengaruh Current Ratio CR), Total Assets Turn Over (TATO) dan Debt To Equity Ratio (DER) Terhadap Pertumbuhan Laba PT Tempo Scan Pasifik, Tnk Periode 2008-2017. *Jurnal Ilmiah Akuntansi dan Manajemen (JIAM)*, 15(2), 56–62.

- Panjaitan, R.J. (2018). The Influence of Current Ratio, Debt To Equity Ratio, Net Profit Margin and Return on Assets on Profit Growth in Consumer Goods Companies Listed on the Indonesia Stock Exchange for the 2013-2016 period. *Journal of Management* , 4 (1), 61–72.
- Puspasari, M. F., Suseno, Y. D., & Sriwidodo, U. (2017). Pengaruh Current Ratio, Debt To Equity Ratio, Total Asset Turnover, Net Profit Margin dan Ukuran Perusahaan Terhadap Pertumbuhan Laba. *Jurnal Manajemen Sumber Daya Manusia*, 11(1), 121-133.
- Safitri, AM, & Mukaram, M. (2018). The Effect of ROA, ROE, and NPM on Profit Growth in the Consumer Goods Industry Companies Listed on the Indonesia Stock Exchange. *Journal of Business and Investment Research* , 4 (1), 25. <https://doi.org/10.35697/jrbi.v4i1.990>
- Sugiyono. (2018). *Quantitative Research Methods (Metode Penelitian Kuantitatif)*. Alfabeta.
- Tiyas, N., Titisari, KH, & Nurlaela, S. (2018). the Influence of Financial Ratios Against Growth of Profits At Manufacturing Companies Listed on the. *International Conference on Technology, Education, and Social Science* , 2 (2017), 517–524.
- Widiyanti, M. (2019). The Influence of Net Profit Margin, Return On Assets and Debt To Equity Ratio on Profit Growth in LQ-45 Companies. *Journal of Accounting and Finance Research* , 7 (3), 545–554. <https://doi.org/10.17509/jrak.v7i3.17826>
- Widyatuti, M. (2017). *Textbook of Critical Analysis Of Financial Statements (Buku Ajar Analisa Kritis Laporan Keuangan)*. Jakarta: Jakad Media Publishing.