

# **The Effect of Total Assets, Earning Management and Debt to Equity Ratio on Return on Investment in Infrastructure, Utility and Transportation Companies Listed in Indonesia Stock Exchange 2012-2015 Period**

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**Keywords** : Total Asset Turnover, Earnings Management, Debt To Equity Ratio, Return On Investment.

**Abstract** : The objective of the study was to examine and analyze the effect of total asset turnover, earnings management and debt to equity ratio on Return on Investment in listed in the Indonesia Stock Exchange Infrastructure, Utility and Transportation Companies in the period of 2012-2015. The research approach used is quantitative analysis. This type of research is quantitative descriptive research. The study population was the Financial Statements of 46 Infrastructure, Utility and Transportation Companies which the Indonesia Stock Exchange in the period of 2012-2015. The sample of this study were 8 Infrastructure, Utility and Transportation Companies. Before the regression model is used to test hypotheses, the model has been previously tested for classical assumptions. Classical assumption tests are carried out include: autocorrelation test, heteroscedasticity test, and multicollinearity test. The test results that become the conclusion of this study stated that total assets turnover was not significantly affect Return on Investment in the Indonesian Stock Exchange in the period of 2012-2015 in Infrastructure, Utility and Transportation Companies. Earnings management had a significant effect on Return on Investment on Infrastructure, Utility and Transportation Company of the Indonesia Stock Exchange in the period of 2012-2015. Debt to equity ratio has no significant effect on the Return on Investment of the Indonesian Stock Exchange in the period of 2012-2015. Total asset turnover, earnings management and debt to equity ratio have a significant and significant impact on the Return on Investment of the Indonesia Stock Exchange in the period of 2012-2015 Infrastructure, Utility and Transportation Companies.

## **1 INTRODUCTION**

The infrastructure and transportation industries play an important role in accelerating the country's economic development. This economic development requires the participation of sectors involved in this industry. Currently the infrastructure industry is the big three industries in stock trading in Indonesia. This industry is supported by five major sector pillars which are classified into the energy sector, the maintenance sector for transportation facilities, the telecommunications sector, the transportation sector and the construction sector. Of the five sectors that support the infrastructure industry, the telecommunications sector plays the most dominant role here.

Good or bad company performance can be seen from the level of net income obtained by the company. If the level of return on investment is high, it shows the company's ability to generate returns from the level of investment it does well. If the company has a low level of return on investment, it indicates that the company's ability to generate returns from the level of investment it does is not good.

Companies that have a fast asset turnover will result in high net income. Asset turnover is defined as the turnover of current assets and fixed assets owned by the company. If a company has a fast asset turnover, it is better than a company that has a slow asset turnover. This asset turnover affects the return on investment.

Financial statements are prepared with the aim of presenting the condition, position and financial performance of a company which will later provide benefits to users in making economic decisions. The information contained in the financial statements is a reference for parties who have interests related to the company. A quality financial report is a financial report that is free from manipulation and is in accordance with the facts that actually happened to the company. However, in fact there are many manipulations related to corporate financial reporting. Management realizes the tendency of investors / shareholders to focus on earnings information without paying attention to the procedures used to produce earnings information, thus encouraging management practices on earnings.

A company that uses debt as an alternative funding can be said as a company that has implemented a Debt to Equity Ratio. Debt to equity ratio is a ratio that is widely used to increase (leveraged) company profitability. In other words, the Debt to Equity Ratio has the financial impact that is good and bad for the company, can cause the company to develop better (bad return on investment) and even result in bankruptcy or bankruptcy conditions. However, Infrastructure, Utility and Transportation Companies in Indonesia still view positively about the potential for investment in Infrastructure, Utility and Transportation Companies.

The description of the background above is the idea that underlies the author to conduct research entitled: "The Effect of Total Asset Turnover, Profit Management and Debt to Equity Ratio on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange 2012- Period. 2015".

## 2 LITERATURE REVIEW

### Total Asset Turnover

According to Kasmir (2011: 185) total asset turnover is a ratio used to measure the turnover of all assets owned by the company and measure how many sales were obtained from each rupiah of assets.

According to Prastowo (2015: 84) the total asset turnover ratio measures the asset activity and the company's ability to generate sales through the use of these assets. This ratio also measures how efficiently these assets have been used to generate income.

$$\text{Asset Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

### Profit management

According to Fahmi (2014: 204) earnings management is an action that regulates earnings according to what is desired by certain parties or especially by company management.

According to Subramanyam and Wild (2014: 131) earnings management can be defined as deliberate management intervention in the process of determining earnings, usually to fulfill personal goals.

According to Rahmawati (2012: 111), earnings management is a manager's choice of accounting policies to achieve several specific goals.

According to Fahmi (2014: 206) in accounting, earnings management is measured using discretionary accruals. Where discretionary accruals are obtained by means of total accruals minus non-discretionary accruals. Total accruals are obtained by means of operating cash flows minus investment cash flows.

$$\text{TAC} = \text{Operating Cash Flow} - \text{Investment Cash Flow}$$

### Debt to Equity Ratio

According to Kasmir and Jakfar (2013: 131) debt to equity ratio is used to determine the ratio between total debt and equity. This ratio is useful for knowing how much the company's assets are financed from debt.

According to Fahmi (2012: 73) the debt to equity ratio defines it as a measure used in analyzing financial statements to show the amount of collateral available to creditors.

According to Athanasius (2012: 63) the formula for the Debt to Equity Ratio:

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

### Return On Investment

According to Kasmir (2014: 201) the return on investment or better known as the Return on Investment (ROI) or return on total assets is a ratio that shows the results (return) on the total assets used in the company. ROI is also a measure of management effectiveness in managing its investment.

According to Sitanggang (2012: 30), ROI is a ratio that measures the company's ability to earn net profit from the amount of funds that the company invests or the company's total assets.

According to Soemohadiwidjojo (2017: 50) this indicator is used to measure the ability of invested capital to generate net profits. ROI is expressed as a percentage (%).

$$\text{Return on Investment} = \frac{\text{EBIT}}{\text{Total Investment}} \times 100$$

The research hypothesis is:

1. Total asset turnover has an effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the Period 2012-2015.
2. Earnings management affects the Return on Investment of Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period.
3. Debt to equity ratio has an effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period.
4. Total asset turnover, earnings management and debt to equity ratio have an effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period.

## 3 METHODOLOGY

Location of research on Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange 2012-2015 Period. Researchers plan research activities in November 2016 - August 2018.

This research approach uses quantitative research. This type of research uses quantitative research methods.

The study population was the financial statements of 46 infrastructure, utility and transportation companies listed on the Indonesia Stock Exchange for the period 2012-2015. The samples of this research were 8 Infrastructure, Utility and Transportation Companies.

Before the regression model obtained is used to test the hypothesis first the model is tested with classical assumptions. The classical assumption tests carried out include: normality test, multicollinearity test, autocorrelation test, heteroscedasticity test, and multicollinearity test. This data analysis model uses multiple regression analysis.

## 4 FINDINGS AND DISCUSSION

Table 1. Results of Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	124,964	130,843		,955	,348
	TATO	294,739	268,899	,170	1,096	,282
	TAC	3,321E-11	,000	,547	3,691	,001
	DER	-22,589	23,129	-,148	-,977	,337

a. Dependent Variable: ROI

Based on table 1 above, the regression formula is obtained as follows:

$$\text{ROI} = 124,964 + 294,739 \text{ TATTOOS} + 3,321 \text{ TAC} - 22,589 \text{ DER}$$

The results of the interpretation of the regression are as follows:

1. The constant value (a) shows a value of 124,964. With the assumption of independent variables such as the effect of total asset turnover, earnings management and a debt to equity ratio of zero, the Return on Investment is 124,964.
2. The coefficient value of total asset turnover is positive at 294,739, assuming the earnings management variable and debt to equity ratio is zero. This shows that for each increase in total asset turnover once, the Return on Investment will increase by 294,739.
3. The earnings management coefficient is positive at 3,321, assuming the debt to equity ratio variable is zero. This shows that for each one-time increase in earnings management, the Return on Investment will increase by 3,321.
4. The coefficient value of debt to equity ratio is negative for - 22.589. This shows that for every one time decrease in debt to equity ratio, the Return on Investment will decrease by 22.589.

**Table 2. Statistical Test Results F**  
ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2130346,432	3	710115,477	6,586	,002 <sup>a</sup>
	Residual	3018978,043	28	107820,644		
	Total	5149324,475	31			

a. Predictors: (Constant), DER, TAC, TATO

b. Dependent Variable: ROI

Seen the results of Fcount is 6,586 with a significant value of 0.002 while Ftable is 2.95 with a significant 0.05, the conclusion is Fcount > Ftable, namely 6.586 > 2.95 and significant 0.002 < 0.05, so the decision is Ho is rejected and Ha is accepted This means that the variables of total asset turnover, earnings management and debt to equity ratio have a significant and significant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period.

**Table 3. Statistical Test Results T**  
Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	124,964	130,843		,955	,348
	TATO	294,739	268,899	,170	1,096	,282
	TAC	3,321E-11	,000	,547	3,691	,001
	DER	-22,589	23,129	-,148	-,977	,337

a. Dependent Variable: ROI

The results of partial statistical tests are as follows:

1. Earning per share has a total asset turnover has a t-count value of 1.096 with a significant value of 0.282 while t table is 2.048 with a significant 0.05 so that the conclusion is tcount < t table, namely 1.096 < 2.048 and with a significant 0.282 > 0.05, the decision is Ho is accepted and Ha is rejected, meaning that the total asset turnover

variable has no and insignificant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period.

2. The earnings management variable has a t-count value of 3.691 with a significant value of 0.001 while the t-table is 2.048 with a significant 0.05, the conclusion is that  $t_{count} > t_{table}$  is  $3.691 > 2.048$  and a significant  $0.001 < 0.05$  so that the decision is  $H_0$  is rejected and  $H_a$  accepted, meaning that the earnings management variable has a significant and significant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the Period 2012-2015.
3. The variable Debt to equity ratio has a t-count value of -0.977 with a significant value of 0.337 while the t-table is 2.048 with a significant 0.05, the conclusion is that the value- $t_{count} > -t_{table}$  is  $-0.977 > -2.048$  and with a significant value of  $0.337 > 0.05$  so that the decision is  $H_0$  is accepted and  $H_a$  is rejected, meaning that the Debt to equity ratio variable does not have a negative and insignificant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period.

### **The Effect of Total Asset Turnover on Return on Investment**

The results of this study indicate that total asset turnover has no and insignificant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 period with  $t_{count} < t_{table}$ , namely  $1.096 < 2.048$  and significant  $0.282 > 0.05$ , then the decision is  $H_0$  is accepted and  $H_a$  is rejected

The results of this study are in line with the research of Ningsih, Puspitaningtyas and Iswono (2015) which states, Total Asset Turnover has no and significant effect on Increased Profitability.

Total asset turnover has no and insignificant effect on Return on Investment because high total assets cannot increase company profits because total assets are rotating rapidly and mostly consist of accounts receivable and inventories.

### **The Effect of Earnings Management on Return on Investment**

The results of this study indicate that earnings management has a significant and significant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the period 2012-2015 with  $t_{count} > t_{table}$  of  $3.691 > 2.048$  and significant  $0.001 < 0.05$ , so the decision is  $H_0$  was rejected and  $H_a$  accepted.

### **Earnings management has a significant positive effect on Return on Assets.**

Earnings management has a significant and significant effect on Return on Investment due to higher earnings management due to low profit levels aimed at obtaining loans from banks or to attract investors to invest.

### **The Effect of Debt to Equity Ratio on Return on Investment**

The results of this study indicate that the Debt to equity ratio has no negative and insignificant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period with a value of  $-t_{count} > -t_{table}$ , namely  $-0.977 > -2.048$  and significant  $0.337 > 0.05$ , so the decision is  $H_0$  is accepted and  $H_a$  is rejected.

## **5 CONCLUSION**

Total asset turnover has no and insignificant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the period 2012-2015 with  $t_{count} < t_{table}$  that is  $1.096 < 2.048$  and significant  $0.282 > 0.05$ , so the decision is  $H_0$  was accepted and  $H_a$  was rejected.

Earnings management has a significant and significant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 period with  $t_{count} > t_{table}$  of  $3.691 > 2.048$  and significant  $0.001 < 0.05$  so that the decision is  $H_0$  rejected and  $H_a$  accepted.

Debt to equity ratio has no negative and insignificant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 period with a value of  $t_{count} > t_{table}$ , namely  $-0.977 > -2.048$  and significant  $0.337 > 0.05$  so that the decision is  $H_0$  is accepted and  $H_a$  is rejected.

Total asset turnover, earnings management and debt to equity ratio have a significant and significant effect on Return on Investment in Infrastructure, Utility and Transportation Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period with an Adjusted R Square value of 35.1% while the remaining 64,9% is explained by other variables not examined in this study such as cash turnover, accounts receivable turnover, working capital turnover and leverage.

## REFERENCES

- Aminah dan Gunakan. 2015. Pengaruh Manajemen Laba Terhadap Kinerja Keuangan Pada Perusahaan Manufaktur Tahun 2011-2012. *Jurnal Akuntansi & Keuangan*. Vol. 6. No. 1 Maret 2015.
- Fadilah, Ghani dan Amaniyah. 2017. Pengaruh Quick Ratio, Inventory Turnover Dan Debt To Equity Ratio Terhadap Rentabilitas Pada Perusahaan Kabel Yang Terdaftar Di Bursa Efek Indonesia. *Kompetensi*, Vol 11, No 1, April 2017. Universitas Trunojoyo Madura
- Fahmi, Irham. 2012. *Pengantar Manajemen Keuangan*. Bandung : Penerbit Alfa beta.
- Ghozali, Imam. 2013. *Aplikasi Analisis Multivariate Dengan Program IBM SPSS*. Jakarta : Penerbit Universitas Diponegoro.
- Harahap, S.S. 2013. *Analisis Kritis Atas laporan Keuangan*. Jakarta : Penerbit Raja Grafindo Persada.
- Harmono. 2014. *Manajemen Keuangan*. Jakarta : Penerbit PT Bumi Aksara
- Hery, Cand. 2013. *Teori Akuntansi*. Jakarta : Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Hery. 2016. *Financial Ratio For Business Analisis Keuangan Untuk Menilai Kondisi Finansial dan Kinerja Perusahaan*. Jakarta : Penerbit PT Gramedia
- Hery. 2017. *Teori Akuntansi Pendekatan Konsep dan Analisis*. Jakarta : Penerbit PT Grasindo.
- Husnan, Suad dan Pudjiastuti, Enny. 2015. *Dasar-dasar Manajemen Keuangan*. Edisi Ketujuh. Yogyakarta : UPP STIM YKPN
- Julita. 2012. Pengaruh Debt to Equity Ratio dan Debt to Assets Ratio Terhadap Profitabilitas Pada Perusahaan Transformasi yang Terdaftar Di Bursa Efek Indonesia. *Jurnal*.
- Jumingan. 2014. *Analisis Laporan Keuangan*. Jakarta: PT Bumi Aksara.
- Kamaludin & Rini Indriani. 2012. *Manajemen Keuangan*. Bandung : Penerbit CV. Mandar Maju.
- Kasmir. 2011. *Analisis Laporan Keuangan*. Cetakan Keempat. Jakarta : Penerbit Rajagrafindo Persada.
- Muslich. 2007. *Manajemen Keuangan Modern*. Cetakan Keempat. Jakarta : Penerbit Bumi Aksara
- Ningsih, Puspitaningtyas dan Iswono. 2015. Pengaruh Rasio Perputaran Total Aset dan Rasio Lancar Terhadap Peningkatan Profitabilitas Perusahaan. *Jurnal. Jember* : Universitas Jember (UNEJ).
- Prastowo, Dwi. 2015. *Analisis Laporan Keuangan Konsep dan Aplikasi*. Edisi Ketiga. Cetakan Ketiga. Yogyakarta : Unit Penerbit dan Percetakan Sekolah Tinggi Ilmu Manajemen YKPN
- Priyatno, duwi. 2010. *Paham Analisa Statistik Data Dengan SPSS*. Yogyakarta : Penerbit MediaKom
- Rahmawati. 2012. *Teori Akuntansi Keuangan*. Edisi Pertama. Cetakan Pertama. Yogyakarta : Penerbit Graha Ilmu.
- Sitanggang, J.P. 2012. *Manajemen Keuangan Perusahaan*. Jakarta : Penerbit Mitra Wacana Media

- Soemohadiwidjojo, Arini. 2017. KPI Key Performance Indicator Untuk Perusahaan Dagang. Jakarta : Penerbit Raih Asa Sukses.
- Subramanyam dan John Wild. 2010. Analisis Laporan Keuangan. Edisi Kesepuluh. Jakarta : Penerbit Salemba Empat.
- Sugiyono. 2012. Metode Penelitian Bisnis. Jakarta : Penerbit CV Alfabeta.
- Sumarsan, Thomas. 2010. Sistem Pengendalian Manajemen. Jakarta : Penerbit Indeks
- Sunyoto, Danang. 2013. Analisis Laporan Keuangan Untuk Bisnis. Yogyakarta : Penerbit Caps.
- Zuhri, S., Juhandi, N., Sudibyo, H. H., & Fahlevi, M. (2020). Determinasi Harga Saham Perusahaan Manufaktur Subsektor Makanan dan Minuman. *Journal of Industrial Engineering & Management Research*, 1(2), 25-34.