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THE EFFECT OF DEBT TO EQUITY RATIO AND NET PROFIT MARGIN TOWARD PROFIT CHANGE IN PT. UNIT TRACTORS, TBK

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Abstract

This study aims to determine the effect of Debt to Equity Ratio and Net Profit Margin on profit changes at PT. United Tractors. Tbk. Both simultaneously and partially. The dependent variable used in this study is Debt to Equity Ratio and Net Profit Margin while the independent variable is profit change. The sample used is the period 2009-2016. Data were processed using SPSS multiple linear regression software. The results of this study indicate that Debt to Equity significantly influences changes in profit, Net Profit Margin significantly influences profit changes, Debt to Equity and Net Profit Margin together significantly influence profit changes.

Keywords: Changes in Profit, Debt to Equity Ratio, Net Profit Margin.

1. Introduction

Every company expects its business to grow and of course it needs support from the company's management capabilities in carrying out some policies for financial planning. The problem that usually arises is how companies get funds and use these funds according to their needs. Coupled with economic growth that leads to a free market economic system, where each company must compete and find ways to win the competition.

Management as an internal company has an interest in making efforts to improve profit quality. The more high-quality corporate profits, the more interested investors become one of the owners of the company. To do profit planning, companies can take some accounting policies.

Companies can use several ratios in financial statements, including using the ratio between debt and equity (Debt to Equity Ratio) and Net Profit Margin (NPM). Thus, companies can connect various estimates contained in financial statements so that operational activities can be interpreted.

Based on the results of research by Pratama and Titik (2015), it states that Debt to Equity Ratio (DER) and Net Profit Margin (NPM) have a significant effect on profit changes in property and real estate companies listed on the Indonesia Stock Exchange. Another study conducted by Siti Fatimah (2014), stated that Debt to Equity Ratio (DER) and Net Profit Margin (NPM) had no effect on profit changes in manufacturing companies in various industry sectors listed on the Indonesia Stock Exchange.

PT. United Tractors. Tbk is a company engaged in the heavy equipment industry and one of the subsidiaries of the Astra Group which has a stable financial track record from 2009-2016 according to financial statement data that we got from the Indonesia Stock Exchange website (www.idx.go.id) . Within 8 years, PT. United Tractors. Tbk has never experienced a loss despite fluctuating profit percentage. That was the attraction for us, so we chose the company as the object of research.

2. Literature Review

Debt to Equity Ratio (DER)

According to Gunawan and Wahyuni (2013), Debt to Equity Ratio is a Financial Leverage considered as a financial variable because it theoretically shows the ratio of a company so that it has an impact on stock price uncertainty. High Debt to Equity Ratio has a bad impact on company performance because the higher level of debt means the interest expense will be greater which means reducing profits, Conversely, a low level of Debt to Equity Ratio shows better performance, because it causes a high rate of return the higher it is.

According to Marietta (2013), Debt to Equity Ratio (DER) is the company's ability to fulfill all its obligations, which is aimed at how much of its own capital is used to pay debts. The greater the proportion of debt used for a company's capital structure, the greater the amount of its liabilities. The increase in debt will ultimately affect the size of net income for shareholders, including dividends to be received.

Net Profit Margin

According to Dini and Indarti (2012) Net Profit Margin (NPM) is a relationship between net income after tax and net sales which shows management's ability to drive a company successfully enough to leave certain margins as reasonable compensation for owners who have provided their capital for a risk. The results of the calculations reflect the net profit per dollar of sale. Capital market investors need to know the company's ability to generate profits. By knowing this investor can judge whether the company is profitable or not.

According to Rutika, Marwoto and Panjaitan (2015) The fluctuating development of Net Profit Margin (NPM) can be seen that the level of sales obtained by the company in a certain period does not provide maximum results and achieve the desired sales profit, and also if a company has operating expenses or high operating expenses will cause the company's net profit to decrease. In fact, the greater the Net Profit Margin (NPM) will increase the net profit and will have an impact on the company's Net Profit Margin (NPM) performance.

Change in Profit

According to Nurmalasaari (2012) changes in profit represent an increase or decrease in profit per year. And the assessment of the level of investment returns by investors is based on the company's financial performance, it can be seen from the level of profit changes from year to year. Investors in assessing the company not only see profits in a certain period but continue to monitor changes in profit from year to year.

Presentation of profit through the report is an important focus of company performance, company performance presented in the financial statements is the result of a series of processes at the expense of various resources, while one of the parameters for evaluating the company's performance is profit growth. Brolin & Rohman (2014).

Framework

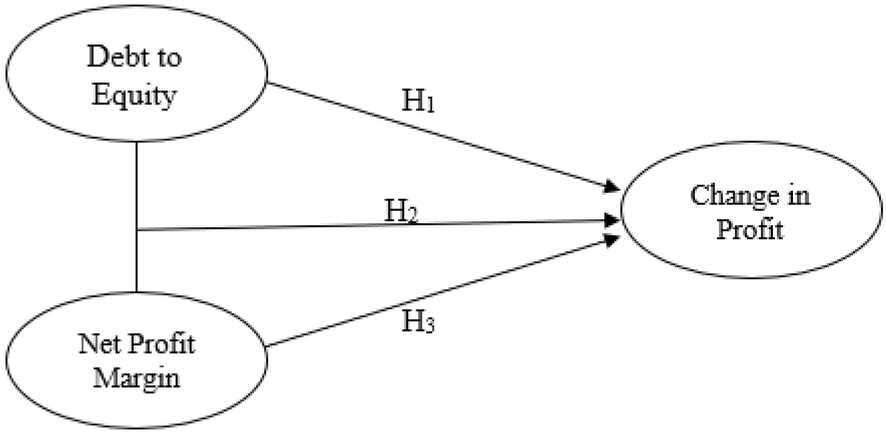

Figure 1. Research Framework

Source: Processed research data, 2019

Hypothesis:

Based on the research objectives, the theoretical basis and framework of thought can be proposed as follows:

H1: Debt to Equity Ratio (DER) influences changes in profit
H2: Net Profit Margin (NPM) affects the Profit Change
H3: Debt to Equity Ratio (DER) and Net Profit Margin (NPM) effect on Profit Change

3. Methods

This type of research is quantitative data, which is in the form of secondary data in the form of financial statements from companies listed on the Jakarta Stock Exchange (JSX). In this case the calculation is done by using the values in the company's financial statements. The population that will be the object of this study are all companies that have been listed on the Jakarta Stock Exchange (JSX) in 2009-2016. While for sampling the object of research is PT. United Tractors. Tbk and has published all of its financial statements on the Jakarta Stock Exchange (JSX) and has reported its obligations at the Tax Office. The sample selection in this study uses a purposive sampling method with the criteria of companies listed on the Jakarta Stock Exchange (JSX) during 2009-2016 and not delisted during the observation period, the Company has Debt, Equity, sales, profit before and after tax on financial statements during observation period, the Company publishes an annual financial report (annualy report), Determination of the year based on consideration of the latest data obtained in the study in 2009-2016

4. Results and Discussion

Research Data Analysis

Data collected namely the ratio of financial statements at PT. United Tractors.Tbk., Namely Debt, Equity, Net Profit and Sales. The data taken is quarterly financial statements from the period 2009-2016, so the number of samples we get is 32 samples, the results of data collection can be seen in the appendix.

Descriptive statistics

Statistical results show descriptive statistical results of each variable, namely DER, NPM and Change in Profit (CIP).

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
NPM	32	.0682976	.1500824	.107336544	.0190208435
DER	32	.4891809	.8970747	.660200000	.1109551573
CIP	32	-.5535664	.5726266	.110589275	.3233065918
Valid N (listwise)	32				

Source: Processed research data, 2019

Based on the data in the table the number of observations is 32 quarterly. NPM values have an average of 0.107336544 DER has an average of 0.660200000 and Change in Profit 0.110589275.

Normality test

Normality test is used to determine whether the regression model in this study is the independent variable and the dependent variable both have normal distributors or not. A good regression model is having a normal distribution. The results of the Kolmogorov-Smirnov non-parametric statistical test show the level of change in profit as the dependent variable is 0.2 (greater than 0.05) so that the relationship between the independent and dependent variables is normally distributed.

Table 2. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		32
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.21575325
Most Extreme Differences	Absolute	.114
	Positive	.114
	Negative	-.083
Test Statistic		.114
Asymp. Sig. (2-tailed)		.200[c,d]

Source: Processed research data, 2019

Multicollinearity

In Table 3 the coefficient of Collenearity Statistics below is used to test the requirements of multicollinearity analysis. From the table, each independent has tolerance value = 0.910 and VIF = 1.098. The tolerance value of all independent variables is greater than 0.10 and the VIF is less than 10. Thus it can be concluded that the regression model is free of multicollinearity.

Table 3. Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	-1.574	.291		-5.408	.000		
NPM	9.829	2.207	.578	4.453	.000	.910	1.098
DER	.953	.378	.327	2.519	.018	.910	1.098

a. Dependent Variable: CIP

Source: Processed research data, 2019

Autocorrelation Test

The results of the autocorrelation test for Change in Profit as the dependent variable showed the value of durbin-watson 0.844. This value is smaller than du = 1.8261 and (4-du) = 2.1739 so it can be concluded that in the regression model there is no autocorrelation problem.

Table 4. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.745[a]	.555	.524	.2230689916	.844

a. Predictors: (Constant), DER, NPM

b. Dependent Variable: CIP

Source: Processed research data, 2019

Heteroscedasticity Test

The scatterplot graph results in Table 5 show that the points spread randomly above and below the origin and do not form certain patterns. So it can be said that the analysis of multiple linear regression X1 and X2 against Y there is no hesteroskidacity problem, so that the linear regression analysis can be continued.

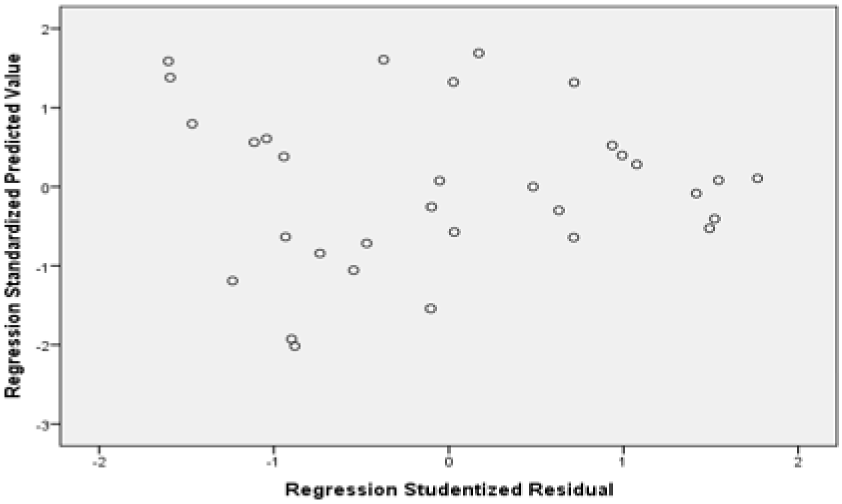

Figure 2. Scatterplot

Source: Processed research data, 2019

Partial Test

Table 6. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.574	.291		-5.408	.000
	NPM	9.829	2.207	.578	4.453	.000
	DER	.953	.378	.327	2.519	.018

a. Dependent Variable: CIP

Source: Processed research data, 2019.

If seen from table 6, it can be concluded as follows:

a) Effect of DER on Profit Change H1: Debt to Equity Ratio (DER) influences changes in profit DER has a t value of 2,519 and sig of 0.018, which means it is smaller than 0.05. Thus, DER has a significant effect on changes in profit. So from the hypothesis it can be concluded that H01 is rejected and Ha1 is accepted.

b) Effect of NPM on Profit Change H2: Net Profit Margin influences profit changes NPM has a t value of 4,453 and sig of 0,000 which means it is less than 0.05. Thus, NPM has a significant effect on changes in profit. So from the hypothesis it can be concluded that H02 is rejected and Ha2 is accepted.

Simultaneous Test

Table 7. ANOVA[a]

Model	Sum of Squares	Df	Mean Square	F	Sig.

Regression	1.797	2	.899	18.060	.000[b]
Residual	1.443	29	.050		
Total	3.240	31			

a. Dependent Variable: CIP

b. Predictors: (Constant), DER, NPM

Source: Processed research data, 2019.

H3: Debt to Equity Ratio (DER) and Net Profit Margin (NPM) affect the change in profit From table 7. we can conclude that there is a significant influence between the independent variable (NPM and DER) with the dependent variable (Change in Profit) this is shown from the acquisition value of sig 0.00 (less than 0.05). So from the above hypothesis it can be concluded that H03 is rejected and Ha3 is accepted.

Table 8. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.745[a]	.555	.524	.2230689916

a. Predictors: (Constant), DER, NPM

b. Dependent Variable: CIP

Source: Processed research data, 2019.

In Table 8 we can see that the value of R Square is 0.555, which means that the independent variable has a 55.5% effect on the dependent variable, and the remaining 45.5% is influenced by other variables not found in this study.

5. Conclusion

Based on the research and discussion objectives described, it can be concluded that: Debt to Equity Ratio (DER) significantly influences profit changes, Net Profit Margin (NPM) significantly influences profit changes, Debt to Equity Ratio (DER) and Net Profit Margin (NPM) significantly influences profit changes.

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