International Journal of Economics, Business and Accounting Research (IJEBAR)
Peer Reviewed – International Journal
Vol-6, Issue-3, 2022 (IJEBAR)
E-ISSN: 2614-1280 P-ISSN 2622-4771
https://jurnal.stie-aas.ac.id/index.php/IJEBAR

THE EFFECT OF FINANCIAL RATIOS IN PREDICTING PROFIT CHANGES IN MANUFACTURING COMPANIES LISTED ON THE STOCK EXCHANGE IN 2016 - 2020

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Abstract: This study aims to prove how much influence the Current Ratio (CR), Debt to Equity Ratio (DER), and Net Profit Margin (NPM), Total Asset Turn Over (TATO), Return On Assets (ROA) simultaneously and partially affect the changes in profits of manufacturing companies in the consumption sector listed on the Indonesia Stock Exchange (IDX) from 2016 to 2020. The population in this study are all manufacturing companies that produce consumer goods listed on the Indonesia Stock Exchange (IDX) from 2016 to 2020. Sample In this study, as many as 30 consumer manufacturing companies from various industries are listed on the Indonesia Stock Exchange. The type of data used is secondary data from the official website of the Indonesia Stock Exchange (IDX). The analysis technique uses multiple linear regression analysis . The partial results as a whole show Current Ratio (CR), Debt to Equity Ratio (DER), and Net Profit Margin (NPM), Total Asset Turn Over (TATO), Return On Assets (ROA) simultaneously have the same effect on Changes in Profit in consumption Manufacturing companies listed on the Indonesia Stock Exchange (IDX).

Keywords: *Current Ratio (CR), Debt to Equity Ratio (DER), Net Profit Margin (NPM), Total Asset Turn Over (TATO), Profit Change*

1. Introduction

The development of industry in Indonesia makes every company that is competing to advance its company. Every company has the main goal of obtaining and increasing company profits every year. The company's profits can be reflected in the financial statements produced by the company concerned. Financial statements are information that shows the financial position, performance, and changes in the financial position of a company that has been past and The prospects in the future, financial statements are prepared for users of financial statements so that they can be used to support economic decision making. One of the important things in the company's achievement appraisal is its financial condition.

Users of financial statements are divided into 2, namely internal parties and external parties. Internal parties are employees and company management, while external parties are investors, creditors, suppliers, customers and government agencies. For investors, financial statements can provide useful information for investment decision making, which is to invest (for new investors), and withstand investments or release investments (for old investors). Investors need useful information to predict the company's ability to generate profits and pay dividends. The benefits received by investors from investment will be proportional to the risks contained in it.

This information not only wants to be known by managers but also investors and other interested parties such as the government and creditors. Profits obtained by the company for the coming year cannot be ascertained, it is necessary to have a prediction of profit change. Changes

in profit will affect the investment decisions of investors and prospective investors who will invest their capital into the company, where profit is an indicator to determine the company's financial performance, whether it has increased or decreased. Changes in the increase or decline will affect financial policies for further activities, such as policies regarding dividends, payment of debt, allowance, investment, and maintain the continuity of the company's activities.

Analysis of financial ratios that can be used to predict changes in earnings, namely the liquidity ratio, in this ratio can measure the company's short -term liquidity capabilities by looking at the company's current assets relative to its current debt. The ratio of the activity of the look at some assets then determines the level of activities of these assets at a certain level of activity. The solvency ratio measures the company's ability to fulfill its long-term obligations. The profitability ratio measures the company's ability to generate profits (profitability) at the level of sales, assets and capital capital. Market ratios measure market prices relative to book value. Research that analyzes the effect of financial ratios in predicting changes in profit has been carried out by previous researchers. Research Syamsudin and Ceky Primayuta (2009), conducted research on financial ratios to predict changes in earnings. This study uses 145 company samples. The results showed that the current ratio, net profit margin and debt to equiti ratio had no significant effect on changes in earnings. While the total asset turn over had a significant effect on changes in earnings.

Hurun Ainia's research (2011) shows that the current ratio, net profit margin has a significant effect on profit, while total asset turn over has no significant effect on profit. Research Diyan (2011) and Danny and Muhammad (2011) showed that DER had a significant effect on changes in earnings. Fatmawaty (2013) in his research showed that ROA had a significant effect on changes in earnings. However, the results of the research of Gani and Indira (2011) showed that ROA had no significant effect on changes in earnings. So that from the results of research before there are still differences in research results, so it is necessary and important further research on the effect of financial ratios on changes in earnings. This research replicated previous research conducted by Claudya Monica Pangkong, et all (2017), who also analyzed the effect of financial ratios and predictions of changes in manufacturing company profits.

By increasing the needs of the community for consumer goods, the higher the profit gained by the consumer goods industry company (Fandi 2013). The third difference is the use of the observation period, where in previous studies using 2 (two) years of observation, while research that will be conducted using 5 years of observation, namely 2016-2020. Where the manufacturing industry in 2019 is a tool to sustain economic growth in Indonesia. Because economic growth recorded 6.98%. This figure is more compared to national economic growth which is only 6.54%. The achievement of the manufacturing industry is also further than the growth of 2018. Whereas throughout the first half of 2018 the Composite Stock Price Index (CSPI) has managed to score an increase of 338.27 points or around 13.13%. The increase was supported by the strengthening of shares, there were three sectoral indexes that grew the sharpest, namely the consumer goods sector (41.93%), the various industrial sectors (32.22%), and the manufacturing sector (29.94%). The sharp increase in the sectoral index is widely supported by the increase in the seminters incorporated in it, among others, consumer goods consisting of 36 Ems. This is intended so that the results of the study can provide better information about the condition of the company's actual performance in the manufacturing company of the consumer goods industry in the long run.

2. Literature Review

Signal theory or signaling theory is an action taken by company management that gives instructions for investors about how management views company prospects. This theory provides an explanation of the reasons the company has the drive to submit or provide information related to the company's financial statements to external parties. The encouragement to submit or provide information related to financial statements for external parties is based on the presence of information asymmetry between company management and external parties (Bergh et al., 2014).

One of the general objectives of accounting is to provide information that can be used to predict future events, as for prediction value criteria in general is a probability of the relationship between economic events that are important for decision makers and predictor variables that are relevant in accounting information . The tendency to predict or suspect an event more precisely, especially in the economic field will provide a better basis for planning. Predictions or forecasts can be used to determine the state of the company in the future. Forecasting is done on the basis of data obtained from the previous period. Proposal predictions are important related to the function of capital market efficiency, so this prediction is considered useful for users of accounting information. Relevant profit forecasting involves analysis of profit and assessment components of the company's future. Profit information can be used by the company's internal and external parties to measure the level of effectiveness of the company in utilizing existing sources of funds. The size that is often used to assess the success or failure of a company's management is the profit obtained by the company (Riaahi and Belkaoui, 2009).

Changes in profit is an increase in profits obtained by the company. To predict earnings growth can be done by analyzing its financial ratios. In general, financial ratios can be grouped into liquidity ratios, solvency ratios, profitability ratios, leverage ratios, activity ratios and productivity ratios (Harahap, 2015). Profit growth is influenced by several factors including the amount of the company, the age of the company, the level of leverage, the level of sales, changes in past earnings, current ratio, debt to equity ratio and return on assets.

Current Ratio is a form of liquidity ratio. The higher the acquisition of the current ratio means the greater the company's ability to meet short -term financial obligations (Zerlinda, 2017). In the end the company can see the amount of profit growth that occurs in the future. Current ratio of a company is useful to find out the possibility of providing loans by creditor, besides that the company will more easily run the company's operational activities to generate profits. This shows that the current ratio can affect the growth of earnings that occur.

Debt to Equity Ratio is one measure of solvency performance, in this ratio will be shown the comparison between the total liabilities of the company with the total capital sourced from the owner of the company (equity). According to (Kariyoto, 2017) states that the higher the Debt To Equity Ratio, the more bad it will be on the company's performance, because the higher the Debt To Equity Ratio, the higher the debt to be paid and the higher the interest expense to be paid so that it can have an impact on the company's profit earned.

Net Profit Margin (NPM) is a ratio that measures the company's ability to generate net profit. The higher this ratio indicates that the company is more efficient in its production, personnel, marketing and finances, this causes an increase in investment attractiveness from investors to invest their capital, so that company profits will increase (Hanafi and Halim, 2009). Research according to (Rantika, 2016) which states that net profit margin has no significant effect on profit growth.

Total Assets Turnover (TAT) is the ratio between the number of assets used and the number of sales earned during a certain period. The greater the total assets turnover, the more efficient

the use of all company assets to support sales activities (Cahyaningrum, 2012). The results of the study (Saputra, et al, 2015) state that TATO has no significant effect on profit growth.

Kasmir (2012) ROA is used to measure management's ability to obtain overall profitability and managerial efficiency. Meanwhile research according to Azhary, A. & Muharam, H. (2017). This ratio measures the company's overall ability to generate profits with the total amount of assets available within the company.

Hypothesis Development

a. Effect of Current Ratio on Changes in Profit
   (Dhany Lia Gustina and Andhi Wijayanto, 2015), Researching financial ratio analysis in predicting earnings changes, where the results of his research on the current ratio (CR) partially have a positive effect on earnings changes. Current ratio shows the comparison between current assets and current liabilities (debt). The higher the current ratio means the greater the company's ability to meet short-term financial obligations. Victor Pattiasina, et all (2018) researched financial ratio analysis to predict earnings changes, where the results showed that Current Ratio had a significant effect on earnings changes, while ROA did not significantly affect earnings changes.
   H1: Current Ratio has a significant positive effect on earnings changes.
b. The Effect of Debt to Equity on Changes in Profit
   Debt to equity ratio shows the ratio (ratio) between total liabilities (debt) and all equity (own capital). The greater the amount of debt compared to the total equity owned, it means that the risk for investors (investors) is higher. Dhiyan, 2011) examines the Effect of Current Ratio, Net Profit Margin, Debt To Equity Ratio Dean Total Asset Turn Over on Profit Changes, From the results of his research, it shows that the Debt To Equity Ratio (DER) has a significant effect on changes in earnings. (Dhany Lia Gustina and Andhi Wijayanto, 2015) in research on the effect of Current Ratio (CR), Total Assets Turn Over (TATO), Debt to Equity Ratio (DER), Return On Assets (ROA) on changes in earnings. From the results of this study, the Debt to Equity Ratio has a significant effect on changes in earnings Based on the description that has been stated previously, the hypotheses proposed in this study are:
   H2: Debt to Equity Ratio has a significant positive effect on earnings changes.
c. Effect of Net Profit Margin on Changes in Profit
   Net Profit Margin measures the company's ability to generate profits in relation to sales achieved. Or measure how much profit the company can get from every rupiah of sales. This ratio is a comparison (ratio) between operating profit (EBIT/earnings before interest tax) and sales. Hurun Ainia (2011), examines the effect of financial ratios on profits in consumer goods industrial sector companies with 27 samples of companies in the consumer goods industry sector. The results obtained stated that Net Profit Margin had a significant effect on profit. Gani and Indira (2011) researched on Financial Ratio Analysis to Predict Profit Changes in Indonesian Telecommunication Companies, from the results of this study NPM had a significant effect on profit changes. Based on the description that has been stated previously, the hypotheses proposed in this study are:
   H3: Net Profit Margin has an effect on predicting profit changes.
d. The Effect of Total Asset Turn Over on Changes in Profit
   This ratio shows how effectively the company uses all assets to create sales and profits. Total asset turnover shows the comparison between sales (sales) and total assets (total assets). Research results (Syamsudin & Primayuta, 2009). (Gani & Indira, 2011), researching Financial Ratio Analysis to Predict Profit Changes in Indonesian Telecommunication

Companies. His research proves that CR, NPM and TATO have a significant effect on earnings changes. and (Claudya Monica Pangkong, et all, 2017) proves that Total Asset Turn Over can be used to predict earnings changes. Based on the description that has been stated previously, the hypotheses proposed in this study are:

H4: Total Asset Turn Over has a significant positive effect on changes in Profit

e. The Effect of Return on Assets on Changes in Profit

This ratio measures the ratio of profit before tax to total assets. So Return On Assets (ROA) indicates how much the ability of assets owned to generate a rate of return or income. Fatmawaty (2013) in his research entitled the effect of financial ratios on changes in profits at PT Telkom Indonesia with the results of the study it can be seen that ROA has a significant effect on changes in profits so that it can be used to predict changes in earnings in the future. Based on the description that has been stated previously, the hypotheses proposed in this study are:

H5: Return on Assets has a significant positive effect on earnings changes.

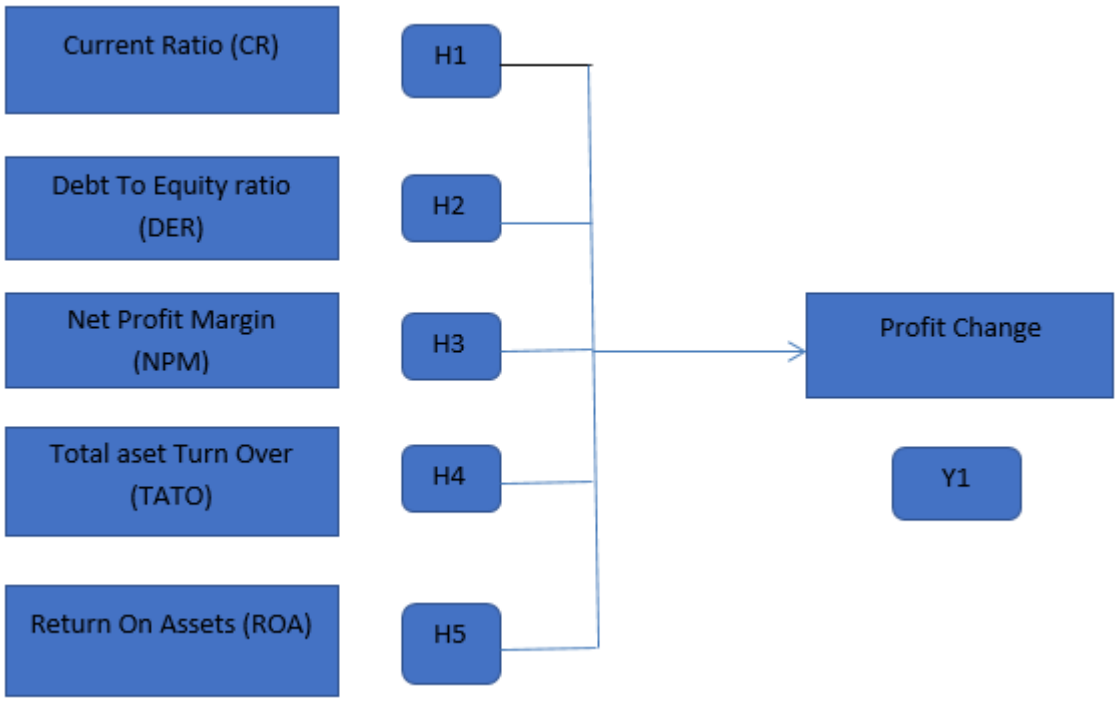

Figure 1. Research Framework

Formulation of Hypothesis:

H1: Current Ratio has a significant positive effect on earnings changes.
H2: Debt to Equity Ratio Positive Significant effect on earnings changes.
H3: Net Profit Margin has a significant positive effect on profit changes.
H4 : Total Asset Turn Over has a Significant Positive influence on changes in Profit
H5: Return on Assets has a significant positive effect on profit changes.

3. Research Method

This type of research is explanatory research that aims to obtain clarity on phenomena that occur in the empirical world and seeks to obtain answers that aim to explain the relationship between variables through data analysis in order to test hypotheses. The population in this study

were all manufacturing companies listed on the Indonesia Stock Exchange in 2016-2020. The sampling method that will be used in this study is a purposive sampling method with the following criteria:

a. A consumer goods manufacturing company listed on the IDX and publishing financial reports in a row from 2016-2020.
b. The company's financial statements use Indonesian currency (rupiah).
c. Manufacturing companies that do not have negative profits for the 2016-2020 period.
d. Have complete data related to the variables used in the study.
e. The existence of information about financial ratios contained in the financial statements.

The type of data used in this study is secondary data, namely company annual report data or annual report for the period 2016 - 2020 obtained from the Indonesian Capital Market Directory (ICMD) and annual report obtained from the official website of the Indonesia Stock Exchange (IDX). To be able to detect a healthy company or not, we can look at one of the factors that can indicate a healthy or good company in its economic cycle, one of which can see the profits generated by the company. Profit on the company can be reflected in the financial statements produced by the company concerned. Financial statements are information that shows the past financial position, performance, and changes in the financial position of a company and its prospects in the future. Financial statements are prepared for users of financial statements so that they can be used to support economic decision making.

The variables used to predict earnings changes in this study are the independent variables, namely Current Ratio, Debt to Equity Ratio, Net Profit Margin, Total Assets Turn Over and Return On Assets, while the dependent variable used is profit changes.

Hypothesis Test

Classic Assumption Test

Classical assumption test is needed to find out whether the regression estimation results are completely free from heteroscedasticity symptoms, multicorrelation symptoms, and auto correlation symptoms. The regression model can be used as an unbiased estimation tool if it meets the BLUE (Best Linear Un-biased Estimater) requirements, namely there is no heteroscedasticity, multicorrelation and autocorrelation. If there is heteroscedasticity, the variance is not constant so it can cause a standard error bias. If there is multicorrelation, it will be difficult to isolate the individual effects of the variables, so that the significance level of the regression coefficient is low.

Normality Test

Normality test is used to determine whether the data population is normally distributed or not. This test is usually used to measure data on an ordinal, interval, or ratio scale. If the analysis uses the parametric method, then the normality requirements must be met, namely the data comes from a normal distribution. If it is not normally distributed, or the number of samples is small and the type of data is nominal or ordinal, then nonparametric statistics are used. In this test, the one sample Kolmogorov-Smirnov test will be used using a significance level of 0.05. Data is declared normally distributed if the significance is greater than 5% or 0.05. (Ghozali, 2011)

Multicollinearity Test

Multicollinearity test is needed to determine whether there are independent variables that have similarities with other independent variables in one model. The similarity between independent variables in one model will cause a very strong correlation between an independent variable and other independent variables. Detection of multicollinearity in a model can be seen from the value of the variance inflation factor (VIF), if the value of the variance inflation factor (VIF) is

not more than 10 and the tolerance value is not less than 0.1, then the model can be said to be free from multicollinearity. (Ghozali, 2011).

Autocorrelation Test

Testing the autocorrelation in the model aims to determine whether there is a correlation between the confounding variables in a certain period and the confounding variables in the previous period. Autocorrelation often occurs in samples with time series data with n-sample items such as companies, people, regions, and others. An easy way to detect autocorrelation can be done with the Dubin-Waston test. The multiple linear regression model is free from autocorrelation if the Dubin Waston count is located in the no autocorrelation area. Determination of the location is assisted by tables dl and du, assisted by the value of k (the number of independent variables). To speed up the process, whether there is autocorrelation in a model can be used as a benchmark for calculated DW values.

Test Criteria:

Decision making whether or not there is autocorrelation using the DW table criteria with a significance level of 5%. D-W values between -2 to +2 means that there is no autocorrelation.

Heteroscedasticity Test

Heteroscedasticity occurs if there is no similarity in the standard deviation of the value of the dependent variable on each independent variable. If there is heteroscedasticity, it will widen so that the statistical significance test results are no longer valid. The test of the classical assumption of heteroscedasticity uses a graph between the predicted values obtained from the regression model and the square of each residual. If the points of the graph do not show a certain pattern or are random, it can be concluded that there is no heteroscedasticity (Ghozali, 2011).

Multiple Linear Regression Analysis

To prove the hypothesis, this study uses a simple linear regression analysis method. This statistical analysis is used to prove the effect of the current ratio, debt to equity ratio, net profit margin, total asset turnover and return on assets on profit changes. The model used in this study can be formulated as follows. Perubahan Laba = σ = X1 Current Ratio + X2 DER + X3 Net Profit Margin + X4 Total Asset Turn Over + X5 Return On Asset + e

Source: (Hendra Agus and Diah Pujiati, 2011)

Coefficient of Determination (Adjusted R^2)

Analysis of the coefficient of determination, to measure the percentage of the influence of the independent variable on the dependent variable. Usually in the correlation output, this coefficient is expressed in R2. The value of R2 indicates the level of ability of all independent variables to influence the dependent variable, while the rest is determined by other variables outside of the independent variables. The value of R Square is said to be good if it is above 0.5, because the value of R Square ranges from 0 to 1. In general, samples with time series data have a fairly high R Square or Adjusted R Square (above 0.5), while the dampel with certain data items called cross-section data generally has a rather high R Square or Adjusted r square. low (below 0.5), but it is possible for cross-sectional data to have high R Square and Adjusted R Square values. (Ghozali, 2011).

T- test

That is an analysis to find out how much influence the current ratio, debt to equity ratio, net profit margin, total asset turnover and return on assets have on changes in profit.

a. If the significance of > 5%, then there is no effect of current ratio, debt to equity ratio, net profit margin, total asset turnover and return on assets on profit changes.
b. If the significance of < 5%, then there is an effect of current ratio, debt to equity ratio, net profit margin, total asset turnover and return on assets on profit changes.

4. Results and Discussion

4.1. Results

Object of Research

Manufacturing companies that produce consumer goods listed on the Indonesia Stock Exchange in 2016-2020 by looking at the financial statements on the Indonesia Stock Exchange. The companies studied have complete data regarding the variables used in the study. The names of the companies studied include: Aneka Gas Industri Tbk, Bentoel INTL Investama, Campina Ice Cream Industry PT, Cottonindo Ariesta Tbl PT, Darya Varia Laboratoria PT, Eratex Djaja Tbk PT, Garudafood Putra Putri Jaya, Gudang Garam Tbk PT, HM Sampoerna Tbk PT, Indofarma Tbk PT, Indofood CBP Sukses Makmur, Indofood Sukses Makmur Tbk, Industri Jamu dan Farmasi, Inti Agri Resourches TBK, Japfa Comfeed Indonees Tbk, Madusari Murni Indah Tbk, Martina Berto Tbk, Mayora Indah PT, Merck Tbk, Mustika Ratu Tbk, Pabrik Kertas Djiwi Kimia, sariguna Primartha Tbk, Sekar Laut Tbk, Sepatu Bata, Siantar Top, Surya Toto Indonesia, Tempo Scan Pasific Tbk, Ultrajaya Milk Ind, Unilever Indonesia Tbk.

Data Description

The data in this study are CR, DER, NPM, TATO, ROA and Profit Changes from manufacturing companies in the Consumption sector in 2016–2020 which have met the criteria, namely as many as 30 companies.

4.2. Discussion

Data Analysis

Basic Assumption Test

1). Normality Test

The normality test aims to test whether the regression model, the dependent and independent variables have a normal distribution or not. The results of the normality test are as follows:

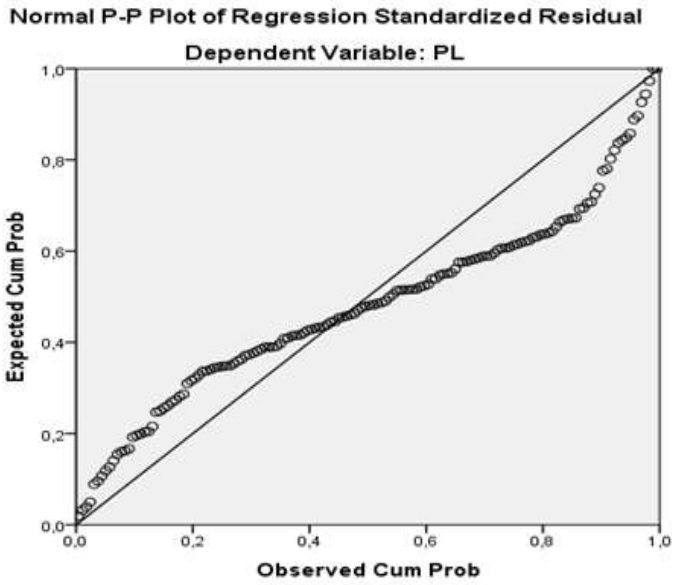

Figure 2. Normality Test

Based on the picture above, it can be concluded that the distribution of the data in the picture above is spread around the straight line (not scattered far from the straight line) and the distribution follows the direction of the diagonal line. Thus, it can be concluded that all variables in this study are normally distributed, so that the regression model has met the assumption of normality.

2). Linearity Test

The linearity test aims to determine whether two variables have a linear relationship or not significantly. This test is used as a prerequisite in correlation analysis or linear regression.
The results of the linearity test output are presented in the table below:

Table. 1 Linearitas Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74159,508	5	14831,902	23,277	,000[b]
	Residual	91755,660	144	637,192		
	Total	165915,169	149			

a. Dependent Variable: PL

b. Predictors: (Constant), ROA, CR, NPM, DER, TATO

Multiple Linear Regression Analysis

Multiple linear regression analysis was used to measure the form of the relationship between more than one independent variable and the dependent variable. This study will measure the relationship between the independent variables CR, DER, NPM, TATO, ROA, with changes in earnings as the dependent variable. The output results of multiple linear regression data processing are presented in the table below:

Table 2. Multiple Regression Analysis

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,121	5,495		,022	,982		
	CR	,108	,264	,026	,408	,684	,922	1,085
	DER	11,650	5,737	,135	2,031	,044	,871	1,148
	NPM	11,133	7,395	,094	1,506	,134	,975	1,026
	TATO	-14,835	3,690	-,267	-4,020	,000	,870	1,149
	ROA	182,822	17,059	,741	10,717	,000	,804	1,244

a. Dependent Variable: PL

Based on the table above, the following regression equation is obtained:
Y = 0.121 + 0.108 X1 + 11.650 X2 + 11.133 X3+ (-14,835) X4 + 182.822 X5
From these equations, it can be described as follows:

1.) Constant value is 0.121, this means that if the independent variables are CR, DER, NPM, TATO, ROA are constant or zero, then the change in profit is 0.121. A positive constant value indicates a positive influence on the independent variable. If the independent variable increases or has an effect in one unit, then the change in profit variable will increase or be fulfilled.
2.) The X1 coefficient value is 0.108, this indicates that the CR variable has a positive relationship and is directly proportional to changes in earnings. If the CR increases by one unit, the change in profit increases by 0.108. On the other hand, if the CR decreases by one unit, the change in profit will also decrease by 0.173.

3.) The X2 coefficient value is 11.650, this shows that the DER variable has a positive and directly proportional relationship to changes in profit. If the DER increases by one unit, the change in profit increases by 11,650. Vice versa, if the DER decreases by one unit, the change in profit will also experience a decrease of 11.650.
4.) The X3 coefficient value is 11.133, this shows that the NPM variable has a positive and directly proportional relationship to changes in earnings. If the NPM increases by one unit, the change in profit increases by 11.133. On the other hand, if the NPM decreases by one unit, the change in profit will also decrease by 11.133.
5.) The X4 coefficient value is -14,835, this shows the TATO variable has a negative and inverse relationship to changes in profit. If the TATO increases by one unit, the change in profit decreases by -14,835. Vice versa, if the TATO decreases by one unit, the change in profit will also increase by -14.835.
6.) The value of the X5 coefficient is 182.822, this shows that the ROA variable has a positive and directly proportional relationship to changes in profit. If ROA increases by one unit, the change in profit increases by 182,822 . On the other hand, if ROA decreases by one unit, the change in profit will also decrease by 182,822.

Classic Assumption Test
Multicollinearity Test
The multicollinearity test aims to test whether there is a correlation between the independent variable (free) and the dependent variable (bound) in a regression model. The results of the data multicollinearity test processing are presented in the table below:

Table 3. Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,121	5,495		,022	,982		
	CR	,108	,264	,026	,408	,684	,922	1,085
	DER	11,650	5,737	,135	2,031	,044	,871	1,148
	NPM	11,133	7,395	,094	1,506	,134	,975	1,026
	TATO	-14,835	3,690	-,267	-4,020	,000	,870	1,149
	ROA	182,822	17,059	,741	10,717	,000	,804	1,244

a. Dependent Variable: PL

Based on the table above, the VIF value for the CR variable is 1.085; the DER variable is 1.148; on the NPM variable of 1.026; the TATO variable is 1.149; On the ROA variable of 1.244 where the value is smaller than 10, it can be concluded that there is no multicollinearity in the data of this study. This means that the independent variables CR, DER, NPM, TATO, ROA do not interfere with or affect each other.

Heteroscedasticity Test
Heteroscodesity test was conducted to test whether in a regression model there was a difference in variance from the existing data residuals. In this study, heteroscedasticity test was carried out by analyzing the plot graph between the predicted value of the dependent variable and its residual. The output results are as follows:

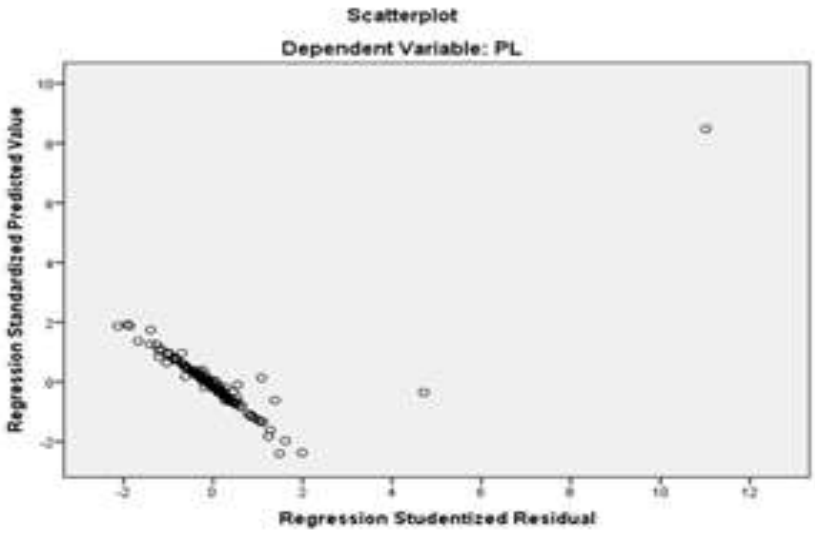

Figure 3. Heteroscedasticity Test

From the figure above, it shows a scatterplot image of the points spread randomly (does not have a certain pattern) and spreads above and below the value 0 on the Y axis. So it can be concluded that there is no heteroscedasticity.

Autocorrelation Test

The autocorrelation test aims to test whether in a linear regression model there is a correlation between the confounding error in a certain period and the previous confounding error. Autocorrelation test results are presented in the following table:

Table 4. Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,669[a]	,447	,428	25,243	,447	23,277	5	144	,000	1,590

a. Predictors: (Constant), ROA, CR, NPM, DER, TATO

b. Dependent Variable: PL

Decision making whether or not there is autocorrelation using the DW table criteria with a significance level of 5%, that is, the result is 1,590. D-W values between -2 to +2 means that there is no autocorrelation.

Hypothesis testing

A. Partial Hypothesis Test

The partial hypothesis test is intended to test the influence between the independent variable and the dependent variable individually or individually, to answer the provisional assumptions that have been formulated in this study. Based on the table, Then the results of hypothesis testing in this study obtained a CR significance value of 0.684, DER of 0.044, NPM of 0.134, TATO of 0.000, ROA of 0.000. Where the significance value is less than 5% or 0.0. This shows that:

1. The independent variable CR is 0.684 > 0.05 so it does not have a partial effect on Changes

in Profit.
2. The independent variable DER is 0.044 <0.05 so that it has a partial effect on Changes in Profit.
3. The independent variable NPM is 0.134 > 0.05 so it has no partial effect on changes in Profit.
4. The independent variable TATO is 0.000 <0.05 so that it has a partial effect on changes in Profit.
5. The independent variable ROA is 0.000 <0.05 so that it has a partial effect on changes in profit.

Table 5. Partial Hypothesis Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74159,508	5	14831,902	23,277	,000[b]
	Residual	91755,660	144	637,192		
	Total	165915,169	149			

a. Dependent Variable: PL

b. Predictors: (Constant), ROA, CR, NPM, DER, TATO

Based on table 1, it can be concluded that H0 is rejected and H1 is accepted. This can be seen from the calculated F value of 23,277. While the resulting significance value is 0.000 which is smaller than 0.05. Thus, it can be concluded that this multiple regression model is feasible to use, and the independent variables which include CR, DER, NPM, TATO, ROA have a simultaneous effect on the dependent variable earnings changes.

Coefficient of Determination (R Square)

The coefficient of determination essentially measures how far the model's ability to explain the variation of variables. The coefficient of determination is used because it can explain the goodness of the regression model in the dependent variable. The higher the coefficient of determination, the better the ability of the independent variable to explain the dependent variable. Based on the table, it shows the value of the coefficient of determination or R Square of 0.447 or 44.7%. This shows that the variables studied CR, DER, NPM, TATO, ROA are able to explain the dependent variable variance, Profit Changes are 44.7%, while the rest are influenced by variables not examined in this study.

T Uji Test

Table 6. T Uji Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,121	5,495		,022	,982		
	CR	,108	,264	,026	,408	,684	,922	1,085
	DER	11,650	5,737	,135	2,031	,044	,871	1,148
	NPM	11,133	7,395	,094	1,506	,134	,975	1,026
	TATO	-14,835	3,690	-,267	-4,020	,000	,870	1,149
	ROA	182,822	17,059	,741	10,717	,000	,804	1,244

a. Dependent Variable: PL

The results of hypothesis testing (T test) in the table above show that the significance value:

a. CR variable is 0.684 which is greater than 0.05. This shows that the CR variable has no effect on Changes in Profit.
b. The DER variable is 0.044 which is smaller than 0.05. From these data, it shows that the DER variable has an influence on changes in profit.
c. The NPM variable is 0.134 which is greater than 0.05. From these data, it shows that the NPM variable has no effect on changes in earnings.
d. TATO variable is 0.000 where the result is smaller than 0.05. The data shows that the TATO variable has an influence on changes in earnings.
e. The ROA variable is 0.000 where the result is smaller than 0.05. From these data, it shows that the ROA variable has an influence on Changes in Profit.

5. Conclusion and Suggestion

5.1. Conclusion

Based on the results of data analysis in this study, it can be concluded as follows:

a. Current Assets (CR) have no effect on Changes in Profit. This means that any increase in the CR variable cannot increase the Change in Profit and vice versa.
b. Debt To Equity Ratio (DER) has an effect on changes in earnings, so that any increase in the DER variable can increase changes in profit and vice versa.
c. Variable Net Profit Margin (NPM) has no effect on changes in profit, if there is an increase in NPM, it will not increase changes in profit and vice versa.
d. Variable Total Asset Turn Over has an effect on changes in profit, if there is an increase in TATO it will increase changes in profit and vice versa.
e. The Return to Assets (ROA) variable has an effect on Profit Changes, if there is an increase in ROA it will increase profit changes and vice versa.

5.2. Suggestion

Based on these conclusions, some suggestions that can be used as consideration are as follows:

a. For investors and potential investors, it is necessary to conduct fundamental analysis by analyzing financial statements in making investment decisions. considering financial performance.
b. For DER, TATO and ROA are several ratios that can be used to predict Profit Changes, because these 3 factors have an effect and have a positive relationship to Profit Changes.

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