Factors Affecting Stock Returns in Detected and Non-Detected Earnings Manipulation Cases

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ABSTRACT

This research aimed to show the difference in profitability ratios in affecting a company's stock return if earnings manipulation is detected or not detected. The profitability ratios used in this research are Earnings per Share, Net Profit Margin, and Return on Assets, with Firm Size as the control variable. There are 340 manufacturing company data listed on Indonesia Stock Exchange from 2016 to 2019 whose passed purposive sampling was used as this study data. This research applied the Beneish M-Score tool to detect earnings manipulation, which shows 276 companies detected and 64 companies not detected manipulation. The testing uses multiple regression to see the partial, simultaneous, and influence of independent variables on the stock return. The analysis shows that the profitability ratios of detected and non-detected affect stock return. Partially, the non-detected shows that EPS and ROA have a significant positive effect on stock return, while NPM is insignificant. While the partial test of detected manipulation shows that EPS and NPM have a significant positive effect, and ROA showed a significant negative effect. Both non-detected and detected earnings manipulation revealed an insignificant effect for the firm Size.

INTRODUCTION

Financial statements are the source of information on corporation performance. The 5main component of financial statements is company earnings for an accounting period. Investors can use reported financial information as a basis for investment decision-making. Ghazali, et al., (2015) stated that, ideally, financial statements reflect a company's actual performance. However, companies could present earnings in a way that suits themselves, known as Earnings Management (Ghazali et al., 2015). Earnings management conforms to the Generally Accepted Accounting Principles; hence, it differs from fraudulent activity. Management of earnings is regarded as fraud if it violates the accounting standards, called Earnings Manipulation (Christensen et al., 2017). According to Tabassum et al., (2015), manipulated financial statements did not reflect the company's actual performance.

Financial performance improvement is a company interest that they must meet in serving financial statements. A company's performance in earning its profit is portrayed in financial statements, which financial users essentially utilize to assess its performance (Healy & Wahlen, 1999) achieving that requires a company to perform well gradually to maintain performance (Shuto, 2007). Financial performance continually fluctuates; hence, a company needs to manage earnings to achieve a good picture (Maccarthy, 2017). Furthermore, company performance is a significant aspect for forecasting stock return (Ghazali et al., 2015), which is affected by earnings manipulation that causes the earnings report not to reflect company performance. However, investors continue to use financial statements for decision-making to predict the stock return of a company (Ghazali et al., 2015). Investors further use profitability ratios to analyze a financial report for forecasting future stock returns based on the company's portrayed performance. Hence, there are possibilities that financial statements provide somewhat unclear financial performance with earnings management and earnings manipulation

affecting the performance. Therefore, it is essential to obtain a company's actual performance. A tool created by Messod D. Beneish, the M-Score model, is a tool to detect earnings manipulation (Beneish, 1999). By using the M-Score model, Beneish (1999) is able to identify manipulators 76% correct and 17.5% incorrect from 74 companies that manipulate their earnings. Other tests have proven that the Beneish model could detect Enron's financial fraud (Maccarthy, 2017). In the previous research by Tarjo & Herawati (2015), they implemented the Beneish M-Score model in detecting earnings manipulation.

The U.S. Securities and Exchange Commission (SEC) whistleblower programs report showed the report of frauds conducted in companies. In 2020, the "Corporate Disclosure and Financials" was the most common complaint allegation in SEC whistleblower programs reports (U.S. Securities and Exchange Commission (SEC), 2020). Compared with the 2019 reports, there was a drastic increase in "Corporate Disclosure and Financials" complaints. In 2019 there were only 1107 complaints, while in 2020, it reached 1710 complaints. Besides, the ACFE (Association of Certified Fraud Examiners) report to the nation in 2020 concluded that "Financial Statements Fraud" caused the highest median loss per case (Association of Certified Fraud Examiners (ACFE), 2020). The "Financial Statements Fraud" caused a $954,000 median loss per case, the highest median loss per case in the ACFE occupational fraud categories. Moreover, ACFE (2020) showed that the manufacturing sector was third among the most fraud cases based on the various industry categories. Also, it showed that the manufacturing industry has the most financial statement fraud cases compared to other sectors.

The problem is that the investors do not know any effect of earnings manipulation on their stock return analysis. Some companies, on the one hand, may not manipulate their earnings. On the other hand, some companies may do earnings manipulation. With earnings manipulation, the financial statements could not inform investors of the value relevance of the company's earnings performance (Mostafa, 2017). Whereas earnings information significantly affects stock return, which can drive investors to hold and buy a company's shares (Kasmiati & Santosa, 2019). Therefore, a company's false performance information would mislead investors' analysis of stock returns (Kedia et al., 2015). Based on these conditions, the question emerges regarding the effect of earnings manipulation on stock return, whether the detected and non-detected earnings manipulation companies have different effects on profitability ratios in influencing stock return analysis or not. Following the problem mentioned, the purpose of this study was to obtain empirical evidence by analyzing the different effects of the detected and non-detected earnings manipulation on the stock return. This research would help the stock return reference studies by stock return differences on company detected and non-detected earnings manipulation.

Hypothesis Development

Positive accounting theory explained by Watts & Zimmerman (1986) assumes that the objective of accounting theory is to explain and predict accounting practices; a) to explain implies explaining a reason for accounting practices, b) to predict means that the theory predicts a phenomenon that may occur from an accounting practice. In their research, it was explained that there were three hypotheses about company incentives in choosing accounting methods which are bonus plan, debt covenant, and political cost hypothesis (Watts & Zimmerman, 1978, 1986, 1990). Positive accounting theory has a vital role because of its ability to provide information on the consequences of a company's decision (Watts & Zimmerman, 1986). One of the company's decisions is earnings management to gain incentives through financial reporting. Increasing the income from earnings management can be obtained through four sources, which are debt contracts, compensation agreements, equity offerings, insider trading (Beneish, 2001). From those sources, it is evident that the first two sources had been hypothesized in the Watts & Zimmerman (1978, 1986, 1990) earlier research. Hence, it shows

that earnings management is the accounting practice that could be explained and predicted by positive accounting theory.

The research by Beneish, Lee, & Nichols (2013) stated that companies with a higher probability of manipulation earn lower stock returns. According to Kedia, et al., (2015), earnings manipulation is a fraudulent reporting of information that will lead to false profitability performance and is likely to mislead investors when investing. Those statements are proven through Lento & Yeung's (2017) research which found evidence that relatively companies with a relatively high level of earnings management and low EPS show a weak future stock performance. Al-Shattarat, et al., (2018) also found that earnings management has a negative effect on future operating performance and leads to a performance decline in subsequent operating. Dakhlallh et al. (2020) found the same result that shows manipulation of earnings has a significant negative impact on the company performance that induces future issues of less performance.

A company's performance is represented in its reported earnings that the greater the earnings indicate, the better performance (Al-Shattarat et al., 2018; Dakhlallh et al., 2020). A profitability ratio is one of the accounting ratios that can assess how well a firm is generating earnings over a specified period (Har & Ghafar, 2015). Santosa (2019) research stated that the profitability ratio positively affects stock return. A prior study by Satryo, Rokhmania, & Dipyana (2017); Saeidi (2012); and Jauharia & Sugeng (2012) used the profitability ratios that are Earnings Per Share (EPS), Net Profit Margin (NPM), and ratio related to a return which is the Return on Assets (ROA).

Prior research showed that ROA insignificantly affects the stock return and EPS has a negative and significant effect on stock return (Jasman & Kasran, 2017). In Cahyaningrum & Antikasari's (2017) research, the ROA and EPS show a positive and significant effect on the stock return. While the research conducted by Satryo, Rokhmania, & Diptyana (2017) indicates that ROA does not affect stock return, yet EPS does. Endri's (2020) research showed that ROA has a positive and significant effect on stock return. On the other hand, Reniati's (2020) study showed that the EPS effect on stock return is insignificant. In Öztürk's (2017) research, NPM has a positive and significant effect on stock return, while Kusmayadi, Rahman, & Abdullah (2018) showed that NPM has a negative and significant effect on stock return. Therefore, based on the problem and objective above, the research hypotheses are:

H_1: Profitability Ratios has a positive impact on the stock returns of the non-detected manipulated companies.

H_2 : Profitability Ratios has a negative impact on the stock returns of the detected manipulated companies.

RESEARCH METHODS

This research uses secondary data from company financial statements and the stock's closing price from 2016 until 2019. Stock's closing price is the last stock price at a specific date. In this study, the date is based on the audited financial statement publication date. The financial statement data are from *Bursa Efek Indonesia* on their website, www.idx.co.id, each company website, or Indonesia Finance Market on www.idnfinancials.com. The stock's closing price data are from Yahoo Finance (www.finance.yahoo.com).

Population and sampling

This research population data is from the manufacturing sector companies listed in IDX during the 2016-2019 period. There are 268 manufacturing companies listed in IDX. This study uses the purposive sampling technique to eliminate the sample with incomplete data, to avoid companies with an absence of specific data. Furthermore, purposive sampling is used because

this research does not aim to generalize the entire Indonesian manufacturing sector companies listed in IDX (Etikan, 2016).

The purposive sampling technique used several categories to gather the data; (1) Listed in IDX from 2016 until 2019. (2) Stated the financial statement in Rupiah currency. (3) Provide a complete financial report from 2016 until 2019. (4) Data of stock's closing price from 2016 until 2019. Therefore, there are 268 manufacturing companies as the samples of this research. Those samples from purposive sampling are tested using the M-Score statistical model. The M-Score model will show which companies are detected doing earnings manipulation or not, and those results are the sample of this research.

Table 1. Purposive Sampling

Sample Selection Process	
The manufacturing company listed in IDX	268
Not listed in IDX from 2016 until 2019	(86)
The financial report stated in Rupiah	(15)
Incomplete financial report from 2016 until 2019	(7)
Incomplete stock's closing price data from 2016 until 2019	(75)
The number of companies used as research samples	85
Four years period	*4
The total of data used as research samples	340

Source: Processed Data (2021)

Model and variables

The data of companies that detected and non-detected as conducting earnings manipulation were used in this research. Thus, the company's financial reports will be tested using the M-Score model to show the data. The detection of earnings manipulation will be obtained by using this formula (Beneish, 1999):

$$M= -4,.84+0.92\times DSRI+0.528\times GMI+0.404\times AQI+0.892\times SG \quad …………1)$$

$$+0.115\times DEPI-0.172\times SGAI+4.679\times TATA-0.327\times LVGI$$

1. Days Sales Receivable Index:
$$DSRI = \frac{Receivables_t \,/\, Sales_t}{Receivables_{t-1} \,/\, Sales_{t-1}} \quad …………………..2)$$

2. Gross Margin Ratio:
$$GMI = \frac{[(Sales_{t-1}-COGS_{t-1}) \,/\, Sales_{t-1}]}{[(Sales_t-COGS_t) \,/\, Sales_t]} \quad ………………...3)$$

3. Assets Quality Index:
$$AQI = \frac{[1-(Current\ Assets_t-PP\&E_t) \,/\, Total\ Assets_t]}{[1-(Current\ Assets_{t-1}-PP\&E_{t-1}) \,/\, Total\ Assets_{t-1}]} \quad ……………...4)$$

4. Sales Growth Index:
$$SGI = \frac{Sales_t}{Sales_{t-1}} \quad ………………….5)$$

5. Depreciation Index:
$$DEPI = \frac{[Depreciation_{t-1} \,/\, (Depreciation_{t-1}+PP\&E_{t-1})]}{[Depreciation_t \,/\, (Depreciation_t+PP\&E_t)]} \quad ……………...6)$$

6. Selling, Growth, and Administrative Index:
$$SGAI = \frac{(Sales, General, and\ Administrative\ Expense_t \,/\, Sales_t)}{(Sales, General, and\ Administrative\ Expense_{t-1} \,/\, Sales_{t-1})} \quad ……...7)$$

7. Total Accruals to Total Assets:
$$TATA = \frac{(Income\ from\ Continuing\ Operations_t-Cash\ Flows\ from\ Operations_t)}{Total\ Assets_t} \quad …..8)$$

8. Leverage Index:

$$LVGI = \frac{[(Current\ Liabilities_t + Total\ Long\ Term\ Debt_t)\ /\ Total\ Assets_t]}{[(Current\ Liabilities_{t-1} + Total\ Long\ Term\ Debt_{t-1})\ /\ Total\ Assets_{t-1}]} \quad \ldots\ldots.9)$$

The M-Score model analyzes four-period financial statements data from 2016 until 2019. Since to detect manipulation in one year needs to use the previous year's data, it will result in three data of manipulation detection for each company. This research assumes that a company conducts earnings manipulation if 2 of 3 data shows the company has been detected as conducting manipulation. Then, there will be two groups of data. The first group refers to companies not detected conducting earnings manipulation. The second group relates to companies detected conducting earnings manipulation. Afterward, the researcher performs a classic assumption test for each data group as a prerequisite of multiple regression analysis. That test includes the Normality test, Multicollinearity test, Heteroscedasticity test, and Autocorrelation test. Eventually, on the condition that each data group passes the classic assumption test, the researcher will execute separate multiple regression analyses, including t-test, f-test, and coefficient of determination.

Multiple regression analysis is used to know the influence between variables which will show the effect of each variable in determining the dependent variable. In this research, firm Size is added as the control variable. Previous research by Mirgen et al. (2017); and Din (2017) used firm Size as a control variable because it is known to have the ability to increase the significance level of impact on stock return. This research measures the firm Size as the natural logarithm of total assets. Thus, the variables are stock return, earnings per share, net profit margin, return on assets, and firm Size. The multiple regression equation is as follows:

$$Y_1 = \beta_0 + \beta_1 EPS + \beta_2 NPM + \beta_3 ROA + \beta_4 SIZE + \epsilon \qquad \ldots\ldots\ldots.10)$$
$$Y_2 = \beta_0 + \beta_1 EPS + \beta_2 NPM + \beta_3 ROA + \beta_4 SIZE + \epsilon \qquad \ldots\ldots\ldots.11)$$

Y_1 = Stock return on companies detected non-manipulation
Y_2 = Stock return on companies detected manipulation

T-test analysis is used to know the partial influence of the independent variable towards the dependent variable. If the probability results are higher than 0.05, the variable insignificantly influences the stock return, and if the results are lower than 0.05, the variable significantly affects the stock return.

F-test analysis is used to know the simultaneous influence of independent variables on the dependent variable. If the F-test result is higher than the table score, so it significantly influences stock return. Conversely, if the F-test result is lower than the table score, it insignificantly affects stock return.

The coefficient of determination (adjusted R^2) is used for knowing the percentage of influence from all independent variables to the dependent variable. This research shows the percentage influence of EPS, NPM, and ROA on the stock return. The result will be between 0 and 1, which means 0 is 0% influence and 1 is 100% influence on the stock return.

For the variables, this research uses one dependent variable, namely stock return, three independent variables, namely EPS, NPM, and ROA, and one control variable, namely firm Size. In this case, obtaining the dependent variable data - stock return, it could be from the stock's closing price, and using this formula:

$$Stock\ Return = \frac{(P_t - P_{t-1})}{P_{t-1}} \qquad \ldots\ldots\ldots.12)$$

P_{t-1} stands for stock closing price on the day the company's audited financial statement is released to the public, and P_t is a stock closing price the next day. While for the independent variable data and the control variable data, this study obtained the data using these formulas:

1. The earnings per share (EPS) ratio, which measures how much net income is generated for each share, can be acquired using this formula:

$$EPS = \frac{(Net\ Income\ After\ Tax - Preferred\ Dividends)}{Outstanding\ Share} \qquad \dots\dots 13)$$

2. Net profit margin (NPM) ratio, which measures how efficient a company's in converting its earnings into profits, can be gained using this formula:

$$NPM = \frac{Net\ Income\ After\ Tax}{Sales} \qquad \dots\dots.14)$$

3. Return on assets (ROA) ratio, which measures how profitableness is a company in generating income from the assets, can be derived using this formula:

$$ROA = \frac{Net\ Income\ After\ Tax}{Total\ Asset} \qquad \dots\dots.15)$$

4. A firm size which classifies a company according to their Size that is based on the total assets can be measured using this formula:

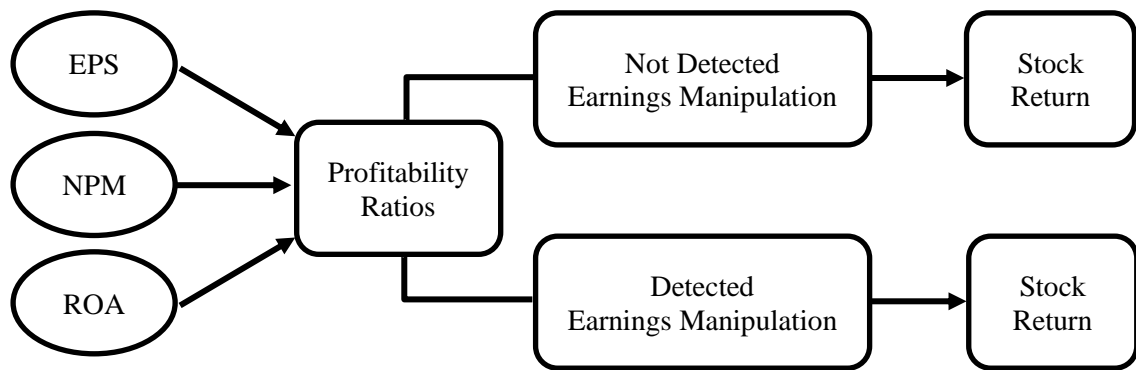$$FS = Ln(Total\ Assets) \qquad \dots\dots.16)$$

Figure 1. Model Framework

RESULTS AND DISCUSSIONS

Many entity data have been eliminated through purposive sampling in the data collection process. As a result, there are only 340 data that pass the sampling requirements. From those data, the researcher conducts the Beneish M-Score analysis to separate which companies are regarded as non-manipulation and manipulation companies. Subsequently, the Beneish M-Score tool discovered 276 non-manipulation data and 64 manipulation data.

Classic Assumption Tests - Not Detected Conduct Earnings Manipulation

This research uses the Kolmogorov-Smirnov (K-S) test to test the data normality. The test produces a K-S value of 0.078, which is above 0.05. This result shows that this data group passes the normality test. The multicollinearity test was determined based on tolerance value and VIF in collinearity statistics. The tolerance value of each variable should be higher than 0.1, while if it is using the VIF value, the results of each variable should be lower than 10 to conclude that there is no multicollinearity in the data set. From the test results, whether using a tolerance of VIF value, the amounts are met the condition of no multicollinearity signs.

The heteroscedasticity test in this research uses the Glejser test. This test shows that all independent variables have a significance value of more than 0.05, which means this data group passes the heteroscedasticity test. In the autocorrelation test, the researcher used the Durbin Watson method. This test method uses the value of dU: 1.823 and the 4-dU: 2.177, gathered in

the Durbin Watson table. The test result should be dU<DW<4-dU free from autocorrelation. The DW value for this group of data is 1.982. So, the test result is 1.823<1.982<2.177, which means the not detected conduct earnings manipulation data are free from autocorrelation. Those test results conclude that this data group is passing the classic assumption test.

Detected Conduct Earnings Manipulation
          The result of the K-S value is 0.200, which is greater than 0.05. From that Kolmogorov-Smirnov test, it can be concluded that the detected manipulation groups of data are passing the normality test. The multicollinearity test result for this group of data showed no multicollinearity signs. By reason, all variable tolerance values are higher than 0.1; likewise, the VIF value is lower than 10. The Glejser test for heteroscedasticity testing showed significance for all independent variables is above 0.05. These results mean this data group passes the heteroscedasticity test. For autocorrelation testing, this data group has the value of dU is 1.694 and 4-dU is 2.305. The DW value for this group of data is 2.252. So, the condition of dU<DW<4-dU, or 1.694<2.252<2.305, is passed, which means no autocorrelation in the detected manipulation groups of data. In conclusion, the detected conduct earnings manipulation data passed the classic assumption test.

Table 2. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Not Detected Conduct Earnings Manipulation					
Stock Return	276	-.07	.08	.0044	.03071
EPS	276	-1783.41	5655.00	174.9181	633.67102
NPM	276	-246.63	38.42	2.7117	20.77423
ROA	276	-58.25	44.68	5.0153	10.21864
Size	276	11.52	14.55	12.6790	.66811
Valid N (listwise)	276				
Detected Conduct Earnings Manipulation					
Stock Return	64	-.07	.10	.0209	.03410
EPS	64	-104.66	871.00	96.2587	172.99351
NPM	64	-87.04	39.00	4.6902	17.12094
ROA	64	-18.39	52.67	8.4187	12.82515
Size	64	10.96	13.65	12.5041	.67549
Valid N (listwise)	64				

Source: SPSS Version 26.0 (2021)

Not Detected Conduct Earnings Manipulation
          From the descriptive statistics in table 2, the stock return has a minimum value of -0.07, a maximum value of 0.08, an average of 0.0044, and a standard deviation of 0.03071. This result shows that the manufacturing company in 2016-2019 that is not detected conduct earnings manipulation has a 0.44% increase in stock return from the day after the publication of the annual financial report. The standard deviation is higher than the mean value, which was quite dispersed stock return data. The EPS variable has the highest value of 5655, the lowest value of -1783.41, the mean of 174.9181, and the standard deviation of 633.67102. The mean value means, on average, a company can generate Rp 174.9181 for each share. The standard deviation has a high value, which means the EPS data are very scattered.
          The NPM variable has a minimum value of -246.63, a maximum value of 38.42, an average of 2.7117, and a standard deviation of 20.77423. The mean value means that a company has 2.7117% of net profit from the total revenues, while the rest is for expenses. Also, with that amount of standard deviation, it means the NPM data is reasonably distributed. The ROA variable has the lowest value of -58.25, the highest value of 44.68, the mean of 5.0153, and a

standard deviation of 10.21864. The mean value means every Rupiah of the average company's assets can generate 5.0153% net profit. The standard deviation results in a pretty high amount, which means the ROA has a slightly high dispersion of data. While the control variable, which is Size, has a minimum value of 11.52 and a maximum value of 14.55. The mean of Size can be interpreted that the average total assets of 276 companies in the form of logarithm value are 12.6790. The standard deviation of Size is 0.66811, which is quite far below the mean value, so it can be interpreted that the Size data dispersion tends clustered.

Detected Conduct Earnings Manipulation

The dependent variable, Stock Return, has a minimum value of -0.07, a maximum value of 0.10, a mean value of 0.0209, and a standard deviation of 0.03410. The mean value means that average each company's stock return is increasing as much as 2.09% on the day after the publication of the annual financial report. While the standard deviation value has a relatively higher value than the mean value, it can be concluded that the stock return data dispersion is spread. The EPS variable has the lowest value of -104.66, the highest value of 871, an average value of 96.2587, and a standard deviation of 172.99351. The mean value tells that, on average, in this data group, each company share is valued at Rp 96.2587. The standard deviation of EPS results in a high value, which means the data distribution is varied.

The NPM variable has a minimum value of -87.04, a maximum value of 39, a mean value of 4.6902, and a standard deviation of 17.12094. The mean value means that the company's total sales consist of 4.6902% of net profit. The value of standard deviation shows that NPM data is highly dispersed. The ROA variable has a minimum value of -18.39, a maximum value of 52.67, a mean value of 8.4187, and a standard deviation of 12.82515. The mean value means 8.4187% of net profit generated by every Rupiah of the average company's assets. The standard deviation has a slightly high value, which means that the ROA data is quite highly scattered. The Size variable has the lowest value of 10.96, the highest value of 13.65, a mean value of 12.5041, and a standard deviation of 0.67549. The mean value shows that the average company total assets in this data group is 12.5041. The value of the standard deviation of Size data is relatively low, which can be interpreted as having data that tends to be central to the mean.

Hypothesis Testing
Multiple regression for non-detected manipulation

From the t-test result (table 3), the EPS and ROA variable have a significance value under 0.05, which mean it has a partial effect on stock return. Also, if it uses the t-table value, with the degrees of freedom 271 and two-tailed significance level of 0.025, the t-table value is 1.968. That t-table amount is lower than the t-count of EPS and ROA variable, which shows the same result as the significance value method. For NPM and Size variable, it has a significance value higher than 0.05, and also, the t-count of the Size variable is negative.

Table 3. Coefficients^a – Not Detected

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.050	.036		1.396	.164
	EPS	6.370E-6	.000	.131	1.991	.047
	NPM	2.707E-6	.000	.002	.022	.982
	ROA	.001	.000	.263	3.129	.002
	Size	-.004	.003	-.087	-1.405	.161
a. Dependent Variable: Stock Return						

Source: SPSS Version 26.0 (2021)

Thus, from the significant value and the t-test results can be interpreted that NPM does not affect stock return; Size has a negative effect yet insignificant, while EPS and ROA are positive and significantly affect the stock return.

Table 4. ANOVA^a – Not Detected

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.027	4	.007	7.876	.000b
	Residual	.232	271	.001		
	Total	.259	275			

a. Dependent Variable: Stock Return
b. Predictors: (Constant), Size, NPM, EPS, ROA

Source: SPSS Version 26.0 (2021)

From the f-test result in table 4 above, it can be seen that in the non-detected manipulation group of data, the significance value is 0.000<0.05. The result means that simultaneously EPS, NPM, ROA, and Size significantly affect Stock Return. It has the same result if it is analyzed through the F value. If the F-count>F-table value means independent variables simultaneously have a significant effect on the dependent variable and vice versa. The value of the F-table for the denominator of 272, nominator of 4, with 0.05 significance level is 2.404. It shows that the F-count is greater than the F-table, 7.876>2.404, which has the same result as the significance value test.

Table 5. Model Summary – Not Detected

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.323a	.104	.091	.02928

a. Predictors: (Constant), Size, NPM, EPS, ROA

Source: SPSS Version 26.0 (2021)

From the model summary in table 5 above, the researcher decided to use an adjusted R square value for the coefficient of determination. That value is chosen because of the accuracy in determining all independent variables' influence on the dependent variable. The adjusted R square of EPS, NPM, ROA, and Size to Stock Return is 0.091. Thus, in the form of a percentage, the EPS, NPM, ROA, and Size of the non-detected manipulation group of data have a 9.1% influence on the value of Stock Return.

$$Y_1 = \beta_0 + \beta_1 EPS + \beta_2 NPM + \beta_3 ROA + \beta_4 SIZE + \epsilon$$

$$Y_1 = 0.050296 + 0.000006 * EPS + 0.000003 * NPM + 0.000790 * ROA + -0.004018 * SIZE + \epsilon$$

The multiple regression model above shows that in manufacturing companies that are not detected for earnings manipulation, the stock return value is 0.050296 if any variables have no influence. If there is an influence from EPS as much as 1 point, it increases the stock return value by 0.000006. If the 1-point increase is by NPM, the stock return value will rise by 0.000003. Then, if ROA affects stock return by 1 point, it will add 0.000790. While if Size gives an influence of 1 point, the stock return value will have a 0.004018 reduction.

The hypothesis testing for the non-detected data group shows that independent variables simultaneously affect dependent variables. It also shows that independent variables can determine 9.1% of the dependent variable. At the same time, the partial test shows varying results. In this case, the EPS, NPM, and ROA positively impact the stock return though the NPM is not significant. These results align with Cahyaningrum & Antikasari's (2017) results of EPS & ROA; Satryo, et all., (2017) EPS result; and Endri's (2020) ROA, which show a significant positive effect. Also, it is partially aligned with Öztürk's (2017) research which results in positive NPM but is insignificant. However, these results are not aligned with the

ROA results from the Satryo, et al., (2017), Reniati's (2020) EPS result, and Kusmayadi, et al., (2018) NPM result, which show significant negative effects. Meanwhile, the Size variable has an insignificant negative impact on the stock return. Thus, the H_1, which states that profitability ratios positively impact non-detected manipulation, is partially accepted since the NPM is insignificant and the Size variable negatively influences the value of the stock return. This hypothesis result is not fully aligned with the previous research by Har & Ghafar (2015) and Santosa (2019) express a positive effect of profitability ratios on stock return. The underlying reasons for this result vary. It could be due to regulations, nature, market, or even its management. Those conditions might have differed for each company, which probably reduce or restraint the company's performance.

Multiple regression for detected manipulation

The t-test results (table 6) show that Size is the only independent variable that insignificantly affects the Stock Return. This detected manipulation data groups have degrees of freedom 59 and a two-tailed significance level of 0.025, resulting in the T-table value of 2.001.

Table 6. Coefficients[a] – Detected

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.068	.077		-.887	.379
	EPS	9.956E-5	.000	.505	2.419	.019
	NPM	.001	.000	.488	2.543	.014
	ROA	-.002	.001	-.738	-2.730	.008
	Size	.007	.006	.144	1.188	.240
a. Dependent Variable: Stock Return						

Source: SPSS Version 26.0 (2021)

From those significance values and t-table values, it can be concluded that both EPS and NPM significantly positively affect the stock return. On the contrary, ROA has a significant negative effect on stock return, while the Size variable has a positive impact yet it was insignificant.

Table 7. ANOVA[a] – Detected

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.013	4	.003	3.177	.020b
	Residual	.060	59	.001		
	Total	.073	63			
a. Dependent Variable: Stock Return						
b. Predictors: (Constant), Size, NPM, EPS, ROA						

Source: SPSS Version 26.0 (2021)

ANOVA test result (table 7) shows that the significance value of the independent variable in the detected manipulation data group is 0.02, which is lower than 0.05. The result shows the EPS, NPM, ROA, and Size simultaneously affect the Stock Return significantly. The analysis through the F value also has the same results. The value of the F-table for the denominator of 60, nominator of 4, with 0.05 significance level is 2.525. It shows that the F-count, which is 3.177, is greater than the F-table.

Table 8 of the model summary shows that in the detected manipulation group, the result of the adjusted R square is 0.121. Thus, EPS, NPM, ROA, and Size determine the value of Stock Return by 12.1%, while 87.9% is affected by another variable

<div align="center">**Table 8. Model Summary – Detected**</div>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.421a	.177	.121	.03196
a. Predictors: (Constant), Size, NPM, EPS, ROA				

Source: SPSS Version 26.0 (2021)

The multiple regression equation of the detected manipulation data group above shows that the stock return value on the day after the annual financial statements are published is -0.067929 if other variables do not affect it.

$$Y_2 = \beta_0 + \beta_1 EPS + \beta_2 NPM + \beta_3 ROA + \beta_4 SIZE + \epsilon$$
$$Y_2 = -0.067929 + 0.000100 * EPS + 0.000972 * NPM + -0.001961 * ROA + 0.007292 * SIZE + \epsilon$$

While if there is 1 point of EPS variable which influencing, the stock return value increases 0.000100. If the 1-point effect is from NPM, it will add 0.000972 to the stock return value. When ROA increases by 1 point, then the stock return value lessens as much as 0.001961. If it has 1 point of influence for the Size variable, the stock return value will gain 0.007292.

The detected manipulation hypothesis testing shows that simultaneously the independent variables have a significant effect on the dependent variable. Also, it shows that the independent variables determine 12.1% of the dependent variable. At the same time, the partial test shows that EPS, NPM, and Size positively influence the value of the stock return, although the effect of Size is not significant. These results follow the EPS result from Cahyaningrum & Antikasari (2017) and Satryo, et al., (2017) results, and Öztürk's (2017) NPM results. Meanwhile, Reniati's (2020) EPS and NPM results from Kusmayadi, Rahman, & Abdullah (2018) are despite these research results. On the contrary, ROA influence is significantly negative toward the stock return value, and it is partially in accordance with Satryo, et al., (2017) ROA result even though insignificant. Therefore, H_2, which states profitability ratios negatively influence the stock return of detected earnings manipulation company, is partly rejected since EPS and NPM variables significantly give positive influences on the stock return value. This hypothesis result is not fully aligned with the previous research by Beneish, Lee, Nichols, et al. (2013), Lento & Yeung (2017), Al-Shattarat, et al., (2018), and Dakhlallh et al. (2020), which states that earnings manipulation leads to a decline in the company's future performance. The inharmonious output might be caused by the companies steadfastly conducting earnings manipulation and yet have not perceived the adverse aftermath of performance manipulation.

CONCLUSIONS AND SUGGESTION

The stock return of manufacturing companies listed in the Indonesia Stock Exchange from 2016 to 2019 is simultaneously affected by profitability ratios for non-detected and detected earnings manipulation. For the non-detected manipulation, the EPS and ROA variables significantly affect stock return, while NPM is insignificant. The EPS and NPM have a significant positive effect for the detected earnings manipulation, while ROA has a negative and significant effect on stock return. The control variable, firm Size, in non-detected has a negative effect, while in detected earnings manipulation has a positive effect on stock return, and both effects are insignificant.

The detected result indicates that if earnings manipulation alters reporting that increases EPS, NPM, and Size, it could increase the stock price. Therefore, it means a stock price incentive is the company's result of earnings manipulation, which shows how aligned manipulation is with positive accounting theory. Also, the research results denote that several profitability ratios other than EPS have a contrary effect on the detected and non-detected earnings manipulation. Therefore, it indicates that earnings manipulation influences a

company's profitability ratios. Thus, investors should examine the company's earnings manipulation status for a better profitability ratio analysis for investing.

Additionally, the various ratios effect exemplify profitability ratios should not be hypothesized as a whole. Nonetheless, the hypothesis is for each profitability ratios component. Also, the results point out that for the non-detected group, its independent variable only determines 9.1% of the dependent variable, while for the detected group is only 12.1%. Therefore, the researcher suggests that future researchers include other ratios such as solvency, liquidity, and efficiency. Furthermore, future researchers should use an average or more extended period of stock return to represent stock price changes better.

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