

The Effect of Earnings Management, Board Characteristics, and Firm Size to Firm Performance on Manufacturing Companies

Sari Dewi¹, Vieri Wijaya²

Departement of Accounting, University Internasional Batam¹

Departement of Accounting, University Internasional Batam²

Abstract. This study aims to examine the effect of earnings management, board characteristics, and firm size on firm performance by measuring Tobin's Q (TQ). In this study, we examine the effect of earnings management using accrual-based earnings management and real earnings management, the effect of board characteristics using the variable the board of directors size and board of commissioners size, and also examine the effect of firm size by means of the natural log of firm assets. The results of this study indicate that accrual-based earnings management and firm size have a significant positive impact on firm performance while for real earnings management variables, the board of directors size, and the board of commissioners size are not significant on firm performance in this research topic.

Keyword. Earnings Management, Board Characteristics, Firm Size, and Firm Performance

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Corresponding Author. sari@uib.ac.id, and 1842128.vieri@uib.edu

INTRODUCTION

The company was built with the aim of making a profit. Profit is generated if the company is able to manage and utilize assets and resources properly and correctly. Profit is usually used as a medium for measuring company performance and becomes a picture of the company's finances. Firm performance is an indicator that is often used because it is important in management research strategies and is often used as a resource dependent variable (Adryanti, 2019). Hereby states the importance of information from the financial statements issued by the company is the main resource for every market participant, because it can reduce information asymmetry between executives, investors, and other stakeholders, and the most significant economic data is company profits.

Despite the company's reported earnings, the results of accounting decisions and the company's fundamental activities, organizations tend to achieve certain profit projections. Where executives use different legal and sometimes illegal methods and strategies to achieve certain profit goals, this phenomenon is called earnings management according to researchers (Dakhlallh et al., 2020). Earnings management is any practice that is intentionally carried out by company executives to report accounting results that are not in accordance with those actually achieved due to opportunistic and or informational reasons.

Researchers Wijayanti et al. (2014) revealed that the CEO manipulated earnings to capture the market and create his reputation early in his tenure. Earnings management is used according to Yusnita et al. (2015) in order to manipulate the company's financial data to achieve certain goals, companies can report larger profits to attract investors than other competitors, so that it becomes an inspiration for executives in creating a perfect performance image of the company to attract investors. Therefore, the relationship between earnings management and company performance varies, based on the quality of company management (Dakhlallh et al., 2020). Where there is a major problem, namely the existence

of earnings management practices in financial reporting procedures that are manipulated, and cause the financial statements to affect the choices of investors and stakeholders (Taouab & Issor, 2019).

In this case the researchers found one case that occurred in the company PT. Garuda Indonesia TBK, which reported that the company's financial statements had a net profit of US\$809,000 in 2018 or in Indonesia rupiah of 11.56 billion Indonesia rupiah, referring to the exchange rate of 14,300 Indonesia rupiah per United States (US) dollar. This condition is inversely proportional to the company's 2017 performance which lost US\$216,580,000. Equivalent to 3.09 trillion Indonesia rupiah. However, in the third quarter of 2018, the state-owned airline still lost US\$114,080,000 or the equivalent of 1.63 trillion Indonesia rupiah (Christian et al., 2021).

From the results of this study, researchers understand the various points of view that make researchers to carry out this research. That everyone has a different point of view, therefore, the activities carried out greatly affect the firm performance and one of them is the financial report because most of the important decisions given by these stakeholders are based on financial data taken from the financial statements company.

Firm Performance

Firm performance is an important thing that must be obtained by every person or group in the company because the effect of firm performance reflects the company's ability to manage and allocate resources. Companies that have good performance can bring in high profits which of course generate job opportunities and increase individual income. The company's financial profitability will increase the profits of the employees themselves, have better production units, and bring higher quality products to consumers (Taouab & Issor, 2019).

The Effect of Earnings Management on Firm Performance

Firm Performance on Jordanian suggests that accrual-based and real earnings management with firm performance (Tobin's Q) has a significant positive relationship. Researchers Dakhlallah et al. (2020) state accrual-based earnings management with the Jones model has an effect on firm performance, with this stating that there is a positive relationship between accrual-based earnings management and future performance.. Researchers Santoso and Widayawati (2017) also examined that accrual-based earnings management calculated using discretionary accruals partially had a significant positive effect on the performance of manufacturing companies. Whereas Researchers Khuong et al. (2019) assume that companies that use this form of capital call regularly use real earnings management and will experience a significant negative company value decline in the company's future. Researchers Wijayanti et al. (2014) also stated that real earnings management has a negative impact on the company's earnings performance in the future.

H1: Accrual-based earnings management has a significant positive effect on determining the firm performance.

H2: Real earnings management has a significant negative effect on determining the firm performance.

The Effect of Board Characteristics on Firm Performance

Researchers Vieira (2018) stated that the board of directors size in a company aims to lead to better monitoring of management decisions to reduce conflicts between large and

minority shareholders in promoting stakeholder interests with other interests, all of which can have a positive effect on firm performance. Study Goel and Sharma (2020) provide a different point of view if the size of the board of directors size affects the firm performance. Some studies believe that the larger the size of the board of directors, the more positive impact on the future firm performance will be.

Researchers Dewi et al. (2018) suggested that a small number of members of the board of commissioners size will improve the firm performance, with the results of the test, the board of commissioners size has a significant negative effect on the firm performance. Because the effect of a large commissioner size on fraud in financial reporting is significantly positive. That way, the board of commissioner’s size is moreless effective in controlling management. Study Hidayat and Utama (2018) also found that the involvement of family members on the board of commissioners size has a negative impact on firm performance because family members are a group of people with similar interests and can hinder the effectiveness of the internal control system.

H3: The board of directors size has a significant positive effect on determining the firm performance.

H4: The board of commissioners size has a significant negative effect on determining the firm performance.

The Effect of Firm Size on Firm Performance

Researchers Erawati and Wahyuni (2019) states that companies with larger sizes can have greater financial strength in supporting performance, then there is a positive relationship between firm size and firm performance. On the other hand, researchers Apriliani and Dewayanto (2018) also found a positive significant effect between firm size on firm performance because firm size shows how capable the company is in generating profits. It has good prime sources, both internal and external.

H5: Firm size has a significant positive effect on determining the firm performance.

METHOD

Types, Data Sources, and sample

This research is quantitative (number) with secondary collection techniques. The sample taken in this learning study is the annual report of the manufacturing sector which has been published on the IDX (Indonesian Stock Exchange). The annual report that will be taken as a sample in the study from 2016-2020. Provisions in sampling are companies that have had an IPO (Initial Public Offering) since 2016 and companies that report the availability of variable data required by this researcher.

Variable Type	Variable	Measurement	Reference
Dependent	Tobin's Q	$\text{Tobin's Q} = \frac{\text{MVE} + \text{BVA} - \text{BVE}}{\text{BVA}}$	Yusnita et al. (2015)
	Accrual-Based Earnings Management	$\frac{TACC_{it}}{A_{it-1}} = \alpha_0 + \beta_1 \left(\frac{1}{A_{it-1}} \right) + \beta_2 \left(\frac{\Delta SALES_{it} - \Delta REC_{it}}{A_{it-1}} \right) + \beta_3 \left(\frac{PPE_{it}}{A_{it-1}} \right) + \beta_4 ROA_{it-1} + \mu_{it}$	Dechow et al. (1995)

Variable Type	Variable	Measurement	Reference
Independent	Real Earnings Management	$CFO_{it}/A_{it-1} = \alpha_0 + \beta_1(1/A_{it-1}) + \beta_2\left(\frac{SALES_{it}}{A_{it-1}}\right) + \beta_3\left(\frac{\Delta SALES_{it}}{A_{it-1}}\right) + \epsilon_{it}$	Roychowdhury (2006)
	Board of Directors Size	Total Members of the Board of Directors	Vieira (2018)
	Board of Commissioners Size	Total Members of the Board of Commissioners	Dewi et al. (2018)
	Firm Size	Log Natural (Total Company Assets)	Al-Slehat (2019)
Control	Leverage Ratio	Leverage Ratio = $\frac{\text{Total Company Debts}}{\text{Total Company Assets}}$	Tambunan and Prabawani (2018)

RESULTS AND DISCUSSION

Table 1. Descriptive Statistical Results

Information	Descriptive statistics				
	N	Minimum	Maximum	Average	Std. Deviation
Firm Performance	630	-1.97911	23.28575	1.71574	2.30405
Accrual-based Earnings Management	630	-0.41695	1.36009	0.426164	0.15344
Real Earnings Management	630	-2.08118	0.03674	-0.16995	0.16021
Board of Directors Size	630	2	16	4.94	2.212
Board of Commissioners Size	630	1	12	4.12	1,725
Firm Size	630	25.21557	33.49453	28.64444	1.58091
<i>Leverage Ratio</i>	630	0.00345	5.19018	0.55858	0.56967

From table 1 above, it can be concluded that the number of sample data that meet the criteria is 630 data from 2016 to 2020. The results from the table state that the firm performance that will be described with an average value of 1.71574 which means that there are still many manufacturing companies that are not good in asset management so that the average value is low. From the output results, the average value of accrual-based earnings

management is 0.426164, which means that the company has accrual profit which is only 42% and is quite profitable for a manufacturing company's performance. While the output results of the average value of real earnings management is 0.16995, which means that the company's profit is very bad at -16% and is not very good for a manufacturing company's performance.

The next discussion, explaining the characteristics of the board with the variable the board of directors size and the board of commissioners size in the table above shows that the board of directors size has an average value of 4.94 which means that manufacturing companies in Indonesia have 4 members of the board of directors to manage the company's operations. Meanwhile, the variable the board of commissioners size has an average value of 4.12 which means that manufacturing companies in Indonesia have 4 commissioners in supervising and providing advice to the board of directors so that supervision is more optimal. The firm size has an average value of 28.64444, which means that the average assets owned by manufacturing companies registered in Indonesia are quite high.

Panel Data Regression Model Selection

Chow Test

Table 2. Chow Test Results

<i>Effects Test</i>	<i>Statistics</i>	<i>Probability</i>	<i>Conclusion</i>
<i>Fixed cross-section</i>	1019.818630	0.0000	<i>Fixed Effect Model</i>

Table 2 shows the probability result of 0.0000 where the result does not reach 0.05 of the dependent variable of firm performance. From the results of these probabilities, it can be concluded that the best model for this research is to use the fixed effect model (FEM).

Hausman Test

Table 3. Hausman Test Results

<i>Effects Test</i>	<i>Statistics</i>	<i>Probability</i>	<i>Conclusion</i>
<i>Fixed cross-section</i>	65.077230	0.0000	<i>Fixed Effect Model</i>

Table 3 shows the probability result of 0.0000 where the result is smaller than 0.05 of the dependent variable of firm performance. From the results of these probabilities, it can be concluded that the best model for this research is to use the fixed effect model (FEM).

R Square Test

Table 4. R Square Test Results

<i>Dependent Variable</i>	<i>R Square Test</i>	<i>Sig</i>
<i>Firm Performance</i>	<i>Adjusted R-Squared</i>	0.273677

Table 4 shows the results of the R squared test with a significance of 0.273677, in other words, 27% of all independent variables simultaneously or simultaneously affect the dependent variable. Then the rest of the percentage concludes that there are other variables without being examined that affect the dependent variable (firm performance).

F-test

Table 5. F-test Results

<i>Dependent Variable</i>	<i>F Uji test</i>	<i>Sig</i>
<i>Firm Performance</i>	<i>Prob(F-statistic)</i>	0.0000

Table 5 shows the results of this output test with a probability of 0.0000 with the model (FEM). What can be concluded for the independent variables are accrual-based earnings management, real earnings management, the board of directors size, the board of commissioners size, the firm size, and the leverage ratio. In this study, it has a significant effect on the dependent variable of company performance according to a small standard of 0.05.

T-test

Table 6. T-test Results

Variable	Coefficient	Prob.	Information	Hypothesis
Accrual-based Earnings Management	3.573848	0.0000	Significantly Positive	1
Real Earnings Management	-0.447180	0.0731	Not significant	2
Board of Directors Size	-0.005230	0.8029	Not significant	3
Board of Commissioners Size	-0.018053	0.5002	Not significant	4
Firm Size	0.135472	0.0000	Significantly Positive	5

From table 6 it can be concluded that the results of the t-test of the 1st hypothesis, namely accrual-based earnings management variables have a significant positive effect on firm performance where it can be seen that the probability result is 0.000 and the coefficient value is 3.573848 in other words this hypothesis is proven.

The second hypothesis, namely the real earnings management variable has a negative and insignificant effect on firm performance where it can be seen that the probability result is 0.0731 and the coefficient value is -0.447180 in other words this hypothesis is not proven or rejected.

The third hypothesis, namely the variable the board of directors size has a negative and insignificant effect on firm performance where it can be seen that the probability result is 0.8029 and the coefficient value is -0.005230 in other words this hypothesis is not proven or rejected.

The fourth hypothesis, namely the variable the board of commissioners size has a negative and insignificant effect on firm performance where it can be seen that the probability result is 0.5002 and the coefficient value is -0.018053 in other words this hypothesis is not proven or rejected.

The fifth hypothesis, namely the firm size variable has a significant positive effect on firm performance where it can be seen that the probability result is 0.000 and the coefficient value is 0.135472 in other words this hypothesis is proven.

Discussion

The Effect of Accrual-Based Earnings Management on Firm Performance

According to researchers Adryanti (2019), Dakhilalh et al. (2020), and Santoso and Widyaswati (2017) stated that accrual-based earnings management has a significant positive effect on firm performance, because managers deal with discretionary accruals to modify their earnings through existing public offerings or equity offering procedures providing evidence of a positive relationship between accrual-based earnings management estimated from the Jones model and firm performance.

The Effect of Real Earnings Management on Firm Performance

From the results of the study above, it is stated that real earnings management has no effect on the dependent variable, because real earnings management reduces the value of a company because the actions taken by managers to increase current year's profits will have a negative impact on the firm performance profit in the future (Wijayanti et al., 2014).

The Effect of The Board of Directors Size on Firm Performance

From the results of the study above, it is stated that the board of directors size has no effect on the dependent variable, because the more of board of directors size it will have a negative impact on the firm performance. However, based on the results of the study, the effect is not significant, this can happen because of the influence that the board of directors size does not contribute to improving the firm performance (Merendino & Melville, 2019).

The Effect of The Board of Commissioners Size on Firm Performance

From the results of the study above, it is stated that the board of commissioners size has no effect on the dependent variable, because the board of commissioners size has a negative impact on firm performance, but not significant. This can happen because of the influence that members of the board of commissioners do not supervise the performance of the board of directors so that the firm performance (Afriani Utama & Utama, 2019), and (Hidayat & Utama, 2018).

The Effect of The Firm Size on Firm Performance

According to researchers Apriliani and Dewayanto (2018), and Erawati and Wahyuni (2019) states that there is a significant positive impact between firm size and firm performance because firm size shows how capable the company is in generating profits, the larger the company, the higher the profit generated. Company managers want high corporate profits, because high profits illustrate that the firm performance is good.

CONCLUSION

This study was conducted to determine the effect of firm performance in manufacturing companies listed on the Indonesia Stock Exchange. The independent variables are accrual-based earnings management, real earnings management, the board of directors size, the board of commissioners size, the firm size with the leverage ratio control variable. Based on the results of the research above, it can be concluded that this test shows that the relationship between the dependent variable of firm performance with the Tobin's Q model only has a significant positive impact on the independent variables consisting of accrual-based earnings management and firm size, while for other independent variables such as real earnings management, the board of directors size, and the board of commissioners size are not significant on performance in this research topic.

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