Jurnal Akuntansi dan Auditing Indonesia
https://journal.uii.ac.id/JAAI

Determining factors of earnings management based on accrual model

Soliyah Wulandari, Asep Dadan Suganda*
Faculty of Islamic Economics and Business, Universitas Islam Negeri Sultan Maulana Hasanuddin, Banten, Indonesia
*Corresponding author email: asep.dadan@uinbanten.ac.id

ARTICLE INFO

Article history:
Available online

Keywords:
Accruals earnings management; company size; leverage; company age; profitability

DOI:
https://doi.org/10.20885/jaai.vol25.iss1.art5

ABSTRACT

The research objective is to find empirical evidence of the factors influencing accruals earnings management in Jakarta Islamic Index Listed Companies which include company size, leverage, company age, profitability, and board directors. The population of the research is Jakarta Islamic Index Listed Companies. 13 samples were taken from these companies using the purposive sampling method and based upon the sample criteria. 71 observations were conducted on the 13 companies to obtain primary data of the research, while secondary data were collected through documentation of financial statement from Indonesia Stock Exchange. To test the research hypotheses, multiple regressions was used. The result of this research proved that company age and profitability have influence on accrual earnings management in Jakarta Islamic Index Listed Companies. On the other hand, company size, leverage, and board directors have no influence on accruals earnings management in Jakarta Islamic Index Listed Companies.

Introduction

The earnings information stated in the company's financial statements has several important functions, such as assessing management performance, helping to estimate the ability of representative earnings in the long run, and assessing the risk of investing or lending funds. Hence, for its importance, the profit figure has triggered management to carry out earnings management (Kirschenheiter & Melumad, 2011) .

Using accrual basis in preparing financial statements has impact on earnings management. So, the practice of earnings management is a phenomenon that is difficult to avoid. In the accrual basis, management is given the freedom to choose accounting policies in accordance with the Financial Accounting Standards. Nevertheless, this freedom is often abused by managers (Wiryadi & Nurzi, 2013).

Ethics is an important factor in the financial reporting process which has long been addressed by practitioners and academics. Financial fraud and non-regulatory financial reporting are classified as ethical failures (Staubus, 2005). Meanwhile, as earnings management has become a topic of interest in recent decades, it covers the company's actual financial position and covers relevant information that investors should acknowledge (Loomis, 1999).

According to Christiani and Nugrahanti (2014), the freedom in choosing accounting policies gives managers opportunity to choose policies that maximize their utility or the company's market value. However, the manager's actions in carrying out earnings management practices can also lead to negative consequences as they have occasion to mislead the financial statement users' information in the decision-making process. Despite so, in the practice, the earnings management actions cannot be generally considered as violation to accepted rules and principles (Dimarcia et al., 2016).

Earnings management can reflect their managers' motivations in reporting their performance in the company which has gained researchers' interests to dig deeper into this situation (Surya et al., 2016). Therefore, this study was conducted to determine the factors that influence earnings management. Based on the explanation above, the researchers wanted to develop the research conducted by Bassiouny in 2016. Bassiouny examined the factors that influence earnings management which were also tested in this study, namely company size, firm financial leverage, and company age. In addition, this study also included profitability as the factors that affect earnings management (Wiyadi et al., 2015), and the size of the board of commissioners (Mehmet et al., 2014). Bassiouny conducted his research on the most active companies listed on the Egyptian Stock Exchange (EGX) with sample period of 2007 to 2011 (Bassiouny, 2016). While, this study used companies listed on the Jakarta Islamic Index with sample period of 2013 to 2018.

The Jakarta Islamic Index (JII) is a sharia stock index that was first launched on the Indonesian capital market on July 3, 2000. The JII constituents only consist of the 30 most liquid Islamic stocks listed on the IDX.

P ISSN 1410-2420 | E ISSN 2528-6528

Review of JII Islamic stocks constituents is conducted twice a year, May and November, following a review of the Sharia Securities List (DES) and the Financial Services Authority (OJK).

The IDX determines and selects Islamic stocks which are the constituents of JII. The liquidity criteria used in selecting 30 Islamic stocks that are constituents of JII is Sharia stocks which are included in the constituents of the Indonesian Sharia Stock Index (ISSI) that have been recorded for 6 months at least. 60 stocks were selected based on the order of the highest average market capitalization for the past 1 year. From the 60 stocks, then 30 stocks were selected based on the highest average of daily transaction value in the regular market. The remaining 30 shares were selected shares.

Indonesia is a country with biggest Muslim population. Thus, it has special attraction for investors and creditors to invest their money in companies registered in the JII. Apart from being seen from the point of view of their business activities and products that are not in conflict with sharia principles, companies listed in JII are also ranked based on the most liquid Islamic stocks which add to a positive assessment for these companies. The companies are competing to be registered in the JII for the extent of public interest in sharia. Thus, this has triggered enabling companies listed in JII to carry out earnings management.

What makes this research different is the combination of several variables that have been carried out by previous researchers, so it is hoped that the results of this study will add up the more comprehensive discussion of the main problems; size, leverage, age, profitability, and the board of directors on accrual earnings management.

Literature Review

Earnings management can be defined as "deliberate management intervention in the process of determining earnings, usually to meet personal goals" (Schipper, 1989). Often this process includes beautifying the financial statements, especially the bottom number, namely profit. Earnings management can be "cosmetic", if managers manipulate accruals that have no cash flow consequences. Earnings management can also be "pure", if managers choose actions with cash flow consequences with the aim of changing earnings (Subramanyam, 2014). Firm size is a scale used to classify companies, the size of a company can be seen from the total assets, total sales, average sales, stock market value of the company and others (Agustin & Trisnawati, 2015). Leverage is an indication of the amount of debt the company has. Leverage is used to see how far the company's ability to fulfill its obligations through assets and capital owned by the company (Arifin & Destriana, 2016). Company age is the age at which the company was founded until the company was able to run its operations. The age of the company can reflect the experience and ability of the company to compete in the economic sector (Frista & Murniarti, 2017).

According to Hanum, profitability is the ratio used to assess the company's performance in generating profit from all funds owned by the company (Hanum, 2009). Profitability is used by investors to assess the company's performance in generating company profits on owned funds and company profits on shares invested by investors. The board of directors is the people who have the task of creating and managing corporate governance mechanisms in order to run properly and effectively (Arifin & Destriana, 2016). According to Anglin et al., the board of directors is also one of the parties that can watch management performance effectively (Anglin et al., 2013).

In addition, this research is proxied by discretionary accruals which are calculated using the Modified Jones Model to analyze the earnings management. This modification is designed to eliminate the possibility of the Jones Model conjecture to measure discretionary accruals by error when management discretion is exercised against income. In the modified model, non-discretionary accruals are estimated during the period (Dechow et al., 1995).

The Effect of Firm Size on Accrual Earnings Management

The size of the company is considered very sensitive to the reporting behavior of company profits (Napitupulu, 2012). According to Mahiswari and Nugroho, company size can determine how much or at least earnings management practices are carried out within the company. Large size companies generally pay more attention to their performance by the public; thus, they must report their financial conditions in real terms transparently. While a small size company tend to practice earnings management by reporting greater profits in order to show good and satisfying performance to the public (Mahiswari & Nugroho, 2014). In other word, the smaller the size of the company, the greater possibility of the company to practice earnings management will be. Based on the results of previous research and the logical reasoning above, the first hypothesis formulated in this study is:
H1: Firm size affects accrual earnings management

The Effect of Financial Leverage on Accrual Earnings Management

Leverage is an indication of the amount of debt the company has. According to Arifin Destriana (2016), leverage is used to see how far the company's ability to fulfill its obligations through assets and capital owned by the company. A high degree of leverage indicates that the company has made large long-term loans in order to

increase the company's profitability, but large loans also allow the risk of company bankruptcy to increase (Arifin & Destriana, 2016). Therefore, companies with high levels of leverage will try to fulfill debt covenants in order to obtain a good assessment from creditors so as to enable the company to practice earnings management (Dimarcia et al., 2016). Based on the results of previous research and logical reasoning above, the second hypothesis formulated in this study is:
H2: Financial leverage affects accrual earnings management

The Effect of Firm Age on Accrual Earnings Management

Research that has been conducted by Bassiouny (2016) showed that there was no influence of company age on earnings management. The results of this study were correspond with the research conducted by Savitri (2014). On the other hand, research that has been conducted by Kholik et al., (2020), Uddin et al., (2013), Frista & Murniarti (2017), Rafique & Mamun (2016), and Kusumaningtyas and Farida (2014) showed that there was influence of company age on earnings management. Meanwhile, companies that have long been established tend to carry out earnings management in increasing company profits because of the experience in business management from previous management (Frista & Murniarti, 2017). Based on the results of previous research and logical reasoning above, the third hypothesis formulated in this study is:
H3: Firm age affects accrual earnings management

The Effect of Profitability on Accrual Earnings Management

According to research conducted by Wiryadi et al., (2015), it was found that profitability has no influence on earnings management. This research is supported by research conducted by Trisnawati et al., (2015) which stated that profitability has no effect on earnings management. In addition, the statement is also supported by research conducted by Susanto (2013) which stated that profitability has no influence on earnings management. High profitability requires companies to maintain stability of earnings, so that profitability will affects earnings management. Based on the results of previous research and logical reasoning above, the fourth hypothesis formulated in this study is:
H4: Profitability affects accrual earnings management

The Effect of Board of Directors Size on Accrual Earnings Management

The effect of board size on earnings management has been investigated by Ngamchon (2015) which showed that there is no influence of board size on earnings management. The results of this study are in line with the finding in Arifin and Destriana (2016). Companies with a large number of boards of directors will be better at improving the quality of company earnings and have better financial expertise in detecting earnings management that can reduce earnings management actions taken by management (Bala & Kumai, 2015). Based on the results of previous research and logical reasoning above, the fifth hypothesis formulated in this study is:
H5: Board size affects accrual earnings management

Research Method

The design of this research is causality where the research aims to see the effect of the independent variable on the dependent variable (Sekaran & Bougie, 2016)sekara. This study aims to prove the influence of the variable company size (SIZE), corporate financial leverage (LEV), company age (AGE), company ownership structure (STR), and board size (BOARD) on accrual earnings management (EM) as the dependent variable.

The population used in this study is all companies listed on the Jakarta Islamic Index. The sampling method in this research is purposive sampling method with following criteria: *first*; Companies listed on the Jakarta Islamic Index from 2012 to 2018. *Secondly;* Companies that has published financial reports for the period of 2012 to 2018. *Last;* Companies whose financial reporting period ended on December 31.

Dependent Variable

Earnings management is an effort carried out by management by beautifying the numbers presented in the financial statements for a specific purpose so that the financial statements do not reflect the real financial conditions Amertha (2013). In this study, earnings management is proxied by discretionary accruals calculated using the Modified Jones Model 1995. The following are the steps in measuring the accrual earnings management variable according to Bassiouny (2016):

Step 1 Calculating the Accrual Total

Equation 1: $TA_t = NI_t - CFO_t$ .....(1)

Step 2 Calculating the Non-Discretionary Accrual Value

Equation 2: $NDA_t = \beta_{1j} [1/A_{t-1}] + \beta_{2j} [(\Delta REV_t - \Delta AR_t)/A_{t-1}] + \beta 3j [PPEt/A_{t-1}]$ .....(2)

Step 3 Calculating Accrual Value with Multiple Regression Equation

Equation 3: $TAC_t/A_{t-1} = \beta_{1j} [1/A_{t-1}] + \beta_{2j} [(\Delta REV_t - \Delta AR_t) / A_{t-1}] + \beta_{3j} [PPE_t/A_{t-1}] + \varepsilon_t$ .....(3)

Step 4 Calculating the value of discretionary accruals (DA) with the formula:

Equation 4: $DA_{jt} = TAC_{jt}/ A_t\text{-}1 - NDA_{jt}$.....(4)

Explanation:

TA_t	: Total Accruals year t
NI_t	: *Net Income* year t
CFO_t	: *Cash Flow from Operating Activities* year t
NDA_t	: *Non Discretionary Accruals* company j year t
At-1	: Total Assets for company j year t-1
ΔREV_t	: Change in revenue / sales of company j year t minus year t-1
ΔAR_t	: Change in company's receivables j year t minus year t-1
PPE_t	: The company's gross fixed assets j year t
β1j, β2j, β3j	: Firm specific parameters

Independent Variable

Company size is the size of a company determined by total assets, sales and market capitalization (Arifin & Destriana, 2016). According to Bassiouny (2016), company size can be measured by:.

Company size = Ln (Total Assets) .....(5)

Leverage is the ratio between total debt and total assets (Guna & Herawaty, 2010). This ratio measures the extent to which the company's assets can finance debt (Arifin & Destriana, 2016). Profitability is the company's ability to generate profits. Profitability is measured using a ratio scale or the return on assets formula (Wiyadi et al., 2015). The size of the Board of Directors is the number of boards of directors in the company. The board of directors is the people who have the task of creating and managing corporate governance mechanisms to run properly and effectively (Arifin & Destriana, 2016).

Furthermore, the data used in this study was secondary data, from financial statement data and annual reports of companies listed on the Jakarta Islamic Index from 2013 to 2018. Therefore, to analyze the data, this study used multiple regressions. The regression equation used in this study:

EMit = α0 + α1SIZEit + α2LEVit + α3AGEit + α4ROAit + α5BOARDit + εit.....(6)

Explanation:

$\alpha_{0 \ldots} \alpha_5$	: Constant
EM_{it}	: Accrual earnings management in it period
$SIZE_{it}$	: Company size in it period
LEV_{it}	: Leverage the company's finances in it period
AGE_{it}	: Company age in it period
ROA_{it}	: Profitability in it period
$BOARD_{it}$	: Board of commissioner's size in it period
ε_{it}	: Error in it period

Based on the regression result of this equation, the hypotheses can be received if the significance value is 0.05 or below. Otherwise, the hypotheses can be rejected if the significance value is above 0.05.

Results and Discussion

Descriptive Analysis

The companies used in this study were companies listed on the Jakarta Islamic Index with the research period from 2013 to 2018. There were 13 companies that meet the sample selection criteria, as presented in Table 1. Descriptive statistics provides an overview of the characteristics of each variable derived from the sample data in this study. These characteristics explain the number of samples used (N), the minimum (MIN) and the maximum (MAX) values, the mean and standard deviation of each variable. These descriptive statistics help researchers

know and understand the sample data used in the study. Table 2 provides an overview of the descriptive statistics in this study.

Table 1. Sample Selection Procedure

Sample Criteria	Number of Companies	The Amount of Data
Companies listed on the Jakarta Islamic Index from 2013 to 2018	62	372
Companies that are not consistently listed on the Jakarta Islamic Index from 2013 to 2018	(49)	(294)
Companies that do not publish financial reports for 2012 to 2018	(0)	(0)
Companies whose financial reporting period is not as of December 31	(0)	(0)
Amount of Data Before Outlier	13	78
Number of Data Outliers		(7)
Total Final Data After Outlier		71

Table 2. Descriptive Statistic

Variable	N	Min	Max	Mean	Std Deviation
EM	71	0.00817	0.85655	0.33649	0.18363
SIZE	71	30.24816	33.32081	31.57153	0.85345
LEV	71	0.07158	0.72637	0.43148	0.13008
AGE	71	4	134	41.32	31.118
ROA	71	0.01510	0.46660	0.10159	0.08513
BOARD	71	5	11	7.58	1.583

To sum up the finding, the hypotheses in this study were tested using multiple regressions to see whether they were supported or not. Before testing the hypothesis, it is necessary to test the classical assumptions, such: normality test, multicollinearity test, autocorrelation test and heteroscedasticity test.

The data normality test was carried out in order to determine whether the residual data in the regression model was normally distributed or not. The data normality test in this study used the Kolmogorov-Smirnov test with a significance value of 0.05. Based on the data, it can be seen that the asymp. sig. (2-tiled) of 0.000 was less than 0.05. This shows that the residual data were not normally distributed. Therefore, an outlier test was carried out. There were 7 data that had to be removed so that the number of data became 71 samples. Furthermore, the data normality test was conducted for the second time after the outlier test which showed that the asymp value. sig. (2-tiled) was 0.092. This shows that the residual data was normally distributed after the issuance of the outlier data.

The multicollinearity test was also carried out to detect whether there were correlation in between each independent variable in the regression model. Multicollinearity test in this study used Tolerance (> 0.1) and VIF (<10). Based on Table 3, it can be seen that company size (SIZE), leverage (LEV), company age (AGE), profitability (ROA), and the board of directors (BOARD) have a tolerance value above 0,1 and VIF below 10. so, it can be concluded that there was no multicollinearity. This means that there is no correlation between each independent variable in the regression model.

Table 3. Multicollinearity Test

	Collinearity Statistics		Explanation
	Tolerance	VIF	
SIZE	0.655	1.528	Multicollinearity does not occur
LEV	0.822	1.217	Multicollinearity does not occur
AGE	0.615	1.626	Multicollinearity does not occur
ROA	0.511	1.957	Multicollinearity does not occur
BOARD	0.814	1.229	Multicollinearity does not occur

The autocorrelation test was conducted to test whether there was a correlation between the confounding error in the previous period (t-1) and the confounding error in period t in the regression model. It can be concluded in the regression model in this study that autocorrelation did not occur since the value of dU<DW < 4-dU. The following analysis shows the results of the autocorrelation test using the Durbin-Watson (DW) test. It can be seen that the DW value is 1.860, this value was compared to the table value using the 5% degree of confidence. As the number of samples was 71 and the number of independent variables was 5, the dU was 1.7685 (using the DW Table). Therefore, the DW value of 1,860 was greater than the upper limit of the dU value of 1.7685, and was less than 4-dU (2.2315), (1.7685 < 1.860 < 2.2315). It can be concluded that there was no autocorrelation in the regression model of this study. This shows that there was no correlation between the period t confounding error and the t-1 confounding error.

To find out whether there is an inequality of variance from the residuals of one observation to another in a regression model, a heteroscedasticity test is necessary. A good regression model is one which heteroscedasticity does not occur (homoscedasticity). To test for heteroscedasticity, the Glejser test was used. The Glejser test was used to regress the absolute value of the residual data on the independent variables (Ghazali, 2016). If the significance value is > 0.05, there is no heteroscedasticity. Table 4 shows the results of the Glejser test. The results based on variable Company Size was (0.648), Leverage was (0.387), Company Age was (0.805), Profitability was (0.708), and the Board of Directors was (0.888). All of these results had a significance level above 0.05. Therefore, it can be concluded that there was no heteroscedasticity in this research.

Table 4. Glejser Test

Variable	Sig	Explanation
SIZE	0.648	Heteroscedasticity does not occur
LEV	0.387	Heteroscedasticity does not occur
AGE	0.805	Heteroscedasticity does not occur
ROA	0.708	Heteroscedasticity does not occur
BOARD	0.888	Heteroscedasticity does not occur

Dependent Variable: ABS_RES1

The data in this study have met all the classical assumption tests. After the data was tested with classical assumptions, the next step was hypothesis testing. In this section, we will explain the output of multiple regressions which consists of: Correlation coefficient analysis which was conducted to see the strength of the influence of the independent variable on the dependent variable. Based on the results of the correlation coefficient (R) analysis, it can be seen that the correlation coefficient (R) value of 0.638 was greater than 0.5. This means that the relationship between Firm Size, Leverage, Company Age, Profitability, and the Board of Directors on accrual Earnings Management (EM) in the regression model is strong.

Correlation coefficient analysis was carried out to see how far the model's ability to explain the variation in the dependent variable. The results of the coefficient of determination analysis can be seen from the adjusted R square value of 0.361 or 36.1%. This shows that the percentage variation of the dependent variable, namely accrual Earnings Management, can be explained by variations in the independent variables, namely Company Size, Leverage, Company Age, Profitability, and the Board of Directors was 36.1%, and the remaining 63.9% was explained by variations from other variables not included in this study.

The F statistical test was carried out to see whether the regression model is feasible or not for decision making in this study. The F statistical test was conducted to determine whether all the independent variables included in the regression model had a simultaneous effect on the dependent variable. The results of the F statistical test of this study showed that the significance value was 0.000. This shows that the regression model used in this study was fit so that the data was suitable for decision making use.

The results of the t statistical test were carried out to show how far the influence of each independent variable on the dependent variable was, as well as to answer whether the hypothesis was supported or not.

The results of the coefficient of determination analysis can be seen from the adjusted R square value of 0.361 or 36.1% (see Table 5). This shows that the percentage of variation in the dependent variable, namely Accrual earnings management (EM) can be explained by variations in the independent variables, namely company size (SIZE), leverage (LEV), company age (AGE), profitability (ROA), and the board of directors (BOARD) is 36.1%, and the rest 63.9% is explained by variations from other variables not included in this research.

Table 5. Multiple Regressions Result

Variable	B	Sig.	Explanation
SIZE	-0.007	0.770	Ha_1 not supported
LEV	-0.084	0.576	Ha_2 not supported
AGE	0.002	0.005	Ha_3 supported
ROA	0.834	0.005	Ha_4 supported
BOARD	-0.005	0.688	Ha_5 not supported
Adjusted R Square	0.361		
Prob (F-statistic)	0.000		
Significant at α=5%			

a. Dependent Variable: EM

b. Predictors: (Constant), BOARD, SIZE, AGE, LEV, ROA

Based on Table 5, it can be seen that the Company Size variable (SIZE) has a significance value of 0.770. Because the significance value is greater than 0.05, it can be concluded that firm size has no effect on accrual earnings management. This means that Hypothesis 1 (Ha_1) cannot be supported. Earnings management practices do not depend on the size of the company, both large and small companies have the possibility to do earnings management so that the company can manage profits in order to achieve its goals.

The test results show that the Leverage variable (LEV) has a significance value of 0.576 which means it is above 0.05. This means that leverage has no effect on accrual earnings management, so Hypothesis 2 (Ha_2) cannot be supported. High or low leverage does not affect the company in carrying out earnings management practices. The company will face a high risk of default as a result of having high leverage. This means that earnings management can be used as a mechanism to avoid default risk, because the company still has to fulfill its obligations.

From the results of the t statistical test presented in Table 5, it can be seen that the Company Age variable (AGE) has a significance value of 0.005. Because the significance value is less than 0.05, it can be concluded that company age has an effect on accrual earnings management, so Hypothesis 3 (Ha_3) is supported. The company age variable has a coefficient value of 0.002. This means that the company age has a positive effect on accrual earnings management, that is, the longer the company stands, the greater the company does accrual earnings management. The age of the company is a factor in the consideration of investors in investing and creditors in providing loans. This is because the company's age reflects the company's experience and capabilities in running its business. The longer the company operates, the greater the company's desire to practice earnings management. This is very possible because the company wants to show good and stable management performance.

The test results show that the Profitability variable (ROA) has a significance value of 0.005. Because the significance value is less than 0.05, it can be concluded that profitability has an effect on accrual earnings management, thus Hypothesis 4 (Ha_4) is supported. The profitability variable has a coefficient value of 0.834. This means that profitability has a positive effect on accrual earnings management, namely the greater the company's ability to generate profits, the greater the company performs accrual earnings management. The possibility of carrying out these high earnings management practices is because they will be more intensive in managing earnings, then in the end they will be able to attract investors to invest, and creditors to lend their funds.

Based on the test results, it can be seen that the variable size of the Board of Directors (BOARD) has a significance value of 0.688. Because the significance value is greater than 0.05, it can be concluded that the size of the board of directors has no effect on accrual earnings management. This means that Hypothesis 5 (Ha_5) cannot be supported. The number of the board of directors whether it is small or large, cannot affect their ability to supervise management behavior to carry out earnings management practices. The number of directors cannot guarantee the effectiveness in carrying out the monitoring function management performance. Moreover, the large number of directors cannot function optimally because they tend have more obstacles in coordinating with each other.

Conclusion

Based on the results of statistical testing on the 13 samples companies listed on the Jakarta Islamic Index, the following conclusions were obtained that firm size has no effect on accrual earnings management (the significance value is 0.770 > 0.05). The Leverage has no effect on accrual earnings management (the significance value is 0.576 > 0.05). Furthermore, the Company Age has an effect on accrual Earnings Management (the significance value is 0.005 < 0.05). In addition, the profitability also affects accrual earnings management (the significance level is 0.005<0.05). The size of the board of directors has no effect on accrual earnings management (the significance level is 0.688 > 0.05). We can conclude that factors which determine accruals earnings management of Jakarta Islamic Index Companies are company age and return on assets. Therefore, investors and creditors will consider these factors to decide investment and loan providing.

This research has several limitations. First, this study used a period of 6 years, namely 2013 to 2018, so this study is unable to detect long-term effects. Second, this study only used companies listed on the Jakarta Islamic Index as research objects, so the results of this study cannot be generalized to all companies listed on the Indonesia Stock Exchange (IDX). Third, this study only used 5 independent variables whereas accrual earnings management can be influenced by many other variables not included in this study.

Based on the limitations, we provide suggestions as future research opportunities. First, for the next research, it is better to increase the study period, for example, 10 years or more. Second, to expand the object of research beyond the companies listed on the Jakarta Islamic Index so that the research results can be generalized to all companies listed on the Indonesia Stock Exchange, such as manufacturing or non-financial companies. Finally, future research may examine other variables that affect earnings management such as board of commissioners, institutional ownership, and managerial ownership.

References

Agustin, Y., & Trisnawati, I. (2015). Pengaruh auditor dan rasio keuangan terhadap managemen laba. *Jurnal Bisnis Dan Akuntansi2*, *17*(1), 33–45.

Amertha, I. S. P. (2013). Pengaruh return on asset pada praktik manajemen laba dengan moderasi corporate governance. *E-Jurnal Akuntansi Universitas Udayana*, *4*(2), 373–387.

Anglin, P., Edelstein, R., Gao, Y., & Tsang, D. (2013). What is the relationship between REIT governance and earnings management? *The Journal of Real Estate Finance and Economics*, *47*(3), 538–563.

Arifin, L., & Destriana, N. (2016). Pengaruh firm size, corporate governance dan karakteristik perusahaan terhadap manajemen laba. *Jurnal Bisnis Dan Akuntansi2*, *18*(1), 84–93.

Bala, H., & Kumai, G. B. (2015). Board characteristic and earnings management of listed food and beverages firms in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, *3*(8), 25–41.

Bassiouny, S. W. (2016). The impact of firm characteristics on earnings management: an empirical study on the listed firms in Egypt. *Journal of Business and Retail Management Research*, *20*(3), 34–45.

Christiani, I., & Nugrahanti, Y. W. (2014). Pengaruh kualitas audit dan faktor lainnya terhadap manajemen laba. *Jurnal Akuntansi Dan Keuangan*, *16*(1), 52–62.

Dechow, P. M., Richard G. Sloan, & Amy P. Sweeney. (1995). Detecting earnings management. *The Accounting Review*, *70*(2), 193–225.

Dimarcia, Ria, N. L. F., & Krisnadewi, K. A. (2016). Pengaruh divesifikasi operasi, leverage dan kepemilikan manajerial pada manajemen laba. *E-Journal Akuntansi Universitas Udayana*, *15*(3), 2324–2351.

Frista, & Murniarti. (2017). Pengaruh ukuran perusahaan, umur perusahaan, dan struktur kepemilikan terhadap perataan laba pada perusahaan perbankan yang terdaftar di BEI tahun 2011-2014. *Jurnal Ekonomi & Bisnis Dharma Andalas*, *19*(1), 28–44.

Ghazali, I. (2016). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS*. Badan Penerbit Universitas Diponegoro.

Guna, I. W., & Herawaty, A. (2010). Pengaruh mekanisme good corporate governance, independensi auditor, kualitas audit dan faktor lainnya terhadap manajemen laba. *Jurnal Bisnis Dan Akuntansi*, *12*(1), 53–68.

Hanum, Z. (2009). Pengaruh Return on Asset (ROA), Return on Equity (ROE) dan Earning Per Share (EPS) terhadap Harga Saham pada Perusahaan Otomotif yang Terdaftar di Bursa Efek Indonesia Periode 2008-2011. *Jurnal Manajemen Dan Bisnis*, *8*(2), 1–9.

Kholik, A., Maulida, S., Suganda, A. D., Hanika, I. M., Ismainar, H., Muniarty, P., Marlina, H., Merung, Y. A., & Nufus, H. (2020). *Perilaku Konsumen (Ruang Lingkup dan Konsep Dasar)*. Widina Bhakti Persada.

Kirschenheiter, M., & Melumad, N. D. (2011). Earnings' Quality and Smoothing. *Financial Accounting & Reporting Section (FARS) Meeting Paper*, 1–34. https://doi.org/10.2139/ssrn.930445

Kusumaningtyas, M., & Farida, D. N. (2014). Pengaruh ukuran komite audit dan kepemilikan institusional terhadap manajemen laba. *Jurnal Akuntansi Indonesia*, *4*(1), 66–82.

Loomis, C. J. (1999, August). Lies, Damned Lies, and Managed Earnings. *Fortune Magazine*.

Mahiswari, R., & Nugroho, P. I. (2014). Pengaruh mekanisme corporate governance, ukuran perusahaan dan leverage terhadap manajemen laba dan kinerja keuangan. *Jurnal Ekonnomi Dan Bisnis*, *17*(1), 1–20.

Mehmet, A., Ic, S., & Sayim, M. (2014). The effects of corporate ownership structure and board size on earnings management: Evidence from Turkey. *International Journal of Business and Management*, *9*(12), 124–132.

Napitupulu, R. H. E. (2012). Faktor-faktor yang mempengaruhi manajemen laba pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. *Jurnal Bisnis Dan Akuntansi*, *14*(2a), 61–78.

Ngamchon, W. (2015). Impact of board effectiveness and shareholders structure on earning management in Thailand. *Review of Integrative Business & Economic Research*, *4*(2), 342–354.

Qaiser, R. Y., & Abdullah, A. M. (2016). Audit committee structure and earnings management in Asia Pacific. *Econoic and Business Review*, *2*(1), 66–84.

Savitri, E. (2014). Analisis pengaruh leverage dan siklus hidup terhadap manajemen laba pada perusahaan real

estate dan property yang terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi*, *3*(1), :72 – 89.

Schipper, K. (1989). Earning Management. *Accounting Horizons*, *3*(4), 91–106.

Sekaran, U., & Bougie, R. (2016). *Research Method for Business Textbook: A Skill Building Approach*. Wiley.

Staubus, G. J. (2005). Ethics failures in corporate financial reporting. *Journal of Business Ethics*, *57*(1), 5–15.

Subramanyam, K. R. (2014). *Financial Statement Analysis* (11th ed.). McGraw - Hill International Edition.

Surya, S., Soetama, D. R., & Ruliana, R. (2016). Pengaruh earning power terhadap earning management. *Jurnal Ilmu Akuntansi*, *9*(1), 97–115.

Susanto, Y. K. (2013). The effect of corporate governance mechanism on earning management practice (case study on Indonesia manufacturing study). *Jurnal Bisnis Dan Akuntansi*, *15*(2), 157–167.

Trisnawati, R., Wiyadi, & Nugraheni, D. (2015). The analysis of information asymmetry, profitability, and deferred tax expense on integrated earning management. *South East Asia Journal of Contemporary Business, Economics and Law*, *7*(1), 17–24.

Uddin, B. M. B., Roudaki, J., & Clark, M. (2013). Corporate governance compliance and discretionary accruals: New Zealand evidence. *Australasian Accounting, Business and Finance Journal*, *7*(2), 101–124.

Wiryadi, A., & Nurzi, S. (2013). Pengaruh asimetri informasi, kualtas audit, dan struktur kepemilikan terhadap manajemen laba. *Wahana Riset Akuntansi*, *1*(2), 155–180.

Wiryadi, Trisnawati, R., Sasongko, N., & Fauzi, I. (2015). The effect of information asymmetry, firm size, leverage, profitability and employee stock ownership on earnings management with accrual model. *International Journal of Business, Economics and Law*, *8*(2), 21–30.

Wiyadi, Trisnawati, R., Sasongko, N., & Fauzi, I. (2015). The effect of information asymmetry, firm size, leverage, profitability and employee stock ownership on earnings management with accrual model. *International Journal of Business, Economics and Law*, *8*(2), 21–30.