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The impact of financial distress, sustainability report disclosures, and firm size on earnings management in the banking sector of Indonesia, Malaysia, and Thailand

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Abstract

Research Question: Does financial distress, sustainability report disclosures, and firm size have an effect on earnings management?

Motivation: Researchers want to know the effect of financial distress, sustainability report disclosures, and firm size on earnings management.

Idea: The purpose of this paper is to determine the impact of Financial Distress (FD), Sustainability Report (SR), and Firm Size (FS) on earnings management in the banking sector of Indonesia, Malaysia and Thailand.

Data: The data for this research is taken from the financial reports, annual reports, and sustainability reports issued by the companies from 2019 to 2020. The populations in this study are banking companies listed on the Indonesian, Malaysian, and Thailand Stock Exchanges. The samples used are 43 public banking companies in Indonesia, 10 public banking companies in Malaysia, and 8 public banking companies in Thailand.

Tools: This study uses a regression model made with E-Views 10.

Findings: The results show that financial distress has a significant influence on earnings management, sustainability reports have no influence on earnings management, and firm size has an influence on earnings management, but only in Malaysia's and Thailand's banking companies.

Contribution: The results of this study are expected to provide ideas and reference materials regarding financial distress, disclosure of corporate sustainability reports, firm size, and earnings management practices. For companies, especially from the banking sector, this study is expected to provide information that they must be careful in reporting financial statements that will be published considering that banking companies are a business entity

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that receives and safeguards money owned by the public and lends out this money in the form of loans or credits. Banks are the main financial institutions in the financial system that drive the economy in a country. If a banking company experiences a financial crisis, it will have a wide impact on the financial system and economic sector in a country. The results of this study are also expected to help investors make investment decisions in a company and the results of this study are expected to help creditors in making funding decisions in a company.

Keywords: earnings management, financial distress, sustainability report, firm size.

JEL codes: M410

1. Introduction

The main purpose of financial statements is to provide information on the company's performance in a certain period. Financial statements are a means to account for the actions performed by managers on the owner's resources (Belkaoui, 2007). One of the information listed in the financial statements is the profit that shows the company's performance. Profit-related information is used for decision making on the basis of tax payments, dividend distribution, and bonus distribution basis. In addition, it is also considered a criterion that determines a company's going concerns. The importance of the profit figure becomes a motivation for the company's management to conduct earnings management. Earnings management occurs when managers use assessment in financial statements to modify financial statements to mislead some stakeholders about the firm's underlying economic performance or to influence contractual outcomes that depend on reported accounting numbers (Healy & Wahlen, 1999). The motivational factors for companies to conduct earnings management are political interests, bonus payments, tax deductions, reputation reasons, public offerings of shares, and factors caused by debt (Muda *et al.*, 2018).

One of the factors that supports companies to perform earnings management is financial distress. When unstable economic conditions occur (such as in the current condition of the COVID-19 outbreak), many companies around the world experience difficult financial conditions and even some have gone bankrupt. According to Platt and Platt (2009), financial distress is a condition in which the company is experiencing a stage of declining financial condition that occurred before bankruptcy or liquidation. Jacoby *et al.* (2019) explained that public companies experiencing financial difficulties will be prompted to practice earnings management to avoid bankruptcy.

Earnings management is often carried out by small companies rather than large ones. It aims to identify and show that a company is doing well, hence investors would be

interested in investing. On the other hand, large companies will be overseen by the public, and therefore they need to report their financial statements carefully in order to offer a more accurate report. According to Agoes and Ardana (2018), small companies are most likely to conduct earnings management because they want to present a good image and intend to persuade investors to invest. Meanwhile, large companies are more meticulous in reporting financial statements, because they prioritize accuracy. Based on research conducted by Suryanawa (2017), it was indicated that the size of the company affects the earnings management. Meanwhile, Majid and Susanto (2017) explained that company size does not affect earnings management.

Earnings management can reduce the credibility of company financial statements because it adds bias and causes distrust of financial statements' users (Setiawati *et al.*, 2000). This condition requires efforts to rebuild the company's image, since all news related to the company spread in the public will affect the users of financial statements, especially investors. Investors tend to stop investing in a company if they know that the company is doing earnings management. Therefore, it can lower the confidence of users of financial statements. It is difficult for a company to rebuild the trust of users if it is revealed that a company practices financial statement manipulation. One of the most common strategies used by companies to cover earnings management practices is to publish sustainability reports. Sustainability reports help to build a positive image of the company through positive actions related to social and environmental issues (Orlitzky & Rynes, 2003). In addition, it also helps companies build a good image in the eyes of social and environmental observers. Based on GRI (2013), sustainability reporting is the practice of measuring, reporting and accounting for company performance efforts to achieve sustainable development goals to both internal and external stakeholders. Gadenne (2012) explained that sustainability reports are published by companies to reveal the performance of the company in the economic, environmental and social fields to all stakeholders and users of financial statements.

The obligation of banking companies in Indonesia to publish sustainability reports is supported by Financial Services Authority which has issued Financial Services Authority Regulation Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. The regulation requires banks, including commercial banks, rural banks, and Sharia rural banks, to implement sustainable finance. The main objective of Regulation No. 51 of the Financial Services Authority is to improve the social and environmental performance of the company in Indonesia, towards a sustainable approach according to international standards and best practices. However, the issuance of this regulation becomes a challenge for banking companies from 2019 to 2020. It is due to the COVID-19 pandemic, which engulfed the world and had an impact on the company's financial condition. Thus, companies must consistently

implement a sustainable economy in the midst of difficult economic conditions. Banking is a business entity that receives and safeguards money owned by the public and lends out this money in the form of loans or credits (Suartana & Gupta, 2018). Banking is the main financial institution in the financial system that drives the economy of a country. If a banking company experiences a financial crisis, it will have a large impact on the financial system and economic sector in a country.

According to all of these problems explained, the research aims to find out the influence of financial distress, disclosure of sustainability reports, and firm size on earnings management. The sample used is banking companies listed on Indonesia, Malaysia and Thailand's Stock Exchanges from 2019 to 2020. The reason to use three different countries as the sample is that the researcher intends to compare how banking companies from three different countries dealt with the COVID-19 pandemic situation while still publishing a sustainability report during those two years. In addition, in the middle of COVID-19, banks must continue to strive and be committed to maintaining financial stability because it affects the finances of a country.

2. Literature review

2.1 Agency theory

Agency theory considers that there is a contract between the owner (principal) and the company manager (agent) that instructs the latter to perform services on behalf of the owner and authorizes the manager to make the best decision for the owner (Jensen & Meckling in Kristanti, 2015). Agency relationship often causes several problems known as agency problems. It is generated by the misalignment of the principal's goals and the agent's goals as the party authorized to manage the company.

The separation of ownership among agents allows them to understand more about the company than the principal or owner itself. It can be an opportunity for agents to utilize adequate information to perform earnings management (Pramesti *et al.*, 2013). Agents or company managers in the banking sector are not merely getting pressure from shareholders (principals), but also from the public and government to report profits considering that banking is a business field entrusted to collect and distribute funds to the public. Furthermore, banking companies have a role as the drivers of the economy in a country.

In a company, the principal is someone who invests capital, commonly called investors, while agents are management who run the company. Shareholders measure good or bad performance managers through the earnings generated. Also, managers make efforts to achieve the maximum profit in order to fulfill the wishes

of the shareholders. Therefore, it is possible for managers to manipulate shareholders when reporting the condition of the company so that it looks good in the eyes of shareholders though contrary to the existing conditions of the company. The emphasis on agency theory is to make a contract so that the relationship between shareholders and management runs optimally. More precisely, agency theory provides a solution represented by the preparation of contracts with the aim that conflicts that arise between shareholders and management can be minimized (Chairunesia *et al.*, 2018). One of the examples of conflicts that arise between shareholders and management is information asymmetry, which is a situation in which management has more information than shareholders on the conditions in the company and the goals for the future (Mahawyahrti *et al.*, 2016).

2.2 Earnings management

The responsibility for preparing and publishing external accounting information is in the hands of company managers. As insiders, managers apply their knowledge of the company and the current state of the business to prepare information to provide a true and fair point of view of the company’s financial state and performance. To make accounting information useful for decision making, it must be relevant and reliable (Spohr, 2005). However, given the existence of information asymmetry between managers and external users of accounting information, it provides an opportunity for managers to use their discretion in preparing and reporting accounting information for their own benefit. The use of discretion in preparing and reporting accounting information is what we call earnings management.

Earnings management occurs when managers use assessment in financial reporting and in compiling transactions to regulate financial statements to mislead some stakeholders about the underlying financial performance of the company or to influence contractual outcomes that depend on reported accounting numbers (Healy & Wahlen, 1999). Earnings management can also create an increase or decrease in reported earnings. This can be considered detrimental if it contributes to minimizing the company's costs. However, it can be useful if it allows signaling of more information about the company in the future.

There are several factors that can motivate managers to manage earnings. Duncan (2001) stated that earnings management occurs in companies that experience excessive earnings periods or when they refuse to report declining earnings. Meanwhile, Aman *et al.* (2006) argued that debt covenants, political costs, internal financing, and equity ownership are factors that cause earnings management. In this research, it is assumed that management tends to manage earnings to avoid reporting losses or to avoid decreasing reported earnings. It aims to show that the company is able to compete and maintain good performance in the market (Shuto, 2007).

The ability of managers to use their own judgment and decisions in accounting allows them to choose any allowed accounting method and any estimate in accounting method (Dechow & Skinner, 2000). One of the ways to manage profits is to use payables. Although total liabilities are closely related to income management, it should be noted that the entire portion of total expenses payable is not related to income management. In the total accumulated fee, it will be differentiated into two parts. The first part we call nondiscretionary accrual accounting, also known as ordinary accrual accounting, based on management's estimates based on a company's economic performance (Rahman & Ali, 2006).

Another part of the total accrual liabilities is the discretionary accrual liabilities, which is the portion of the total accrual liabilities that have been managed by the Board of Directors, within the bounds of the accrual principles accounting (Amman *et al.*, 2006). Therefore, an arbitrarily adjusted value will be used to determine the management of the results. Ratsula (2010) suggests that there are four earnings management techniques. The first known technique is taking a bath. Using this technique, management is more inclined to report losses to improve the probability of profits being announced in the future, especially during times of high stress or organizational reorganization. Second, reduce revenue. Highly profitable companies will be more likely to practice this technique to avoid political pressure and tax thinking, as the technique will force management to increase expenses to minimize earnings report. The third technique is revenue maximization. This technique is applied primarily for the benefit of individuals such as managers rather than for the benefit of shareholders. The final technique is income smoothing. This technique is used purposefully to reduce the volatility of reported earnings. In most cases, management will refuse to describe the reported low income; therefore, they will adjust revenue as a revenue management technique. The ability of techniques to be chosen as revenue management tools will depend on the motivation of the management (Ratsula, 2010).

2.3 Financial distress

According to Platt and Platt (2009), financial distress is the stage of decline in the financial condition experienced by companies that occurred before bankruptcy or liquidation. Information about companies experiencing financial distress is beneficial, especially to provide an early warning sign of bankruptcy in the future. Thus, management can make the right decisions to prevent these problems before bankruptcy occurs. Financial distress can be derived from internal and external factors of the company. Damodaran (in Rahmayanti, 2017) explained that internal factors come from cash flow difficulties and the amount of debt. Meanwhile, external factors are government policies, interest rate policies, and global financial conditions.

Complexities in measuring financial distress very often lead to an identification problem of whether and individual factor are a trigger of financial distress or somewhat its consequences (Outecheva, 2007). The difference in financial distress has its roots in the variety of sources of financial difficulties. Financial theory stated that these difficulties can be caused by exogenous or endogenous risk factors. Normally, endogenous risk factors refer to internal problems of the company. Therefore, the risk only affects a particular firm or a small number of firms within the same business line. However, exogenous risk factors are more prevalent, which means that they can affect all companies within the market.

The choice of income-increasing or income-decreasing discretionary accruals depends on the rigorousness of the financial distress (Jaggi & Lee, 2002). The probability for the management of a company to employ income-increasing discretionary accruals is higher if the financial distress is expected to be temporary and vice versa. As in the case of companies that go into bankruptcy, the management of these companies will be more inclined to use income-decreasing earnings management in managing their reported earnings due to the fact that several years prior to the violations, companies have managed their earnings upward and thus have exhausted their means of upward earnings management. Hence, they are forced to resort to income-decreasing earnings management.

2.4 Sustainability report

Sustainability reports allow companies to assess their contribution to economic, environmental and social conditions at the local, regional and global levels (GRI, 2013). The sustainability report must contain a complete and transparent statement on the organization's contribution to the sustainability of the Earth (Gray, 2008). The GRI-G4 sustainability report is divided into economic, social, human rights and environment. The economic impacts and conditions generated by the company at both the local and global levels are the distribution and creation of economic value, indirect economic impacts, and the existence of the market. The impact of company activities on society and reactions from social institutions may include various concerns and movements of companies to anticipate or manage issues such as corruption, society, public policy, and anticompetitive behavior such as monopoly and antitrust. Although it was initially a social issue, sustainability has evolved into a strategic issue for the company. This begins with Elkington's creation of the Triple Bottom Line in 1998.

According to Elkington (1998), companies should not only report the profits of the company but also social and environmental aspects. In addition, companies must also focus on the interests of shareholders and stakeholders by giving thoughtful attention to the equality principle, which includes management practices, investment, nondiscrimination principles, freedom of association, disciplinary

practices, protection, child labor, and the rights of indigenous peoples. In addition, the company has an impact on the environment, such as natural ecosystems and materials used for business activities, energy, waste emissions, waste release, transportation of products and services, compliance and aspect assessment.

In general, the level of disclosure of sustainability reports is divided into two, namely, regulatory disclosure requirements and voluntary disclosure. The capital market authorities require regulatory disclosure requirements for companies with domestic and foreign market participants in the country concerned. Meanwhile, voluntary disclosure is made based on management decisions. As in agency theory, managers understand more information than external parties about the company's condition and projected future performance. Managers disclose information voluntarily with incentives and benefits such as increasing stock liquidity, reducing the cost of capital, and other incentives (Choi & Meek, 2008).

2.5 Firm size

Firm size is a company scale measured in various ways, that is, calculating total assets, total income, and market capitalization (Suryani, 2018). Small companies tend to do earnings management rather than large companies, since they want to deliver a good image and intend to persuade investors to invest. Meanwhile, large companies will meticulously demonstrate their financial statements because large companies are mostly overseen by the public, rather than small companies.

In a large asset there is a large capital; the greater the level of sales means that the velocity of the money is even greater so that the company's capitalization increases (Sulistyo, 2016). The company measurement can use the total assets of the company, for both large and small companies. Large companies have large amounts of assets. Therefore, large companies will be careful and efficient in relation to the management of company profits. This is in accordance with the opinion of Reviani and Sudantoko (2012) who consider that company size can be known from the total assets and sales.

Large companies are more adept at negotiating with auditors. The larger the firm size, the greater the negotiation power of the firm. Nelson, Elliott, and Tarpley (2002) stated that the large firm's earning management practices were ignored by the auditors. Large-sized firms have more accounting treatments for a transaction and more current assets. It indicates that large-size firms are more able to manage their earnings than small firms. Despite strong internal control system in large sized firms, its management violates its system to report its earning as it desired. Large firms manipulate their earnings to reduce political cost. The benefits and skills to organize the income change with the size of the firm. The firm size was computed by taking the log of total assets of the company. According to Burgstahler and

Dichev (1997), earning management practices are more prevalent among large and medium sized firms than small firms. Burgstahler and Dichev (1997) estimate that 8-12% of company management manipulate earnings to increase revenue and 30-44% of company management does earnings management. The relationship of earning management with firm size remains unexplored and unknown. In this study, this unexplored relation is studied.

The proprietary cost theory presented by Verrecchia (1983) supports the idea of earning management and firm size. This theory states that large firms are easily scrutinized by investors and regulators compared to small firms. The managers of large firms realize that the cost of supplying non-proprietary information to public is minimal as compared to the managers of small firms. The large firms engage in the less earning management while the smaller firms manage their earnings more. From an economic perspective, the size of the firm determines the ability of the family to exert powers and dominate the family firms. There are different incentives and behaviour that large and small firms have with regard to earning management.

3. Hypotheses development

3.1 Financial distress

Immanuel (2015) found that there is a significant effect between financial distress and earnings management. The company will perform earnings management if it experiences financial distress. This research is in line with Ghazali (2015) who revealed a negative influence between financial distress and earnings management. The study line with study by Demirkan and Platt (2009) that explain the main reason the distressed companies do not engage in earnings management was simply that they have exhausted their means of manipulating and managing earnings prior to distress and perhaps they fail to perceive benefit from such manipulation.

The results of research by Ariesanti (2015) say that there is a positive influence between financial distress and earnings management because company management tends to carry out earnings management in order to provide positive information to investors and display short-term earnings performance which always increases even though in fact the company is in trouble. The results of this study are also supported by the research conducted by Paramita *et al.* (2017) which says that if a company is experiencing financial distress, the company's management will always carry out earnings management. This is done because of the demands of investors (principals) for profits from the company. Research by Sari and Meiranto (2017) explains that financial distress can describe poor company performance, where company management will be considered unable to run the company. In anticipating this, the company's management will act conservatively by doing earnings management to

hide the company's poor performance. Based on these descriptions, the hypothesis of this research is as follows.
H_1: There is a significant relationship between financial distress and earnings management.

3.2 Sustainability report

Based on the research of Pardede (2014), the sustainability report disclosure level has a significant effect on earnings management practice. It means that the wider the disclosure in the report sustainability, the lower practice of earnings management. But according to the research by Farhan (2018), the sustainability report has no impact on earning management. The decrease or increase in profit that is used to show the best performance of the company will mislead the stakeholders. The discovery of earnings management activities will destroy stakeholder trust and harm the company's flexibility to generate revenue.

Research conducted by Aditya & Juniarti (2016) shows that companies that prepare sustainability disclosures will be able to reduce earnings management practices. On the contrary, the results of research conducted by Chih *et al.* (2008) show that the more companies disclose sustainability report, the greater the company's earnings management practices. This shows that companies that disclose sustainability reports will have a greater desire to perform earnings management. Due to different research results, researchers are interested in examining the effect of sustainability report disclosure on earnings management. Based on these descriptions, the hypothesis of this research is as follows.
H_2: There is a significant relationship between sustainability report disclosure and earnings management.

3.3. Firm size

Astari and Suryanawa (2017) stated that firm size has a positive influence on earnings management. The size of a company will be a very important information for investors and creditors because it will be associated with a high risk of investment made. Large companies will also face more pressure from stakeholders so that the company’s performance can be in line with investors’ expectations. Yet, the results of Sucipto's research (2021) show that firm size has no effect on earning management. The size of the company is not the main factor influencing the practice of earnings management. This means that earnings management practices can be influenced by various factors, both internal and external, depending on the needs of the company.

This is contrary to the results of Yunietha & Palupi's research (2017) which states that firm size has no effect on earnings management because whatever the size of

the company can have the same opportunity to make earnings management and the total assets of the company are not the only basis for making investment decisions so that the amount of assets cannot be a guarantee for a company has a good performance. Based on these descriptions, the hypothesis of this research is as follows.

H_3: There is a significant relationship between firm size and earnings management.

4. Methodology and methods

4.1 Assessment of strategy, context, and nonresponse bias

This study used secondary data obtained from annual financial reports and sustainability reports of 43 banking companies listed on the Indonesian stock exchange, 10 banking companies listed on the Malaysian stock exchange, and 8 banking companies listed on the Thai stock exchange in the period 2019 to 2020. The data analysis technique used was linear regression equations using the E-Views 10 application. The dependent variable used was earnings management, while the independent variables were financial distress, sustainability report disclosure, and firm size.

The study applied the Modified Jones Model for the measurement of earnings management. Discretionary accrual or abnormal accrual is widely used because of its ability to capture the quality of accounting information in common sense and in a universal manner. The techniques to measure financial distress in this study is the Altman Z Score. Altman Z-Score is the most popular method in measuring the financial condition of the company and it has been employed to measure financial distress by several studies (Maina & Sakwa, 2012). However, we used the Sustainability Report Disclosure Index (SRDI) to measure sustainability report and natural logarithm of total asset to measure firm size.

4.2 Construct measurement

The variables used in this research are listed as follows:

Table 1: Variables

Variable Model	Proxy	Abbr.	Measurement
Earnings Management	EM	Exogenous Variable	DAit = TAit – NDAit
Financial Distress	FD	Endogenous Variable 1	Z-Score = 6.56 X1+3.26 X2+6.72 X3+1.05 X4

Variable Model	Proxy	Abbr.	Measurement
Sustainability Report	SR	Endogenous Variable 2	$SRDI = \frac{k}{n}$
Firm size	FS	Endogenous Variable 3	FD = Ln (Total Assets)

The model regression equation can be written systematically as follows:

$$EM = a + \beta 1FD + \beta 2SR + \beta 3FS + \varepsilon$$

Information:

EM = Earnings Management
a = Constant
$\beta 1 - \beta 3$ = Regression Coefficient
FD = Financial Distress
SR = Sustainability Reporting Disclosure Index
FS = Firm Size
ε = Error

5. Results

The research indicators were based on financial distress, sustainability report disclosure, firm size, and earning management variables. The data was processed according to the data analysis techniques needed to answer each research hypothesis

5.1 Hypotheses testing results

Table 2: Hypothesis testing result

Variable		Coefficient	T-Stat	Probability	Conclusion
(Constant)	EM	0.0032	0.1793	0.0380	
Financial Distress	FD	0.0034	2.8680**	0.0049	Significant positive impact
Sustainability Report	SR	-0.0166	-1.1446	0.2547	Insignificant impact
Firm Size	FS	0.0013	1.3623	0.1757	Insignificant impact
Adj R squared			0.0718		
F			3.0435		
Significance			0.0316		
Durbin Watson			1.9651		

***Note*: ** Significance level at 5%**

The results of data processing answered the hypothesis through the probability value. The research hypothesis can be accepted if the probability value is < 0.05 and the t-stat is > 1.6574. This indicated that the independent variable has a significant effect and vice versa. The research model described that financial distress has a significant effect on earnings management at Bank Indonesia, Malaysia, and Thailand. This variable has a probability of < 0.05, financial distress with a value of 0.0049, and t-stat > 1.6574. In conclusion, Hypothesis 1 is accepted. Furthermore, the sustainability report does not have a significant effect on earnings management. The probability value is 0.2547 and the t-stat is < 1.6574. The firm size has no significant effect on earnings management. The firm size variable probability value is 0.1757 > 0.05 and t-stat is < 1.6574. Therefore, it can be concluded that hypothesis 2 is rejected and that the sustainability report disclosure index has no effect on the earnings management. Hypothesis 3 is also rejected as the firm size does not have a significant effect on earning management. From the calculation results in the table, the moderated regression equation can be arranged as follows.

$$\mathbf{EM = 0.0032 + 0.0034\ FD - 0.0166\ SR + 0.0013\ FS} + \varepsilon$$

This equation illustrates that if the financial distress, sustainability report, and firm size are 0 or constant, then the value of the earnings management is 0.0032. If financial distress increases by one unit, then the value of earnings management increases by as much as 0.0034 with a sustainability report and firm size of 0. Nevertheless, the interaction between earning management and sustainability report is negative by -0.0166. This indicated that for every one unit increase in the sustainability variable, the earnings management will decrease by 0.0166. Furthermore, the interaction between earnings management and firm size has a positive value of 0.0013. This explained that for every increase of one unit of firm size, the earnings management will increase by 0.0013.

This study also analyzed the impact of financial distress, sustainability report, and firm size on earnings management separately in each country, and the results of hypothesis testing are presented as follows:

Table 3: Hypothesis testing result for all countries

Var	Indonesia		Malaysia		Thailand	
	Coefficient	T-Stat	Coefficient	T-Stat	Coefficient	T-Stat
(Constant)	0.0573	2.1855	-0.2591	-2.3315	-0.5306	-1.6081
FD	0.0038	2.7056**	0.0057	1.7964*	0.0200	1.8242*
SR	0.0081	0.4095	-0.0372	-0.9021	-0.0284	-0.1032
FS	-0.0025	-1.4204	0.0149	2.9051**	0.0234	2.2182**
Adj R Squared	0.06322		0.46682		0.33444	

Var	Indonesia		Malaysia		Thailand	
	Coefficient	T-Stat	Coefficient	T-Stat	Coefficient	T-Stat
F	F	Significance	F	Significance	F	Significance
	2.9121	0.0392	6.5450	0.0042	3.5124	0.0491
Durbin W	2.1071		2.0179		2.0626	
	No autocorrelation		No autocorrelation		No autocorrelation	
	Note: *Significance at level 10%; **Significance at level 5%					

This table described that there are significant differences on the effect of independent variables on earnings management in banking companies in each country tested. The research hypothesis can be accepted if the probability is < 0.05 which indicates that the independent variable has a significant effect and vice versa. Additionally, this study also used a significant level of 10%. This means that if the probability value is > 10%, the hypothesis is not accepted. This significant difference is caused by the financial or nonfinancial conditions of each company. In Indonesia, the research found that, of 43 banking companies, only financial distress had a significant positive effect on earnings management with a probability value of 0.0083 and a t-stat of 2.7056 > 1.6627 compared to other independent variables such as sustainability with a probability value of 0.6832 and a t-stat of 0.4095 < 1.6627. The probability value of firm size is 0.1593 > 0.05 and a t-stat of -1.420458 < 1.6627. In conclusion, the sustainability report variable and the size of the firm in banking companies in Indonesia do not have an effect on earnings management. In 10 Malaysian banks, financial distress has a significant positive effect on earnings management with a probability value of 0.0913 with a significance of 10% and a t-stat of 1.7964 > 1.3253. The firm size also has a significant positive effect with a probability value of 0.0103 and a t -stat of 2.9051 > 1.7247. The sustainability report does not have a significant effect on earnings management with a probability value of 0.3804 > 0.05 and a t-stat of < 1.7247. Meanwhile, in 8 Thai banks, it is found similar results to Malaysian banks. Financial distress and firm size had a significant positive effect with a probability value of financial distress of 0.0931 at a significance of 10% with a t-stat of 1.8242 > 1.3367. The probability value of the firm size is 0.0466 with a significance of 5% with a t-stat of 2.2182 > 1.3367. The sustainability report variable is not significant with earnings management with t-sate value < 1.3367.

6. Discussion and conclusion

6.1 Discussion

This study analyzed the effect of financial distress, sustainability and bank firm size on earnings management in Indonesia, Malaysia and Thailand from 2019 to 2020.

The earnings management variables used was the Modified Jones Model. Based on the results of the analysis, the regression coefficient of financial distress is 0.0034 in all samples with a probability value of 0.0049 which is lower than the significance level of 0.05. Therefore, it can be concluded that the first hypothesis is accepted, in which financial distress has a significant positive effect on earnings management. The results of this study also indicated that financial distress can affect earnings management in all banking companies in Indonesia, Malaysia, and Thailand. This means that in banking companies in the three countries, the more the company experiences financial distress, the more motivation for management to take earnings management actions. However, the results of this study are in line with research by Immanuel (2015). His study also provided empirical evidence that financial distress has affected the earnings management. The regression coefficient shows positive results. It means that the higher level of the financial distress in a company, it will increase the actions of earnings management in the company and vice versa. Meanwhile, Ghazali's research (2015) shows that financial distress has a negative effect on earnings management. A negative relationship between financial distress and earnings management shows that the managers of the firm would practice earnings management when the company is not in distress condition and would do otherwise if the company is in distress.

The results of this study can be explained by the agency theory proposed by Jensen and Meckling (1976) in Kristanti (2015). The theory explained that the financial condition of a company can affect the company's management to perform earnings management. The information contained in the financial statements can be used by the company's stakeholders to assess the company's current condition. In addition, financial statements can also reveal the amount of assets, money, and even profits owned by the company. A company can be said to be in financial distress if the company has experienced negative net income for several years. Therefore, the company's management as an agent who manages the company will try to do earnings management for the benefit of the principal. The higher the level of financial distress experienced by a company, the higher the level of earnings management that will be carried out by agents, and vice versa.

Based on the results of the analysis, the regression coefficient for the sustainability report in all banking companies in the three sample countries is -0.0166 with a probability value of 0.2547, which is higher than the significance level of 0.05. Therefore, we can conclude that the second hypothesis is not accepted. In summary, the sustainability report does not have a significant effect on earnings management in Indonesian, Malaysian, and Thai banks. The results of this study also show that the sustainability reporting by banks in Indonesia, Malaysia, and Thailand cannot affect earnings management actions. In general, the purpose of companies disclosing a lot of information about social responsibility activities is to form a good company profile to be more careful in carrying out fraudulent practices. Social responsibility activities that are carried out and disclosed on a continual basis in the company's

annual report will have an impact on the survival of the company and will receive the support from stakeholders. Companies must provide relevant information to stakeholders about the position, efforts, and achievement of corporate social and environmental responsibility through disclosure of social responsibility or sustainability reporting.

The results of this study are in line with the results of research conducted by Farhan (2018). He stated that the sustainability report has no effect on earnings management. The decrease or increase in profit that is used to show the best performance of the company will mislead the stakeholders. The discovery of earnings management activities will destroy stakeholder trust and harm the company's flexibility to generate revenue. Therefore, the effect of sustainability reports weakens the relationship with earnings management. Companies that prepare sustainability reports tend to carry out smaller earnings management activities so that the reported earnings of a company will be of better quality. This study has the same results as Orlitzky *et al.* (2003) research which stated that companies that contribute more to social responsibility such as social activities to the community and activities to preserve the natural environment that disclose sustainability reports will tend to be less likely to take earnings management actions.

Based on the results of the analysis, the regression coefficient of firm size in all samples is 0.0031 with a probability value of 0.1757 which is higher than a significance level of 0.05. Therefore, it can be concluded that firm size in Indonesian, Malaysian, and Thai banks has no significant effect on earnings management. Meanwhile, the results of the analysis of each country described that firm size has a significant effect on earnings management at Malaysian banks with a probability value of 0.0103 and Thai banks with a probability value of 0.0466 lower than 0.05. Furthermore, the third hypothesis is accepted and the firm size has a significant positive effect on the earnings management in Malaysian and Thai banks. This is due to the fact that the sample size of the banking companies from Malaysia and Thailand is less than in Indonesia. The results of research in Malaysian and Thai banks showing significant results in earnings management are the same as the results of the research conducted by Medyawati (2016) that company size has a positive relationship with earnings management because large companies have more complex operational activities than small companies, so earnings management is possible.

Small companies cannot escape the need for additional funds from outside parties to develop and expand their business. By being able to report favorable profit information, the company will attract the attention of investors to invest in small companies. Investment can help the company develop its business. This capital can be used by the company to improve its human resources, expand its business, and develop innovation. In addition, favorable profit information will also help small banking companies to find creditors. Creditors can trust companies that have

favorable profit information and are more likely to obtain the desired loan amount at a low interest rate. In the banking world, the firm size is crucial.

The measurement used to calculate firm size in this study is the total assets owned by the company. According to Bestivano (2013), the firm size of a banking company also describes the level of public trust in maintaining assets owned by a banking company. Large banking companies have a high level of public trust. Earnings management is an effort by the management of the banking company to gain attention and trust from the public because people will have more confidence in companies that have good profit information so that the assets they have in the bank can be properly managed. This is in line with research conducted by Suryanawa (2017), which explained that the larger the company, measured by total assets, the less effective earnings management actions occur. The big companies will tend to report financial conditions accurately because they are more concerned about the wider community. It makes companies more careful and transparent in the presentation of financial statements and minimizes earnings management actions. Meanwhile, small companies tend to perform earnings management by reporting larger profits so that they can show better company performance.

However, this contradicts research by Agustia and Suryani (2018). They stated that firm size does not affect earnings management. It is because the tight supervision from the government, analysts, and investors who participate in running the company causes managers to be afraid to take decisions for taking earnings management actions. Strict control will directly reduce earnings management actions because the possibility of these actions will be widely known by the public and can damage the image and credibility of the management of banking companies. In addition, firm size is not the only consideration for investors to invest in. There are many other important factors to consider in investing such as the level of profit, the company's business prospects in the future, and so on. Therefore, the size of the firm does not affect the level of earnings management.

There are similarities and dissimilarities in research with this previous research, the researcher can conclude that the size of the company is not the main factor influencing the existence of earnings management. This means that earnings management practices can be influenced by various factors, both internal or external, depending on the economic and noneconomic needs of the company. The economic conditions in a country will also affect the economic conditions of a company. Therefore, it will also affect the manager as an agent of the company to make a decision on the reporting of financial statements.

6.2 Conclusions

This empirical research was done using a sample of Indonesian, Malaysian, and Thai public banking company in the time span of 2019 to 2020. The regression analysis

to test all hypotheses was only performed on the final sample of 122 observation. The results indicated that financial distress has a significant effect on earnings management at Indonesian, Malaysian, and Thai banks. Therefore, the first hypothesis is accepted. In this result, sustainability is explained to have no effect on earnings management. Meanwhile, the firm size does not have an effect on earnings management in all sample banks and Indonesian banks. However, the firm size has an effect on earnings management on Malaysian and Thai banks.

Employment of earnings management camouflages firm operating performance and reduces the reliability and precision of reported earnings information. This then raises issues to policy makers as well as regulators, since biased information provided to investors would give a negative impact on their decision making process, which in turn negatively affects smooth functioning of financial markets. Based on the results of this study, the authors expect that investors and creditors who want to invest and provide funding, especially during the COVID-19 pandemic, should pay more attention to the background and fundamentals of the company. Therefore, they are not only seeing the amount of profit generated by the company, since of the total profit reported is not necessarily the actual profit. In addition, the results of this study are expected to contribute ideas and reference materials regarding financial distress, disclosure of corporate sustainability reports, firm size, and earning management practices to academics and professionals. For banking companies, which are sectors that are trusted by the public, they must be more careful with reporting their earnings. Banking is also an economic driver of a country, which must be careful in reporting financial reports to the public and shareholders, since it will affect the reputation, image, and trust of the banking company in the public.

This research has several limitations. This study only uses the financial reporting period for two years, namely 2019 and 2020, in which the COVID-19 pandemic is happening in both years. The total number of public banking companies in Indonesia, Malaysia and Thailand is 61 companies, so the total sample is 122. Suggestions for further research can use a period of more than two years to obtain more extensive research results. In addition, to measure earnings management, other variables can be used, such as information asymmetry, earning power, good corporate governance, and others.

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