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THE INFLUENCE OF FINANCIAL DISTRESS, CASH HOLDINGS, AND PROFITABILITY TOWARD EARNINGS MANAGEMENT WITH INTERNAL CONTROL AS A MODERATING VARIABLE: THE CASE OF LISTED COMPANIES IN ASEAN COUNTRIES

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Abstract

This study aims to define and analyze the relationship between financial distress, cash holding, and profitability and earnings management with internal control as a moderating variable in relation to six major countries in Southeast Asia (Indonesia, Malaysia, Singapore, Thailand, Philippines, and Vietnam). Earnings management is measured by the Jones model of discretionary accruals. Secondary data sources are used, namely companies listed on the S&P Capital IQ, with 480 observations that fit the criteria. Purposive sampling techniques are employed, with a new sample of observational data from the consumer staples sectors in the six countries covering the period 2016-2020. ASEAN was chosen because of the lack of previous research using this as the research population. The data were processed using the Eviews 11 program. The theoretical basis used in the research is agency theory and signaling theory. The results indicate that financial distress and profitability positively affect earnings management, whereas cash holdings have a negative impact. The study also verifies that internal control as a moderating variable strengthens the negative impact of financial distress and profitability on earnings management, while strengthening the positive impact of cash holdings.

Keywords: Financial Distress, Cash Holding, Profitability. Internal Control, Earnings Management

Abstrak

Penelitian ini memiliki tujuan untuk menguji dan menganalisa hubungan antara *financial distress*, *cash holding*, dan profitabilitas terhadap manajemen laba dengan *internal control* sebagai variabel moderasi untuk enam negara di Asia Tenggara yaitu Indonesia, Malaysia, Filipina, Singapura, Thailand dan Vietnam. Manajemen laba menggunakan proksi *Discretionary Accruals* (Model Jones). Sumber data penelitian ini menggunakan data sekunder dari perusahaan yang tersedia di S&P Capital IQ dengan total 480 observasi yang telah sesuai kriteria yang digunakan dengan menggunakan teknik *purposive sampling* dari perusahaan industri *consumer staples* untuk negara Asia Tenggara, yaitu Indonesia, Malaysia Filipina, Singapura, Thailand dan Vietnam periode 2016 – 2020. Data diolah menggunakan Eviews 11. Dasar teori yang digunakan dalam penelitian ini adalah teori keagenan dan teori sinyal. Penelitian ini mendapatkan hasil bahwa *financial distres*s dan profitabilitas memiliki pengaruh positif terhadap manajemen laba, sedangkan *cash holding* memiliki pengaruh negatif terhadap manajemen laba. Penelitian ini menunjukkan bahwa *internal control* sebagai variabel moderasi memperkuat pengaruh negatif, *financial distress* dan profitabilitas terhadap manajemen laba. Sedangkan, internal control sebagai variabel moderasi memperkuat pengaruh positif *cash holding* terhadap manajemen laba.

***Kata kunci: Financial Distress, Cash Holding,* Profitabilitas. *Internal Control,* Manajemen Laba**

INTRODUCTION

The main objective of financial accounting is to provide financial statements that give information about a company's financial position to external parties such as investors and creditors. Financial reporting aims to provide an accurate picture of the company's finances, including revenues, expenses, profits, capital, and cash flow. This concept and the related information are useful in making economic decisions as they describe the company's situation (Lessambo 2018). In addition, according to Young (2018), financial statements are useful for providing business-related information to people interested in a certain company. The statement will help investors, bankers, suppliers, customers, tax authorities, and competitors.

Schroeder (2019) states that company profits reported in financial statements attract the attention of analysts and users of financial statements because earnings help to evaluate the company's past performance and forecast future cash flows. Management can manage the resulting profit by selecting accounting policies to achieve the targeted profit. The choice of this accounting policy aims to increase or decrease the profits earned by the company, following what is desired by management (Lestari and Wulandari 2019). Therefore, the financial statements are considered unable to explain the company's real situation. Management can manipulate the presentation of accounting profit information called earnings management (Lestani et al. 2021).

The Report to the Nations ACFE of 2020 explained that the type of fraud that caused the most significant losses was financial statement fraud (Association of Certified Fraud Examiners (ACFE) 2020), including the manipulation of statements by, for example, earnings management. This may be employed by the managers of accounting policies by taking actions that affect earnings in order to achieve specific objectives on reported earnings (Scott 2009). Managers can set earnings targets based on their underlying motivation. Three main hypotheses of positive accounting theory, namely the bonus plan hypothesis, debt to equity hypothesis, and political cost hypothesis, are the basis for detecting earnings management.

In previous studies, many variables have been shown to affect earnings management. The research conducted by Li et al. (2020) demonstrates that financial distress positively affects earnings management. Their results also show that internal control can weaken the influence of financial distress on earnings management. They add several other variables that can affect earnings management. In this study, employs the cash holding variable because it is rarely used to observe its effect on earnings management. A profitability variable was also added in this study. Its results differ from those of previous studies.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Literature Review

Agency Theory

Agency theory defines an association between the company's owners (shareholders) and the company's management, which is known as an agency relationship. The agency relationship is like an agreement between one party as the principal to another party as the agent. The principal assigns the agent to work in the principal's interests, and the principal authorizes the agent to make decisions. In other words, there is a separation of the ownership and management functions that are interrelated. The agency relationship between the principal and the agent will incur monitoring and bonding costs. In addition, there will be differences between the decisions of agents and principals (Jensen and Meckling 1976).

Agency problems can occur between the principal and the agent when the agent's interests and the principal are not aligned. The principal wants to maximize the profit from a given investment, while the agent seeks to maximize its utility. For example, when compensation schemes are related to profits, agents may decide on accounting policies to increase profits (Schroeder 2019).

Signaling Theory

A signal theory was found based on Job Market Signaling research conducted by Spence. Spence (1973) concludes that the relevant information provided by the information owner can be used by the recipient so that the recipient will adjust his behavior according to the intended signal.

The theory is also used in investment decisions made by investors. The company's internal parties, as the information owners, will be encouraged to publish information related to the company's situation to attract potential investors to invest their funds in it. The existence of an investment plan in the company will positively affect any increase in its share price (Ross 1977). On the other hand, if the information provided to the principal parties (recipient parties) is limited, this will lead to lower company value. This can be increased by reducing information asymmetry by giving signals to the principals about the prospects of the company (Chairunesia et al. 2018).

Earnings Management

Schroeder (2019) defines earnings management as another issue of earnings quality. Earnings management is defined as the efforts made by the management to influence reported earnings. Earnings management influences the stock market, increases management compensation, reduces loan covenant violations, and avoiding government intervention. The management can control the company's income because the company's profit report affects the decisions of investors and creditors. Concerning the company's performance which will affect the outcome of the agreement (contract), the management can manipulate the profits generated by the company. The agency problem arises because of the opportunistic behavior of the agent, namely the behavior of management to maximize its welfare as opposed to the principal (Agustia and Suryani 2018).

Financial Distress

Financial distress is a financial condition that encountered a decline before bankruptcy. Companies that are unable to control and maintain the stability of their company's financial performance will encounter financial distress (Chairunesia et al. 2018).

The financial distress of a company adversely affects the company's performance, resulting in a lower debt coverage service ratio. The impact of financial distress on the debt coverage service ratio is negative. It can be said that the initial stage of financial distress may be a decrease in revenue. The company's profitability is declining, and its quick ratio is declining due to its high leverage (Ufo 2015).

Companies in a state of financial difficulty will encounter a lack of cash flow to meet obligations. Meanwhile, companies that do not have a sustainable business model and are not feasible without asset restructuring are called companies in economic distress. Some factors affect financial difficulties, as follows (Altman et al. 2019)

Cash Holding

Cash is the most liquid asset, is the standard medium of exchange, and is the basis of measurement and accounting for other items. Cash holding is cash available in the company that can be used for investment in fixed assets and distributed to investors (Gill and Shah 2011). Cash

equivalents are short-term investments that are easily converted into cash and do not undergo the risk of significant changes in value (Kieso 2020). In short, a company can take on more debt if it has more cash on its balance sheet by considering the cash holding (Rhyne and Brigham 2018).

Profitability

The profitability ratio measures the company's financial performance in seeking profit/profits obtained. In addition, this ratio reflects the efficiency of the company's management in measuring its effectiveness (Kasmir 2019).

Internal Control

Internal control based on COSO is a method used to help ensure the achievement of a company's goals. In accounting theory, internal control is a process that is influenced by organizational structure, workflow, authority, people, and management information systems, which are designed to help organizations achieve certain goals or objectives. Furthermore, organizational resources must be continuously measured and monitored to detect fraud and protect organizational resources (Jamshedy-Navid 2010).

The auditor may conclude that earnings presentation is reasonable since the internal controls are well designed, high compliance, analytical reviews are based on reported balances, and audited balances and other economic data show no unusual relationships. Thus, the internal control system can help reduce agency costs caused by agency conflicts. (Kinney 2016).

Hypothesis Development

Influence of Financial Distress and Internal Control on Earnings Management

In the relationship between financial distress and earnings management, a high level of distress can force management to perform earnings management to increase profits and then announce these to the public. Based on signaling theory, this gives signals to external parties related to the situation of the company. Companies experiencing high financial distress will encourage managers to conduct earnings management (Chairunnisa et al. 2021). Such distress will make company managers attempt to preserve their interests by manipulating profits (Qadri and Najiha 2021). A company that does not have sufficient resources to meet its needs will face financial distress (Farooque et al. 2018).

Short-term financial distress can in fact be more severe. Cash flow, company strategy, and company financial statements can be indicators of such distress (Chairunesia et al. 2018), but there are various possibilities for companies to recover from each stage of it. However, recovery is more complicated when financial distress becomes detrimental (Farooque et al. 2018). In this situation, management will be compelled to take earnings management actions so that investors remain interested in the company (Chairunnisa et al. 2021).

Chairunnisa et al. (2018) and Li et al. (2020) found evidence that financial distress significantly affects earnings management. Furthermore, Li et al. clarified that internal control weakens the relationship between financial distress and earnings management. Companies in financial distress may have high disclosures of material weakness, and poor internal control quality may not be adequate to control or detect existing difficulties. The following hypotheses are therefore posited:

H_1 : Financial distress has a positive effect on earnings management

H_2 : Internal control weakens the positive effect of financial distress on earnings management

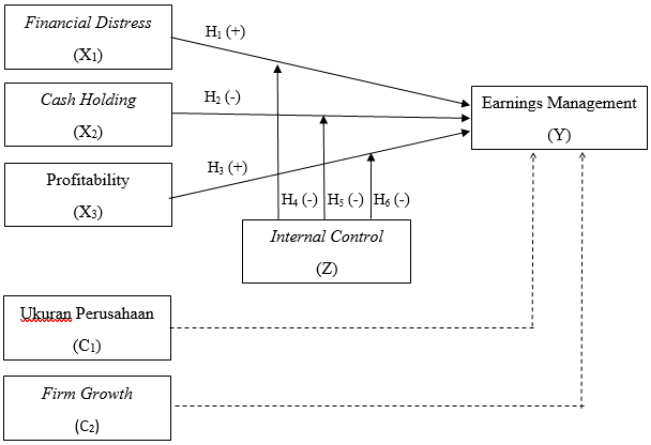

Figure 1
Theoretical Framework

Influence of Cash Holding and Internal Control on Earnings Management

A company's cash holdings affects its attractiveness to investors (Kusmiyati and Hakim 2020). In relation to agency theory, managers have the power to determine the level of a company's cash holding. Earnings management based on discretionary accruals follows companies' cash holding decisions due to its relationship with information asymmetry and external funding costs. Theoretically, manipulation of discretionary accruals can increase the information asymmetry between agents and principals (Khuong et al. 2020).

Cash holding is likely to lead to high opportunity costs because cash can be quickly channeled into promising investment projects. In addition, excessive cash holding may may pose a higher risk of being used for personal gain (Chen et al. 2020).

Based on the results of research by Saniamisha and Jin (2019), cash holdings have a negative effect on earnings management. Companies that perform earnings management have low cash holdings. Chen et al. (2020) explain that effective internal control helps companies target the optimal level of cash holdings. Those with good internal control tend to have a low level of cash because management adequately assesses the benefits and costs of holding more or less cash and applies appropriate cash policies. The following related hypotheses are therefore proposed:

H_3 : Cash holding has a negative effect on earnings management

H_4 : Internal control weakens the negative effect of cash holding on earnings management

Influence of Profitability and Internal Control on Earnings Management

Making a profit is one of the goals of a company. Once the company's profitability is low, the bonus received by management will also be low (Adi et al. 2020). Therefore, management performs earnings management with the aim of receiving bonus compensation. This follows the positive accounting theory (Lestani et al. 2021).

Internal control plays a vital role in a company's profitability. However, its implementation can mean additional costs, although good internal control can increase the reliability of the company's operations and value. Moreover, it can reduce fraudulent actions (Vu et al. 2022). The related hypotheses are:

H_5 : Profitability has a positive effect on earnings management

H_6 : Internal control weakens the positive effect of profitability on earnings management

RESEARCH METHOD

Population and Samples

The study is based on a population of public companies from consumer staples sectors listed on the S&P Capital IQ in six major countries in Southeast Asia (Indonesia, Malaysia, Singapore, Thailand, Philippines, and Vietnam) over the 2016-2020 period. Purposive sampling was used with the following criteria:

1. The public companies from the consumer staples sectors have conducted initial public offerings (IPOs).
2. The companies regularly submit financial-audited reports every year.
3. The companies have complete data to support the research.

Research Model

A multiple linear regression model was used, as follows:

Model 1

$$\textit{M LABA} = \beta_o + \beta_1 DISTRESS_{it} + \beta_2 CHOLD_{it} + \beta_3 PROF_{it} + \beta_4 IC_{it} + \beta_5 SIZE_{it} + \beta_6 GROWTH_{it} + \varepsilon_{it}$$

Description:

M LABA	: *Earnings Management*
$B_{0,1,\ldots 6}$	: *Coefficient Regression*
DISTRESS	: *Financial Distress*
CHOLD	: *Cash Holding*
PROF	: *Profitability*
IC	: *Internal Control*
SIZE	: *Company Size*
GROWTH	: *Company Growth*

Model 2

$$\textit{M LABA} = \beta_o + \beta_1 DISTRESS_{it} + \beta_2 CHOLD_{it} + \beta_3 PROF_{it} + \beta_4 IC_{it} + \beta_5 DISTRESS * IC_{it} + \beta_6 CHOLD * IC_{it} + \beta_7 PROF * IC_{it} + \beta_8 SIZE_{it} + \beta_9 GROWTH_{it} + \varepsilon_{it}$$

Description:

M LABA	: *Earnings Management*
$B_{0,1,\ldots 9}$	: *Coefficient Regression*
DISTRESS	: *Financial Distress*
CHOLD	: *Cash Holding*
PROF	: *Profitability*
IC	: *Internal Control*
*DISTRESS * IC*	: *Intercation between Financial Distress and Internal Control*
*CHOLD * IC*	: *Intercation between Cash Holding and Internal Control*
*PROF * IC*	: *Intercation between Profitability and Internal Control*
SIZE	: *Company Size*
GROWTH	: *Company Growth*

Object Variable and Operational Variable

1. Dependent Variable

The dependent variable is that which is influenced by the research (Sugiyono 2013); in this case it is earnings management. In this study it is proxied using discretionary accruals in two stages. These can be measured using the modified Jones model, which is better able to detect earnings management than other models (Dechow et al. 1995; Qadri and Najiha 2021).

2. Independent Variable

The independent variable is a variable that affects research (Sugiyono 2013). In this study, those used are financial distress, cash holdings, and profitability. Financial distress was measured using the debt service coverage ratio (DSCR). Companies in financial distress are indicated by a DSCR value of < 1.2 and are represented by the number 1. On the other hand, those not in a financial distress are indicated by a DSCR value of > 1.2 and represented by 0 (Santosa et al. 2020). In this research, cash holding calculation was made by the ratio of cash and cash equivalents to total assets in order to measure the company's cash holdings (Xu and Li 2018). The profitability ratio is a ratio that shows the combined effect of liquidity, assets and debt management

Object Variable	Operational Variable	Source
Dependent Variable: Earnings Management	1) $TACit = NI_{it} - CFO_{it}$ 2) $\frac{TAC_{it}}{A_{it-1}} = \beta 1(\frac{1}{A_{it-1}}) + \beta 2(\frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}}) + \beta 3(\frac{PPE_{it}}{A_{it-1}})$	Dechow et al., (1995) dan Qadri & Najiha (2021)
Independent Variable: Financial Distress	$DSCR = \frac{EBITDA}{Debt\ Service}$	Santosa et al. (2020) dan Sanbowo & Ary (2021)
Cash Holding	$Cash\ Holding\ (CHOLD) = \frac{(Cash + Cash\ Equivalent)}{Total\ Asset}$	Saniamisha & Jin (2019)
Profitability	$Return\ On\ Asset = \frac{Net\ income}{Total\ asset}$	Rhyne & Brigham (2018)
Control Variable: Company Size	$Size = Log\ (Total\ Asset)$	Y. Agustia & Suryani (2018) dan Li et al. (2020)
Company Growth	$Sales\ Growth = \frac{Sales\ in\ Current\ Year - Sales\ in\ Previous\ Year}{Sales\ in\ Previous\ Year}$	Sebastian & Handojo (2019)
Moderating Variable: Internal Control	*Internal Control* *= net income before extraordinary items in current year* *− net income before extraordinary items in prior year*	Doyle et al. (2007) dan D'Mello et al. (2017)

Figure 2
Variable Operationalization

Description	Asia Tenggara						Total
	Indonesia	Malaysia	Filipina	Singapura	Thailand	Vietnam	
Total Observations for 2016 - 2020	80	185	20	40	115	40	480

Figure 3
Detail Observations

on operating results (Rhyne and Brigham 2018).

3. Moderating Variable

The moderating variable is one that can strengthen or weaken the influence of an independent variable on the dependent variable (Solimun et al. 2020). In this study, the moderating variable used is internal control, which is calculated using a dummy variable, aggregate loss. Supposing the net income before extraordinary items in year t and the year before t is < 0, the value of the indicator is set at 1; otherwise, the value is 0 (Doyle et al. al. 2007; D'Mello et al. 2017).

4. Control Variable

The control variable is a variable that is made constant so that other factors outside the study do not affect the independent variable on the dependent variable (Sugiyono 2013). This study uses company size and company growth as control variables. The function of the control variable is to prevent based calculation results.

Table 1
Descriptive analysis test result

	Mean	Maximum	Minimum	Std. Dev.	Observations
MLABA	-0.0188	0.8379	-0.6127	0.0970	480
DISTRESS	0.4396	1.0000	0.0000	0.4969	480
CHOLD	0.0716	0.4759	0.0003	0.0762	480
PROF	0.0219	0.6070	-2.6404	0.1493	480
IC	0.4958	1.0000	0.0000	0.5005	480
DISTRESS*IC	0.2438	1.0000	0.0000	0.4298	480
CHOLD*IC	0.0357	0.4760	0.0000	0.0648	480
PROF*IC	-0.0030	0.3200	-2.6400	0.1346	480
SIZE	15.2942	20.4139	11.7678	1.6255	480
GROWTH	0.0594	6.5838	-0.7020	0.4054	480

RESULT AND ANALYSIS

96 companies from the consumer staples sectors of Indonesia, Malaysia, Singapore, Thailand, Philippines, and Vietnam over the period 2016 – 2020 were studies. The data observations were processed by Eviews11.

Result

Based on the results of descriptive statistical analysis, it was possible to determine the number of observations, the minimum, maximum, mean, and standard deviation.

Table 1 shows that earnings management as the dependent variable has a minimum value (min) of -0.6127 and a maximum value (max) of 0.8379 with an average value (mean) of -0.0188 and a standard deviation (std. dev) of 0, 0970. A negative value refers to accruals; it shows companies tend to engage in earnings management practices to understate income. Financial distress as an independent variable has a minimum (min) value of 0 with 269 samples and a maximum (max) value of 1 in 211 samples for after using a dummy variable. Financial distress has an average value (mean) of 0.4396 and a standard deviation (std. dev) of 0.4969. Cash holding as an independent variable has a minimum value (min) of 0.0003 and a maximum value (max) of 0.4759 with an average value (mean) of 0.0716 and a standard deviation (std. dev) of 0.0762. Profitability as an independent variable has a minimum value (min) of -2.6404 and a maximum value (max) of 0.6070 with an average value (mean) of 0.0219 and a standard deviation (std. dev) of 0.1493. Internal control as an independent variable has a minimum value (min) of 0 and a maximum (max) of 1 for using a dummy variable. Financial distress has an average value (mean) of 0.4958 and a standard deviation (std. dev) of 0.5005.

In addition, the moderating variable between internal control and financial distress have a minimum value (min) of 0.0000 and a maximum value (max) of 1,000, with an average value (mean) of 0.2438. and standard deviation (std. dev) of 0.4298. The moderating variable between internal control and cash holding has a minimum value (min) of 0.0000 and a maximum value (max) of 0.4760 with an average value (mean) of 0.0357 and a standard deviation (std. dev) of 0,0648. The moderating variable between internal control and profitability has a minimum value (min) of -2.6400 and a maximum value (max) of 0.3200 with an average value (mean) of -0.0030 and a standard deviation (std. dev) of 0.1346.

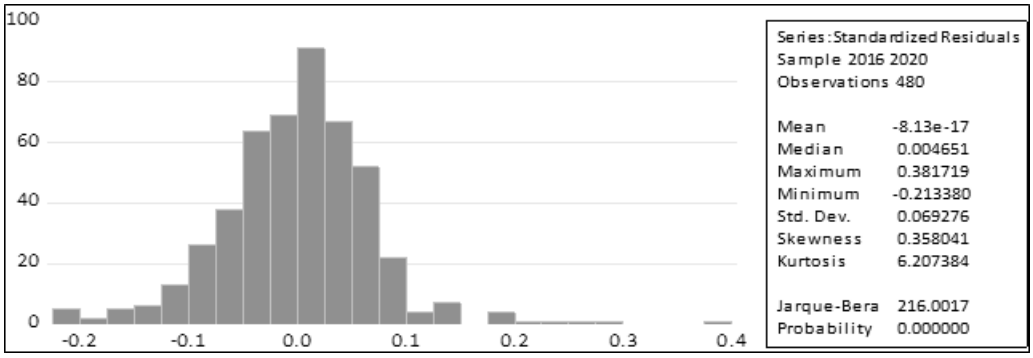

Figure 3
Normality Test Result – Model 1
Source: Eviews 11

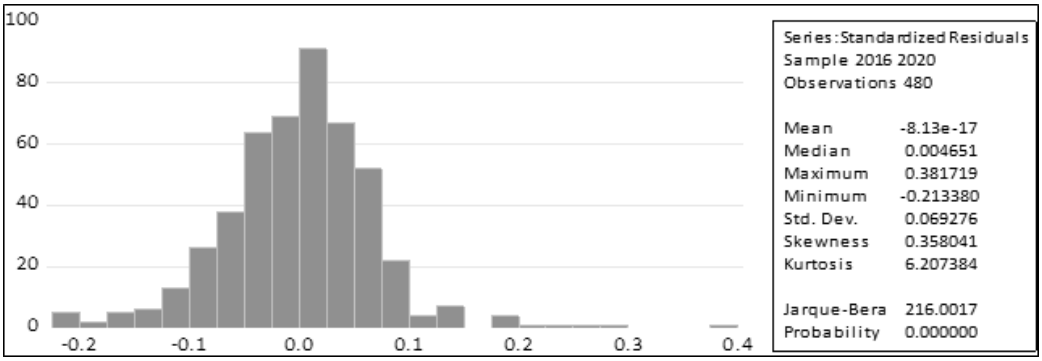

Figure 4
Normality Test Result – Model 2
Source: Eviews 11

Testing the Classical Assumptions

The classical assumption test consists of normality, multicollinearity, heteros-cedasticity and autocorrelation, tests.

1. *Normality Test Results*

The normality test used was the Jarque-Bera test. Assuming the Jarque-Bera probability is > 0.05, the data are normally distributed.

The normality test results shown in Figure 3 indicate that the Jarque-Bera probability of 0.000 is less than the significance value of 0.05. This means that the dependent, independent and control variables are not normally distributed.

Similar to Model 1, the Jarque-Bera probability (0.000) in Model 2 is lower than the significant value (0.05), meaning that the data for dependent, independent, control, and moderating variables not to be normally distributed, as portrayed in Figure 4.

Therefore, the normality test of both models shows that the data are not normally distributed. This can happen because of the possibility of data inequality in the company used as the object of observation.

2. *Multicollinearity Test Results*

The signs of multicollinearity are indicated by the value of the variability between the independent variables based on the VIF (Variance Inflation Factor) value of above 10. The results of the multicollinearity test from in this examination are shown in Table 2.

According to Multicollinearity Result Test Results in Table 2, all variables have a VIF value below 10, meaning that the first model multicollinearity test does not show signs of multicollinearity.

Table 2
Multicollinearity Test Results

Model	Variable	Centered VIF
1	C	NA
	DISTRESS	1.8790
	CHOLD	1.3181
	PROF	2.7007
	IC	1.7887
	SIZE	1.3319
	GROWTH	1.1828
2	C	NA
	DISTRESS	3.8500
	CHOLD	5.7622
	PROF	13.6764
	IC	3.9438
	DISTRESS*IC	5.1711
	CHOLD*IC	7.4540
	PROF*IC	13.4216
	SIZE	1.2034
	GROWTH	1.2407

In model 2, multicollinearity symptoms occur because there is a strong correlation between the profitability variable and internal control as a moderating variable in a multiple regression model.

3. Heteroscedasticity Test Results

The heteroscedasticity test aims to test whether there is an inequality of variance between the residual of one observation and another. The heteroscedasticity test in this study shows with a probability that is less than < 0.05.

Table 3 shows the probability of all variables > 0.05. This result indicates that the first research model has no heteroscedasticity in the multiple linear regression model. In addition, the Heteroscedasticity Test for Model 2 shown in Table 3 indicates that this study has signs of heteroscedasticity in the multiple linear regression model, with the emergence of probability < 0.05 in the DISTRESS, and PROF*IC variables. In model 2, the symptom of heteroscedasticity occurs because the possibility of variance from the error between one observation and another occurs unequally.

4. Autocorrelation Test Results

The Lagrange Multiplier Test (LM test) was was used to determine the existence of autocorrelation. The test produces Breusch-Godfrey statistics, so it is also known as the Breusch-Godfrey Test.

The results of the autocorrelation test using the Breusch-Godfrey test show that the probability value of Obs*R-squared is 0.8039, higher than the probability value (0.05). Therefore, it can be concluded that there are no autocorrelation signs in model 1s.

Similar to model 1, the probability value of Obs*R-squared in model 2 (0.4176), as shown in Table 7, is greater than the probability value (0.05), which indicates there iare no signs of autocorrelation.

Table 3
Heteroscedasticity Test Results

Model	Variable	Coefficient	Std. Error	t-Statistic	Prob.
1	C	-0.0694	0.1415	-0.4906	0.6240
	DISTRESS	0.0054	0.0047	1.1469	0.2522
	CHOLD	0.0650	0.0629	1.0342	0.3017
	PROF	-0.0080	0.0122	-0.6534	0.5139
	IC	-0.0046	0.0034	-1.3410	0.1807
	SIZE	0.0068	0.0092	0.7351	0.4627
	GROWTH	0.0264	0.0045	5.9176	0.0000
2	C	0.1091	0.0234	4.6698	0.0000
	DISTRESS	0.0200	0.0058	3.4662	0.0006
	CHOLD	0.0683	0.0405	1.6883	0.0920
	PROF	0.2274	0.0334	6.8114	0.0000
	IC	0.0059	0.0064	0.9286	0.3536
	DISTRESS*IC	-0.0137	0.0076	-1.8151	0.0701
	CHOLD*IC	0.0081	0.0488	0.1654	0.8687
	PROF*IC	-0.2965	0.0367	-8.0748	0.0000
	SIZE	-0.0051	0.0015	-3.4851	0.0005
	GROWTH	0.0173	0.0047	3.6690	0.0003

Tabel 4
Autocorrelation Test Results

Model	Breusch-Godfrey Serial Correlation LM Test:			
1	F-statistic	0.2143	Prob. F(2,471)	0.8072
	Obs*R-squared	0.4365	Prob. Chi-Square(2)	0.8039
2	F-statistic	0.8546	Prob. F(2,468)	0.4261
	Obs*R-squared	1.7466	Prob. Chi-Square(2)	0.4176

. In this study, there were no autocorrelation symptoms in the two multiple regression models.

Regression Model

1. *Chow Test Result*

   The Chow test was performed to decide whether the data utilized in the study are the common effect model (CEM) or the fixed effect model (FEM). The hypothesis for the Chow test is as follows:

   H_0: Probability > 0,05: means the data model uses the Common Effect Model (CEM)

   H_1: Probability < 0,05: means the data model uses the Fixed Effect Model (FEM)

   According to the Chow Test Result run in Table 5, the probability value of the Chi-square Cross-section is smaller than the significance value of 0.05. As a result, the model used for this analysis is the Fixed Effect Model (FEM).

2. *Hausman Test Result*

   The Hausman test was conducted to decide whether the data utilized in the study are the Random Effect Mode

Tabel 5
Chow Test Results

Model	Test cross-section fixed effects			
	Effects Test	**Statistic**	**d.f.**	**Prob.**
1	Cross-section F	2.1926	-95375	0.0000
	Cross-section Chi-square	212.0524	95	0.0000
2	Cross-section F	2.115484	-95,378	0.0000
	Cross-section Chi-square	204.651955	95	0.0000

Tabel 6
Chow Test Results

Model	Test cross-section random effects			
	Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
1	Cross-section random	12.8566	6.0000	0.0454
2	Cross-section random	16.4630	9.0000	0.0578

Tabel 7
Lagrange Multiplier Test Results

Model	Lagrange Multiplier Tests for Random Effects			
	Test Hypothesis			
		Cross-section	**Time**	**Both**
1	Breusch-Pagan	26.9700	1.1582	28.1283
		0.0000	-0.2818	0.0000
2	Breusch-Pagan	29.3708	0.3233	29.6941
		0.0000	-0.5696	0.0000

REM) or the Fixed Effect Model (FEM). The hypotheses for the Chow test are as follows:

H_0 : Probability > 0,05 : means the data model uses the Random Effect Model

H_1 : Probability < 0,05 : means the data model uses the Fixed Effect Model

According to the Hausman test results, the cross-section random probability value is smaller than the significance value of 0.05. As a result, the Fixed Effect Model (FEM) is used for model 1 and Random Effect Model (REM) for model 2.

3. *Lagrange Multilier Test Result*

The Lagrange Multiplier test was performed to decide whether the data utilized are the study is the common effect model (CEM) or the random effect model (REM). The hypotheses for the Hausman test are as follows:

H_0 : Probability > 0,05 : means the data model uses the Common Effect Model (CEM)

H_1 : Probability < 0,05 : means the data model uses the Fixed Effect Model (FEM)

Table 7 shows that the probability value of Breusch-Pagan is 0.0000 or <0.05. Therefore, the model used for this

Tabel 8
T-Test Result – Model 1 Test Results

Dependent Variable: MLABA				
Sample: 2016-2020				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.0200	0.0440	-0.4546	0.6496
DISTRESS	0.0197	0.0077	2.5663	0.0106
CHOLD	-0.1784	0.0581	-3.0714	0.0023
PROF	0.3999	0.0235	17.0506	0.0000
IC	-0.0036	0.0068	-0.5330	0.5943
SIZE	-0.0001	0.0028	-0.0325	0.9741
GROWTH	-0.0033	0.0086	-0.3797	0.7043
Root MSE	0.0706	**R-squared**		0.4001
Mean dependent var	-0.0132	**Adjusted R-squared**		0.3925
S.D. dependent var	0.0912	**S.E. of regression**		0.0711
Sum squared resid	2.3894	**F-statistic**		52.5704
Durbin-Watson stat	2.0256	**Prob(F-statistic)**		0.0000

research is the Random Effect Model (REM).

Hypothesis Test Result

1. *Adjusted R Square Test*

A coefficient of determination test was run to calculate the ability of the regression model. The value of the coefficient of determination (Adjusted R Squared) shows the variation in the dependent variable that the independent variables can explain. The greater the value of the coefficient of determination, the better the research model.

The adjusted R-squared value shown above is 0.39. It can be concluded that together financial distress, cash holdings, profitability, internal control, company size, and company growth affect earnings management by 39.2%, while 60.8% is due to other variables outside the research model used.

In addition, the adjusted R-squared value shown in Table 8 is 0.51. This indicates that together financial difficulties, cash storage, profitability, financial difficulties*internal control, cash storage*internal control, profitability*internal control, company size, company growth, and internal control affect earnings management by 51%. The other 49 % comes fromother variables outside the research model used.

2. *F-Test*

The results of the simultaneous effect test (statistical test F) aimed to estimate whether the independent variables in the research regression model had a significant effect on the independent variables. The results of the F-test can be seen from the probability values at significance levels of 5%, 10%, and 15%. Based on the data processing results shown in Table 11, the significance value is 0.000. The results illustrate a significance of 0.000 < 0.05, so it can be concluded that

Tabel 9
T-Test Result – Model 2 Test Results

Dependent Variable: MLABA				
Sample: 2016 2020				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.0453	0.0403	-1.1223	0.2623
DISTRESS	0.0328	0.0095	3.4372	0.0006
CHOLD	-0.2900	0.0679	-4.2706	0.0000
PROF	0.9611	0.0550	17.4755	0.0000
IC	0.0235	0.0104	2.2537	0.0247
DISTRESS*IC	-0.0280	0.0123	-2.2669	0.0238
CHOLD*IC	0.1723	0.0796	2.1654	0.0309
PROF*IC	-0.6694	0.0606	-11.0556	0.0000
SIZE	-0.0001	0.0026	-0.0311	0.9752
GROWTH	0.0003	0.0077	0.0419	0.9666
Root MSE	0.0625	**R-squared**		0.5272
Mean dependent var	-0.0129	**Adjusted R-squared**		0.5181
S.D. dependent var	0.0910	**S.E. of regression**		0.0631
Sum squared resid	1.8738	**F-statistic**		58.2268
Durbin-Watson stat	2.0333	**Prob(F-statistic)**		0.0000

financial distress, cash holdings, profitability, internal control, company size, and company growth significantly affect earnings management. Furthermore, the data processing results in shown Table 12 indicate that the interaction, independent, moderating, and control variables also simultaneously affect the dependent variable, with a significance value of 0.000 (value < 0.05). Therefore, it can be concluded that internal control (IC) as a moderating variable simultaneously affects earnings management.

3. T-Test

The individual parameter significance test aims to consider the relationship of each variable based on the level of significance with the dependent variable, at levels of 5%, 10%, and 15%.

In relation to hypothesis 1, hypothesis 3, and hypothesis 5, Table 8 shows that the results of the individual parameter significance test (T-test) indicate the probability value of each variable as follows:

1) The T-test results for financial distress (DISTRESS) have a coefficient of 0.0197 and a probability value of 0.0106. The positive coefficient value indicates that financial distress positively affects earnings management. Therefore, financial distress has a significant positive effect on earnings management.
2) The T-test results for cash holding (CHOLD) have a coefficient of -0.1784 and a probability value of 0.0023. The negative coefficient value indicates that financial distress negatively affects earnings

management. Therefore, cash holding has a significant negative effect on earnings management.

3) The T-test results for profitability (PROF) have a coefficient of 0.3999 and a probability value of 0.0000. A positive coefficient value indicates that profitability positively affects earnings management. Therefore, profitability has a significant positive effect on earnings management.

If the probability is more than 0.05, then the moderating variable strengthens the effect of the relationship between the independent and the dependent variable. Regarding hyphotesis 2, hyphotesis 4, and hyphotesis 6. Table 9 shows the results of the random common effect test, from which the probability value of each variable can be seen, as follows:

1) The T-test results for financial distress (DISTRESS) with internal control (IC) as the moderating variable have a coefficient of -0.0280 and a probability value of 0.0238. The negative coefficient value indicates that financial distress negatively affects earnings management. Therefore, internal control as a moderating variable partially strengthens the negative effect of financial distress (DISTRESS*IC) on earnings management.
2) The T-test results for cash holding (CHOLD) with internal control (IC) as the moderating variable have a coefficient of 0.1723 and a probability value of 0.0309. The positive coefficient value indicates that cash holding positively affects earnings management. Therefore,
3) internal control as a moderating variable partially weakens the positive effect of cash holding (CHOLD*IC) on earnings management.
4) The results of the T-test for profitability (PROF) with internal control (IC) as the moderating variable have a coefficient of -0.6694 and a probability value of 0.0000. The negative coefficient value indicates that profitability negatively affects earnings management. Therefore, internal control as a moderating variable partially strengthens the negative effect of profitability (PROF*IC) on earnings management.

Analysis

Financial Distress Positively Affects Earnings Management

Based on the results of the hypothesis testing shown in Table 8, financial distress has a positive effect on earnings management. The higher the distress, the higher the company's earnings management. The company supplies information to investors about its performance; financial distress will impact the external parties related to company investment. In addition, it will affect management, which makes efforts to manage earnings by optimizing the level of profit in the company's operational activities.

The results of this study also verify that financial distress has a positive effect on earnings management and are in line with research conducted by Chairunesia et al. (2018), Li et al. (2020), Qadri and Najiha (2021), Jacoby et al. (2019), and Putri and Rachmawati (2018).

Internal Control Strengthens the Negative Effect of Financial Distress on Earning Management

Based on the results of the hypothesis testing shown in Table 9, it is indicated that internal control as a moderating variable strengthens the negative effect of financial distress on earnings management. Companies in financial distress will make weak disclosure of material truths, so those encountering financial distress and which have more ineffective internal controls will undertake more earnings management.

Cash Holding Negatively Affects Earnings Management

Based on the results of the hypothesis testing shown in Table 8, cash holding negatively affects earnings management. The lower the company's cash holding, the higher the motivation for earnings management. In general, companies that perform earnings management have low cash holdings as management wants investors to remain interested in investing in shares in the company.

In conclusion, the results of this study indicate that cash holding negatively affects earnings management and rae in line with the research conducted by Saniamisha and Jin (2019).

Internal Control Strengthens the Positive Effect of Cash Holding on Earnings Management

Based on the results of the hypothesis testing shown in Table 9, internal control as a moderating variable strengthens the positive effect of cash holding on earnings management. Such control helps companies set targets for the optimal level of cash holdings. Low cash holdings will reduce earnings management practices carried out by management, so management will control the company's cash for more profitable investment purposes.

Profitability Positively Affects Earnings Management

The results of the hypothesis testing shown in Table 8 indicate that profitability positively affects earnings management. Profitability is an essential measuring factor for external parties, and a higher level will affect company performance; the higher the profitability, the greater the occurrence of earnings management. Management seeks to provide positive information by portraying increased company profits.

The study clarifies that profitability has a positive effect on earnings management. This is in line with the results of previous research conducted by Saniamisha and Jin (2019), Anasta (2019) and Sun and Farooque (2019), who found that profitability had a significant positive effect on earning management.

Internal Control Strengthens the Negative Effect of Profitability on Earnings Management

The results of the hypothesis testing shown in Table 9 indicate that internal control as a moderating variable strengthens the negative effect of profitability on earnings management. Good internal control can increase the company's operational reliability and value and also can reduce fraudulent actions.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

The study aimed to define and analyze the relationship between financial distress, cash holdings, and profitability and earnings management, with internal control as a moderating variable with reference to six major countries in Southeast Asia (Indonesia, Malaysia, Singapore, Thailand, Philippines, and Vietnam) over the period 2016 – 2020. The results indicate that the financial

distress, cash holdings, profitability, and internal control variables simultaneously significantly affect earnings management in consumer staples companies in these countries. Furthermore, the study also verifies that financial distress and profitability positively affect earnings management, whereas cash holding has a negative impact. In addition, internal control as a moderating variable strengthens the negative impact of financial distress and profitability on earnings management, but strengthens the positive impact of cash holdings.

The research model has classical assumptions on the normality, heteroscedasticity, and multicollinearity tests. Treatment was performed to reduce the symptoms of such assumptions by reducing data outliers and transformation. However, there are still symptoms of classical assumptions.

Recommendation

The following recommendations are made. First, future studies should add samples from other sectors in Southeast Asian countries. Second, the length of the research period should be expanded. Third, future studies could also modify the number of determination variables aside from this analysis to define a more varied effect on earnings management.

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