The Effect of Information Asymmetry and Debt on Accrual Earnings Management: Firm Size as a Moderating Variable

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ABSTRACT: One of the opportunistic manager practices is earnings management. This attitude arises because of the high asymmetry of information between the principal and manager, weak regulation and control. If information asymmetry is high, stakeholders do not have sufficient resources, incentives or access to relevant information to monitor managers' actions. Through the size of the company is expected to see how big the influence of information asymmetry and debt on earnings management actions. This research is included in the third TKT measurement, namely proof-of-concept of important functions and/or characteristics analytically and experimentally. This study aims to examine the impact of the interaction of information asymmetry and debt on earnings management through accrual of working capital with firm size as a moderating variable. This study uses quantitative methods with cross-sectional data. This study uses secondary data in the form of financial statements of consumption sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2015 to 2021. The results prove that DER has a positive effect on earnings management and company size is able to moderate the effect of DER on earnings management. However, information asymmetry has no effect on earnings management and firm size is not able to moderate the effect of information asymmetry on earnings management.

KEYWORDS: Information asymmetry, earnings management, leverage, firm size.

INTRODUCTION

Every company has a contract with management in which a manager has responsibilities to society and shareholders. Usually the form of accountability is in the form of financial statements. Financial statements describe the company's financial condition, company performance, changes in financial position, and so on. The management provides information on the financial statements which will be assessed and evaluated for their performance (Chen et al, 2005). Judging from its historical development, financial statements have undergone a change in function, namely from the initial function which was only as a form of accountability for managers to capital owners to several functions that are more focused on future interests. However, in reality, not all financial statements are able to describe the actual economic conditions and are not transparent (W. Utami, 2006). Management knows more about the company's economic conditions than investors and management behavior is not always beneficial for capital owners (Jensen & Meckling, 1976).

Jensen & Meckling (1976) reinforce one of the opportunistic managers' practices is to conduct earnings management. This opportunistic attitude arises because of the relatively high information asymmetry between the principal (owner) and manager, weak regulation and control. If information asymmetry is high, stakeholders do not have sufficient resources, incentives or access to relevant information to monitor managers' actions.

(Pernamasari & Sugiyanto, 2022) said the existence of information asymmetry will encourage management to present financial statements that do not reflect actual conditions, especially if this is used as a basis for measuring performance. (Setiany & Wulandari, 2015) in their research proved that investors as principals use financial information. Information asymmetry problems potentially experienced by investors can be overcome with better quality financial information so that investors can make appropriate investment decisions. Investors themselves have various considerations to decide on a stock investment in the capital market. Ardian & Khoiruddin (2014) added that stock price fluctuations are erratic and contain the risk of causing investor uncertainty in determining their investment decisions, such as the company's financial condition contained in the annual report. So to assist investors in making investment decisions, companies need to carry out financial reporting by manipulating earnings.
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Wang & Wang (2017) analyze the effect of asymmetric information trading, namely how stock prices move after investors obtain information about events that occur. The result is that the price-sensitive trader or information seeker gains an advantage in analyzing the stock market in the presence of information asymmetry so that the data reduces losses. However (Ghazali et al, 2015) added that if the earnings information is used by managers to convey superior and useful information they know about the company’s performance to shareholders and debt holders, then earnings management may not be harmful to shareholders and the public.

As revealed (Rahimipour, 2017) a relationship can be found between accounting items and managers who have the ability to manipulate them such as discretionary accruals and stock returns. Managers of developing companies have more incentives and motivation for signaling confidential information about the company’s future performance through discretionary accruals. As a result, investors will recognize incentives and motivations and will be rewarded for this information reflected on financial statements.

According to Utami (2005) to detect the presence or absence of earnings management, the measurement of accruals is very important to note. Total accruals are the difference between profit and cash flows from operating activities. Total accruals are divided into two parts, namely: (1) the accrual part which is naturally present in the process of preparing financial statements is called normal accruals or non-discretionary accruals, and (2) the accrual part which is manipulation of accounting data is called abnormal accruals or discretionary accruals.

Pradita & Haryanto (2017) examined the relationship of information asymmetry between budget participation and budgetary slack. The result is that asymmetric information is considered capable of mediating the relationship between budget participation and budgetary slack. Information asymmetry occurs when subordinates have more relevant information in the decision-making process related to budgeting, which the superior does not have. Likewise with the results of research (Wijayanto et al, 2007) where there is a significant positive relationship between information asymmetry and earnings management, the higher the information asymmetry, the higher the earnings management so that the existence of earnings management will have an effect on the financial statements used. Likewise with the relationship between debt and earnings management, companies whose assets are financed by debt tend to take action to increase the amount of profit earned due to high interest expenses. The consequence of using leverage according to (Cai & Zhang, 2011) is that if from the use of debt it turns out that the rate of return on assets (return) is greater than the cost of debt, the leverage is profitable and the return on capital using this leverage also increases, on the contrary if the return on on assets is less than the cost of debt, then leverage will reduce the rate of return on capital. The results of the study (Y. P. Agustia & Suryani, 2018) managed to obtain evidence that leverage has an effect on earnings management actions.

The relationship between company size and information asymmetry and earnings management is that large companies have a high enough initiative to practice earnings management, because one of the driving factors is that large companies must be able to meet the expectations of shareholders. Likewise, companies whose assets are financed by debt tend to take action to increase the amount of profit earned due to the high interest expense (Mustikawati & Cahyonowati, 2015; Sutapa & Suputra, 2016).

LITERATURE REVIEW

Agency theory

Agency theory states that there is an agency relationship as a contract between management as an agent with ownership as a principal of the company, a working relationship between the party that gives the authority (principal), namely the shareholder and the party receiving the authority (agent) of the company in the form of cooperation, called the principal nexus of contract providing authority and authority to agents to run the company in the interests of owners and principals, (Jensen & Meckling, 1976). Agents have more information about their capacity, work environment and the company as a whole. This is what results in an information imbalance between the principal and the agent, which is called information asymmetry. This information asymmetry and conflict of interest encourage agents to present untrue information to the principal, especially if the information relates to the agent's performance.

Earnings management

Copeland, 1968 in (Utami, 2005) defines earnings management as "same ability to increase or decrease reported net income at will", this means that earnings management includes management’s efforts to maximize or minimize profits including profit equipment in accordance with management wishes. Earnings management is carried out to influence investors' perceptions, especially to influence the decision to buy company shares.
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Zang (2012) said that accrual earnings management tends to be carried out by managers after the fiscal year ends. Some managers may find it very expensive because their company faces intense competition in the industry. Within an industry, companies tend to face varying degrees of competition and, therefore, come under different amounts of pressure when deviating from an optimal business strategy.

In this study, the proxy for earnings management used is the actual specific model, namely the accrual of working capital. The use of working capital accruals is more appropriate as has been studied by (Utami, 2005). Because discretionary accruals are considered more complicated, a proxy for the ratio of working capital accruals to sales is used. The reason is because earnings management mostly occurs in sales accounts. Working capital accrual data can be obtained directly from the operating activity cash flow statement, so that investors can directly obtain the data without performing complex calculations.

Information Asymmetry

The perspective of information asymmetry implies that managers try to reduce information asymmetry in order to maximize the value of the company in an opportunistic way. Imbalance of information from both owners and managers of the company can lead to information asymmetry, which in accordance with agency theory, the existence of information asymmetry can provide benefits for managers in maximizing their personal benefits. (W. Utami, 2005) revealed that the higher the information asymmetry, the greater the bid-ask spread, in this case the disclosure of financial statements is expected to reduce information asymmetry so that the bid-ask spread also decreases.

When information asymmetry arises, disclosure decisions made by managers can affect stock prices because information asymmetry between more informed investors and less informed investors raises transaction costs and reduces the expected liquidity in the market for company shares (Komalaari, 2000). Nuryatno et al, 2019).

Debt

Debt policy can be represented through leverage ratios. The leverage ratio describes the source of operating funds used by the company. The leverage ratio also shows the risks faced by the company. The greater the risk faced by the company, the uncertainty to generate future profits will also increase (D. Agustia, 2013). The consequence of using leverage according to (Cai & Zhang, 2011) is that if from the use of debt it turns out that the rate of return on assets (return) is greater than the cost of debt, the leverage is profitable and the return on capital using this leverage also increases, on the contrary if the return on on assets is less than the cost of debt, then leverage will reduce the rate of return on capital.

Company Size

Company size is the scale of the company seen from the total assets of the company at the end of the year. However, total sales can also be used to measure the size of the company. Companies with large sizes have greater and wider access to sources of funding from outside, so that obtaining loans will be easier because it is said that companies with large sizes have a greater chance of winning the competition between surviving in the industry (Nariastiti & Ratnadi, 2014).

Method analysis and model design

The population of this research is the consumption sub-sector manufacturing companies on the Indonesia Stock Exchange, with the observation year 2015-2021. Sampling in this study used a purposive sampling technique, where purposive sampling is a sampling technique of data sources with certain considerations. The number of manufacturing companies listed on the IDX until 2021 is 140 companies.

Dependent Variable

The dependent variable or the dependent variable is the variable that is influenced or which is the result of the independent variable (Sugiyono, 2013). The dependent variable used in this study is earnings management. Earnings Management, proxied based on the ratio of working capital accruals to sales (W. Utami, 2005). In this study, the proxy for earnings management used is the actual specific model, namely the accrual of working capital. The use of working capital accruals is more appropriate as has been studied by (Utami, 2005). Because discretionary accruals are considered more complicated, a proxy for the ratio of working capital accruals to sales is used. The reason is because earnings management mostly occurs in sales accounts. Working capital accruals data can be obtained directly from the operating activity cash flow statement, so that investors can directly obtain the data without performing complex calculations.

Earnings management (EM) = Working capital accruals (t) / Sales period (t) Accrual of working capital = ΔAL - ΔHL - ΔCash Information: 
ΔAL = Change in current assets in period t

ΔHL = Change in liabilities in period t

ΔCash = Change in cash in period t
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ΔHL = Change in current liabilities in period t  
ΔCash = Change in cash and cash equivalents in period t  
Working capital accruals data can be obtained directly from the operating activity cash flow statement, so that investors can directly obtain the data without performing complex calculations.

Independent Variable

Independent variables or independent variables are variables that affect or are the cause of changes or the emergence of the dependent variable (the dependent variable) (Sugiyono, 2013). The independent variables used in this study are information asymmetry and debt.

a. Information asymmetry (Ai). Information asymmetry in this study was measured using the relative bid ask spread. (Rahmawati & Handayani, 2017) calculates the relative bid-ask spread as follows:

\[ \text{SPREAD}_{it} = \frac{(\text{ask}_{it} - \text{bid}_{it})}{((\text{ask}_{it} + \text{bid}_{it})/2) \times 100} \]

Note: SPREAD_{it} = Relative bid-ask spread of company i on day t  
ASK_{it} = The highest ask (bargain) price of company i's shares on day t  
BID_{it} = The lowest bid (ask) price for company i shares on day t

b. Debt. In this study is to use the variable Leverage. A low leverage ratio indicates that the company has a good financial position because the company is able to cover all of its short and long term debts when the company is liquidated. In this study, the leverage ratio (LEV) is calculated by comparing total liabilities with total equity. DER = Total liabilities / total equity

Moderating Variables

The moderating variable in this study is the firm size variable. In this study, the size of the company here uses total assets, namely:

\[ \text{Size} = \ln (\text{Total assets}) \]

To test the framework above, using SPSS.22 analysis tool to test the feasibility of the model, F test and t test. There are several ways to test regression with moderating variables and one of them is Moderated Regression Analysis (MRA). Moderated Regression Analysis (MRA) or interaction test is a special application of linear multiple regression where the regression equation contains interaction elements (multiplication of two or more independent variables), (Lie, 2009). The multiple linear regression equation in this study is as follows:

\[ \text{EM} = \alpha + \beta_1 \text{Ai} + \beta_2 \text{DER} + \beta_3 \text{Ai}*\text{Size} + \beta_4 \text{DER}*\text{Size} + \epsilon \]

Information:
EM: Earning Management  
Ai: Asimetry Information  
DER: Debt to equity ratio  
Size: Company Asset
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RESULT AND DISCUSSION

Descriptive Test Results Table 1 Descriptive Test Results Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>asimetriinformasi</td>
<td>154</td>
<td>1.2371</td>
<td>116.7260</td>
<td>20.868458</td>
<td>15.3420699</td>
</tr>
<tr>
<td>leverage ukuran perusahaan</td>
<td>154</td>
<td>1.0000</td>
<td>382.4800</td>
<td>65.639430</td>
<td>66.6261416</td>
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<tr>
<td>manajemen laba</td>
<td>154</td>
<td>-5.0131</td>
<td>13.1140</td>
<td>0.052559</td>
<td>1.1791646</td>
</tr>
</tbody>
</table>

In table 1 the results of the descriptive test can be described as follows:

1. Information asymmetry. Information asymmetry in consumption industry companies obtained a minimum value of 1.23 belonging to Pt Darya-Varia Laboratoria Tbk in 2020 and a maximum value of 116.72 belonging to Pt Merk Tbk in 2020. On average the value of information asymmetry in companies in this sector is 20.86, where the higher the information asymmetry, the greater the bid-ask spread, in this case the disclosure of financial statements is expected to reduce information asymmetry so that the bid-ask spread also decreases.

2. Leverage. In this study, the measurement of leverage using the DER proxy is how much the company's capital is financed by debt or how much the company's debt affects its capital management. In the table above, the minimum DER value of 1 belongs to Pt HM Sampoerna Tbk in 2020 and 2021, while the maximum DER value of 382.4 belongs to PT. Pyridam Farma Tbk in 2021. On average, the DER value for consumption sector companies is 65.63, which means that from 100 percent of the capital/equity owned by the company, on average, 65.63 percent is financed by debt.

3. Company size. In this study, the measurement of company size uses the total asset value. The minimum asset value of 6.19 or 492 billion belongs to PT Chitose Internasional Tbk in 2021. While the maximum asset value of 26.71 or 3.9 trillion belongs to PT Chitose Internasional Tbk in 2016.

4. Earnings management. In this study, the measurement of earnings management uses accrual of working capital. Earnings management is an attempt by company managers to intervene or influence the information in the financial statements. The earnings management proxy used in this study is the actual specific model, namely the accrual of working capital. In the table above, the minimum value of -5.01 belongs to Pt Unilever Tbk and the maximum value of 13.11 belongs to Pt Unilever Tbk. On average, manufacturing companies in the consumption sector have a value of 0.05, this means that the management has 0.9% in influencing the company's operations. The smaller the accrual value, the smaller the management action in influencing the company's operations.

Normality test result

In this study, the One-Sample Kolmogorov-Smirnov Test was used to test for normality.

Table 2. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>N</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>.0000000</td>
</tr>
<tr>
<td>1.40882244</td>
<td>.081</td>
</tr>
<tr>
<td>.081</td>
<td>.081</td>
</tr>
<tr>
<td>-.071</td>
<td>.081</td>
</tr>
<tr>
<td>.191c</td>
<td>.191</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
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Based on the results of the normality test above, the Sig (2-tailed) value through the OneSample Kolmogorov-Smirnov Test was obtained, which was 0.068 or > 0.05. So it can be said that these data are normal and can be continued to the next test.

Model Fit Test
Table 3. Model Conformity Test Results

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.696</td>
<td>.344</td>
</tr>
<tr>
<td>Asimetry information</td>
<td>.248</td>
<td>.092</td>
</tr>
<tr>
<td>DER</td>
<td>.005</td>
<td>.050</td>
</tr>
<tr>
<td>Size</td>
<td>.022</td>
<td>.011</td>
</tr>
<tr>
<td>Moderating 1</td>
<td>-.001</td>
<td>.000</td>
</tr>
<tr>
<td>Moderating 2</td>
<td>1.525E-5</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Earning Management

Uji F = 0.005
R Square = 0.117
DW = 1.950

Based on table 3 the results of the model suitability test, the regression function can be made as follows:

\[ Mn\text{Profit} = -0.696 + 0.248A_{i} + 0.005D_{ER} + 0.022Size - 0.001A_{i}*Size + 1.52D_{ER}*Size \]

If there are no factors that influence earnings management in consumption sector companies in Indonesia during the year of observation, it is -0.696 or <1. If there is a 1% increase in the information asymmetry variable, it will increase the earnings management value by 0.248. If there is an increase of 1% of the DER variable, it will increase the value of earnings management by 0.005. If there is an increase of 1% of the company size variable, it will increase the value of earnings management by 0.022. If there is an increase of 1% of the moderating variable between size and information asymmetry, it will reduce the value of earnings management by 0.001. If there is an increase of 1% of the moderating variable between size and DER, it will increase the value of earnings management by 1.52.

If look at table 3, it can be seen that the F test value is below 0.05, so it can be said that this model is fit, simultaneously all independent variables have an influence on the dependent variable. If look at the Rsquare value of 0.117, it can be said that the independent variable is able to influence 11.7% on the dependent variable and the remaining 88.3% is influenced by other variables outside this study.

If look at the t-test by paying attention to the significant coefficient values in table 3, it can be said that the information asymmetry variable has no effect on earnings management, while DER and firm size have a positive effect on earnings management. The moderating variable between firm size and information asymmetry has no effect on earnings management, so it is also called a Potential Moderating Variable or this variable does not interact with the predictor variable and does not have a significant relationship with the dependent variable. While the moderating between company size and DER has an effect on earnings management, including the type of quasi-moderation (pseudomoderation). Quasi moderation is a variable that moderates the relationship between the predictor variable and the dependent variable where the pseudo moderating variable interacts with the predictor variable as well as the predictor variable.

DISCUSSION

a. The effect of information asymmetry on earnings management.

In the results of table 3 it can be said that information asymmetry has no effect on earnings management. It can be said that information asymmetry is not a factor that is highly considered in earnings management actions carried out by the company's management. This is because in addition to good company growth, there is also the possibility of errors in previous financial reporting that are not in accordance with qualitative rules. This result is in line with the results (Barus & Setiawati,
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2015; Patriandari & Fitriana, 2019) saying that information asymmetry has no effect on earnings management because it is possible that the market does not react to earnings announcements made by companies that carry out earnings management, because the earnings information reflects earnings management. the company's performance is estimated to be bad and the company is rated negatively.

b. Effect of DER on earnings management

Table 3 shows that DER has a positive effect on earnings management. This means that the higher the debt, the higher the accrual value, which can be said to carry out earnings management actions. Companies that have a high DER ratio, company managers tend to use accounting methods that can increase revenues or profits. Companies with high DER ratios will also have difficulty in obtaining additional funds from creditors and even companies are threatened with violating debt agreements. So that management tends to carry out earnings management, to gain trust so that investors and creditors want to invest their funds or lend funds to companies. Agency theory (Jensen & Meckling, 1976) says agents have more information about self-capacity, work environment and the company as a whole, this is what can make management take earnings management actions. This result is in line with (Y. P. Agustia & Suryani, 2018) successfully obtaining evidence that leverage has an effect on earnings management actions.

c. Firm size in moderating the effect of information asymmetry on earnings management

Table 3 shows that firm size has a positive effect on earnings management, but is unable to moderate the effect of information asymmetry on earnings management. It can be said that companies that have larger assets have a broader and more complex structure of stakeholders in their management. However, even though the company has large assets, information asymmetry is not a factor that is highly considered by management in earnings management actions. Management will be much more careful in managing the company and conveying this information in the financial statements. Financial statements still produce the same information when tested again using the same method. This result is not in line with research (Mustikawati & Cahyonowati, 2015) which says that large companies will cause information asymmetry gaps, which lead to earnings management actions.

d. Firm size in moderating the effect of DER on earnings management

Table 3 shows that firm size has a positive effect on earnings management, and firm size is also able to moderate the effect of DER on earnings management. The moderating relationship is pseudo moderation (Quasi Moderator), where the predictor and dependent variables interact with each other. It can be said that companies that have large assets tend to have their capital/equity come from debt. Companies that have more assets/capital financed by debt tend to take action to increase the amount of profit. This increase in the amount of profit can be manipulated by management with earnings management actions. This result is in accordance with (Sutapa & Suputra, 2016) where large companies have a high enough initiative to practice earnings management, because one of the driving factors is that large companies must be able to meet the expectations of shareholders.

CONCLUSION

This research can be drawn a conclusion, namely:

1. Information asymmetry has no effect on earnings management. It can be said that information asymmetry is not a factor that is highly considered in earnings management actions carried out by the company's management.
2. DER has a positive effect on earnings management. It can be said that the higher the company's debt, the higher the accrual value which can be said to carry out earnings management actions.
3. Firm size is not able to moderate the effect of information asymmetry on earnings management. It can be said that companies that have larger assets have a broader and more complex structure of stakeholders in their management.
4. Firm size is able to moderate the effect of DER on earnings management. It can be said that companies that have large assets tend to have their capital/equity come from debt. Companies that have more assets/capital financed by debt tend to take action to increase the amount of profit.

REFERENCES

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