The Determinants of Real Earnings Management

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ABSTRACT
This study aims to define and analyse the relationship between firm size, profitability and real earnings management. Real earnings management is measured by Cohen et al dan Roychowdhury. Secondary data sources are used, namely, companies listed on the Indonesian Stock Exchange. Purposive sampling techniques are employed, with a new sample of observational data from the manufacturing company for the period 2019-2021. The results indicate that firm size, financial distress, and profitability positively affect real earnings management.

Introduction
Financial statements are the company’s communication media used to connect interested parties both internal and external to the company. The principal does not have sufficient information on the agent's performance because the principal cannot monitor the agent's daily activities to ensure that the agent works in accordance with the wishes of the shareholders, while the agent has more information about his personal capacity, work environment, and the company as a whole. This causes an information gap called information asymmetry. The information asymmetry that occurs between management (agent) and the owner (principal) provides an opportunity for managers to act opportunistically, namely for personal gain. This personal gain triggers agents to carry out earnings management. Earnings management is carried out in two ways, namely accrual manipulation and real activity manipulation. Managers favor earnings management through real activity manipulation over earnings management through accruals. The earnings component of financial statements is often used to measure company performance. Accrual income is considered a better measure than cash flow from operating activities because accruals consider timing issues, unlike those contained in cash flow from operating activities. The underlying reasons for managers to perform earnings management are influenced by profit, risk, and speculation [1].

Earnings management is tested through real activity concentrated on investment activity. Management manipulates real activities to avoid losses in the company’s annual financial statements. Earnings management is the behavior of managers to deceive investors and maximize their welfare because they control more information than for interests. Real activity manipulation is manipulation through daily company activities throughout the accounting period with the aim of meeting profit targets or to avoid losses [2]. Manipulating through real activities is a safe way to achieve profit targets because it can be done at any time throughout the accounting period. Real earnings management is a form of earnings management carried out through manipulation of the
company's operational activities. This manipulation is measured by a deviation from the company's normal operational practices. The motivation for management to do this is the desire to "trick" the company's financial reporting for several stakeholders in order to fulfill certain objectives. This deviation does not actually provide added value to the company but only to meet reporting targets for managers Abshari. This definition is consistent with the results of a study from which found evidence that: (a) financial executives burden several transaction policies aimed at meeting earnings targets such as negative earnings, the same earnings as before and forecasts from analysts; (b) financial executives also desire to manipulate real activities in order to meet sales volumes, and increase production volumes [3]. This may result in lower sales margins. Real earnings management is an opportunistic action taken by management to manipulate earnings figures in financial statements through the company's real operations which can directly affect cash flow. Real earnings management usually occurs when company management deviates from business plans through the company's real activities to meet profit targets [4]. The intervention of company managers in real activities is carried out through decisions related to operational activities or real activities of the company [5]. Real earnings management is carried out by exchanging details of inter-costs for adjusted costs, with the hope that the cost shortfall can be covered when sales improve. When the company's financial statements show a very healthy condition, the greater the real earnings management practices carried out.

The measurement of real earnings management uses: (a) Abnormal cash flow operations (Abn.CFO) is earnings manipulation carried out by the company through cash flow operations which will have a lower cash flow than the normal level. (b) Abnormal production cost (Abn. PROD) is real earnings management carried out through manipulation of production costs, where the company will have higher production costs than its normal level. (c) Abnormal discretionary expenses (abn. DISC) is earnings manipulation carried out through discretionary expenses[6].

The measure of management performance in managing company operations is seen through the level of profit generated by the company. From this, there is a suspicion of earnings management practices when the amount of company profit has not met the specified target [7]. Firm Size is basically a grouping of companies into several groups, including large, medium and small companies. Company scale is a measure used to reflect the size or size of the company based on the company's total assets. Firm Size is a value that gives an idea of the size of a company. The size of a company can be classified based on the total assets owned, share value, total sales, market capitalization, and others. The bigger the company, the greater the risk it has compared to a small company. This is because large companies receive more attention and strong demands from external parties to produce satisfactory company performance. However, some researchers have found that Firm Size does not influence management to carry out earnings management.

Profitability is an indicator of the success achieved by the company in generating profits, so the higher the profitability of a company to generate profits. In general, managers' efforts tend to avoid reporting losses. As a result, companies are motivated to
extend the strands of increased profits. Companies have great motivation to inform a better picture of company performance and increase company valuation [8].

Companies that are in financial distress have a high potential to carry out earnings management to hide their losses and business debt and present financial reports that look healthy [9]. Financial distress will encourage companies to carry out various techniques to manipulate their financial statements with the aim of obtaining a good image from their stakeholders through earnings management. The manufacturing sector states that financial distress affects management decisions to carry out earnings management. Earnings management applied in financial distress conditions can be explained through some of the results of previous research [10].

The occurrence of earnings management due to financial distress indicates a difference in interests between company management and stakeholders which is explained through agency theory. Agency relationship is a relationship between managers as agents and company shareholders as principals. The relationship between the agent and the principal will lead to agency problems because there is a conflict of interest between the two parties [11]. Agency problems that arise in the current condition are caused by financial distress. Financial distress is a condition that indicates that the company's cash flow is unable to meet its financial obligations [12]. Internal and external factors of the company can influence the causes of financial distress. The lack of future risk prediction capabilities of company management causes internal factors. Meanwhile, external factors can be influenced by important things to the company's operations and a country's economy at the macro level.

Financial statement analysis can be used to evaluate company performance, anticipate financial distress to bankruptcy, and the company's financial health [13]. Some financial statements that can be used as predictive tools are the company's statement of financial position, income statement, and cash flow statement. Investors' attention is only centered on corporate earnings information without paying attention to the procedures for obtaining this data. The influence of financial distress on the amount of profit earned can affect the company's management decision-making. Several things motivate company managers to carry out earnings management, namely avoiding losing revenue targets and maintaining a good image and company credibility [14].

Research Hypothesis

H1 : Firm Size Affects Real Earnings Management
H2 : Profitability affects Real Earnings Management
H : Financial Distress affects Real Earnings Management

Research Methods

This research data collection method uses documentation techniques and literature studies by downloading audited financial reports from 2019 to 2021 through the IDX website (www.idx.co.id). The sampling technique used a purposive sampling method, with sampling criteria, namely (1) manufacturing companies that did not conduct Initial Public Offering during the study period. The multiple linear regression analysis techniques is to test the relationship between the dependent variable and the independent variable.
Firm Size is one of the proxies used by managers to determine the political sensitivity of the company and the incentives given to managers to choose the income reported in the financial statements. Firm Size can be seen from the company’s total assets at the end of the year. Firm Size research can use asset benchmarks. Because the company’s total assets are large, this can be simplified by transforming into the natural logarithm [15]

The measurement of profitability in this study is peroxide by Return on Asset (ROA). ROA (Return On Asset) measures management’s ability to obtain overall profit (profit). ROA serves to measure the company’s effectiveness in generating profits through the operation of its assets. The higher the ratio obtained, the more efficient the asset management [16]

The first stage of analysis related to identifying companies experiencing financial distress is carried out using the method developed by Altman for emerging markets, namely Altman Z-Score emerging markets. The use of this method is based on the fact that the IDX is an Indonesian exchange, one of the strongest exchanges in Asia and an emerging markets exchange currently the target of various global investors [10]. The Altman Z-Score emerging market method can be calculated with the following formulation.

\[
Z \text{ Score} = 6.56 X_1 + 3.26 X_2 + 6.72 X_3 + 1.05 X_4
\]

**Statements:**

\[
X_1 = \frac{\text{Working Capital}}{\text{Total Asset}}
\]

\[
X_2 = \frac{\text{Retained Earnings}}{\text{Total Asset}}
\]

\[
X_3 = \frac{\text{Current year profit}}{\text{Total Asset}}
\]

\[
X_4 = \frac{\text{Book Value of Equity}}{\text{Total Liability}}
\]

The proxies used to measure real earnings management use Cohen et al. (2008) [17] and Roychowdhury (2006) [4] by the proxies used by Li et al. (2020) [18].

a) CFO is measured using proxies used Cohen et al. (2008).

\[
\text{CFO}_{i,t}/A_{i,t-1} = \alpha_0 + \alpha_1 (1/A_{i,t-1}) + \alpha_2 (S_{i,t}/A_{i,t-1}) + \alpha_3 (\Delta S_{i,t}/A_{i,t-1}) + \epsilon_{i,t}
\]

b) PROD is measured using the normalised level of production costs estimated following Roychowdhury (2006).

\[
\text{PROD}_{i,t}/A_{i,t-1} = \alpha_0 + \alpha_1 (1/A_{i,t-1}) + \alpha_2 (S_{i,t}/A_{i,t-1}) + \alpha_3 (\Delta S_{i,t}/A_{i,t-1}) + \alpha_4 (\Delta S_{i,t}/A_{i,t-1}) + \epsilon_{i,t}
\]

c) DISX follows the proxies used by Roychowdhury (2006).

\[
\text{DISX}_{i,t}/A_{i,t-1} = \alpha_0 + \alpha_1 (1/A_{i,t-1}) + \alpha_2 (S_{i,t}/A_{i,t-1}) + \epsilon_{i,t}
\]

Then the three equations are combined for regression

\[
\text{RE}_{i,t} = \alpha_0 + \alpha_1 \text{PROD}_{i,t} + \alpha_2 \text{DISX}_{i,t} + \alpha_3 \text{CFO}_{i,t}
\]

**Information:**

\[
\text{CFO}_{i,t} = \text{Cash Flow Operation of year } t
\]

\[
\text{PROD}_{i,t} = \text{Total cost of goods sold in year } t \text{ and change in inventory from } t-1.
\]

\[
\text{DISX}_{i,t} = \text{Company’s discretionary spending in year } t
\]

\[
A_{i,t-1} = \text{Total asset in year } t-1
\]

\[
S_{i,t} = \text{Net sales in year } t
\]

\[
\Delta S_{i,t} = \text{Change net sales in year } t
\]
\[ \Delta S_{t-1} \] = Change net sales in year t-1

Furthermore, the independent and dependent variables are entered into the equation for regression:

\[ \text{MLR}_{i,t} = \alpha + \beta_1 \text{TA} + \beta_2 \text{PROF} + \beta_3 \text{FD} + \varepsilon \]

Information:
- \( \text{MLR}_{i,t} \) = Real Earning Management
- \( \alpha, \beta_1, \beta_2, \beta_3 \) = Constanta
- \( \varepsilon \) = Error
- \( \text{TA} \) = Firm Size
- \( \text{PROF} \) = Profitability
- \( \text{FD} \) = Financial Distress

Result and Discussion

Table 1. F Test Regression Results and Coefficient of Determination

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0,657</td>
<td>23,250</td>
</tr>
<tr>
<td>R(^2)</td>
<td>0,312</td>
<td>0,0000</td>
</tr>
<tr>
<td>Adj R(^2)</td>
<td>0,396</td>
<td></td>
</tr>
<tr>
<td>Std Error of the Estimate</td>
<td>0,185</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Data Processing Result SPSS 25)

Table 2. Regression Result t Test

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Coefficient</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA</td>
<td>0,041</td>
<td>0,023</td>
</tr>
<tr>
<td>PROF</td>
<td>0,023</td>
<td>0,005</td>
</tr>
<tr>
<td>FD</td>
<td>0,315</td>
<td>0,012</td>
</tr>
</tbody>
</table>

(Source: Data Processing Result SPSS 25)

The Effect of Firm Size on Real Earnings Management.

Firm Size has a significant positive effect on Real Earnings Management, which means that the larger the company, the greater the possibility of earnings management actions. Large companies tend to get more attention and attention from the government, investors, and even the public. This results in the company having to be more careful in managing its financial statements. On this basis, companies tend to practice earnings management to produce relatively stable profits. The larger the Firm Size, the more earnings management practices are carried out by the company, and the smaller the Firm Size, the tendency to practice earnings management also decreases. The effect of the firm size variable on earnings management partially states that there is a significant positive effect between firm size and earnings management. Large companies will be more careful in reporting their financial condition because the public will see their performance, so they must report accurate financial statement conditions. In contrast, small companies tend to carry out earnings management by reporting large profits to
show satisfactory company performance. The results of this study are consistent with research showing that Firm Size has a positive effect on earnings management [19]

**The Effect of Profitability on Real Earnings Management**

The higher the company’s profitability ratio, the higher the completeness of disclosure of the company’s annual financial statements and vice versa; the lower the profitability ratio, the lower the financial statement disclosure. Profitability using ROA has a positive effect on REM, which means that if the debt funds the company’s assets are high or large, the occurrence of Real Earning Management will also be high. Companies with high profits tend to carry out earnings management to reduce the tax paid to the state by playing earnings. Profitability significantly affects real earnings management, where high profitability benefits both management and stakeholders. Leverage has no effect on real earnings management, so the level of leverage cannot influence management in carrying out earnings management. On average, sample companies have safe leverage in the sense that the company can pay the debt used to finance the company’s assets. Hence, managers are not interested or not motivated to practice earnings management because the company does not need actions that will help the company in certain situations [8].

**The Effect of Financial Distress on Real Earnings Management**

Earnings management behaviour increases as financial distress increases. In this case, the leading role is the CEO, who manages earnings to maintain increased profits. So management does not think long about manipulating earnings to save the company’s survival with previous conditions that cannot be recognised. Financial distress conditions can be done by increasing earnings (income increasing) and decreasing earnings (income decreasing). Abnormal discretionary expense is the lower the abnormal discretionary expense, the higher the actual earnings management behaviour. Abnormal CFO is the lower the company’s abnormal operating cash flow, the higher the manager’s real earnings management behaviour. Abnormal production costs are the higher the abnormal production costs, the higher the real earnings management. Based on the results of the panel data regression test using the standard effect model shows that financial distress has a significant positive effect on earnings management, which means that if the level of financial distress in a company increases, the level of earnings management in a company will also increase, this shows that if the company is experiencing financial distress and the company is unable to pay its debts to creditors at maturity and will result in the bankruptcy of the company, so this will be an opportunity for the company to practice earnings management so that the level of earnings management in a company will increase. Investors want companies with high profits to encourage companies to carry out earnings management. In this case, the company practices earnings management to attract investors to invest in overcoming a company’s financial difficulties [20]

**Conclusion**

Based on the results of the data analysis that has been discussed, it can be concluded that: a) Firm Size positively affects Real Earnings Management, which means that if the debt funds the company’s assets are high or large, the occurrence of Real
Earnings Management will also be high. Companies with high profits tend to carry out earnings management to reduce the tax that must be paid to the state by playing profits. b) Profitability has a positive effect on senior management, meaning that the higher the company’s profitability ratio, the higher the level of completeness of disclosure of the company’s annual financial statements and vice versa, the lower the profitability ratio, the lower the level of disclosure of financial statements. c) Financial distress affects earnings management, explaining that financial distress conditions can be done by increasing earnings (income increasing) and decreasing earnings (income decreasing).

Abnormal discretionary expense is the lower the abnormal discretionary expense, the higher the actual earnings management behaviour. Abnormal CFO is the lower the company’s abnormal operating cash flow, the higher the manager’s actual earnings management behaviour. Abnormal production costs are the higher the abnormal production costs, the higher the real earnings management.

References


