ABSTRACT

Earnings management is an action taken by company management to influence reported earnings. The purpose of this study is to analyze earnings management of Perum Perumnas Regional I Medan by using financial ratios, namely leverage ratios and profitability ratios for the period 2014-2017. Earnings management in this study is proxied by discretionary accrual (DA) and measured using the Jones Modified Model. While the leverage ratio is proxied by the debt to assets ratio (DAR) and profitability ratio is proxied by the return on assets ratio (ROA). This study uses quantitative data and data is collected by documentation techniques. Data analysis techniques used descriptive analysis based on time series methods. The results of the study concluded that Perum Perumnas Regional I Medan practices earnings management with a pattern of increasing profits in 2014, 2016 and 2017. Earnings management practices are motivated because of high leverage values. While profitability does not motivate managers to practice earnings management, because high or low profitability generated by the company is ignored by investors.

Keywords: earnings management, leverage, profitability

INTRODUCTION

The phenomenon of earnings management practices in the last few decades has often occurred amid tight competition in the business world, this can be seen from the increasingly widespread cases of corporate accounting reporting scandals that occur throughout the world. Earnings management seems to have become a corporate culture practiced by many companies in the world. Because this activity is not only in countries with business systems that have not been organized, but also carried out by companies in countries whose businesses have been organized, like the United States (Sulistyanto 2014).

The practice of earnings management is not only carried out by managers, but most involve all parties, both from internal companies and external parties. Earnings management carried out by managers arises because of the desire to improve company performance with large profits and agency problems, namely a conflict of interest between the owner / shareholder (principal) with the manager / management (agent) due to their maximum utility meeting (Sari, NH. 2014). “The emergence of earnings management can be explained by agency theory. Agency theory assumes that every individual is solely motivated by his or her own interests, resulting in a conflict of interest between principal and agent. The shareholder as a principal party contracts to maximize his own welfare with ever increasing profitability while the manager as an agent is motivated to maximize the fulfillment of his economic and psychological needs such as in obtaining investment, loan, and compensation contract” (Arief 2007).
An indication of the emergence of earnings management is the effect of agency problems, namely the conflict of interest between the owner / shareholder (principal) with the manager / management (agent). According (Jensen, Michael C. 1976) “Agency theory is the theory of the relationship between principal and agent whereby the principal gives some authority to the agent to perform some service on behalf of the principal. These parties often have different interests”. While other opinions say “The principal has an interest to obtain bigger returns, whereas management has an interest in obtaining bigger bonuses. This conflict of interest will often trigger management to manage company's earnings for personal gain” (Zhou, Jian., & Elder 2004). Based on agency theory, the government as head of government seeks to maximize tax revenues, while company managers as agents will try to minimize the tax burden that must be paid (Irianto 2017).

According (Scott 2011) “Earnings management by companies can be efficient (increase profit informativeness in communicating private information) and can be opportunistic (management reports earnings opportunistically to maximize their personal interests)”. If earnings management is opportunistic, then the earnings information can lead to investment decisions that are wrong for investors (Siregar, S. V. N. P., & Utama 2005).

As a consequence of the high profit management practices carried out by the company, the public views the business world as a source of corruption, collusion and various other frauds and damages the economic, ethical and moral order. The community no longer believes in information or financial reports published by the company. Because the public considers that the published financial statements are only company tricks to boost company profits, without regard to the interests of other parties.

The case of earnings management that occurred in Indonesia, among others, was carried out by PT. Kimia Farma, Tbk in 2001 which marked up its net profit (Kencana 2015), and PT. Great River International, Tbk in 2003 with indications of inflating sales, accounts receivable and company assets so that cash flow difficulties and failed to pay debts (TEMPO 2006). According to research conducted by (Cornetta, M.M., Marcus, A.J., & Tehranian 2008) several cases of accounting reporting scandals that have been carried out widely including cases Enron, Merck, World Com and the majority of other companies in the United States

In addition, the debate over earnings management continues, this is due to differences in views between practitioners and academics. Practitioners assess earnings management as an act of fraud in the business world, while academics consider that earnings management cannot be categorized as fraudulent. Practitioners want a business to run without the practice of profit management in it. The financial performance produced by the company is actual financial performance without fraud. The cause of earnings management is triggered by many factors within the company, including leverage and profitability.

The leverage ratio is one of the indicators used by investors to see the company's capabilities and risks. Companies with higher leverage ratios will use interest charges on debt to reduce the amount of income tax debt (Minnick 2010). The purpose of using leverage ratios is that the profits obtained are greater than the cost of assets and sources of funds. Sometimes the debt policy is considered as one of the solutions to accelerate production activities and also maintain the company's position to continue operating (Lumapow. 2018). Deviation in the form of earnings management is generally carried out by companies with high leverage ratios. Debt comparison is higher than assets, causing the company to tend to report reported earnings by increasing or decreasing earnings for the period to the current period.

Profitability reflects overall management effectiveness as represented by returns from
sales and investment (David 2013). Company performance is always measured with profit. Low profit rates motivate companies to do earnings management, the aim is to influence the image of investors in the company. Whereas according to (Mansor, N.A., Che-Ahmad., Ahmad-Zaluki, N.A., & Osman 2013) argue in their research that the greater the company’s profitability, the lower their participation in income smoothing. Profitability is important because it can determine the value of a company. This is reinforced by the results of research from (Murniati 2019) which concluded that profitability has a positive and significant effect on firm value

Earnings Management
Before discussing earnings management further, first understanding what earnings management means, earnings management is interpreted as interfering in the process of preparing external financial reports, with the aim of gaining personal gain (those who disagree say that this is only an effort to facilitate operations) the impartiality of a process) (Schipper 1989). Other opinions say, “earnings management occurs when managers uses judgement in financial reporting and instructuring transactions to alter financial report to either mislead some stakeholders about underlying economic performance of the company or to influence contractual that depend on the reported accounting numbers” (Healy, P., & Wahlen 1999). Furthermore, (Phillips, J., Pincus, M., & Rego 2003) defines it as a strategy for generating accounting profits through managerial wisdom related to accounting choices and operating cash flows. Whereas, (Fahmi 2013) defines earnings management is an action to regulate profits in accordance with what is desired by certain parties or especially by company management. The same thing is also stated, earnings management can be interpreted as an accounting trick where flexibility in preparing financial statements is used by managers to earn profits or meet company profit targets (Hery 2015).

Although using unequal vocabulary, these definitions have in common, namely agreeing that earnings management is a managerial activity to influence and intervene in financial statements.

Earnings management in this study was measured using the Modified Jones Model which is considered the most appropriate model in detecting earnings management compared to other models (Dechow, P., Sloan, R. & Sweeney 1995). Following are the steps of the Modified Jones model:

1. Calculating Total Accruals
   \[ TAC_t - TA_{t-1} = a1 \left( 1/TA_{t-1} \right) + a2 \left( \Delta sales_t / TA_{t-1} \right) + a3(PPET/TA_{t-1}) \]
   Information:
   - \( TAC_t \): Total company accruals in period t
   - \( TA_{t-1} \): Total company asset in period t-1
   - \( \Delta Sales_t \): Difference in period t of company sales
   - \( PPET \): Company fixed asset

2. Calculating Non-Discretionary Accruals
   \[ NDTAC_t = a1 \left( 1/TA_{t-1} \right) + a2 \left( \Delta sales_t - \Delta REC_t \right)/TA_{t-1} + a3(PPET/TA_{t-1}) \]
   Information:
   - \( NDTAC_t \): Total company accruals in period t
   - \( TA_{t-1} \): Total company asset in period t-1
   - \( \Delta Sales_t \): Difference in period t of company sales
   - \( \Delta REC_t \): Difference in period t of company net receivable
   - \( PPET \): Company fixed asset

3. Calculating Discretionary Accruals
   \[ DA_t = TAC_t/TA_{t-1} - NDTAC_t \]
   Information:
   - \( DA_t \): Discretionary Accrual
Leverage
Leverage is a comparison between total liabilities and total assets of a company. The leverage ratio is a measure of how much the company is financed with debt. The company's ability to fulfill its obligations can be seen from the company's solvency ratio, where this ratio describes the company's ability to fulfill all company obligations, including short-term debt and long-term debt, both the company is still running and in liquidation conditions (Sunyoto 2013). Leverage is the use of assets or sources of funds were for these uses the company must bear a fixed or fixed cost (Sutrisno 2012).

In agency theory, the closer the company is in accounting agreement violations based on accounting, the more likely it is for company managers to choose accounting procedures that transfer reported earnings from the future period to the current period (Watts, R. L. and Zimmerman 1986). The results of the study stating that company leverage has an effect on earnings management actions are carried out by (Oktovianti, T. & Agustia 2012), (Mamedova 2008), (Asward, I. 2015) and (Manahan Sinaga Manahan 2018). Other studies with different results (Gunawan, K. 2015) and (Susanto, I R. 2017) concluded that leverage does not affect the practice earnings management.

Leverage in this study is proxied by a debt to asset ratio (DAR). Debt to asset ratio (DAR) is a ratio of total debt to total assets commonly referred to as debt ratio, which is a ratio that measures the use of funds originating from creditors (Subramanyam 2017). The purpose of shareholders is to obtain funds from debt in order to maintain their control of the company and also limit the investment made. To measure the debt to equity ratio with the following formula: (Subramanyam 2017).

\[
\text{Debt to Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Asset}} \times 100 \%
\]

Profitability
“Profitability in the company describes the ability of companies to earn profits through all capabilities, and existing sources such as sales activities, cash, capital, number of employees, number of branches, and so forth. Profitability is often used to measure the efficiency of capital use in a company by comparing profit with capital used in operations” (Harahap 2007). Another definition says, the profitability ratio shows the company's ability to generate revenue from its business activities (Subramanyam 2017).

Profitability is often the target of managers to practice earnings management. Managers tend to carry out these activities because with low profits or even losses, they will worsen the manager's performance in the eyes of the owner and will further aggravate the company's image in the public eye (Albercht 1990). The results of research on earnings management show that profitability affects earnings management (Tala, O., & Karamoy 2017) and (Wibisana, I. D., & Ratnaningsih 2014). However, different studies inform that profitability has no impact on earnings management (Agustia, Y P. 2018), (Gunawan, K. 2015) and (Sari, NH. 2014).

Return on assets (ROA) in this study is used as a proxy for profitability, which is the company's ability to generate profits using debt. This ratio shows the company's ability to use all assets owned to generate profit after tax. This ratio is very important for management because it evaluates the effectiveness and efficiency of company
management in managing all company assets. Return on asset ratio is measured by the following formula: (Subramanyam 2017)

\[
\text{Return on Assets} = \frac{\text{Earning After Tax}}{\text{Total Assets}} \times 100 \%
\]

This study aims to analyze whether companies practice earnings management through leverage and profitability ratios. For companies the results of this study can be used as a guide to avoid earnings management that is detrimental to stakeholders. The results of this study can also be used as consideration and input for investors in the decision to invest in the future.

**RESEARCH METHOD**

The approach of this research is descriptive, namely research conducted to determine the value of independent variables, either one or more. Descriptive research is intended to compile, classify, interpret and interpret data so as to provide an overview of the problem under study. The type of data used in this study is quantitative data, while the data source uses secondary data in the form of financial data from the company of the Perum Perumnas Regional I Medan for the period 2014 - 2017. Data collection techniques use documentation techniques. Data were analyzed using descriptive analysis with the Modified Jones model based on the time series method.

**RESULTS AND DISCUSSION**

Results Data Analysis

1. **Earnings Management Perum Perumnas Regional I Medan**

   The modified Jones model is used to measure the value of earnings management in this study because it is considered the best model for detecting earnings management compared to other models. The results of the Jones Model calculation show that the model successfully explains about a quarter of the total accrual variance (Dechow, P., Sloan, R. & Sweeney 1995). The following financial report data and the results of calculation of earnings management Perum Perumnas Regional I Medan.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Asset (Rp)</th>
<th>Fixed Asset (Rp)</th>
<th>Current Liabilities (Rp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>228,629,848.148</td>
<td>2,027,776.575</td>
<td>73,507,268.847</td>
</tr>
<tr>
<td>2015</td>
<td>195,670,047.457</td>
<td>1,201,033.897</td>
<td>39,747,688.810</td>
</tr>
<tr>
<td>2016</td>
<td>204,117,907.164</td>
<td>1,536,024.934</td>
<td>54,345,750.720</td>
</tr>
<tr>
<td>2017</td>
<td>453,228,544.020</td>
<td>7,787,679.063</td>
<td>151,605,632.762</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Liabilities (Rp)</th>
<th>Equity (Rp)</th>
<th>Sales (Rp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>73,748,498.847</td>
<td>155,122,579.301</td>
<td>29,821,568.832</td>
</tr>
</tbody>
</table>
Based on the data in table 1 and table 2, the value of discretionary and non-discretionary can be calculated in table 3.

Table 3: Calculation Result of Profit Management

<table>
<thead>
<tr>
<th>Tahun</th>
<th>a1</th>
<th>a2</th>
<th>a3</th>
<th>TAC</th>
<th>a4</th>
<th>NDTAC</th>
<th>DA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>0,0000000000004379</td>
<td>0,0089</td>
<td>(0,1965)</td>
<td>(0,2131)</td>
<td>(0,2042)</td>
<td>0,0077</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>0,0000000000004374</td>
<td>0,2772</td>
<td>0,0052</td>
<td>0,2824</td>
<td>0,4248</td>
<td>0,4300</td>
<td>(0,1476)</td>
</tr>
<tr>
<td>2016</td>
<td>0,0000000000005111</td>
<td>0,0078</td>
<td>(0,0864)</td>
<td>(0,1688)</td>
<td>(0,1610)</td>
<td>0,0746</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>0,0000000000004899</td>
<td>0,6708</td>
<td>0,0381</td>
<td>0,7089</td>
<td>0,1943</td>
<td>0,23240</td>
<td>0,4765</td>
</tr>
</tbody>
</table>

The value of discretionary accruals (DA) in some studies is used to detect earnings management behavior patterns. can be positive and negative. The values of discretionary accruals (DA) indicate the pattern of earnings management applied by the company. The results of the calculation of the value of discretionary accruals (DA) can be seen there is 3 years, namely in 2014, 2016 and 2017 are positive, while the year 2015 is negative.

2. Debt to Assets Ratio Perum Perumnas Regional I Medan

The results of calculating the debt to assets ratio from Perum Perumnas Regional I Medan can be seen in Table 4 below:

Based on the calculation results in Table 4, it shows that the debt to assets ratio fluctuates every year, in 2015 it decreased by 11.95% from 32.36% in 2014 to 20.31% in 2015. But in the next 2 years, namely in 2016 and 2017, the value of the debt to assets ratio experienced a significant increase, which averaged an increase of 6%. Overall, it can be said that the debt to assets ratio of Perum Perumnas Regional I Medan is not good, because it is more dominant to experience an increase.

Tabel 4: The results of calculating the Debt to Assets Ratio Perum Perumnas Regional I Medan

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Debt (Rp)</th>
<th>Total Assets (Rp)</th>
<th>Debt to Assets Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>73.748.498.847</td>
<td>228.629.848.148</td>
<td>32,26</td>
</tr>
<tr>
<td>2016</td>
<td>54.345.750.702</td>
<td>204.117.907.164</td>
<td>26,62</td>
</tr>
<tr>
<td>2017</td>
<td>151.605.632.762</td>
<td>453.228.544.020</td>
<td>33,45</td>
</tr>
</tbody>
</table>

3. Return on Assets Ratio Perum Perumnas Regional I Medan

The results of the calculation of the return on assets ratio from Perum Perumnas Regional I Medan can be seen in Table 5 below:

Tabel 5: The results of the calculation of the Return on Assets Ratio
### Table 1: Financial Data

<table>
<thead>
<tr>
<th>Year</th>
<th>Earning After Tax (Rp)</th>
<th>Total Assets (Rp)</th>
<th>Return on Assets Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>(1.850.560.888)</td>
<td>228.629.848.148</td>
<td>(0.81)</td>
</tr>
<tr>
<td>2016</td>
<td>2.887.088.390</td>
<td>204.117.907.164</td>
<td>1.41</td>
</tr>
<tr>
<td>2017</td>
<td>39.058.691.239</td>
<td>453.228.544.020</td>
<td>8.62</td>
</tr>
</tbody>
</table>

Based on the results of calculations in Table 5 it can be seen that the return on assets in 2015 increased by 11.43% from (0.81%) in 2014 to 10.62% in 2015. However, in 2016 the return on assets experienced a decrease of 9.21% from 10.62% to 1.41% in 2016. While in 2017 the return on assets rose again by 7.21% from 1.41% to 8.62%. Overall, the return on asset value can be said to be quite good, because the increase that occurred in 2015 and 2017 is greater than the decline in 2016.

**Discussion**

According to (Sulistyanto 2014) empirically the value of discretionary accruals can be zero, positive or negative. Zero value indicates earnings management is done with income smoothing, while positive values indicate that earnings management is done with income increasing and negative values indicate earnings management with income decreasing patterns. Based on the calculation of earnings management in Table 3, it can be seen that there are 3 years in 2014, 2016 and 2017 the value of discretionary accruals (DA) is positive, meaning that earnings management practices are allegedly carried out by Perum Perumnas Regional I Medan using profit growth patterns. Whereas in 2015 the value of discretionary accruals (DA) was negative, meaning that the practice of earnings management was carried out by Perum Perumnas Regional I Medan using a pattern of decreasing profits.

The result of calculating the debt to assets ratio in Table 4 shows fluctuating values. In 2014 the debt to asset value was 32.26% and in 2015 the debt to asset ratio decreased to 20.31%. Whereas in 2016 and 2017 the debt to asset ratio has increased. If it is associated with the practice of earnings management, Perum Perumnas Regional I Medan is suspected of practicing earnings management with a pattern of increasing profits in 2014, 2016 and 2017 due to the company's high debt to asset ratio. If the leverage ratio is large, the value of the company's debt is higher.

According (Wibisana, I. D., & Ratnaningsih 2014) “Companies that have high leverage ratios due to the large amount of debt compared to assets owned by the company, allegedly will practice earnings management because the company is threatened with default, i.e. it cannot fulfill its debt repayment obligations on time”. High debt ratios indicate poor financial performance, this will have an impact on reducing creditor trust in the company and also the company's target is not achieved. These factors are what encourage managers to act opportunistically, namely reporting high corporate profits from the truth. While in 2015 it was alleged that the pattern of earnings management used was a pattern of decreasing earnings, due to lower debt to asset ratio.

Profitability is often the target of managers to do earnings management. If the level of profitability of a low company encourages managers to take earnings management actions to protect their performance in the eyes of the owner and show that the company they lead has good performance. As with the debt to assets ratio, the return on assets ratio in Table 5 shows fluctuating values. In 2014 the return assets ratio was (0.81%), in 2015 it increased to 10.62%, while in 2016 it declined again to 1.41%. Increased again to 8.62% in 2017.

If it is associated with earnings management, Perum Perumnas Regional I Medan is suspected of practicing earnings management with a pattern of increasing profits in
2014 and 2016, because in that year the return on assets ratio of the company is low. Whereas in 2015 the company allegedly practiced earnings management with a pattern of decreasing profits, but if we connect from the return on asset ratio the value increases. Furthermore, in 2017, it is suspected that the practice of earnings management conducted by the Perum Perumnas Regional I Medan with a pattern of increasing profits, even though in 2017 the return on asset ratio increased from the previous year. Previous research conducted by (Christiana, I. 2019), concluded the same results that occur earnings management practies with patterns of profit increase in PT.Berkah Mulia Beton.

Thus, it means that the return on asset ratio is not a factor driving the company to do earnings management compared to the debt to asset ratio. Companies with large or small profitability levels have a low level of earnings management. This is also because investors who tend to ignore existing ROA information so that management becomes unmotivated to do earnings management through profitability variables (Bestivano 2013).

CONCLUSIONS

Based on the results of the research and discussion, it can be concluded that Perum Perumnas Regional my Medan practices earnings management using the pattern of increasing profits in 2014, 2016 and 2017. This action occurs driven by high leverage. In 2015, when viewed from the value of discretionary accrual, it was suspected that the company practiced earnings management with a pattern of decreasing profits, but when viewed from the value of low leverage and high value of profitability, the allegation was biased. Means that in 2015 there was no practice of earnings management. Leverage is the driving factor for companies to take earnings management actions, because high leverage values indicate high corporate debt ratios and poor company performance. Poor performance will affect creditor trust in the company, because creditors worry about the company's ability to repay loans. While profitability is not a driver for companies to practice earnings management. High or low profitability produced by companies is often ignored by investors.

REFERENCES


Cornetta, M.M., Marcus, A.J., & Tehranian, H. 2008. “Corporate Governance and


Perusahaan, Dan Praktik Corporate Governance Terhadap Pengelolaan Laba.” In *Simposium Nasional Akuntansi VIII,*.


