



Analysis of earnings management practices in PROPER companies

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Abstract

This research aims to determine and analyze earnings management practices by companies by using the Jones Model to calculate discretionary accruals that proxy earnings management. The research was conducted at PROPER companies listed on the Indonesia stock exchange from 2017 to 2021. This research will be a descriptive study with a quantitative approach which is a differentiator from other research that tends to conduct associative research, so this research can explore the earnings management practices carried out more intensely. The research result reveal that all PROPER companies are indicated to practice earnings management and are dominated by companies that have made environmental management efforts required following the provisions. This research can be a consideration for stakeholders in making decisions.

Keywords: Earnings management, Discretionary accrual, Jones model, PROPER companies.

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1. Introduction

Financial statements are a component of information from a company that must be published. One of the components most highlighted by stakeholders is the company's profit. However, management often needs to work on carrying out unwise practices by increasing or decreasing the level of profit generated without any connection with the company's future economic increase or decrease or what is commonly called earnings management practices. According to Uwuigbe et al. (2014) the use of discretionary accruals with the Modified Jones Model is considered easier to manage income through credit sales in cash collection. It is considered to be able to detect earnings management better than other models, but according to Stubben (2010) the modified Jones model has a weakness that cannot distinguish discretionary increases in earnings through income or its chapter components so that the results assessed are not much different from the Jones model. Therefore, to simplify this research, the Jones model is used, which is easier to understand but can still proxy earnings management with discretionary accruals.

In addition to information on economic performance, environmental performance is also considered necessary today because, in recent years there have been more cases of environmental damage carried out by companies due to their operational activities (Kusuma, 2013). Therefore, in this era, stakeholders have begun to realize the importance of preserving the environment so that it affects the actions and choices of stakeholders. One of the ways to assess the company's environmental performance is the Company Performance Rating Assessment Program (PROPER).

Earnings management is still widely practiced. Cahyati & Faradila (2013) prove this by investigating earnings management in 11 Islamic commercial banks in 2011, which shows that 3 Islamic commercial banks do earnings management by decreasing income, and 8 Islamic commercial banks do earnings management by increasing income. While in 2012, 9 commercial banks did earnings management by reducing income, and 2 Islamic commercial banks did earnings management by increasing income.

Research on earnings management practices has been carried out in many previous studies, but most previous studies conducted research with a quantitative associative approach that explores the relationship between variables that can affect earnings management practices. As the company gets bigger, the greater the demand for management to provide better performance. Azlina (2010), Muliati (2011), Uwuigbe et al. (2015), Ramadhan (2017), and Yimenu & Surur (2019) provide evidence that company size has a positive effect on earnings management. But this is inconsistent with the research of Handayani & Rachadi (2009), Yusrilandari et al. (2016), Bassiouny (2016), Devanka et al. (2022). This also happens to other factors, for example leverage which according to Bassiouny (2016), Savitri & Priantinah (2019), Yimenu & Surur (2019), and Devanka et al. (2022) states that leverage affects earnings management, but is inconsistent with Azlina (2010), Ardiyansyah (2014), Uwuigbe et al. (2015), Ramadhan (2017), Religiosa & Surjandari (2021) and Chaniago et al. (2021) which did not find the effect of leverage on earnings management practices. As mentioned by Ardiyansyah (2014) and Chaniago et al. (2021) profitability is also one of the factors that influence earnings management practices. But this is contradicted by research conducted by Yusrilandari et al. (2016), Yimenu & Surur (2019) and Devanka et al. (2022) where the results of their research show that profitability does not effect on earnings management.

Based on the many phenomena of companies practicing earnings management and the inconsistency of factors that influence earnings management practices, this study leads this research to investigate earnings management in PROPER companies more deeply. The purpose of this study is to analyze earnings management practices that occur in PROPER companies so

that it is expected to be used as a consideration in decision making and become input and evaluation material regarding regulations to set better standards in the future to minimize earnings management practices and is expected to provide information as a consideration for policy making related to adequate standards to regulate earnings management practices carried out.

2. Literature Review

2.1. Agency Theory

Agency Theory is a theory that explains the contractual relationship between the principal and the agent. Agency Theory in this study explains that management as the agent and stakeholders as the principal have their interests. Unfortunately, management, which has more information about the company's condition than stakeholders, can take advantage of this condition by doing earnings management practices. When stakeholders do not consider certain consequences, this results in stakeholders making decisions that have an advantage over management and are disadvantages to stakeholders. Management should carry out their responsibility to provide information through financial reports to stakeholders with actual conditions.

2.2. Company Performance Rating Program in Environmental Management (PROPER)

Research carried out by Astuti (2014) proves that public awareness as investors and consumers affect the choices made. Other than that, according to Iriyanto & Nugroho (2014) companies with good environmental performance will get a positive response from investors. In recent years, many cases of environmental damage have been carried out by companies due to their operational activities (Nursamsiah et al., 2019). In response to this and efforts to protect the environment by monitoring the company's business activities in exploring natural resources, the government gives attention by the Ministry of Environment and Forestry of the Republic of Indonesia by creating a program to encourage the structuring of companies in environmental management through information instruments. This program is called the Company Performance Rating Program in Environmental Management or usually called PROPER. The results of the PROPER assessment are routinely announced to the public through mass media so that companies that are assessed will get reputational incentives and disincentives based on their level of compliance so that stakeholders can respond actively and positively to this information and motivate companies to improve further their environmental performance (Dewi & Wirasedana, 2017)

2.3. Earnings Management

Earnings management is a management action deliberately made to influence reported earnings in making financial statements to benefit themselves (Sofia, 2016). Earnings management can be caused by the computation of financial statements using the accrual basis (Guna & Herawaty, 2010). discretionary accruals can be a proxy for earnings management. The results of the earnings management analysis will show a positive, negative, or 0 discretionary accrual value, which indicates that there is or is no earnings management practice and what methods management uses to do earnings management practices (Guna & Herawaty, 2010). By knowing the factual illustration of earnings management practices carried out by management, it is hoped that it can be used as a consideration in stakeholder decision making. Based on this, the conceptual framework of this study is depicted in Figure 1.

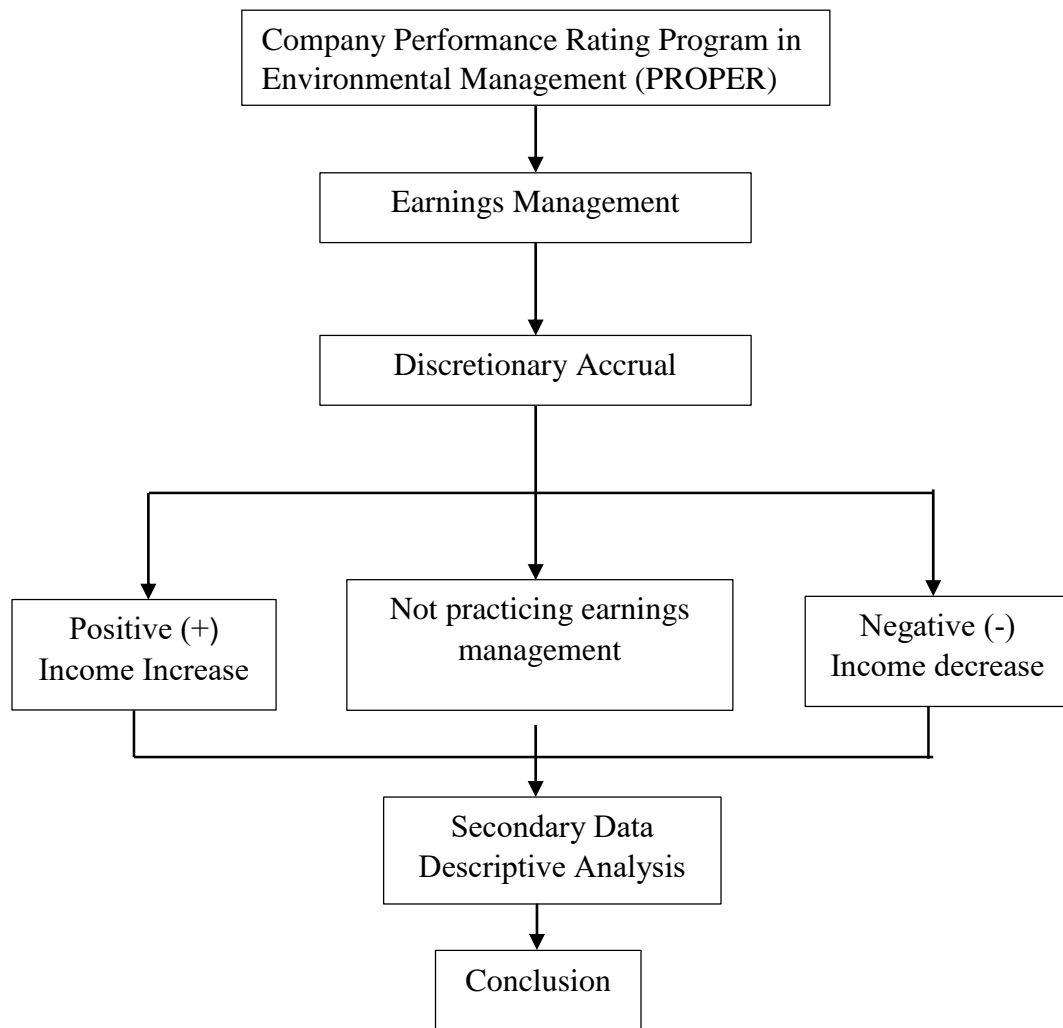


Figure 1. Framework

3. Methodology

The type of this research is descriptive quantitative. This research was carried out with secondary data, which is the financial statements of companies registered as participants in the Company Performance Rating Assessment Program in Environmental Management (PROPER) and listed on the Indonesia Stock Exchange (IDX) in 2017-2021 which were collected using purposive sampling. The companies sampled in this study were 57 companies with a research period of 5 years. So that there are 285 company data. This study used discretionary accruals for the accrual earnings management proxy. Discretionary accrual is measured with Jones Model.

1. Calculate Total Accrual

$$TAC = NI - CFO$$

(Source: Dechow et al., 1995)

2. Estimate Total Accrual

Total accrual (TACC) is estimated by following regression equation:

$$\frac{TAC_{i,t}}{TA_{i,t-1}} = a_1 \left(\frac{1}{TA_{i,t-1}} \right) + a_2 \left(\frac{\Delta Rev_{i,t}}{TA_{i,t-1}} \right) + a_3 \left(\frac{PPE_{i,t}}{TA_{i,t-1}} \right) + e$$

(Source: Dechow et al., 1995)

3. Calculate non-discretionary accrual

Using regression coefficient, non-discretionary accruals (NDACC) is

$$NDA_{i,t} = a_1 \left(\frac{1}{TA_{i,t-1}} \right) + a_2 \left(\frac{\Delta Rev_{i,t}}{TA_{i,t-1}} \right) + a_3 \left(\frac{PPE_{i,t}}{TA_{i,t-1}} \right) \quad (\text{Source: Dechow et al., 1995})$$

4. Discretionary accrual

Discretionary accrual (DA) can be calculated with formula:

$$DA_{i,t} = \frac{TAC_{i,t}}{TA_{i,t-1}} - NDA_{i,t} \quad (\text{Source: Dechow et al., 1995})$$

And for the PROPER rating assessment is assessed from the average rating earned from 2017 to 2021.

4. Results and Discussion

Table 1 shows the descriptive statistics of earnings management practices by PROPER companies listed on the Indonesia Stock Exchange from 2017 to 2021.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
TAC	285	-0.28	1.17	-0.024	0.107
NDA	285	-2.02	3.92	0.125	0.611
DA	285	-3.98	1.97	-1.498	0.611
Valid N (listwise)	285				

Source: Processed Primary Data (2022)

Descriptive data describe in general, PROPER companies have cash from operating activities that are more than the profit earned, nondiscretionary accrual component tends to increase company profits, but discretionary accrual component tends to decrease company profit.

Based on the average PROPER rating obtained during the 5 years of research, 47 companies got a blue rating, 9 companies got a green rating, and 1 company got a gold rating. Based on the calculation of discretionary accrual with Jones Model, the calculation results of the company's discretionary accrual are found in the appendix. Based on the appendix, it is found that 100% of PROPER companies listed on the Indonesia Stock Exchange in 2017-2021 are indicated to have practiced earnings management.

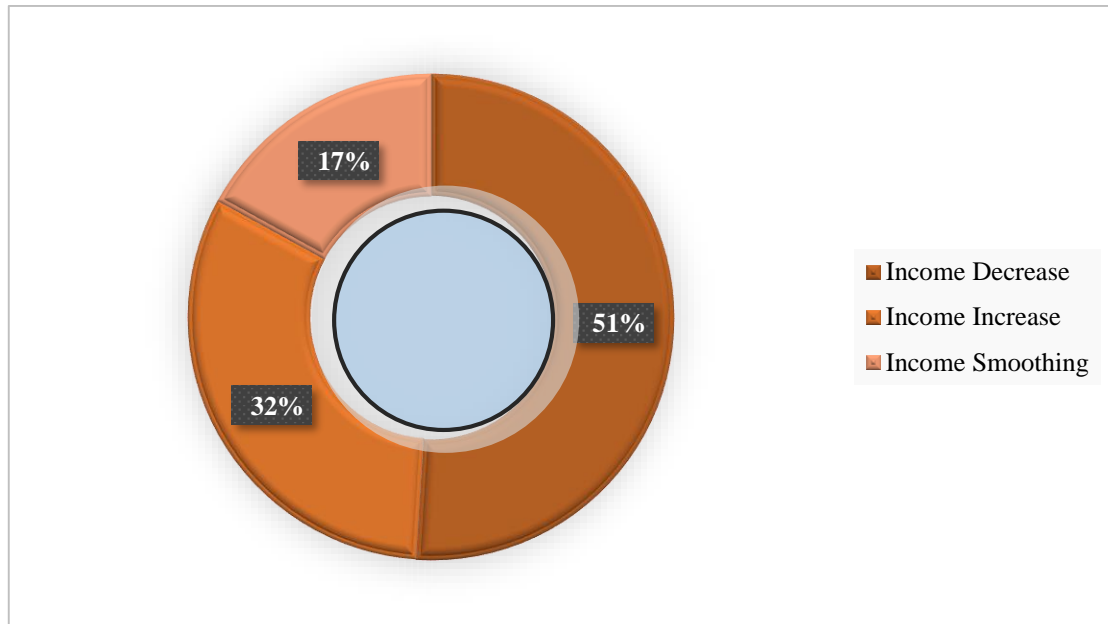


Figure 2. Strategy of Earnings Management

Figure 2 shows the strategy of earnings management practices companies use in this study. 18 companies from this study consistently during the 5 years of research practiced earnings management with a strategy of income increase, 29 other companies consistently used a strategy of income decrease and 10 companies practiced earnings management with a strategy of income smoothing. Meanwhile, based on the PROPER rating, the strategy used by management in carrying out earnings management practices can be seen in Figure 3.

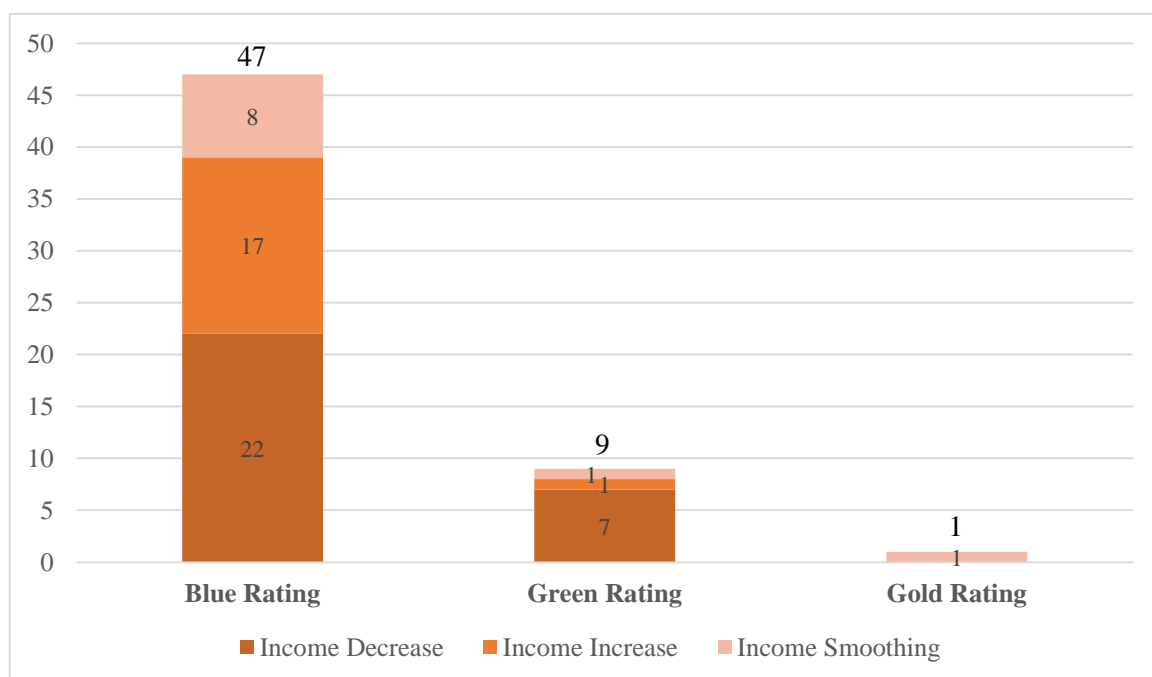


Figure 3. Earnings Management Practices Strategy Based on PROPER Rating

Based on Figure 3, it can be concluded that most companies that get a blue rating practice earnings management with a strategy to decrease income. But not a little either company also

practices earnings management with a strategy income increase, and only a few companies practice earnings management with a strategy income smoothing. Also, on the green rating, the majority of companies practice earnings management with a strategy income decrease and only a minority of companies practice earnings management by increasing or smoothing income. While in the gold rank, there is 1 company that income smoothing.

The results of the study which concluded that all PROPER participating companies listed on the Indonesia Stock Exchange in 2017-2021 indicated to practice of earnings management are supported by agency theory which relates to management as the agent and stakeholder as the principal have their interests, but management who has more information about the company's condition than stakeholders because management has the authority to manage funds and make decisions, can take advantage of this condition by practicing earnings management.

The results of this study are also in line with research conducted by Padmanty (2011), which analyzes earnings management practices contained in Islamic banking financial reports (studies on Bank Syariah Mandiri and Bank Muamalat Indonesia) and in the research of Cahyati & Faradila (2013) which also examines earnings management in Islamic commercial banks, where all financial reports studied contain earnings management.

5. Conclusions

Earnings management practices are indicated to be carried out by all (100%) PROPER companies, with most (51%) practicing earnings management by decreasing income. But not a little either (31%) of PROPER companies practice earnings management by increasing income. Only a small number (17%) of PROPER companies practice earnings management by smoothing income. that most of the companies that are indicated to practice earnings management are in the blue rank, which are companies that have made environmental management efforts required following the provisions and/or laws and regulations.

Acknowledgements

The authors would like to thank the lecturers who have helped the authors in completing this research. The authors would also like to thank all those who have contributed either directly or indirectly in the process of publishing this research.

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Appendix 1

Discretionary accrual value PROPER companies

Company Name	Years				
	2017	2018	2019	2020	2021
PT. AKR Corporindo	-0.043	0.119	-0.316	-0.431	0.029
PT. Aneka Tambang	-0.082	-0.050	-0.093	-0.191	-0.109
PT. Argo Pantes	-0.223	-0.181	-0.164	-0.153	-0.151
PT. Asahimas Flat Glass	-0.482	-0.584	-0.434	-0.500	-0.454
PT. Bukit Asam	0.158	-0.373	-0.337	-0.657	0.191
PT. Charoen Phokphand Indonesia	-0.502	-0.261	-0.216	-0.075	-0.316
PT. Delta Djakarta	-0.224	-0.154	-0.101	-0.222	-0.273
PT. Gudang Garam	-0.426	-0.458	-0.439	-0.570	-0.464
PT. Indocement Tunggul Prakarsa	0.946	0.893	0.881	0.978	0.917
PT. Indofood CBP Sukses Makmur	-0.231	-0.190	-0.229	-0.230	-0.042
PT. Indo-rama Synthetics	0.477	0.562	0.556	0.555	0.639
PT. Indospring	-0.564	-0.538	-0.347	-0.303	-0.631
PT. JapfaComfeed Indonesia	0.017	-0.004	-0.027	-0.033	-0.129
PT. KabelindoMurni	0.972	0.636	0.822	0.820	0.918
PT. Kalbe Farma	0.024	-0.019	-0.026	-0.040	-0.072
PT. Kimia Farma	-0.342	-0.482	-0.755	-0.629	-0.581
PT. KMI Wire & Cable	0.972	0.636	0.822	0.820	0.918
PT. Lippo Cikarang	0.442	0.194	0.077	-0.257	0.001
PT. MalindoFeedmill	-0.237	-0.440	-0.325	-0.106	-0.478
PT. Mayora Indah	-0.154	-0.117	-0.129	-0.069	-0.157
PT. Multi Bintang Indonesia	-0.400	-0.492	-0.400	-0.310	-0.536
PT. Perusahaan Gas Negara	-1.099	-1.207	-1.154	-1.082	-1.249
PT. Phapros	-0.653	-0.504	-0.441	-0.497	-0.554
PT. PP London Sumatera Indonesia	0.075	0.056	0.045	0.101	0.109
PT. Salim IvomasPratama	1.099	0.985	0.981	1.005	1.052
PT. Semen Indonesia	0.466	0.420	0.696	0.399	0.404
PT. Siantar Top	0.497	0.519	0.476	0.490	0.499
PT. Sumi Indo Kabel	0.051	-0.413	-0.027	0.137	-0.276
PT. Suparma	0.601	0.546	0.611	0.516	0.519
PT. Surya Toto Indonesia	0.008	0.062	0.078	0.108	0.043
PT. Tifico Fiber Indonesia	0.198	0.261	0.274	0.288	0.123
PT. Timah	-0.146	-0.048	-0.296	-0.212	-0.233
PT. Unilever Indonesia	-1.519	-1.315	-1.346	-1.279	-1.298
PT. Akasha Wira Internasional	-0.004	-0.162	-0.107	-0.007	-0.514

Company Name	Years				
	2017	2018	2019	2020	2021
PT. Astra Otoparts	-0.309	-0.398	-0.258	-0.047	-0.501
PT. CikarangListrindo	0.305	0.270	0.293	0.294	0.213
PT. Citra Tubindo	-0.036	-0.302	-0.505	-0.164	-0.087
PT. Goodyear Indonesia	-0.574	-0.402	-0.453	-0.624	-0.487
PT. GunawanDianjaya Steel	-0.246	-0.507	-0.384	-0.732	-0.467
PT. HM Sampoerna	0.176	0.152	0.115	-0.047	0.158
PT. Indah Kiat Pulp & Paper	-1.356	-1.203	-0.975	-0.924	-0.964
PT. Kawasan IndustriJababeka	0.766	0.700	0.609	0.586	0.569
PT. Kino Indonesia	-0.740	-0.590	-0.586	-0.856	-0.874
PT. Merck	0.208	1.263	0.349	-0.004	0.353
PT. Polychem Indonesia	-0.015	0.064	0.557	0.421	0.061
PT. Semen Baturaja (Persero)	-1.654	-1.543	-1.412	-1.442	-1.403
PT. Sinar Mas Agro Resource & Technology	-1.524	-1.313	-1.199	-1.375	-1.459
PT. Steel Pipe Industry of Indonesia	-1.542	-1.379	-1.327	-1.071	-1.567
PT. Surya Esa Perkasa	-0.294	-0.951	-0.925	-0.966	-0.914
PT. Trisula Textile Industries	0.209	0.104	0.296	0.205	0.240
PT. Unggul Indah Cahaya	-0.130	-0.020	0.027	-0.182	0.044
PT. United Tractors	-0.149	-0.190	-0.061	-0.185	-0.193
PT. Voksel Electric	0.132	0.168	-0.083	-0.335	-0.219
PT. Wilmar Cahaya Indonesia	-0.147	0.278	0.202	-0.310	-0.798
PT. Prasadha Aneka Niaga	-0.194	-0.035	-0.022	0.178	-0.126
PT. Sat Nusapersada	0.621	-3.980	0.597	1.972	0.685
PT. Vale Indonesia	-0.456	-0.481	-0.417	-0.468	-0.496

Source: Processed Secondary Data (2022)