The Effect of Implementing Green Accounting and Environmental Performance on Return on Assets (ROA) in the Non-Cyclical Consumer Sector Listed on the Indonesian Stock Exchange

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Abstract: This study aims to examine the effect of implementing green accounting and environmental performance on the company's Return on Assets. The population in this study are manufacturing companies in the Consumer Non Cyclical sector listed on the Indonesia Stock Exchange in 2017-2021. Samples were selected using a purposive method sampling with the specified criteria resulted in 8 companies that were worthy of observation, with a research period of 5 years (2017-2021) so that a total of 40 research samples were obtained. This research uses multiple regression analysis using SPSS program. In this study, green accounting variables are measured using the dummy method, environmental performance variables are measured using PROPER rating values and variable Profitability with Return on Assets. Based on the analysis results show that the green variable accounting influences and influences Return on Assets. While Environmental Performance has no effect on Return on Assets.

Keywords: Green Accounting, Environmental Performance, Return on Assets

INTRODUCTION

From these problems, the company should have implemented efforts to prevent environmental damage around the company, namely by implementing an environmental-based accounting system to protect and preserve the environment around the company. The field of accounting that plays a role in efforts to preserve the environment is green accounting. The concept of Green Accounting began to develop in Europe since the 1970s. (Hardianti, 2017) states that the application of Green Accounting has a positive impact on efforts to prevent environmental pollution. In addition, the application of Green Accounting also has an impact on increasing business continuity. Green accounting also provides a way for opportunities to minimize energy, natural resources, reduce health risks, and promote a company's competitive advantage. Thus green accounting is an effort to improve the company's economy without
ignoring the condition of the surrounding environment. Green accounting is the first step to be a solution to these environmental problems. The application of green accounting will encourage the ability to minimize environmental problems faced by companies (Hamidi, 2019). Environmental accounting (Green Accounting) is based on the concept of externality, namely the study of the impact of economic activity that should be calculated and recorded in financial records.

The application of green accounting is very crucial to be implemented in companies. In general, green accounting is a form of implementing an entity or organization's concern for the surrounding environment. Based on this, there are 3 aspects that can or guarantee a company can develop regularly, these criteria are the triple bottom lines. The three criteria or aspects are environmental, financial and social criteria. Triple bottom line which means that the business objectives of the company are not solely to earn profit (profit), but also to prosper the community (people) and maintain environmental sustainability (planet). Until now, environmental criteria have become the main concern and focus because of the increasing number of environmental problems that have occurred, in fact most of them were caused by companies (Dian & Aqila, 2020).

(Khoirunnisak, 2019) in his research assumed that in reality companies often ignore this, because in their view, making products that are environmentally friendly will increase production costs which will result in the price of goods produced will increase. Not apart from that, the company is also important in accounting for all forms of activities related to the environment, namely by environmental disclosure or environmental performance. The company's efforts to implement environmental responsibility can be seen from its environmental performance. (Muda and Wahyuni, 2019) environmental performance is a company activity that is directly oriented to the surrounding natural environment. The company's environmental performance can be in the form of processing business activities both products and services that focus on the impacts they cause.

One of the many environmental damages is the impact of a company's activities, be it mining, industrial or manufacturing companies or other companies. In Indonesia alone, cases of damage or environmental pollution due to activities in industrial houses (manufacturing) have a sizeable contribution to problems such as pollution, waste, product safety and labor. An example of a case of environmental pollution carried out from 2017 to 2018, the production of rayon fiber by PT. RUM which has been running until now has caused air pollution felt by residents of Sukoharjo in the form of a pungent odor which causes residents to feel nauseous, dizzy, tense their necks and have shortness of breath. While water pollution carried out by PT. RUM is in the form of dense colored liquid waste that contaminates agricultural irrigation, administrative sanctions have been given from the government and the Ministry of Environment and Forestry, but these sanctions have not had any effect. In addition, PT. Panggung Jaya Textile (PAJITEX) in Pekalongan Regency, which produces sarongs, has also been proven to have polluted the environment in the form of coal smoke and dust. Coal fly ash causes the houses around the company to become dirty and residents feel itching and respiratory infections. Pata in 2021 PT. PAJITEX was proven to have polluted the environment through the Pekalongan District Court Ruling, but these sanctions did not have a deterrent effect on the PAJITEX company. As for another example of environmental pollution cases during 2019, the Jakarta Environment Agency said that 47 companies from 114 manufacturing industries had chimneys, one of which was the steel smelter PT. Hong Xin Steel and PT. Mahkota Indonesia, which is located in the Cakung area, Jakarta, which was subject to tiered administrative sanctions for carrying out environmental pollution (Wiguna, 2019).

Law Number 23 of 1997 contains about Environmental Management in which everyone who is an entrepreneur or has activities to maintain, manage and provide accurate information about the environment (President of the Republic of Indonesia, 1997). As quoted from
Bisnis.com (2020), in 2019 the Ministry of Environment and Forestry (KLHK) assessed that manufacturing companies' compliance with environmental management was still low. Secretary to the Directorate General of Pollution Control and Environmental Damage, Ministry of Environment, Sigit Reliantoro stated that until 2019 the number of industries that had registered to be assessed for compliance was relatively low. This is evidenced by the Decree of the Minister of Environment and Forestry of the Republic of Indonesia Number SK.1049/MENLHK/SETJEN/PKL.4/12/2019 concerning the Results of the Assessment of Company Work Ratings in Environmental Management for 2018-2019, where a total of 2,045 companies registered to be assessed by the Ministry of Environment and Forestry in terms of environmental compliance, the number of Service Infrastructure Manufacturing (MPJ) industries only reached 29.15% or 597 companies of the total industry assessed through PROPER. Of these manufacturing companies, only 83 companies were recorded as eligible to receive green and above PROPER, after further investigation, the remaining 23 companies were in the green category and one company was in the gold category (Nurcaya, 2020). This means that company awareness, especially manufacturing companies, is still low on green accounting disclosures. This should be important for the understanding of interested parties such as investors, company managers and the general public that social and environmental awareness is no less important than the level of profit that will be obtained. Because social and environmental awareness also affects the company's financial statements.

The application of Green Accounting has a significant effect on profitability by using Return on Assets (ROA) in manufacturing companies in the Consumer Non Cyclical sector. The increase in Return On Assets (ROA) profitability can be beneficial for manufacturing companies in the Consumer Non-Cyclical sector, which can attract investors to invest in their companies, of course this is an advantage for companies in the continuity of their business.

The following is a comparison of Profitability Return On Assets (ROA) in manufacturing companies in the Consumer Non-Cyclical sector that apply and have not or have not implemented Green Accounting and have received PROPER from the government from 2017-2021.

**LITERATURE REVIEW**

In a company or organization to manage a finance certainly cannot escape from accounting. Accounting is a scientific branch that discusses how to record, summarize, calculate, process a detailed cost in financial activities. (Sujarweni, 2018) Accounting comes from English, namely "to account" which means to calculate or be accountable for something related to the financial sector of a company to its owner for the trust that has been given to the manager to carry out company activities.

According to (Warren, et al, 2017: 3) Accounting (accounting) is defined as an information system that provides reports for stakeholders regarding economic activity and company conditions. Accounting is very necessary because stakeholders need a basis or guidance for stakeholders in making decisions and accounting has results which are financial reports so that financial reports are used as one of the influential foundations for stakeholders in terms of making decisions for the business or business of stakeholders. interest.

Meanwhile (According to Hantono and Rahmi, 2018: 2) accounting is: Art (said art because it requires neatness, accuracy, cleanliness) recording, classifying, summarizing, and reporting in a good way on financial transactions and other events related to company finance and interpret the results of the recording. Then (Weygandt, et al, 2018: 31) defines accounting as: "an information system that identifies, records, and communicates the economic events of an organization to interested parties."

All results from the occurrence of this economic activity will be formed into a financial report. The financial statements reflect the performance of the business in question, information
regarding the financial position of the business, as well as other information both financial and non-financial that is required by stakeholders.

The explanation above can be interpreted that accounting consists of three fundamental activities, namely identification, recording and communicating the economic events of an organization to interested parties. The company identifies those economic events to provide a record of financial activities. So, accounting can be defined as an information system that is able to provide data or information in the form of reports that have a relationship with the finances of a business or business that is intended for parties who need this information and can be accounted for. Quoted from the book by (Christy, 2019) accounting principles are general decision rules that govern or underlie the technical development of accounting. Accounting has 4 principles, namely:
1. Cost Principle, that is, assets are recorded at their acquisition cost.
2. The principle of matching income and expenses, that related income and expenses must be matched in the same period.
3. The principle of full disclosure, that financial reports must be presented in full, fair and adequate.

Accounting is closely related to company activities because accounting details form the basis of company decision making. Since the emergence of the Three Bottom Line theory regarding People, Planet, Profit, a new branch of accounting has emerged, namely environmental accounting. Environmental accounting (Environmental Accounting or EA) is a corporate social responsibility for environmental impacts arising from company activities and a term related to the inclusion of environmental costs (Environmental Costs) into accounting practices. Environmental costs are impacts that arise as a result of business activities that must be borne as a result of business activities that affect the environment. Environmental Accounting aims to increase company awareness and attention to the impact of company activities on the environment. In addition, the existence of environmental-based accounting bridges the relationship between companies and non-profit organizations engaged in the environmental sector.

According to (Prof. Dr. Andreas Lako in his book Green Accounting, 2018: 99) explains that green accounting (green accounting) is as follows: "A process of recognizing, measuring value, recording, summarizing, reporting, and disclosure of financial, social, and environmental objects, transactions, or events in the accounting process in order to produce financial, social, and environmental accounting information that is complete, integrated, and relevant information that is useful for users in making economic and non-economic decisions and management.

From the definition above, the focus of accounting is not only limited to financial accounting, but also to social accounting and environmental accounting. According to (Lako, 2018 in Maharani and Handayani, 2021) Green Accounting is a record consisting of phenomena, objects and activities that occur with the surrounding community and related to assets such as land, carbon and water. According to (Putri et al, 2019) environmental accounting or green accounting also provides a way to minimize energy, conserve resources, reduce environmental health and safety risks, and promote competitive advantage.

It can be concluded that Green Accounting is accounting in which it identifies, measures, presents, and discloses indirect costs and benefits of company activities related to the environment and social. Apart from the objectives of Green Accounting, there are characteristics of the Green Accounting. (According to Prof. Dr. Andreas Lako, 2018: 102) there are three special qualitative characteristics of green accounting information which are very useful in evaluating decision-making assessments for users, namely as follows: a) Accountability, namely the accounting information presented takes into account all aspects of the entity's information, especially information related to the economic, social and
environmental responsibilities of the entity, as well as the costs and benefits of the resulting impacts.

b) Integrated and Comprehensive, namely the accounting information presented is the result of integration between financial accounting information and social and environmental accounting information which is presented comprehensively in one accounting reporting package.

c) Transparent, namely integrated accounting information must be presented in an honest, accountable and transparent manner so as not to mislead the parties in economic and non-economic evaluation, assessment and decision-making.

**RESEARCH METHODS**

According to (Sugiyono, 2018: 57) the research variables are: "A research variable is an attribute or trait or value of a person, object or activity that has certain variations determined by the researcher to be studied and then drawn conclusions" Variables in a study are divided into two main variables, namely the independent variable and the dependent variable. The variable used in this study is the independent variable, namely the Implementation of Green Accounting and Environmental Performance, the dependent variable, namely Return on Assets (ROA) (Ali, H., & Limakrisna, 2013).

According to (Sugiyono, 2018: 57) the independent variable is the variable that influences or causes the change or the emergence of the dependent (bound) variable. The independent variables in this study are Green Accounting and Environmental Performance. Green Accounting is a record consisting of phenomena, objects and activities that occur with the surrounding community and related to assets such as land, carbon and water (Lako, 2018 in Maharani and Handayani, 2021). According to (Muda and Wahyuni, 2019) environmental performance is a company activity that is directly oriented to the surrounding natural environment. The company's environmental performance can be in the form of processing business activities both products and services that focus on the impacts they cause (Ilhamalimy & Ali, 2021).

Environmental performance is the company's relationship with the environment regarding the environmental impact of the resources used, the environmental effects of organizational processes, the environmental implications of products and services, product processing recovery and compliance with work environment regulations. According to (Sugiyono, 2018: 39) the dependent variable is often referred to as the dependent variable, which is the variable that is affected or is the result because of the independent variable (independent variable). The dependent variable in this study is Profitability.

**Table 1. Variable Operationalization**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable Concept</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Accounting</td>
<td>Green Accounting is a record consisting of phenomena, objects and activities that occur with the surrounding community and related to assets such as land, carbon and water (Lako, 2018 in Maharani and Handayani, 2021).</td>
<td>Dummy methods</td>
<td>Nominal</td>
</tr>
<tr>
<td>Work Environment</td>
<td>According to (Muda and Wahyuni, 2019) environmental performance is a company activity that is directly oriented to the surrounding natural environment.</td>
<td>PROPER Rating</td>
<td>Nominal</td>
</tr>
<tr>
<td>Profitability</td>
<td>According to (Kasmir, 2017: 196) Profitability Ratio is a ratio to assess a company's ability to make a profit</td>
<td>Return on Asset (ROA) (Nett Profit : Total Assets)</td>
<td>Ratio</td>
</tr>
</tbody>
</table>
Based on the table above, it shows that the data measurement scale has different units of measurement, namely the ratio and nominal scales, so it must be standardized before analysis is carried out. In this study, the nominal measurement scale uses a dummy variable. Where the dummy variable is an independent variable whose form is non-metric or categorical scale. If the independent variable is categorical or dichotomous in size, then in the regression model this variable must be declared as a dummy variable by giving a code of 1 or 0 (Akhtar, 2018). If a company has one of the components of environmental costs, environmental operational costs, product recycling costs, and environmental development and research costs in its annual report, it will be given a score of 1, otherwise it will be given a score of 0.

According to (Sugiyono, 2018:81), defines the sample as follows: “The sample is part of the number and characteristics possessed by the population. Sampling measurement is a step to determine the size of the sample taken in conducting research on an object. To determine the size of the sample can be done with statistics or based on research estimates. This sampling must be carried out in such a way as to obtain a sample that can really function or can describe the actual state of the population, in other words it must be representative (representative).”

The sample technique used is purposive sampling technique. Purposive sampling is a sampling technique with certain considerations. The criteria determined in determining the sample in this study are:

1. Consumer Non Cyclicals Sector Companies listed consecutively on the IDX during the 2017-2021 period.
2. Consumer Non Cyclicals Sector Companies that publish annual reports and present complete information consecutively for the 2017-2021 period.
3. Companies in the Consumer Non Cyclicals Sector that participated in PROPER consecutively during the 2017-2021 period.

| Table 2. Research Sample |
|---------------------------|-----------------------------|
| No | Sample Criteria | Total |
| 1. | Non cyclical Customer Sector Companies listed consecutively on the IDX during the 2017-2021 period | 26 |
| 2. | Non-cyclical Customer Sector Companies that publish annual reports and present complete information consecutively for the 2017-2021 period | 8 |
| 3. | Non cyclical Customer Sector Company that participated in PROPER consecutively during the 2017-2021 period. | 10 |

The total sample that meets all criteria: 8

DISCUSSION

The descriptive analysis test describes the research variables so that they can become a benchmark or basis for analysis and do not intend to make generalizations from the research results. Descriptive statistical tests help provide additional explanations about the data to be studied and can better understand the description of research data. Descriptive statistics also display an overview or description of a data by looking at the average value (mean) and the deviation value of the variables studied.

<table>
<thead>
<tr>
<th>Table 3. Descriptive Statistical Test Results</th>
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<tbody>
<tr>
<td>Descriptive Statistics</td>
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<tr>
<td>Green Accounting</td>
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<tr>
<td>Kinerja Lingkungan</td>
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<tr>
<td>ROA (Return On Asset)</td>
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<tr>
<td>Valid N (listwise)</td>
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140 | Page
1. Column N shows the amount of data used, namely as many as 40 samples, consisting of 8 companies in the Consumer Non Cyclical sector with a research period of 5 years.

2. The Green Accounting independent variable using the dummy method as a measuring tool has a minimum value of 0 which is owned by PT. Siantar Top Tbk (STTP) and PT. Budi Starch & Sweetener Tbk (BUDI). The maximum value of 1 owned by PT. Astra Agro Lestari (AALI), PT. Campina Ice Cream Tbk (CAMP), PT. Ultra Jaya Milk Industry (ULTJ), PT. Charoen Pokphand Indonesia Tbk (CPIN), PT. Gudang Garam Tbk (GGRM), PT. Indofood CBP Sukses Makmur Tbk. The average value is 0.7500 with a standard deviation value of 0.4385. Because the average value is greater than the standard deviation value, this indicates a good distribution of data.

3. Environmental Performance Independent Variable has a minimum value of 3 which is owned by PT. Campina Ice Cream Tbk (CAMP), PT. Ultra Jaya Milk Industry (ULTJ), PT. Siantar Top Tbk (STTP), PT. Budi Starch & Sweetener Tbk (BUDI), PT. Charoen Pokphand Indonesia Tbk (CPIN), PT. Gudang Garam Tbk (GGRM). Maximum value of 4 is owned by PT. Astra Agro Lestari (AALI), PT. Indofood CBP Sukses Makmur Tbk (ICBP). The average value is 3.1000 with a standard deviation of 0.3038. With a larger average value than the standard deviation, it indicates that there is a good distribution of data.

4. The dependent variable Return On Assets (ROA) has a minimum value of 1.00 which is owned by PT. Astra Agro Lestari Tbk (AALI) and a Maximum Value of 17.00 which is owned by PT. Charoen Pokphand Indonesia Tbk (CPIN). The average value is 9.2500 with a standard deviation value of 4.8714. With a larger average value than the standard deviation, it indicates that there is a good distribution of data.

The first hypothesis in this study states that green accounting has an effect on Return on Assets in manufacturing companies in the Consumer Non-Cyclical sector which are listed on the IDX in the 2017-2021 period. Based on the results of the analysis presented, the significance value of 0.037 is smaller than the 0.05 significance level (0.037 < 0.05). These results indicate that green accounting has a significant effect on Return on Assets. Green accounting is a type of environmental accounting that links environmental benefits with costs for economic decision making. This economic decision is the decision making of investors to invest with the company. By disclosing environmental costs, it will show the business ethics carried out by the company, as well as responsible management of resources. Based on previous research, Putri et al. (2019) conducted research with the results showing that environmental accounting and environmental performance have a significant effect on ROA profitability (Sivaram et al., 2019).

Conversely, the results of this study are not in accordance with the results of Faizah's research (2020), which shows that green accounting has no effect on Return on Assets. The implementation of green accounting through the implementation of environmental activities, producing environmentally friendly products that are consumed by the public, as well as obtaining a PROPER rating requires an allocation of environmental costs. The existence of environmental costs is considered a burden on the company because it reduces profits. Companies should consider that environmental costs are investment expenses, because they can provide social legitimacy and an environmentally friendly assessment from the government and society (Sulistiorini & Ali, 2017).

The second hypothesis in this study states that Environmental Performance has no effect on Return on Assets in manufacturing companies in the Consumer Non-Cyclical sector which are listed on the IDX in the 2017-2021 period. Based on the results of the analysis presented, it can be seen that the significance value of the environmental performance variable is 0.775 greater than 0.05 (0.775 > 0.05) which indicates that the company's environmental
performance has no significant effect on the company's Return on Assets. The results of this study indicate that there is no effect of environmental performance through PROPER proxies in managing the environment and cannot affect financial performance even though the company has made efforts to manage the environment in accordance with PROPER requirements. Even though the average PROPER rating received by the company is quite good, namely the blue category. The results of this study are in line with the results of research by Setyaningsih & Fun (2016). It can be interpreted that aspects of the PROPER assessment carried out by the ministry of environment do not directly touch the interests of the community, the compliance aspects assessed by the PROPER committee also include environmental permits, monitoring permits, and the provision of company data, so that the results of environmental performance cannot be directly felt. directly by the public (Setyadi & Ali, 2017).

This can have an impact on not increasing the company's Return on Assets because for the company's survival, a positive image is very important for the company to get, where the company must try to gain good legitimacy from the community. These results are also consistent with Putri & Herawati's research (2017) with results proving that there is no significant relationship between environmental performance and company Return on Assets. From this research it can be seen that the information released by the Ministry of Environment regarding environmental performance cannot directly influence financial performance. Environmental performance is not the biggest factor affecting financial performance, especially the company's Return on Assets (Sudiantini & Saputra, 2022).

CONCLUSION

Based on the results of data analysis on the effect of implementing Green accounting and environmental performance on Return on Assets, in non-cyclical consumer sector companies listed on the Indonesia Stock Exchange in 2017-2022. The research sample was taken using purposive sampling and 8 companies were selected from 26 companies with a total sample of 40 samples. This study used multiple linear regression methods using SPSS 26 software. Multiple linear regression tests in this study used the T-test (partial) and the Coefficient of Determination test (R Square). Based on the results of the analysis carried out, it can be concluded as follows:

1. The results of the first hypothesis are that green accounting has a significant effect on the company's return on assets, because the application of green accounting in companies is evidence that companies care about the environment, through environmental costs in financial statements issued by companies for the environment, as well as information provided disclosed to stakeholders can be considered as a legitimate corporate social contribution, companies tend to realize that voluntary environmental disclosures can be used to maintain corporate legitimacy especially with corporate social and political stakeholders.

2. The results of the second hypothesis are that Environmental Performance has no significant effect on the company's Return on Assets. This study shows that the company's activities in managing the environment cannot affect Return on Assets and does not guarantee that the company's Return on Assets will increase even though the company has made efforts to manage the environment in accordance with PROPER requirements. This is because the PROPER assessment aspect does not directly touch the interests of the community, so it does not get a positive image from the community. So that the application of environmental performance has no significant effect on the company's Return on Assets.

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