

Carbon Emission Disclosure And Green Accounting Practices On The Firm Value

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Abstract: This research was conducted to analyze and examine how the effect of disclosure of carbon emissions and green accounting practices to firm value with a sample of customer goods companies in Indonesia. The measurement of carbon emission disclosure will use the check list obtained from the Carbon Disclosure Project proposed by (Choi et al., 2013) while the Green Accounting Practice uses the Global reporting index contained in the company's financial statements. This study wants to measure how actually Carbon emission disclosures and Green accounting practices affect the firm value. By using the legitimacy theory that focuses on the company's relationship with the community and its environment, then of course the company will always make improvements and prevention of environmental problems that will have an impact on the existence of the company. The company will certainly do various ways, one of which is by conducting carbon emission disclosures which are expected to gain legitimacy so that the company has a level of sustainability. The sample of this study is 16 customer goods companies in Indonesia with an observation period of 2 years 2019-2020 so that there are 32 observation data. By using multiple linear regression of panel data, the results of the study suggest that carbon emission disclosure have no influence or no effect on firm value meanwhile green accounting practices affect on firm value.

Keywords: Carbon Emission Disclosure; Green Accounting Practices; and Firm Value.

Abstrak: Penelitian ini dilakukan untuk menganalisis serta mengkaji bagaimana pengaruh dari pengungkapan karbon emisi dan penerapan dari *green accounting* terhadap nilai perusahaan dengan sampel perusahaan *customer goods* di Indonesia. Indikator *carbon emission disclosure* akan menggunakan daftar list yang diperoleh dari *Carbon Disclosure Project* yang dikemukakan oleh (Choi et al., 2013), sedangkan variabel Praktik *Green Accounting* menggunakan *Global reporting index* yang terdapat dalam laporan keuangan perusahaan. Penelitian ini menggunakan teori legitimacy yang berfokus pada hubungan perusahaan dengan masyarakat dan lingkungannya, maka tentulah perusahaan akan senantiasa untuk melakukan pembenahan serta pencegahan terhadap masalah lingkungan yang akan berdampak pada eksistensi perusahaan tersebut. Perusahaan tentunya akan melakukan berbagai cara salah satunya dengan melakukan *carbon emission disclosure* yang diharapkan akan memperoleh legitimasi agar perusahaan mempunyai tingkat keberlanjutan.

Sampel Penelitian ini adalah 16 perusahaan *customer goods* di Indonesia dengan masa observasi selama 2 tahun 2020-2021 sehingga menjadi 32 data observasi. Dengan menggunakan regresi linear berganda hasil penelitian ini menunjukkan bahwa *carbon emission disclosure* tidak memiliki pengaruh terhadap nilai perusahaan sedangkan praktik dari *green accounting* memiliki pengaruh terhadap nilai perusahaan.

Kata Kunci: Pengungkapan Karbon Emisi; Praktik *Green Accounting*; dan Nilai Perusahaan.

INTRODUCTION

One of the factors that trigger global warming is the operating activities carried out by the company (Maharani and Handayani, 2020). (Murniati and Sovita, 2021) say that very tight industrial competition makes industry players try to improve their company's performance so that they can always maintain business continuity and achieve the company's goal of getting maximum profit. This sometimes makes the company seem indifferent to the environmental impacts caused by the company's business activities (Rosaline and Wuryani, 2020). The amount of pollution and environmental damage caused by company activities proves that there are still many companies who are indifferent and ignore the importance of protecting the environment. Of all the existing cases, the case of the hot mudflow in Sidoarjo that occurred in Surabaya in 2006 is still unsolved even though the company has provided compensation for the damage. Another case of concern is the case of PT. Kamarga Kurnia Textile in 2020, which is related to river water pollution caused by the flow of factory waste, also adds to the long list of cases of pollution and environmental damage. The Ministry of Environment and Forestry or abbreviated as KLHK has sued PT. Kamaraga Kurnia Textil because it is considered not serious in B3 waste and water waste from its business activities. Apart from PT. Kamaraga Kurnia Textil, KLHK has also sued three other companies that have also polluted the environment, namely PT. Kawi Mekar, PT. How Are You Indonesia and PT. United Color Indonesia.

Currently, companies are not only required to focus on the welfare of their owners and management but also all stakeholders like employees, consumers, communities and the environment in which the company is established (Dwicahyanti and Priyono, 2021). Therefore, improving environmental performance will encourage companies to increase the company's voluntary information disclosure to internal and external parties (Anggita, 2020). Companies are required to disclose information about their social activities or corporate social responsibility as is the case with company financial disclosures. Good environmental information disclosure can affect the survival of the surrounding community and avoid environmental damage and also the future of the company (Kusumaningtias, 2013). For this reason, companies are currently competing to implement green accounting, which will encourage the ability to minimize environmental problems faced by companies. This is intended in addition to minimizing environmental problems and costs, the application of green accounting is also intended to provide a good image of the company to the surrounding environment, especially which the company operates.

Global warming is also caused by the greenhouse gas effect. (Sulistiyono, 2012); (Halimah, 2018) states that the increasingly dangerous global warming is driven by the

production of the greenhouse gas effect produced by human actions. These gases will accumulate in the atmosphere, so that it will block the heat wave radiation emitted by the earth to be reflected into space. Climate change that occurs encourages companies to be able to reduce gas emissions resulting from the company's business activities by conducting carbon trading, known as emission trading. Emission trading is carried out by developed countries to developing countries because developed countries tend to produce gas emissions that are greater than developing countries (Bappebti.go.id). According to kompasiana.com, Indonesia itself became one of the three countries that contributed to the largest or highest gas emissions in the world in 2015. Indonesia has been proven to have contributed to the emission of greenhouse gases or the greenhouse gas effect of 85 percent which comes from the destruction of peatlands and defoliation (Carsten and Detlef, 2000). As a driver of economic progress, Indonesia's industrial sector is driven by energy sourced from fossils so that it has an impact on the environment, namely by increasing the earth's surface temperature followed by global climate change. The world's attention to climate change has caused concern due to increasing concentrations of greenhouse gases which in the end has prompted an international agreement called the Kyoto Protocol in 1997. The Kyoto Protocol itself is an agreement and agreement of industrialized countries to reduce their greenhouse gas emissions by the first commitment period 2008 to 2012. Then, in the second commitment period in 2012 which was referred to as the Doha Amendment with a commitment period of 2013-2020 (Fajar, 2014).

The implication of the birth of the Kyoto Protocol has given rise to a carbon accounting policy which is a must for companies to recognize, measure, record, present and carbon emission disclosure. Research by (Ratnatunga, 2007) said that this is related to efficiency of carbon emission from the cost of using raw material, labor, cost of factory overhead, environmental overhead and associated costs of carbon standard management. Meanwhile, the practice of carbon emission disclosure in Indonesia is still done voluntarily. Some of the references used by companies in Indonesia for calculating carbon emissions refer to the provisions of the CO₂ protocol adopted from the World Business Council for Sustainable Development or the World Resources Institute (WBCSD-WRI) and regulations issued by the United Nations Environment Program (UNEP). Indonesia has also taken part in the movement to reduce carbon emissions as seen in the issuance of Presidential Regulation Number 61 of 2011 concerning the National Action Plan for Reducing Greenhouse Gases which is still carried out voluntarily. Many companies have done voluntary disclosures related to social and environmental issues to maintain the company's continuity, so that the company can remain standing and avoid various community rejections. The company has made various efforts to reduce greenhouse gases, one of which is by conducting carbon emission disclosures. In Indonesia, the practice of environmental disclosure is also regulated in the Statement of Financial Accounting Standards Number 1 Paragraph 9 which implicitly also provides advice to companies to carry out social responsibility and environmental disclosure.

THEORETICAL REVIEW

Legitimacy Theory. In (Arum, 2019) the theory of legitimacy has made an organization or company have to show that the company has operated in a behavior that is in accordance with the social values that exist in society. This can be achieved through voluntary

disclosures that are reported in the company's annual report or sustainability report. To get recognition or legitimacy, companies must communicate their environmental activities by disclosing their social environment. The environmental activities disclosure is useful to maintain, restore and gain a recognition or legitimacy. Based on this, companies must be responsive and sensitive to the environmental impacts caused by companies that continue to operate (Budiono and Dura, 2021). In order for the legitimacy gap to be reduced, the company must identify various activities that are under its control and identify the needs of the public who have the power to give recognition or legitimacy to the company (Pradipta and Hadiprajitno, 2015). Entities or organizations or companies can also seek legitimacy or recognition from the community by disclosing carbon emissions or carbon emission disclosures in reducing the greenhouse gas effect which is also a form of company concern for environmental sustainability. In addition to carbon emission disclosure activities, companies can also increase environmental costs or green accounting as an effort to increase the legitimacy of the community. Companies do carbon emission disclosure to obtain legitimacy so that the company has a level of sustainability. A company manager must communicate with many parties to achieve legitimacy. One of the external parties is the regulator who have a big impact on the company. The government has the right to close companies that violate environmental regulations. (Huang and Kung, 2010) say that regulatory pressure has a significant relationship with environmental disclosure. This finding is similar to the result study of (Liu and Anbumozhi, 2009) which says that the government's attention has effect with environmental disclosure on Chinese companies. The pressure from the regulator is wrong one of the main factors that make the company worry about the environment and disclosure carbon (Peng et al., 2015).

Firm Value. Firm value is a meaningful representation of the condition of a company good or bad company value also reflects the good and bad conditions the company. Firm value can also be interpreted as the price prospective buyers are willing to pay if the company is sold. Value on performance current company as well as to see the company's prospects in the future. (Kelvin et al., 2017). The firm value is reflected in the market value of the company's stock, the value of the company can provide benefits for investors if the price the company's stock increases because the higher the stock price in company, the higher profit for shareholders. Price high stock value makes the firm value also high and increases market confidence not only in the company's current performance but also in future prospects of the company. Maximizing the firm value greatly important because by maximizing the firm value, the company has maximize company goals (Damayanthi, 2017). Firm value is one of the main indicators to attract and attract investment in the company's business development efforts. The firm value is the market value of the stock that can show the current state or prospects of the company in the future. Companies with lots of investments will be able to create a positive image to investors so the price of stock companies will be increase and have an impact on firm value (Wijaya and Sedana, 2015). The value of the company's shares is has several factors that influence it such as green accounting through environmental disclosure, company profitability ratios and corporate social responsibility disclosure by the company (Dewi and Narayana, 2020). Every company that stands apart from wanting profit also always has a goal to provide the best in terms of its company's reputation and provide prosperity to all members and shareholders. Increasing the firm value is the most important part of the wishes expected of members and shareholders because the higher value of a

company will indicate a high level of welfare for members and shareholders (Maharani and Handayani, 2021). The firm value is a representation of the condition of a company, which means that the good or bad of the company's value also reflects the good and bad conditions of the company. The firm value is a representation of the condition of a company, which means that the good or bad of the company's value also reflects the good and bad conditions of the company. Firm value can also be interpreted as the price prospective buyers are willing to pay if the company is sold (Kelvin, et al., 2017). Current performance of firm value is also to see the how the company will develop in the future, so so that increasing the firm value is very important to be done by the company (Damayanthi, 2019).

Carbon Emission Disclosure. Carbon Emission Disclosure is a disclosure that assesses the carbon emissions of organization and specify the target for emission reductions (Sari and Budiasih, 2021). Disclosure of carbon emissions is important because the information is needed by stakeholders. They want to know about the environmental risks of the company's operating activities, as well as how sustainable development and protection activities are provided by the company to the environment (Sudiby, 2018). Disclosure of carbon emissions in developing countries is considered to be a new thing, so not many companies have made this disclosure. In addition, companies in developing countries do not have as much funds to make disclosures compared to companies in developed countries. Indonesia itself is a developing country, where the disclosure of carbon emissions is also optional or voluntary (voluntary disclosure) and not a mandatory disclosure (Irwhantoko and Basuki, 2016).

Green Accounting Practices. Green accounting is one of the contemporary concepts in accounting that supports the green movement in companies by recognizing, quantifying, measuring and closing the environmental contribution to business processes (Fauzi and Chandra, 2016). If applied in the long term, the concept of green accounting is actually a program for saving production costs so that it can reduce the company's operational burden (Dewi and Naryana, 2020). In an era where people are very aware of the importance of environmental conservation, the application of green accounting practices by industry can be a special attraction for consumers. Indonesia Government through the Ministry of Industry also rewards companies that are able to implementing green industry every year. Ministry of Environment has also implemented PROPER, namely the Performance Rating Program Company in environmental management. The purpose of developing green accounting or environmental accounting are as follows (Sapulette and Limba, 2021): (1) Environmental accounting is an environmental management tools used to assess the effectiveness of conservation activities based on a summary and classification of environmental conservation costs. (2) Environmental accounting as a communication tool with the community in conveying the negative impact of environmental activities to the public.

The Relationship of Carbon Emission Disclosure and Firm Value. Companies that make voluntary disclosures should get a good perception by the public. Companies that disclose carbon emissions will also have good operational performance. Resources that are used efficiently will reduce operational costs and bring a level of profit for the company (Sari and Budiasih, 2021). Legitimacy theory explains that companies will tend to seek legitimacy

from the surrounding environment related to the company's operating existence. One of them is by providing information related to the company's operating activities that have an impact on the environment. Companies that have gained legitimacy tend to improve their image and reputation in the eyes of the public, which will affect on the overall firm value (Alfayerds and Setiawan, 2021). Thus, increasing the carbon emission disclosures will assist companies in increasing the value of their companies. Research on carbon emission disclosure and company value has been carried out by several researchers before. (Zuhrufiyah and Anggraeni, 2019) stated that Carbon Emission Disclosure has an influence on firm value. (Sari and Budiasih, 2021) in their research revealed that carbon emission disclosures have a positive effect on firm value. The result in this study, support research conducted by (Alfayerds and Setiawan, 2021) which shows that the carbon emissions disclosure has a positive effect and significant on firm value. With the company making disclosures, one of which is: Carbon Emission Disclosure then the company will get a good name and attention from the community and the other stakeholders. Companies that disclose carbon emissions will also have good operational performance. Resources used efficiently will reduce operating costs and bring a level of profit for companies (Delmas and Birch, 2015). So, companies that do carbon emission disclosure will have a positive effect on the firm value. Based on this explanation, the hypothesis can be formulated, namely:

H1: Carbon emission disclosures have a positive and significant effect on firm value.

The Relationship of Green Accounting Practices and Firm Value. Green accounting or environmental accounting practices is the first step that companies can take to minimize environmental problems faced by companies (Hamidi, 2019). The application of green accounting shows that the company has a concern for the environment, through environmental costs that are included in the company's financial statements for the environment (Sapulette and Limba, 2021). The legitimacy theory explains that if there is a misalignment between the appraisal system in the company with community value system, especially where the company is located (legitimacy gap), the company will lose recognition from the public, then the company's survival is threatened (Sulistiawati and Dirgantari, 2016). Thus, the application of green accounting will assist companies in overcoming the discrepancy between the company's value system and the community's value system (legitimacy gap). Research conducted by (Sapulette and Limba, 2021) shows that green accounting has no effect on firm value. Even though, (Maharani and Handayani, 2021) show that green accounting effect on firm value. (Astuti, 2012) in her research stated that green accounting have objectives related to environmental conservation activities by companies or other organizations, which includes the interests of companies and organizations. The results of research by (Zulhaimi, 2015) also found that the application of green accounting can influence decisions shareholders and investors. After the application of green accounting there is an increase earnings and stock prices but not significant. (Tu and Huang, 2015) in research on Taiwanese companies that have been certified ISO14000 (Environmental Management) states that green accounting through environmental costs will have a negative influence on profitability (return on assets, return on equity, and net operating profit), but can increase competitiveness and company sustainability. (Ezeagba, Rachael, and Chiamaka, 2017) in his research on food and beverage companies found that

environmental accounting have a significant influence on Return on equity. Based on this explanation, the first hypothesis can be formulated, namely:

H2: Green Accounting Practices have a positive and significant effect on firm value.

METHODS

The research approach used in this study is a quantitative research approach which is used in this study to analyze and examine carbon emission disclosures and green accounting on the firm value of food and beverage sector. Secondary data used in this study were obtained from databases of various official websites of each food and beverage sector company that is the research sample. The data used in this study is in the form of an annual report for each company that is the research sample. The population in this study are all food and beverage sub-sector companies listed on the Stock Exchange with the sampling used in this study using purposive sampling.

Dependent variable or firm value is measured using the Tobin's Q formula (Sapulette and Limba, 2021). The carbon emission disclosure variable uses a score index which is calculated based on the disclosure item. Calculation of carbon emission disclosure items by adopting (Choi et al., 2013) (Pratiwi, 2018) which consists of several categories: climate change (risks and opportunities), greenhouse gas emissions (GHG), energy consumption, reduction of greenhouse gases and costs (RD/Reductions and Costs) and carbon emission accountability. Giving a score for each item of disclosure (carbon emissions disclosure checklist) with a dichotomous scale. Green accounting variables are measured using a dummy variable (Sapulette and Limba, 2021), namely: (1). A value of 0 is used for companies that do not have components of environmental costs, waste recycling costs, environmental R&D costs in the company's annual financial statements. (2). The value of 1 is used for companies that have components of environmental costs, waste recycling costs, environmental R&D costs in the company's annual financial statements.

This study uses secondary data obtained from databases of various official websites of each food and beverage sector company that is the research sample. The data used in this study is in the form of an annual report for each company that is the research sample. The population in this study were all food and beverage sub-sector companies listed on the Stock Exchange. The sampling technique used in this study is to use purposive sampling technique. The sample criteria use are: (1) Food and beverage sub-sector companies that have go public or are listed on the Indonesia Stock Exchange (IDX) during for two years (2019-2020), (2) Food and beverage sub-sector companies that publish annual financial reports and sustainability reports on the company website or IDX website during for two years (2019-2020), (3) Companies that disclose carbon emissions include at least one policy regarding the item of disclosure of carbon emissions during for two years (2019-2020).

Table 1. The Sample of The Research

No	Company Name	Code
1	Akasha Wira International Tbk.	ADES
2	Buyung Poetra Sembada Tbk.	HOKI
3	Campina Ice Cream Industry Tbk.	CAMP
4	Delta Djakarta Tbk.	DLTA

5	FKS Food Sejahtera Tbk.	AISA
6	Garudafood Putra Putri Jaya Tbk.	GOOD
7	Indofood CBP Sukses Makmur Tbk.	ICBP
8	Indofood Sukses Makmur Tbk.	INDF
9	Mayora Indah Tbk.	MYOR
10	Multi Bintang Indonesia Tbk.	MLBI
11	Palma Serasih Tbk.	PGSO
12	Prima Cakrawala Abadi Tbk.	PCAR
13	Sariguna Primatirta Tbk.	CLEO
14	Sekar Bumi Tbk.	SKBM
15	Sekar Laut Tbk.	SKLT
16	Ultra Jaya Milk Industry & Trading Company Tbk.	ULTJ

Sample Data, 2022

Data analysis was carried out in this study using descriptive statistical analysis and multiple linear regression analysis with descriptive statistics. In addition to measuring the strength of the relationship between variables, regression analysis can also show the direction of the relationship between the independent variable and the dependent variable (Ghozali, 2018).

RESULTS

Descriptive Statistic. Based on table 1, the Firm Value Value variable shows an average value of 3.307, the highest value of 11.878 which occurred in the MLBI stock code in 2019 and the lowest value of 0.777 which occurred in the INDF stock code in in 2020 with a standard deviation of 2.575. The Carbon Emissions Disclosure variable shows an average value of 0.476, the highest value of 1.000 which occurred in the MYOR stock code in 2019 and 2020, then the lowest value of 0.222 which occurred in several stock codes such as DLTA, PSGO, SKBM, SKLT, ULTJ in 2019 to 2020, with a standard deviation of 0.229. The Green Accounting Practice variable shows an average value of 0.875, the highest value is 1.000 and the lowest value is 0.000 with a standard deviation value of 0.336. The results in table 1 show that the probability value for the Carbon Emissions Disclosure variable is 0.365, the Green Accounting Practice variable is 0.000 and the firm value variable is 0.000.

Table 2. Descriptive Statistic Results

	Carbon Emission Disclosure	Green Accounting Practice	Firm value
Mean	0.476	0.875	3.308
Median	0.444	1.000	2.721
Maximum	1.000	1.000	11.878
Minimum	0.222	0.000	0.777
Std. Dev	0.229	0.336	2.575
Skewness	0.575	-2.268	2.084
Kurtosis	2.565	6.143	7.123
Jarque-Bera	2.016	40.599	45.836
Probability	0.365	0.000	0.000
Sum	15.222	28.000	105.839
Sum Sq. Dev	1.629	3.500	205.538
Observations	32	32	32

Data Eviews, 2022

Correlation Analysis. Shows whether there is a correlation between 3 variables using a scatter diagram. The scatter diagram is the distribution of the values of the variables on carbon emission disclosure, green accounting practices and firm value variables. From the scatter diagram, a line can be drawn that roughly divides the two coordinate points on both sides of the line. From this line it can be seen the correlation between the three variables. If the red line up means a positive correlation, if the line decreases it means a negative correlation. If a line cannot be drawn then there is no correlation, and if the points exactly pass through the line there is a perfect correlation. The result of the correlation analysis can be seen in figure 1.

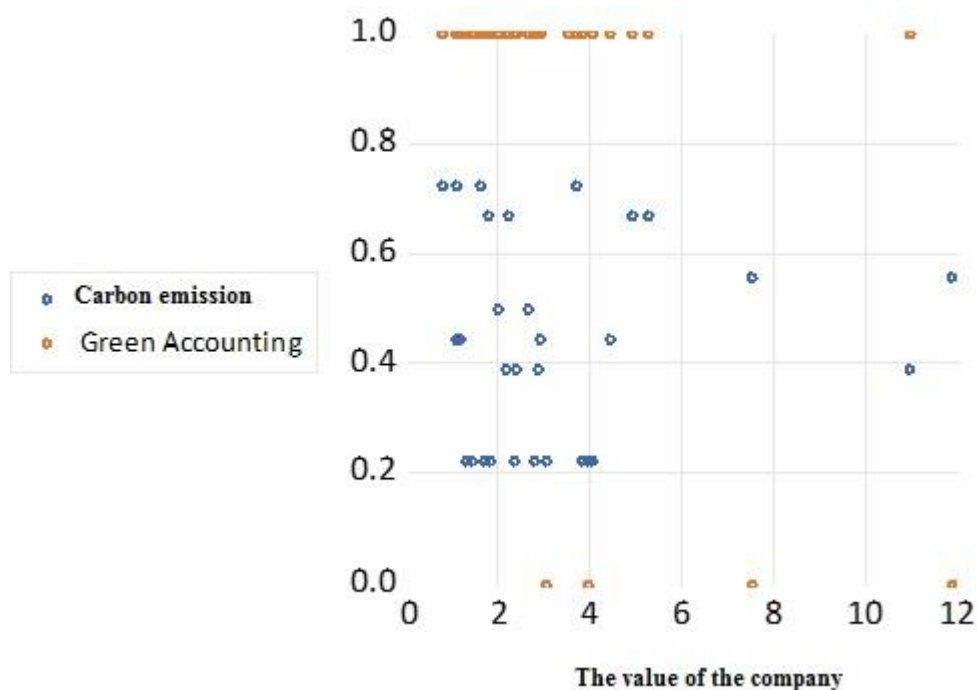


Figure 1. Research Correlation Analysis Result

Lagrange Multiplier Test. Lagrange Multiplier (LM) test is used to find out whether the random effect model is better than the Common Effect (OLS) method. This test is used when the selected of Chow test result is the common effect model. Performing the lagrange multiplier test, the data is also regressed with the random effects model and the common effect model, then fixed/random effect testing is carried out using the committed random effect–lagrange multiplier. The guidelines used in drawing conclusions from the Chow test are: a) If the value of prob (both) Breusch-Pagan less than 0.050, then H_0 is rejected, which means a random effect model; b) if the value of prob (both) Breusch-Pagan more than 0.050, then H_0 is accepted, which means the common effect model. Based on the output, the results obtained that the Breusch-Pagan Probability (Both) value is 0.067 which is greater than the 0.050 significance level (α), then H_1 is rejected, the decision is that the Common Effect Model (CEM) is more appropriate than the Random Effect Model (REM).

Table 3. Lagrange Multiplier Test Result

	Cross Section	Test Hypothesis Time	Both
Breusch-Pagan	2.356 (0.125)	1.005 (0.316)	3.361 (0.067)
Honda	1.535 (0.062)	-1.002 (0.842)	0.377 (0.353)
King-Wu	1.535 (0.062)	-1.002 (0.842)	-0.587 (0.721)
Standardized Honda	1.928 (0.027)	-0.707 (0.760)	-3.126 (0.999)
Standardized King- Wu	1.928 (0.027)	-0.704 (0.760)	-2.744 (0.997)
Gourieroux, et al	-	-	2.356 (0.139)

Data Eviews, 2022

Coefficient of Determination Analysis. The coefficient of determination test was conducted to find out how much the endogenous variables were simultaneously able to explain the exogenous variables. The higher the value of Coefficient of Determination, the better the prediction model of the proposed model. Based on the output of the Common Effect Model (CEM) regression in the R-squared value column, the coefficient of determination (R Squared) of the regression model is 0.257. It can be concluded that Carbon Emissions Disclosure and Green Accounting Practices together have an effect on variations in changes in Firm Value amounting to 25.704 percent, while the remaining 74.296 percent is caused by other factors that not researched. This indicates that there are still many variables outside the Carbon Emissions Disclosure and Green Accounting Practices variables that can affect firm value. Therefore, further research is expected to add other variables that can represent the value of the company better.

Table 4. Coefficient of Determination Analysis Result

Variable	Coefficient	Std. Error	t-statistic	Prob
Constant	6.064	1.348	4.500	0.000
Carbon Emission Disclosure Green Accounting Practices	1.393	1.817	0.767	0.449
	-3.908	1.240	-3.152	0.004
R-Squared	0.257	Mean Dependent Variable		3.307
Adjusted R-Squared	0.206	S.D Dependent Variable		2.575
S.E of Regression	2.295	Akaike Info Criterion		4.588
Sum Squared Resid	152.706	Schwarz Criterion		4.726
Log Likelihood	-70.410	Hannan-Quinn Criterion		4.634
F-Statistic	5.017	Durbin Watson Statistic		1.160
Prob (F-Statistic)	0.013			

Data Eviews, 2022

The model's feasibility test (F statistic test) aims to show whether the model used in this study is feasible or not. The way of testing in this study is by looking at the significance value of F on the output of the regression results using a significance level more than 0.05 ($\alpha = 5$ percent). If the significance value is greater than then this research model is not feasible to use, which means that the regression model does not fit. If the significance value is less than then this research model is feasible to use. Based on Table 3, it can be seen that the significance value of 0.018 is smaller than the level of significance of 0.050 (0.013 less than 0.050), so it can be concluded that this research model is feasible to use.

Classic Assumption Test. The classical assumption test used in linear regression with the Ordinary Least Square (OLS) approach includes linearity, autocorrelation, heteroscedasticity, multicollinearity, and normality tests. However, not all classical assumption tests must be performed on every linear regression model using the OLS approach (Agus Tri and Nano Prawoto, 2016).

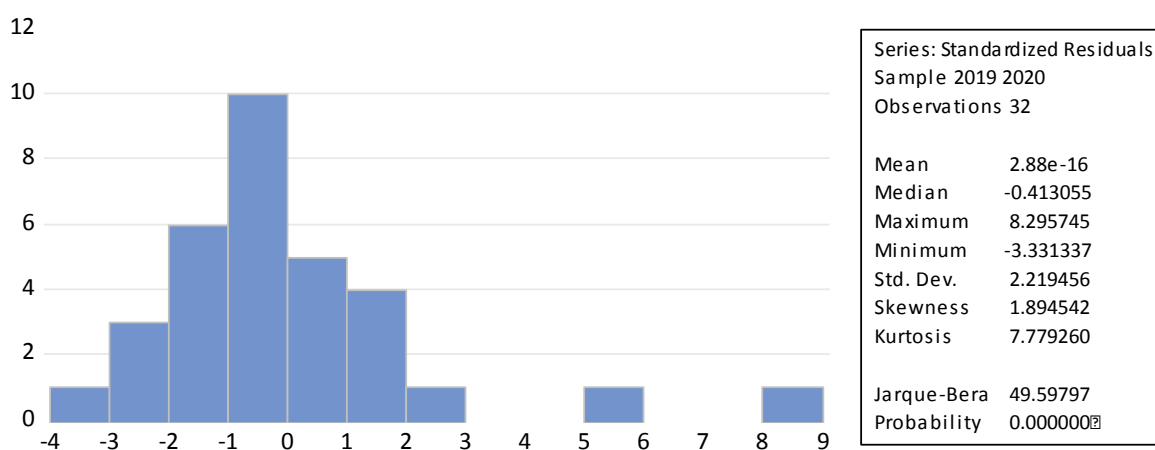


Figure 2. Normality Test Result
Data Eviews, 2022

The normality test aims to test whether in the panel regression model the variables are normally distributed or not. A good regression model is to have a normal or close to normal data distribution. Normality test using the program eviews normality of a data can be known by comparing the value of Jarque-Bera (JB) and the value of Chi-Square table. Hypothesis used: Ho: residual data is normally distributed and Ha: residual data is not normally distributed. Jarque-Berra method of normality test decision rule: (a) Ho is accepted if the Jarque-Berra probability value is greater than the significance level 5 percent or more than 0.050; (b) Ho is rejected if the Jarque-Berra probability value is less than the significance level of 5 percent or less than 0.05. Based on the graph output, it is known that the Jarque-Berra Probability value is 0 which is smaller than the significance level of 0.050, so Ho is rejected. The decision that the residual data in the regression model is not normally distributed. Although the data from the normality test results are not normally distributed, but based on central limit theorem that for samples having a large size of more than 30 (n is more than equal to 30), the data are considered normal (Dielman, 1961).

Multicollinearity Test. Multicollinearity test which aims to test whether the regression model found a correlation between the independent variables (carbon emission disclosure and green accounting practices). A good regression model is one where the independent variables have no relationship with each other (Ghozali, 2016). If the independent variables have a correlation with each other, then these variables are not said to be orthogonal. The orthogonal variable itself is an independent variable whose correlation value between independent variables is equal to zero. Detecting the presence or absence of multicollinearity in the regression is as follows (1) If the correlation coefficient more than 0.800, then the data has multicollinearity, (2) If the correlation coefficient less than 0.800, then the data does not occur multicollinearity. Based on the output, the result is the correlation value of each independent variable less than 0.850, which means that there is no multicollinearity between the independent variables in the regression model.

Table 5. Multicollinearity Test Result

	Carbon Emission Disclosure	Green Accounting Practice
Carbon Emission Disclosure	1.000	0.145
Green Accounting Practice	0.145	1.000

Data Eviews, 2022

Heteroscedasticity Test. Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual of one observation to another observation. If the variance from the residual of one observation to another observation remains, it is called homoscedasticity and if the variance is different then it is called heteroscedasticity. A good regression model is one with homoscedasticity or no heteroscedasticity. To detect the presence or absence of heteroscedasticity, the Glejser test can be used to regress the absolute value. Based on the output, the probability value of each independent variable is greater than the significance level of 0.050, then Ho is accepted. The decision that there is no heteroscedasticity problem in the regression model

Table 6. Heteroscedasticity Test Result

Variable	Coefficient	Std. Error	t-statistic	Prob
Constant	2.865	0.936	3.061	0.005
Carbon Emission Disclosure	0.011	1.262	0.009	0.993
Green Accounting Practices	-1.587	0.861	-1.843	0.076
R-Squared	0.107	Mean Dependent Variable		1.482
Adjusted R-Squared	0.045	S.D Dependent Variable		1.631
S.E of Regression	1.594	Akaike Info Criterion		3.859
Sum Squared Resid	73.668	Schwarz Criterion		3.997
Log Likelihood	-58.747	Hannan-Quinn Criterion		3.905
F-Statistic	1.732	Durbin Watson Statistic		2.320
Prob (F-Statistic)	0.195			

Data Eviews, 2022

Autocorrelation Test. The autocorrelation test aims to see whether in the linear regression model there is a correlation between the confounding error in period t and the confounding error in period t-1 (previous. Based on the output table 6, the Durbin Watson value is 1.160, which means the DW value is between min 2 and plus 2. So the decision does not occur autocorrelation in the regression model

Table 7. Autocorrelation Test Result

R-Squared	0.257	Mean Dependent Variable	3.307
Adjusted R-Squared	0.206	S.D Dependent Variable	2.575
S.E of Regression	2.295	Akaike Info Criterion	4.588
Sum Squared Resid	152.706	Schwarz Criterion	4.726
Log Likelihood	-70.410	Hannan-Quinn Criterion	4.634
F-Statistic	5.017	Durbin Watson Statistic	1.160
Prob (F-Statistic)	0.013		

Data Eviews, 2022

Regression Test Result. The t-test is a partial regression relationship test which aims to determine the significance of the influence of individual independent variables on the dependent variable, assuming other variables are constant. The results of hypothesis testing in this study are:

Table 8. Regression Test Result

Variable	Coefficient	Std. Error	t-statistic	Prob
Constant	6.064	1.348	4.500	0.000
Carbon Emission Disclosure	1.393	1.817	0.767	0.450
Green Accounting Practices	-3.908	1.240	-3.152	0.004
R-Squared	0.257	Mean Dependent Variable		3.307
Adjusted R-Squared	0.206	S.D Dependent Variable		2.575
S.E of Regression	2.295	Akaike Info Criterion		4.588

Sum Squared Resid	152.706	Schwarz Criterion	4.726
Log Likelihood	-70.410	Hannan-Quinn Criterion	4.634
F-Statistic	5.017	Durbin Watson Statistic	1.160
Prob (F-Statistic)	0.013		

Data Eviews, 2022

Based on the output of the Common Effect Model regression in the Prob column, it is known that the probability value of the t-statistic of the carbon emission disclosure variable is 0.450, while the research error rate (α) is set at 5 percent. The results of the comparison show that the value of Prob (0.450) more than (0.050), so that based on the decision criteria it can be concluded that the disclosure of carbon emissions has no significant effect on firm value. In addition, the t-statistic probability value of the green accounting practice variable is 0.004, while the research error rate (α) is set at 5 percent.

Based on the output of the Common Effect Model (CEM) regression in the Prob column (F-Statistic), it is known that the significance/probability value of the regression model is 0.013, while the research error rate (α) is set at 5 percent or 0.050. The results of the comparison show the probability value of F-Statistic 0.013 less than 0.050, so that based on the test criteria it can be concluded that Disclosure of Carbon Emissions and Green Accounting Practices together have a significant effect on Firm Value. In other words, the regression model is significant in predicting the real condition or the regression equation is stated to be good (good of fit).

DISCUSSION

The Relationship of Carbon Emission Disclosure and Firm Value. From the results of the output of the Common Effect Model regression in table 4, it is known that the t-statistic probability value of the carbon emission disclosure variable is 0.450, while the research error rate (α) is set at 5 percent. The results of the comparison show that the value of Prob 0.450 more than 0.050, so that based on the decision criteria it can be concluded that the disclosure of carbon emissions has no significant effect on firm value. In other words, the regression coefficient (slope) of Carbon Emissions Disclosure has no significant effect in predicting Firm Value. In other words, efficiently utilized resources will reduce operational costs and bring a level of profit for the company (Sari and Budiasih, 2021). This means that increasing carbon emission disclosure does not mean that the value of the company will also increase. Researcher suggest that companies should pay more attention to what factors can affect the value of the company, so that later it will be able to increase the confidence of investors and other stakeholders in the company that will can also increase the value of the company.

The results of this study indicate that voluntary disclosures made by companies in Carbon Emissions Disclosure are not something that can increase the value of the company. Whereas it should be, the more companies carry out Carbon Emissions Disclosure, the various parties who need certainty about social responsibility carried out by the company will increasingly give confidence to the company so that the company's value will be better in the eyes of stakeholders. The results of this study contradict the theory of legitimacy, which explains that companies will tend to seek legitimacy from the surrounding environment related to the company's operating activities, one of which is by providing information related to the company's operating activities that have an impact on the

environment. Companies that have gained legitimacy should tend to improve their image and reputation in the eyes of the public, which will have an impact on the overall value of the company (Alfayerds and Setiawan, 2021), but the opposite is found from the results of this study which says that not all companies that get legitimacy will improve the company's image in society. This study also contradicts the research conducted by Sari and (Budiasih, 2021) (Alfayerds and Setiawan, 2021) and shows that carbon emissions' disclosures have a positive effect on firm value. The results of this study indicate that companies that disclose carbon emissions will not help companies increase their company value.

The Relationship of Green Accounting Practices and Firm Value. Based on the output of the Common Effect Model regression in Table 4, it is known that the t-statistic probability value of the green accounting practice variable is 0.004, while the research error rate (α) is set at 5 percent. The results of the comparison show that the value of Prob 0.004 less than 0.050, so that based on the decision criteria it can be concluded that the practice of green accounting has a significant effect on firm value. In other words, the regression coefficient (slope) of Green Accounting Practice has a significant effect on predicting firm value. So according to these results for the green accounting variable stated to have a positive and significant effect on firm value. In other words, the more green accounting increases, the more increase the value of the company, on the contrary if green accounting increases decreases, the value of the company will decrease. As is positive and significant influence between green accounting and the value of company, then in accordance with the Environmental Accounting Guidelines which put forward by the Japanese Ministry of the Environment, who declared green accounting is a quantitative assessment of cost and effectiveness environmental protection so that companies need to have records and reports on environmental activities with the aim of increasing the value company and achieve sustainable development.

The results of this study indicate that the application of green accounting or environmental accounting is the first step that can be taken by companies to minimize environmental problems faced by companies (Hamidi, 2019). The application of green accounting shows that the company has a concern for the environment, through environmental costs that are included in the company's financial statements for the environment (Sapulette and Limba, 2021). The legitimacy theory explains that if there is a misalignment between the company's value system and the community value system (legitimacy gap), the company can lose its legitimacy, then the company's survival is threatened (Sulistiawati and Dirgantari, 2016). The results of this study indicate that the imposition and disclosure of environmental costs by companies can provide confidence for investors and consumers in the assessment of a company, thus affecting the level of sales and profits of the company.

Based on the results of the research that has been done, it can be concluded that the application of green accounting which has a significant positive effect on the value of company, this can be interpreted that the application of green accounting is very needed in quantitative assessment of cost and effectiveness environmental protection so that companies need to have records and reports on environmental activities with the aim of increasing the value company and achieve sustainable development. Thus, the application of green accounting will assist companies in overcoming the discrepancy between the company's value system and the community's value system (legitimacy gap). The results of

this study are in line with the results of research conducted by (Maharani and Handayani, 2021) showing that green accounting has an effect on firm value, but contradicts research conducted by (Sapulette and Limba, 2021) which shows that green accounting has no significant effect on firm value.

CONCLUSION

This study aims to analyze the effect of carbon emission disclosures and green accounting practices on firm value. The sample of this research is 16 customer goods companies listed on the Indonesia Stock Exchange in 2019 and 2020. The results of this study indicate that the carbon emission disclosure does not have a significant effect on firm value. The results of this study indicate that voluntary disclosures made by companies in Carbon Emissions Disclosure are not something that can increase the value of the company. Whereas it should be, the more companies carry out Carbon Emissions Disclosure, the various parties who need certainty about social responsibility carried out by the company will increasingly give confidence to the company so that the company's value will be better in the eyes of stakeholders. Based on the results of the research that has been done, it can be concluded that the application of green accounting which has a significant positive effect on the value of company, this can be interpreted that the application of green accounting is very needed in quantitative assessment of cost and effectiveness environmental protection so that companies need to have records and reports on environmental activities with the aim of increasing the value company and achieve sustainable development.

From the results of this study, it is recommended to add other variables related to the green economy in addition to the variable of carbon emission disclosure and green accounting practices This research is only limited to examining the effect of carbon emission disclosures and green accounting practices so that further researchers are expected to add variables others related to environmental disclosures that can affect the value company. Further researchers are also advised to be able to develop indicators based on the more recent Carbon Disclosure Project questionnaire and wider scope of disclosure of carbon emissions and conduct research in other corporate sectors that have a high level of environmental sensitivity different, resulting in more varied results. In addition, increasing the period of observation data so that it can better describe research data that can better represent research variables.

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