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Analysis of Factors Affecting the Disclosure of Corporate Carbon Emission In Indonesia

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Abstract

This study aims to analyze the influence of PROPER Rating, Industrial Type, Profitability, Leverage and Age of Company on Carbon Emission Disclosure. Measurement of carbon emissions disclosure uses Carbon Emission Disclosure Checklist (CED). The population of this study is non-financial companies listed on the Indonesia Stock Exchange in 2013 - 2016 as many as 406 companies. The technique used in sampling is purposive sampling and selected 32 companies as sample and 126 units of analysis. The analytical tool used to test the hypothesis is descriptive statistical analysis and multiple linear regression analysis processed through IBM SPSS 21 program. The research results show that the PROPER rating and the type of industry have positive effect on carbon emission disclosure. While profitability, leverage and age of the company have no effect on carbon emission disclosure. The conclusions of this study are the PROPER rating and the type of industry proven to influence the company's decision making to disclose carbon emissions. While the profitability, leverage, and firm age cannot affect the company's decision to disclose carbon emissions.

Keywords*: carbon emission disclosure; proper rating; industrial type; profitability; leverage; firm age*

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INTRODUCTION

The issue of global warming countermeasures is a problem that is currently intensively discussed in various parts of the world. One of the causes is greenhouse gases. Indonesia becomes one of the largest greenhouse gas emitter in the world. According to the World Resources Institute (WRI) in 2014 Indonesia has produced 2.05 billion tons of emissions and made Indonesia as the sixth number of largest emitter in the world, while China becomes the country with the largest emitter with more than 10.26 billion tons (Wulandari, 2014). Indonesia's carbon gas emissions are predicted to be 3 gigabytes in 2020 (Manurung, Kusumah, Asikin, & Suryani, 2017).

Indonesia has made a commitment by ratifying the Kyoto Protocol on December 3, 2004 through Law 17/2004 in order to reduce greenhouse gas emissions (Majid & Ghozali, 2015; Utama, 2014). In addition, the government also issued Presidential Regulation Number 61 year 2011 on the National Action Plan for Greenhouse Gas Emission Reduction (RAN-GRK) and Presidential Regulation Number 71/2011. In Article 4 of Presidential Regulation Number 61 year 2011, mentioned that business actors also contribute in efforts to reduce GHG emissions.

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However, there are still many companies in Indonesia which are still doing air pollution that is classified as dangerous among others are PT. Timur Raya and PT. DIC Grapich which release thick smoke that causes residents around experiencing shortness of breathing to be rushed to the hospital (Raka, 2016). Besides these two companies, there is PT. Pemuka Sakis Manis Indah where the sugar company is burning to harvest sugar cane (Momentum, 2017). This has violated Law No. 39 of 2014 Article 56.

Carbon emission disclosure in Indonesia is still voluntary disclosure and its practice is still rarely done by business actors (Anggraeni, 2015; Irwhantoko & Basuki, 2016; Majid & Ghozali, 2015; Marlin, 2017; Prafitri, 2016). According to Robert (2011), companies that disclose carbon emissions have consideration among others to gain legitimacy from stakeholders, avoid threats, especially for companies that produce greenhouse gases such as increasing operating costs, reducing demand (reduced demand), reputational risk, legal proceedings, and fines and penalties.

Voluntary disclosure of carbon emissions makes research concerning the factors affecting the disclosure of carbon emissions in companies in Indonesia to be attractive. However, research on carbon emissions in Indonesia is still limited. Previous research is still dominated by factors that affect the disclosure of social environment or the disclosure of social responsibility.

Specific studies examining carbon emissions disclosure also found varied results. Pradini & Kiswara (2013) find the extent of greenhouse gas emission disclosure is affected significantly by PROPER ratings, whereas Majid & Ghozali (2015) find results that PROPER ratings have no effect on carbon emissions disclosure. Choi,*et al* (2013), Jannah & Muid (2014) find that the extent of carbon emission disclosure is significantly affected by industrial type, but this is in contrast to Pradini & Kiswara's research (2013) which find that industrial type has no effect on carbon emission disclosure.

Research conducted by Choi,*et al* (2013), Luo,*et al* (2013),Prado-Lorenzo, Rodríguez-Domínguez, Gallego-Alvarez, & García-Sánchez (2009), Gatimbu & Wabwire (2016) and Stanny & Ely (2008) find out that profitability has a positive effect on carbon emissions disclosure. Instead of research conducted by Chithambo & Tauringana(2014) and Lorenzo, *et al.* (2009) find results that profitability has no effect on carbon emissions disclosure. Research conducted by Majid & Ghozali (2015); Prado-Lorenzo et al.(2009) and Luo,*et al*(2013) find a negative influence between leverage and disclosure of carbon emissions. While research Gatimbu & Wabwire(2016), Akhiroh & Kiswanto (2016) and Pradini & Kiswara (2013) find out that leverage has no effect on carbon emissions disclosure. In addition, research conducted by Ghomi & Leung (2013) find out that firm age affects carbon emissions disclosure. While research of Chithambo & Tauringana (2014) find out that firm age has no effect on carbon emissions disclosure.

The results of these studies are still varied to indicate a research gap in similar research. Therefore, research on carbon emissions disclosure is interesting to be re-examined. Thus, this study aims to analyze and find empirical evidence of factors that affect companies in disclosing carbon emissions. These factors include Performance Rating Program (PROPER), industrial type, profitability, leverage, and firm age where in previous studies the factors are still inconsistent.

The theory underlying this research is the theory of stakeholders which explains that the company in running its business not solely for the benefit of the company, but also provide benefits for stakeholders. In running the operational activities, company cannot be separated from stakeholders. Companies will react in ways that can satisfy stakeholders when they control the economic resources that are important to the company, because the survival of the company depends on stakeholder support (Gray, *et al,* 1995).

Companies can do various ways in order to get support from stakeholders, one of which is by making the disclosure of the environment including disclosure of carbon emissions. Environmental social disclosure is one form of communication between the company and its stakeholders to seek such support. Through disclosure of carbon emissions, the company seeks to gain such support because such disclosure is considered a form of environmental responsibility that can attract stakeholders.

In addition to stakeholder theory, there is also a theory of legitimacy that supports companies in conducting disclosure. This theory states that there is a social contract between the company and the environment in which the company operates (Ghozali & Chariri, 2007). Explicitly, it can be argued that the theory of legitimacy is an effort to seek for legality from the activities done by the company while implicitly means the expectations desired by general public which are not clearly stated in the legal regulations (Deegan, 2000). The legitimacy from the community will encourage a company to perform both social and environmental responsibilities. Through the disclosure of carbon emissions, the company will be regarded as the company which is responsible for the environment, so the community will always support what the company does as long as it does not harm society.

PROPER is a valuation program on a company for environmental performance. Companies with high PROPER ratings can be rated as companies with good environmental performance. Companies with good environmental performance will be rated by stakeholders as a company with good prospects. Based on the stakeholder theory, the company in conducting its activities will consider whether the activity satisfies the interests of stakeholders or not. Companies with good environmental performance will tend to be wider in disclosing environment including the disclosure of carbon emissions because although this voluntary disclosure will increase cost, it is done in order to meet the needs and desires of stakeholders. Research conducted by Pradini & Kiswara (2013) shows that PROPER ratings have a significant positive effect on the disclosure of carbon emissions. Therefore, the first hypothesis in this study is:

H_1 : PROPER rating has a positive effect on carbon emissions disclosure.

Companies with industrial type that have a great impact on the environment are wider in conducting environmental disclosure. Jannah & Muid (2014) state that high profile company types such as mining, manufacturing that produce environmental damage and high carbon emissions will be more severe than low profile companies such as those engaged in services, trade and so forth. In the theory of legitimacy, companies with high carbon intensity tend to get greater pressure from the public so that companies should provide carbon disclosure reporting in order to withstand such pressure and keep gaining legitimacy from the community. The result of research conducted by Ghomi & Leung (2013), shows the result that the type of industry influences the disclosure of carbon emissions. Thus, the second hypothesis in this study is:

H_2 : Industrial Type has a positive effect on carbon emission disclosure.

Profitability is a company's ability to generate profit / earning. Companies with high profitability are regarded as companies with good financial performance. Mawarti & Yulianti (2015) argue that companies with good financial performance will be better able to spend substantial expenses used to disclose the environment. According to Choi, *et al* (2013) states that companies with good financial conditions are able to afford the additional human or financial resources required for voluntary reporting and the disclosure of better carbon emissions to withstand external pressures. Based on the theory of legitimacy, companies with high profitability will get more pressure from the public, because companies with high profitability are required to always care for the environment, profitable company will be able to respond to the pressure from the community by making environmental disclosures including carbon emissions disclosure. The Result of research conducted by Gatimbu & Wabwire (2016), Prado-Lorenzo et al.(2009), and Jannah & Muid (2014) find that profitability has a positive effect on carbon emission disclosure. Hence, the third hypothesis in this study that is:

H_3 : Profitability has a positive effect on carbon emissions disclosure.

Leverage is a measuring tool used to determine the extent to which the company get the source of capital obtained through debt or credit to be managed by the companies in order to increase profits or generate added value. Companies with high leverage will get more pressure from creditors as the owner of the fund, because the creditor constantly oversees the flow of funds managed by the company. According to stakeholder theory, the greater the leverage of the company, the greater the pressure from the creditor to the company.

Luo, *et al* (2013) argue that high-leverage companies will be more cautious in reducing and disclosing regarding expenditures which related to carbon prevention. Companies with high levels of leverage have a greater obligation to repay debts and interest to creditors than to do disclosure which has great costs such as carbon emission disclosure. Research result of Majid & Ghozali (2015) find out that leverage has a negative effect on carbon emissions disclosure. Thus, the fourth hypothesis in this study is:

H_4 : Leverage has a negative effect on carbon emission disclosure.

Firm age is the length of a company is established and able to compete so that the company still exist and able to maintain continuity of its business. This means that firm age shows the company's ability to maintain its business continuity and have the ability to survive. So the longer the company can survive the more disclosures made by the company as a form of responsibility to the community.

Based on the theory of legitimacy, companies that have long-standing will be better visible by the media and society. Thus, greater pressure will be accepted by the company. Zhang, *et al.*(2012) business and professional attention in recent years. More specifically, there is mounting evidence that indicates that human induced carbon emissions are a major cause of climate change. The objective of the Carbon Disclosure Project (CDP say the public will always put pressure on the company to care about environmental issues. It requires companies with a longer lifespan should disclose the environment more broadly including disclosure of carbon emissions compared to newly established companies, because disclosure of such information can be used to ensure that corporate activity has been accepted by the community. Research result of Ghomi & Leung(2013) found results that the firm age has a positive effect on carbon emissions disclosure. Clarkson, Li, Richardson, & Vasvari (2008) assume that companies with new equipment are likely to have better social performance.

Thus the fifth hypothesis in this study is:

H_5 : The age of company has a positive effect on the disclosure of carbon emission.

Here is presented figure 1 empirical research model that shows the relationship between variables:

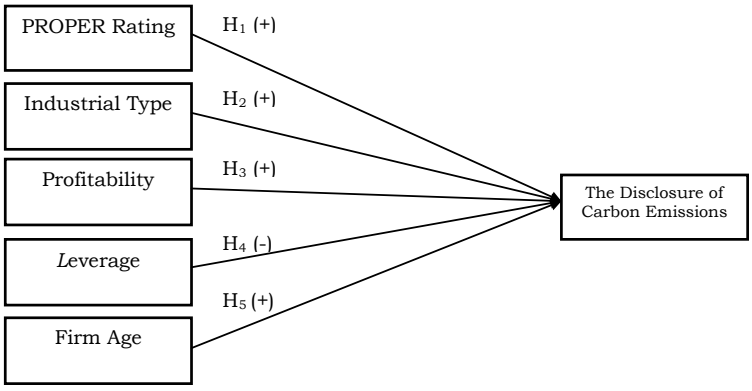

Figure 1. Theoretical Framework

RESEARCH METHOD

This research was a quantitative research with secondary data. The population in this study were 406 non-financial companies listed on the Indonesia Stock Exchange (IDX) period 2013-2016. A total of 32 company samples obtained by using purposive sampling technique with the following criteria:

Table 1. Research Sample Selection Process

No	Sample Criteria	Beyond Criteria	Total Companies
1	Non-financial companies listed on IDX		406
2	Non-financial companies included in the Performance Ranking Program (PROPER) in the period 2013 - 2016	(345)	61
3	Companies that disclosed carbon emissions (including at least one policy related to carbon emissions / greenhouse gases) are either implicitly or explicitly	(29)	32
Total unit of analysis during the observation period of 2013 - 2016			128
The number of outlier data released from the sample			(2)
Total units of data analysis			126

Source: Secondary data processed, 2017

The dependent variable in this research was the disclosure of carbon emission. While the independent variables in this study were PROPER ratings, profitability, leverage and firm age. The explanation of operational definition of each variable used in this research was presented in Table 2.

Table 2. Operational Definition of Variables

No	Variables	Definition	Measurement
1	Carbon Emission Disclosure	One type of environmental disclosure that includes greenhouse gas intensity and energy use as well as strategies and performance on GHG emission reduction targets as well as risks and opportunities in relation to climate change (Choi,*et al* 2013).	Using content analysis by comparing the total items disclosed and the maximum number of items that could be revealed (Choi,*et al*(2013)
2	PROPER Ratings	It is an assessment conducted by the Ministry of the Environment on companies in environmental management (Pradini & Kiswara, 2013).	Referring to the PROPER colour rating the company got 1 = Black / Very bad 2 = Red / bad 3 = Blue / good 4 = Green / very good 5 = Gold / very good (Pradini & Kiswara, 2013)
3	Industrial Type	The classification of the corporate type based on the level of operational sensitivity of the company to the environment from the processing of raw materials to become finished products (Jannah & Muid, 2014)	Using dummy variable where the value of 1 for companies belonging to carbon intensive industries that includes energy, transportation, materials and utilities, while the value of 0 for the opposite. (Jannah & Muid, 2014)

No	Variables	Definition	Measurement
4	Profitability	The ability of companies to generate profits (Gatimbu & Wabwire, 2016; Prado-Lorenzo et al., 2009)	(Gatimbu & Wabwire, 2016; Prado-Lorenzo et al., 2009)
5	Leverage	The comparison between total debt and assets owned by the company (Gatimbu & Wabwire, 2016)	(Gatimbu & Wabwire, 2016)
6	Firm Age	The length of the company stands (Ghomi & Leung, 2013).	Year of company standing (Ghomi & Leung, 2013)

Source: Various references, processed in 2017

Data collection in this study used documentation data, data taken from the annual report, financial report and sustainability report of companies listed on the Indonesia Stock Exchange (BEI) in 2013-2016. Techniques analysis used in this study were descriptive statistical analysis and multiple linear regression analysis with the fulfilment of the classical assumption test using the analytical tool SPSS software version 21. Multiple linear regression analysis was used to obtain an overview of how much influence the independent variable to the dependent variable. Before conducting hypothesis testing, previously classical assumption was conducted which consisted of normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. Multiple linear regression model was systematically expressed in terms of the following equations:

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e \quad \text{.....(1)}$$

Explanation:

Y	= Carbon Emission Disclosure	α	= Constant
X_1	= PROPER rating	$\beta_{1,2,3,4,5}$	= Regression Coefficient
X_2	= Industrial Type	e	= Error
X_3	= Profitability		
X_4	= Leverage		
X_5	= Firm Age		

RESULTS AND DISCUSSIONS

Descriptive statistics aimed to give an explanation of the minimum value, maximum value, mean value and standard deviation. The results of descriptive statistical analysis would be described in table 3 below:

Table 3. Descriptive Statistics

Variables	*N*	Minimum	Maximum	Mean	Std. Deviation
CED	126	0.05	0.83	0.35	0.22
PROPER Ratings	126	2.00	5.00	3.18	0.68
Industrial Type	126	0.00	1.00	0.25	0.43
Profitability	126	-5.88	40.18	8.37	8.75
Leverage	126	0.07	0.75	0.41	0.15
Firm Age	126	9.00	86.00	40.04	14.36
Valid N *(listwise)*	126				

Source: Secondary data processed, 2017

Table 3 showed that the number of units of analysis (N) was 126, obtained the average value of carbon emissions disclosure was 0.35, meaning that from 18 carbon emission disclosure indicators only 35% disclosed by companies in Indonesia. The PROPER rating variable showed

an average value of 3.18, meaning that firms in Indonesia evenly got PROPER 3 or in the blue zone.

The average value of the industrial type was 0.25, meaning that most companies were in the low profile category. The average value of profitability was 8.37, showing that the average company had a profitability of 8.37. The average leverage value was 0.41, this meant that companies in Indonesia had a debt level of 0.41 or 41% of total assets. The average value of the firm age was 40.04 where this value indicated that the average firm was in old age.

The classical assumption test in this research has gone through the transformation stage to produce normally distributed data. Determination of transformation model was based on the histrogram form of data that was not normally distributed. Afterwards, it was determined that the transformation form was with SQRT (k - x). The result of classical assumption test consisting of normality, multicollinearity, autocorrelation and heteroscedasticity tests would be described in table 4.

Table 4. Result of Classical Consumption Test

Classical Assumption Test	Result	Requirement	Explanation
Normality	0.442	Sig > 0.05	Normally distributed
Multicolinearity	Tolerance > 0.1 and VIF < 10	*Tolerance* value > 0.10 and VIF < 10	Free from Multicolinearity
Autocorrelation	0.915	Sig > 0.05	Free from Autocorrelation
Heteroscedasticity	34.146<153.198	C count < C table	Free from Heteroscedasticity

Source: *Output* SPSS secondary data processed, 2017

Based on the result of regression test which has been done obtained regression equation as follows:

$$\mathbf{Y = 0.070 + 0.073X_1 + 0.145X_2 + 0.002X_3 - 0.150X_4 + 0.001X_5 \ldots\ldots\ldots\ldots\ldots\ldots (2)}$$

The constant value of 0.070 could be interpreted that if all independent variables had a value of 0 or constant, then the carbon emission disclosure variable was worth 0.070. PROPER rating variable (X1) had a regression coefficient of 0.073 and showed a positive sign, it could be interpreted that if the executive compensation rate increased 1% would raise the disclosure of carbon emissions of 0.073. Variable of industrial type (X2) showed the value of 0.145 and showed a positive direction. So, it could be interpreted that if the type of industry increased 1% would increase the value of carbon emissions disclosure by 0.145.

The profitability variable (X3) had a value of 0.002 and indicated a positive direction which meant that if the profitability value rose 1%, it would raise the value of carbon emission disclosure by 0.002. The Leverage variable (X4) had a value of 0.150 and indicated a negative direction. This meant that if leverage value increased 1% would lower the value of carbon emission disclosure by 0.150. While the variable of firm age (X5) showed the value of 0.001 with a positive direction, meaning that if firm age increased 1% it would increase the value of carbon emissions disclosure by 0.001.

The Adjusted R value was 0.139. This meant that variables of PROPER rating, industrial type, profitability, leverage and firm age were able to explain the variation of carbon emission disclosure by 13.9% while the remaining of 86.1% was explained by other variables not examined in this study. Standard Error of the Estimate was 0.20522. The smaller the Standard Error of the Estimate value would make the regression model more accurate in predicting independent variables. Hypothesis test summary could be seen in table 5.

Table 5. Hypothesis Test

No	Hypothesis	β	Sig	α	Explanation
1	H_1: PROPER rating had a positive effect on carbon emissions disclosure	0.073	0.010	0.05	Accepted
2	H_2: Industrial type had a positive effect on carbon emission disclosure	0.145	0.002	0.05	Accepted
3	H_3: Profitability had a positive effect on carbon emissions disclosure	0.002	0.462	0.05	Rejected
4	H_4: Leverage had a negative effect on carbon emission disclosure	-0.150	0.205	0.05	Rejected
5	H_5: Firm age had a positive effect on carbon emission disclosure	0.001	0.357	0.05	Rejected

Source: Secondary data processed, 2017

The Effect of PROPER Rating on Carbon Emission Disclosure

The result of research showed that PROPER ratings have a positive effect on carbon emission disclosure, in line with research conducted by Pradini & Kiswara (2013). This showed that the PROPER rating obtained by the company was able to motivate the company in making the disclosure of environment more broadly. The higher the PROPER rating the company gained, the more disclosure the carbon emission would be.

This was because companies with high PROPER ratings were rated as companies with good environmental performance, so to meet the needs and maintain corporate image in the eyes of stakeholders, the company would do something that could convince their stakeholders. The high ownership of PROPER ratings by firms required companies to broaden disclosure including the disclosure of carbon emissions as a form of environmental responsibility and maintaining relationships with stakeholders.

The result of this study supported the stakeholder theory which stated that the success of an entity depended on how the way to maintain the relationship between the entity and stakeholders. Disclosure made by companies with good environmental performance was a good news that could satisfy the desire of stakeholders so that the relationship between the company and stakeholders remained harmonious.

The Effect of Industrial Type on Carbon Emission Disclosure

The result of the research showed that industrial type had a positive effect on carbon emission disclosure. This was because high profile companies such as companies engaged in energy, transportation, raw materials and utilities according to GICS, were companies that had a wider impact on environmental damage, required the company to do wider environment disclosure to gain legitimacy from the public (Jannah & Muid, 2014).

The results of this study were in line with the research undertaken by Choi *et al* (2013) and Ghomi & Leung (2013) which stated that the type of industry had a positive effect on carbon emission disclosure. Choi *et al* (2013) stated that companies with industrial type that produced higher carbon emissions would tend to be wider to disclose carbon emission disclosure because companies were aware of the impacts that could be harmful to society, so companies made disclosures to convince the public.

This result supported the theory of legitimacy which stated that companies with higher carbon intensity would tend to get pressure from the public to be more concerned about the environment. Thus, companies should provide carbon disclosure reports in order to withstand the pressure of the community and still get legitimacy from the public.

The Effect of Profitability on Carbon Emission Disclosure

The result of the research showed that profitability had a positive effect on carbon emission

disclosure. This result was in line with research conducted by Gatimbu & Wabwire (2016); Prado-Lorenzo et al. (2009); Stanny & Ely (2008) Freedman (2005), Lorenzo, *et al* (2009) and Pradini & Kiswara (2013), which stated that profitability had no effect on carbon emission disclosure. This showed that high profitability did not guarantee the company became more broadly in the disclosure of carbon emissions.

The result of this study indicated that although the company had a high level of profitability, in which the company had sufficient resources to be allocated to the disclosure of carbon emissions, did not affect the company's decision to disclose carbon emissions more widely. This was reflected from the inconsistent data of research results which indicated that companies such as PT Aneka Tambang Tbk had low profitability value but the company had high carbon emission disclosure. This was different from PT Unilever Indonesia, where the company had a high profitability value, but had a low disclosure value. While PT Merck Tbk had a high profitability value but also had a high disclosure value. This inconsistency was one of the reasons that profitability had no effect on carbon emission disclosure.

Pradini & Kiswara (2013) stated that companies with less profit levels would take advantage of the disclosure to gain legitimacy. Conversely, companies with high profits did not require such disclosure as the disclosure might disrupt corporate financial information that was perceived as sufficient to gain legitimacy and attention from stakeholders.

The results of this study did not support the theory of legitimacy which stated that companies with high profitability was easier in responding to pressure from the community because the company had more resources that could be used to perform the environmental disclosure compared with companies with low profitability. Environmental disclosure could enable companies to gain legitimacy from the public (Robert, 2011).

The Effect of Leverage on Carbon Emission Disclosure

The result of the research showed that leverage did not affect carbon emission disclosure. The results of this study were in accordance with previous research conducted by Gatimbu & Wabwire(2016) and Akhiroh & Kiswanto (2016) which showed the result that leverage had no significant effect on the disclosure of carbon emission. This indicated that companies with low debt were not necessarily doing more widely disclosure than companies that had high debt.

Lorenzo, *et al* (2009) stated that companies with high leverage would tend to make a number of information disclosures, including the disclosure of carbon emissions because companies could lower their agency costs and could cope with various conflicts between shareholders and their creditors. The condition was reflected from the results of research on leverage variable which showed that PT. Semen Baturaja Tbk which had low leverage value but also had low disclosure value. Different result was shown by PT. Indocement Tunggal Prakarsa Tbk (INTP) where the company had low leverage but had high disclosure value. This showrf that high leverage value did not affect the wide of carbon emission disclosure.

The result of this study did not support the stakeholder theory which stated that the higher the leverage level of the company, the greater the company's obligation to pay the debt, so that the company would tend to prioritize the debt repayment rather than the disclosure of the environment including the disclosure of carbon emissions that had considerable cost.

The Effect of Firm Age on Carbon Emission Disclosure

The result of the research showed that firm age did not affect on the disclosure of carbon emissions. The result of this study was in line with previous studies conducted by Chithambo & Tauringana (2014) which showed the result that firm age had no effect on carbon emission disclosure. This indicated that the older age of the company could not determine whether the company would disclose more broadly or not.

The result of the research showed that there was no influence between firm age and the disclosure of carbon emissions due to the long standing company tended to have obtained the

legitimacy from the community by conducting social responsibility programs (CSR) that were very helpful for the community, so the company tended not to disclose carbon emissions. Long-standing companies did not guarantee that the company would be wider in disclosing its carbon emissions.

Another thing that could prove that firm age did not affect the disclosure of carbon emissions was based on the sample company data, such as PT. Adaro Energy Tbk, which had a 10-year lifespan in 2014, was well below average and was a very young company but had a high carbon emission disclosure. Another sample which showed that firm age did not affect carbon emission disclosure was PT. Gudang Garam Tbk, which had a 56-year lifespan in 2014, was classified in very old age but the company only had a value that was below average and classified in very low disclosure. Such non-contradictory data was another reason for the inability of the firm age on the disclosure of carbon emissions.

The results of this study did not support with the implications of the legitimacy theory which stated that the company that had long standing would be more visible for the media and society, so that greater pressure would be accepted by the company. This made the company made efforts to legitimize the company by making various disclosures.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the study and discussion, it can be concluded that the PROPER rating and the type of industry can affect the company's decision to disclose carbon emissions. Meanwhile, profitability, leverage and firm age cannot affect the company's decision to disclose carbon emissions. Suggestions for further researchers that researchers can further use other indicators in determining the wide of carbon emissions disclosure. Then further research may add other variables that may affect carbon emissions disclosures such as, institutional ownership and firm size because companies owned by institutions and governments will be more adherent in enforcing regulations so that those variables may influence the disclosure of carbon emissions.

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