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The Influence of Social Pressure, Market Pressure, Shareholder Pressure and The Reputation of Public Accounting Firms on Carbon Emission Disclosure

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ABSTRACT

This study aims to examine and obtain empirical evidence regarding the effect of social pressure, market pressure, shareholder pressure, and public accounting firm's reputation on carbon emission disclosure in non-financial companies in Indonesia. In this study, carbon emission disclosure was used as the dependent variable, while the independent variables of this study are social pressure, leverage and profitability which represent market pressure, market capitalization and ownership concentration as proxies for shareholder pressure, and then public accounting firm's reputation.This research was conducted quantitative methods. The population in this study are non- financial companies listed on the Indonesia Stock Exchange in 2017-2019. The sample of this study was selected using purposive sampling method to obtain 39 non-financial companies that published sustainability reports and were listed consecutively on the Indonesia Stock Exchange from 2017 to 2019. Multiple regression analysis is the statistical method used to test the hypothesis in this study.The results of this study showed that social pressure have a significant effect on carbon emission disclosure. Meanwhile, market pressure with leverage and profitability proxies, then shareholder pressure represented by market capitalization and ownership concentration, and the reputation of public accounting firms doesn't have significant effect on carbon emission disclosure.

ABSTRAK

Penelitian ini bertujuan untuk mengkaji dan memperoleh bukti empiris mengenai pengaruh tekanan sosial, tekanan pasar, tekanan pemegang saham, dan reputasi kantor akuntan publik terhadap pengungkapan emisi karbon pada perusahaan non-keuangan di Indonesia. Dalam penelitian ini digunakan pengungkapan emisi karbon sebagai variabel dependen, sedangkan variabel independen penelitian ini adalah tekanan sosial, leverage dan profitabilitas yang mewakili tekanan pasar, kapitalisasi pasar dan konsentrasi kepemilikan sebagai proksi tekanan pemegang saham, kemudian reputasi kantor akuntan publik. Penelitian ini dilakukan dengan metode kuantitatif. Populasi dalam penelitian ini adalah perusahaan non keuangan yang terdaftar di Bursa Efek Indonesia pada tahun 2017-2019. Sampel penelitian ini dipilih dengan menggunakan metode purposive sampling untuk memperoleh 39 perusahaan non keuangan yang menerbitkan laporan keberlanjutan dan tercatat secara berturut-turut di Bursa Efek Indonesia dari tahun 2017 hingga 2019. Analisis regresi berganda adalah metode statistik yang digunakan untuk menguji hipotesis dalam penelitian ini. Hasil penelitian ini menunjukkan bahwa tekanan sosial berpengaruh signifikan terhadap pengungkapan emisi karbon. Sementara itu, tekanan pasar dengan leverage dan profitabilitas proxy, kemudian tekanan pemegang saham diwakili oleh kapitalisasi pasar dan konsentrasi kepemilikan, dan reputasi kantor akuntan publik tidak berpengaruh signifikan terhadap pengungkapan emisi karbon.

INTRODUCTION

The interrelated natural phenomenon of global warming and climate change is an environmental issue that are of concern to various parties in the world at this time. The increasing temperatur of the earth has contributed to extreme and unpredictable climate change.

The rising earth's temperature is caused by carbon and greenhouse gases, which are also increasing from year to year over a long period of time. This situation has an effect on political and economic issues that are increasingly crucial for most countries (Choi et al,. 2013). This global environmental issue is a serious concern because of the various problems that arise and detrimental to various parties around the world. Human activities carried out mostly by companies are the main contributors to climate change where operational activities produce high levels of greenhouse gases and resource management that is not eco-friendly is one of the triggers for global warming. Basically,the intention of establishing an entity is to make a profit from the business activities. Companies tend to achieve targets of high economic growth, so it is possible for them to ignore environmental sustainability.

In 1997, United Nations issued the Kyoto Protocol as a guidance to reduce world emissions. Based on United Nation Framework Convention on Climate Change (UNFCCC) data (cited by Kardono, 2010), emissions trading, the existence of unity between industrialized countries and developing countries in reducing greenhouse gas emissions, and emission absorption projects by Annex 1 countries are mechanisms for efforts to overcome soaring emissions. Indonesia ratified the Kyoto Protocol through Law No.17 of 2004 to participate in the fight against increasing carbon emissions. According to the Direktorat Jenderal Pengendalian Perubahan Iklim (DJPPI), Indonesia has a commitment to reduce carbon and greenhouse gas emissions by 26% independently and 41% if it gets support form other countries with a target of 2020.

The existence of the Kyoto Protocol brings up the term carbon accounting, which is a requirement for companies to recognize, measure, record, present, and disclose about carbon emissions (Irwhantoko & Basuki, 2016). Carbon emission disclosure can be a form of company efforts and participation in reducing carbon emissions. In Indonesia, there are still a few companies that carry out carbon emission disclosures because these disclosures are still voluntary. With the regulations on carbon emission reduction, the triple bottom line concept needs to be implemented by companies that initially onlu focus on profit. The triple bottom line is a concept of doing business with a focus on profit, social, and concern for environmental sustainability (Elkington, 1998).

Berthelot & Robert (2011) explained that legitimacy from stakeholders and avoidance from increased operating costs, reduced demand, reputational risk, fines, and penalties are considerations for a company to realize the disclosure of carbon emissions information. Sustainability reports and annual reports are sources of data related to emissions generated and then disclosed by the company (Choi et al., 2013).

There are several studies that have been conducted to find out several aspects that can influence a company on carrying out carbon emission disclosures, such as research by Choi, et al (2013); Luo, et al (2013); Gonzalez & Ramírez (2016); Irwhantoko & Basuki (2016); and Budiharta & Kacaribu, (2020). These various studies have different results, so this is one of the reasons for re-conducting research on this topic. Research by Gonzalez & Ramírez (2016) found that Company Size, ROA, Financial Risk, companies listed on the IBEX35 and FT500 indexes, and companies with low ownership concentration show a stronger influence on high CDP scores, with the exception of leverage which does not affect high and low CDP scores in Spanish companies.

This study aims to examine the factors that influence the extent of carbon emissions disclosures in non-financial companies in Indonesia, which include social pressure, leverage and profitability which represent market pressure, market capitalization and ownership

concentration as a representation of shareholder pressure, as well as the reputation of public accounting firms.

Carbon emission disclosure is the company's efforts to reduce carbon emissions due to the company's operating activities which are then disclosed in a report as a form of their commitment to mitigating environmental issues. Companies conduct carbon emission disclosure with the aim of legitimizing the company's existence, to meet the demands of the stakeholders, and as a form of corporate social responsibility in the commitment to reduce carbon emissions (Clarkson et al., 2008). Companies that disclose emissions information for their production activities will be included in a sustainability report that is published separately or included as part of the annual report published by the company every year.

Legitimacy theory is focused on the bonds that mediate between companies and society in accordance with the regulations that have been proclaimed by the government so as to create alignments. Suchman (1995) defines legitimacy as a perception that an entity's actions are acceptable if they are in accordance with established norms, values, provisions and boundaries. Environmental disclosure is the company's response to economic, social, and political environmental pressures and the company's efforts to get legitimacy from society in order to avoid the legitimacy gap (Guthrie & Parker, 1989).

Stakeholder theory explains that company activities must be aligned with the expectations of stakeholders (Kılıç & Kuzey, 2019). In addition to focusing on operational activities, the company must be able to provide benefits that can be used as evaluation material for stakeholders in making decisions. However, this situation is due to the fact that stakeholders are parties that can influence or be affected by the achievement of organizational goals (Freeman, 1984). Thus, the disclosure of corporate environmental information is a step that can be taken by companies in obtaining support from stakeholders. Stakeholder theory states that all stakeholders have the right to information related to company operations that are considered to influence them in providing clarity, such as emission reports, sponsorship, and reports on managing policies (Hapsoro & Ambarwati, 2018).

Social pressure is the pressure from society to the company (Luo et al., 2012). The public tends to give a strict supervision to large companies because the company's operational activities are more visible and highlihted by the public than small companies (Al-tuwaijri et al., 2004). The underlying reason for the social pressure on companies is due to public anxiety about the phenomenon of global warming and climate change, which is one of the causes of waste from company operations.

This social pressure refers to company size. In making environmental sustainability disclosures, companies need sufficient finance and skills as a resources (Chithambo & Tauringana, 2014). The costs of reducing pollution and disclosure will be easily covered by large companies due to their adequate resources (Freedman & Jaggi, 2005), so it can be assumed that larger companies will be more confident in disclosing carbon information than smaller companies. Public expectations in the struggle against environmental issues will encourage companies to disclose carbon information so that the legitimacy of the company is no longer questioned (Mobus, 2005). Instead, it will be easy for a legitimacy gap to occur if the company does not disclose information because the public will have an opinion that the company is not committed to fight climate change (Gonzalez & Ramírez, 2016). Based on stakeholder theory, the larger companies will also receive strong pressure from stakeholders who make the company more compliant because they will also oversee the company's behavior in environmental sustainability. According to this description, the proposed hypothesis is as

follows :

H1 : Social Pressure has a positive effect on Carbon Emission Disclosure.

Leverage is a variable that represents market pressure. Leverage is related to a company's finances. Creditors are one of the stakeholders who can influence the company where they act as a source of external funding for the company. High pressure to disclose carbon information will be given to companies with greater liabilities (Gonzalez & Ramírez, 2016). This situation is based on the continuity of the company's operations depending on financial resources controlled by creditors (Choi, 1999), so it can be said if the greater a company holds on to debt financing, it will increase the level of management will respond to criticism from stakeholders regarding the role of company in social responsibility.

The pressure received by companies with high leverage to disclose carbon information aims to reduce the possibility of information asymmetry, in which relevant information is needed by stakeholders when making decisions (Lang & Lundholm, 2000). Therefore, that companies with higher levels of leverage will make the company more extensive in conducting carbon emission disclosure. Consistent with stakeholder theory, under the supervision of stakeholders will make companies more compliant and more likely to disclose carbon information in order to respond stakeholder pressure. According to this description, the proposed hypothesis is as follows :

H2 : Leverage has a positive effect on Carbon Emission Disclosure

Profitability is an independent variable that proxies market pressure in this study. The high level of profitability reflects that the company has good financial performance, so it is possible that the company will disclose environmental information. Bewley & Li (2000) explained that companies with high profitability will be in a safe position to handle the costs of reducing emissions and disclosing credible sustainability information. In addition, companies with high profitability are considered capable of contributing to environmental sustainability (Irwhantoko & Basuki, 2016).

Based on legitimacy theory, public pressure will be given to companies whose corporate activities are more profitable (Magness, 2006), because they are required by the public to always be aware of the environment. Therefore, responding to pressure from the public, companies can conduct carbon emission disclosures so as to avoid legitimacy gaps (Prasetya & Yulianto, 2018). According to Stanny & Ely (2008), companies with more favorable conditions will be in a better situation to meet climate change costs, thus companies will be better able to deliver positive news to investors that facilitate securing company resources. Thus, the hypothesis can be formed as follows :

H3 : Profitability has a positive effect on Carbon Emission Disclosure

Market capitalization is an independent variable in this study that represents shareholder pressure. Shareholders can pressure company managers to disclose other important information (Lee et al., 2013), especially for companies with high levels of market capitalization. Rifqiawan (2015) argue that through the market capitalization, the size of the company can be known on the stock exchange. The higher of market cap level indicates that the company's shares are highly valueable, which will arouse the interest of many investors to invest.

Companies that are growing and thus increasing their market capitalization will feel greater pressure from shareholders and other interested parties to comply with various

regulations (Indraswari & Mimba, 2017). This situation will encourage companies to be clearer in showing their accountability to all stakeholders up to the public by disclosing information related to carbon in more detail. Cooke (1989) argue that disclosures made by companies with high market capitalization and listed in the stock exchange index imply that they have conveyed information in a transparent manner. Companies that have disclosed environmental information, especially carbon emission information transparently, will find it easier to get public legitimacy so that business continuity can be more secure in the long term, which situation will also be beneficial for stakeholders. In that case, it is in line with the hypothesis in this research as follows:

H4 : Market Capitalization has a positive effect on Carbon Emission Disclosure

Ownership concentration is an independent variable that proxies for shareholder pressure. Ratnadi & Ulupui (2016) argue that ownership concentration is the percentage of company's share ownership by substantial shareholders. A company's shares will be more concentrated if the majority are owned by a few shareholders. Otherwise, if the ownership concentration of a company is low, it indicates that the company's shares are owned by many stockholders. Companies with a higher number of shareholders, will be subject to increased pressure by their shareholders. The higher number of shareholders in a company allows for more effective monitoring of the company's operations and strategies (Dam & Scholtens, 2013).

Responding to the pressure on companies from shareholders, attempts are made to carry out voluntary disclosures. According to Cullen & Christopher (2002), companies with lower ownership concentration will be more compliant in disclosing information, aiming to reduce information asymmetry between entities and stockholders. The company's actions in disclosing information can be a rationale for shareholders to inform wiser decision-making (Cormier et al., 2005), as the situation as defined by stakeholder theory. In addition, companies that disclose information, especially information on carbon emissions, will also avoid the threat of revoking legitimacy from society because they perceive companies to be more open and transparent in showing their commitment to addressing environmental issues. In this basis, the formulated hypothesis is as follows :

H5 : Ownership Concentration has a negative effect on Carbon Emission Disclosure

The audit process has an important role in improving the quality of information disclosed in company's reports (Zorio et al., 2013). Titman & Trueman (1986) argue that a high quality public accounting firm will produce high quality information. The independence and prudence of top quality public accounting firm auditors in investigating misstatements and fraud should not be doubted. A reputable public accounting firm with unquestionable quality is likely to encourage their clients to make comprehensive information disclosures.

The extent of information disclosure reflects the quality of the information because the disclosure will allow stakeholders who do not have sufficient information to better assess the environmental impact of the company's operations. According to Bewley & Li (2000), auditors from reputable public accounting firms also tend to require more environmental disclosures because they are expected to be better able to assess the potential environmental impacts of company operations. Thus, the hypothesis can be formed as follows :

H6 : Public Accounting Firm's Reputation has a positive effect on Carbon Emission Disclosure

RESEARCH METHODS

Research Variables in this study, carbon emission disclosure was measured using the carbon emission disclosure checklist developed by Choi et al., (2013). The index was adopted from the information request sheets provided by CDP. Calculation on the carbon emission disclosure index is carried out by giving a 1 score to each item disclosed according to the checklist, and a 0 score if it does not disclose the information. The scores are totaled and divided by the total items in the checklist, which is 18, then multiplied by 100%.

Table 1. Carbon Emission Disclosure Checklist

Category	Item	GHG Emission Details
Climate change: risks and opportunities	CC1	Assessment/description of the risks (regulatory, physical or general) relating to climate change and actions taken or to be taken to manage the risks
	CC2	Assessment/description of current (and future) financial implications,business implications and opportunities of climate change
GHG Emission	GHG1	Description of the methodology used to calculate GHG emissions (e.g. GHG protocol or ISO)
	GHG2	Existence external verification of quantity of GHG emission if so by whom and on what basis
	GHG3	Total GHG Emissions – metric tones CO2-e emitted.
	GHG4	Disclosure of scopes 1 and 2, or scope direct GHG emissions
	GHG5	Disclosure of GHG emissions by sources (e.g. coal, electricity, etc.)
	GHG6	Disclosure of GHG emissions by facility or segment level
	GHG7	Comparison of GHG emissions with previous years
Energy Consumption	EC1	Total energy consumed (e.g. tera-joules or peta-joules)
	EC2	Quantification of energy used from renewable sources
	EC3	Disclosure by type, facility or segment
GHG Reduction and Cost	RC1	Detail of plans or strategies to reduce GHG emissions
	RC2	Specification of GHG emissions reduction target level and target year
	RC3	Emissions reductions ad associated costs or savings
	RC4	Cost of Future emissions factored into capital expenditure planning
Carbon Emission Accountability	ACC1	Indication of which board committee (or other executive body) has overall responsibility for actions related to climate change
	ACC2	Description of the mechanism by which the board (or other executive body) reviews the company's progress regarding climate change

Source: Choi et al., (2013)

This study uses company size as a representation of social pressure, because larger companies will be more subject to pressure exerted by the public and stakeholders. Company size is measured using the natural logarithm (ln) of total assets. Leverage variable and profitability variable represent market pressure. Leverage is obtained by dividing the amount of company debt by the number of company assets. Profitability of this study uses Return on Assets (ROA), which is the comparison of net income with total assets.

Furthermore, in this study, shareholder pressure is represented by market capitalization and ownership concentration variables. Market capitalization is measured using a dummy variable where value 1 for companies listed in the LQ45 index and value 0 for companies not listed in the LQ45 index. Ownership concentration is measured using a dummy variable where the value is 1 for companies where 40% or more of the outstanding shares are owned by 3 or less shareholders and the value is 0 for companies where the outstanding shares are owned by

more than 3 shareholders.

The reputation of a public accounting firm is measured using a dummy variable which is divided into two categories. Code 1 will be given to companies whose financial statements are audited by public accounting firms from the Big Four, then code 0 will be given to companies whose financial statements are audited by public accounting firms excluding the Big Four. The Big Four public accounting firms are KPMG, Deloitte, Ernst & Young, and Price water house Coopers.

This study used multiple regression analysis to measure the strength of correlation between two variables or more and points the direction of correlation between independent variables with dependent variable. Multiple regression model used in this research is :

$$CED = a + \beta 1\ SIZE + \beta 2\ LEV + \beta 3\ ROA + \beta 4\ MARKETCAP + \beta 5\ OC + \beta 6\ Rep\_KAP + e$$

Description :

CED	: *Carbon Emission Disclosure*
α	: Constant
β1 – β6	: Regression Coefficient
SIZE	: Company size
LEV	: *Leverage* (Total Debt / Total Asset)
ROA	: *Return on Assets* (Measurement for Profitability)
MARKETCAP	: Market Capitalization (LQ45 index listing
companies) OC	: *Ownership Concentration*
Rep_KAP	: Public Accounting Firm's
Reputation e	: *Error*

RESULT AND DISCUSSION

The object of this research is non-financial companies listed on the Indonesia Stock Exchange (IDX) during 2017-2019. Purposive sampling method is used to determine the research sample. A total of 117 companies were selected as research samples according to the criteria based on this method. An explanation of sampling is shown in Table 2.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CED	117	5,56	94,44	47,8461	20,56173
SIZE	117	28,55	33,49	30,8909	1,00862
LEV	117	0,13	0,92	0,5359	0,18952
ROA	117	-0,06	0,53	0,0621	0,09856
Valid N (listwise)	117				

Source: Secondary data processed, 2022

Table 3. Distribution Frequency of Market Capitalization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non LQ45 Index	53	45,3	45,3	45,3
	LQ45 Index	64	54,7	54,7	100,0
	Total	117	100,0	100,0	

Source: Secondary data processed, 2022

Table 4. Distribution Frequency of Ownership Concentration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Outstanding Shares is owned by more than 3 shareholders	14	12,0	12,0	12,0
	40% or more of the shares outstanding is owned by 3 or less shareholders	103	88,0	88,0	100,0
	Total	117	100,0	100,0	

Source: Secondary data processed, 2022

Table 5. Distribution Frequency of Public Accounting Firm's Reputation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non Big Four	26	22,2	22,2	22,2
	Big Four	91	77,8	77,8	100,0
	Total	117	100,0	100,0	

Source: Secondary data processed, 2022

Based on the table 2, it can be seen the lowest and the highest values, along with the mean and standard deviation of the 117 observed data. Carbon emission disclosure (CED) which is the dependent variable in this study shows a mean value of 47,8461 which means that on average companies disclose carbon emissions by 8 points out of a total of 18 points of carbon emission disclosure. The standard deviation of the CED variable is 20,56173, which is not more than the mean value, so it can be said that the data deviation on the CED variable is relatively low. In addition, the minimum value shown in the CED variable is 5,56 and the maximum value in this variable is 94,44.

Size is a representation of the social pressure variable which is an independent variable by indicating the size of the company and is measured using the natural logarithm of the company's total assets. Based the table 2, the social pressure (SIZE) variable has a minimum value of IDR 28,55 trillion and a maximum value of social pressure (SIZE) is IDR 33,49 trillion. The mean value of this variable is IDR 30,8909 trillion with a standard deviation of 1,00862. That means the social pressure (SIZE) variable has relatively homogeneous data because the standard deviation value is smaller than the mean value.

Leverage is measured by total liabilities divided by total assets. This variable is a proxy for market pressure. The leverage variable (LEV) has a maximum value of 0,92 and a minimum value of 0,13. In addition, the mean value of the leverage variable is 0,5359 with a standard deviation of 0,18952, where the standard deviation is below the average, which means that leverage has a low level of data variation.

Furthermore, market pressure is represented using the profitability variable. The profitability variable (ROA) shows a minimum value is -0,06 and a maximum value is 0,53. Then, the mean value of the profitability variable is 0,0621 and the standard deviation of this variable is 0,09856 which is higher than the calculated mean value so that it can be said that profitability has a high level of data variation.

The market capitalization variable (MARKETCAP) is a dummy variable whose measurement uses codes with numbers 1 and 0. According to the results listed in table 4, there are 64 companies or 54,7% of the total sample, whose companies are listed in the LQ45 index, while the other 53 companies or 45,3% of the total sample are companies that are not included

in the LQ45 index.

Dummy variable to measure ownership concentration (OC) has 0 as lowest value and the highest value of 1. As shown in table 5, 103 companies or 88% of the total 117 companies, the outstanding shares with a minimun ownership of 40% are owned by no more than 3 shareholders, which can be concluded that the majority of the company's shares are owned by a few shareholders. The remaining, 12% or 14 companies from the total sample, the outstanding shares are owned by many shareholders with a proportion of ownership less than 40%, so there is no dominant ownership in these 14 companies.

The independent variable of public accounting firm's reputation (Rep_KAP) also uses dummies. Based on the table 6, there are 91 companies audited by KAP Big Four or equivalent to 77,8% of the total sample of 117 companies, while 26 other companies or 22,2% of sample companies, stated that their financial statements were not audited by one of the big four public accounting firms.

The data that has been obtained can be regressed if it has crossed the classical assumption test. There are four kinds of classical assumption tests used in this research: normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

Table 6. Classic Assumption Test

Model	Normality		Multicollinearity		Heteroscedasticity	Autocorrelation
	Asymp. Sig. (2-tailed)		Tolerance	VIF	Glejser Test	Durbin-Watson
1	0,063	Constant			0,410	1,910
		SIZE	0,589	1,699	0,237	
		LEV	0,743	1,346	0,793	
		ROA	0,824	1,213	0,464	
		MARKETCAP	0,608	1,644	0,907	
		OC	0,965	1,036	0,083	
		Rep_KAP	0,868	1,151	0,270	

Source: Secondary data processed, 2022

The normality test listed in Table 6 was processed using a non-parametric statistical test, namely the One Sample Kolmogorov–Smirnov test. This test displays the significant amount of Asymptotic Sig. (2 tailed) in the model is 0,0063. It can be summed up that the data has been normally scattered because it has a significance value greater than 0,05.

From the table 6, it can be deduced that this study has passed the multicollinearity test. The entire tolerance value evidence this in each variable passed 0,10. In addition, all the VIF amount shows a number under 10.

Based on the table 6, displays the outcome of the glejser test. The results show that all variables have a significance value exceeding the limit value of 0,05. It can be ascertained that the regression models do not deliver any heteroscedasticity.

Table 6 shows the result of the durbin-watson test is 1,910. It is known that the dU value is 1,8073 and the value of 4-dU is 2,1927. Based on the results, it is concluded that the regression model do not have autocorrelation issues.

Table 7. Hypothesis Test

Model		Prediction	Coefficient	t	p-value
1	(Consta t)		-170,720	-2,617	0,010
	SIZE	+	8,343	3,837	0,000
	LEV	+	-50,328	-4,886	0,000
	ROA	+	6,388	,340	0,735
	MARK ETCAP	+	-4,801	-1,113	0,268
	OC	-	-9,426	-1,794	0,076
	Rep_K AP	+	-2,123	-,491	0,624

Source: Secondary data processed, 2022

Table 6 shows the result of the durbin-watson test is 1,910. It is known that the dU value is 1,8073 and the value of 4-dU is 2,1927. Based on the results, it is concluded that the regression model do not have autocorrelation issues.

Table 7 shows the results of the multiple regression. Overall, the multiple regression shows that the model fits and is statistically significant. The value of F statistic is 6,558 with p-value is0,000. The regression has an adjusted R square (R2) of 22,3%. The t test or partial test is conducted to determine whether the dependent variable is influenced by individual independent variables. If the research variable has significance < 0,05 and has a coefficient coefficient that is in line with the research hypothesis, it indicates a significant influence on the dependent variable.

First, social pressure (SIZE) is positively affects and significant with carbon emission disclosure with a coefficient 8,343 and p-value 0,000. Of course, these results are per the expected hypothesis so that H1 can be supported. The findings of this research is persistent with research conducted by Luo, et al (2012) and Peng, et al (2014). It is proven in this study that large companies have a higher level of carbon emission disclosure because they have more resources than small companies with fewer resources, thus affecting the disclosure of carbon emissions information that is not comprehensive. The results of this study are in line with legitimacy theory because larger companies must be more prominent to legitimize their company's operations for the long term, they tend to carry out carbon emission disclosure as a form of social responsibility. In addition, the results of this study are also consistent in terms of stakeholder theory which explains that large companies will be more subject to stakeholders and will be more encouraged to carry out carbon emission disclosure with the aim of showing that their actions are legitimate and consistent as a good company by following government regulations in combating climate change issues (Brammer & Pavelin, 2006).

The results of the second hypothesis test show that leverage has no impact on carbon emission disclosure. The coefficient value of this variable is -50,328 with p-value 0,000. Because the coefficient on leverage show a negative direction and different from the research hypothesis, so that H2 is not supported. The findings of this research is persistent with research conducted by Cormier & Magnan (2003) and Luo, et al (2013). The test results show that high leverage companies will have a low level of carbon emission disclosure. The reason is that companies will prioritize paying off their liabilities to creditors to maintain trust and ensure business continuity rather than making detailed disclosures related to carbon emissions, where the disclosure is still voluntary. The results of this study are inconsistent with legitimacy theory and

stakeholder theory, which suggest that high leverage companies will disclose carbon emissions more widely in response to pressure from stakeholders.

The results of the third hypothesis test show that profitability does not have a significant influence to carbon emission disclosure (coefficient = 6,388; p-value = 0,735). Thus, H3 is not supported. The findings of this research is persistent with research conducted by Eleftheriadis & Anagnostopoulou (2014) and Pratiwi & Sari (2016). Based on these results, it can be seen that companies with high profitability do not necessarily disclose carbon emission information, which is due to the high costs required, thus making companies have a low level of carbon emission disclosure. The findings of this study do not prove legitimacy theory and stakeholder theory, which explain that companies with high profit levels or qualified resources will disclose carbon emissions in detail to achieve public legitimacy and provide relevant carbon information to company stakeholders.

The results of the fourth hypothesis test show that market capitalization does not have a significant effect to carbon emission disclosure. Thus, H4 is rejected. The regression coefficient of this variable is -4,801 and the level significance is 0,268. The findings of this research is persistent with research conducted by Domench (2003). The results of this study shows that not all companies that have a large market capitalization and are listed in the LQ45 stock index disclose carbon emissions widely, so this study cannot be in accordance with legitimacy theory and stakeholder theory which explain that shareholder pressure will make companies disclose about carbon as a form of environmental information transparency so the company is no longer questioned about the legitimacy that will affect business continuity and investment value of shareholders and other investors.

The results of the fifth hypothesis test show that ownership concentration does not have a significant effect to carbon emission disclosure, which means that H5 is rejected. The regression coefficient of this variable is -9,426 and the level significance is 0,076. The findings of this research is persistent with research conducted by Roberts (1992) and Ghomi & Leung (2013). The test results show that the high level of shares concentrated in a company does not affect the extent of the company's carbon emission disclosure. These results make this study inconsistent with legitimacy theory and stakeholder theory, which explain that a company with a low level of ownership concentration indicates that the company has a large number of shareholders, so the company will receive considerable pressure from them to disclose carbon emissions.

The results of the sixth hypothesis test show that public accounting firm's reputation does not have a significant effect to carbon emission disclosure, which means that H6 is rejected. The regression coefficient of this variable is -2,123 and the level significance is 0,624. Therefore, companies that are audited by a reputable public accounting firm, namely the big four, do not influence the company to disclose detailed information related to carbon emissions. The results of this study cannot support legitimacy theory or stakeholder theory which explains that companies whose audits are carried out by reputable public accounting firms will be more extensive in disclosing information which also includes carbon emission information. The findings of this research is persistent with research conducted by Wardhani & Kawedar (2019).

CONCLUSION

The results showed that the carbon emission disclosure in non-financial companies in Indonesia was positively influenced by social pressure. Meanwhile, market pressure which is represented by leverage and profitability variables, has no effect on carbon emission disclosure. In addition, market capitalization and ownership concentration, which represent shareholder

pressure, and then public accounting firm's reputation are proven to have no significant effect on carbon emission disclosure in non-financial companies listed on the Indonesia Stock Exchange in 2017- 2019.

This study has limitations. The first limitations is many non-financial companies listed on the IDX do not published sustainability reports in a row every year, so the research sample is limited to 39 companies out of a total 386 non-financial companies. Second, there is subjectivity when conducting content analysis in measuring carbon emission disclosure in the sustainability reports of each sample company. Another limitation is that based on the results of adjusted R2 test, it is known that the factors of social pressure, leverage, profitability, market capitalization, ownership concentration, and public accounting firm's reputation which are independent variables in this study can explain the variation of the dependent variable, namely carbon emission disclosure, no more than 22,3% and the other 77,7% is explained by other variables were not included in the model.

Based on the limitations encountered in this study, suggestions for futher research are that companies in Indonesia are expected to be more active in disclosing about carbon emissions, so that public trust is stronger and makes the research easier. Then, the future research is expected to expand the research period to review the development of carbon emission disclosure in the company and add more research samples to make better statistical results. The last suggestions is that further research can consider to add other variables that have not been used in this study that can affect on carbon emission disclosure, such as company growth, regulatory pressure, and age of the firm.

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