The Determinants of Carbon Emission Disclosure Moderated by Institutional Ownership

by Badingatus Solikhah

Submission date: 08-Feb-2021 11:10AM (UTC+0700)
Submission ID: 1504140378
File name: The_Determinants_of_Carbon.pdf (171.77K)
Word count: 6334
Character count: 35298

Accounting Analysis Journal 8(2) (2019) 135-142

AAJ ACCOUNTING ANALYSIS JOURNAL

Accounting Analysis Journal

https://journal.unnes.ac.id/sju/index.php/aaj

The Determinants of Carbon Emission Disclosure Moderated by Institutional Ownership

Kurniawan Krisnawanto*[1] and Badingatus Solikhah[2]

[1,2]*Accounting Department, Faculty of Economics, Universitas Negeri Semarang*

ARTICLE INFO

Article History:
Received January 15, 2019
Accepted March 1, 2019
Available July 30, 2019

Keywords:
carbon emission disclosure; profitability; environmental performance; media exposure; institutional ownership

ABSTRACT

The purpose of this study is to analyze the influence of company size, profitability, environmental performance, media exposure to carbon emission disclosure and institutional ownership as a moderating variable. The population in this study was all companies which published sustainability reports and were listed on the Indonesia Stock Exchange in 2014-2018 with a total of 43 companies. The sample in this study was included as saturated samples so that the total sample was 43 companies with 132 units of analysis. The data analysis techniques used were descriptive statistical analysis and inferential statistical analysis in Eviews9. The results show that environmental performance has a significant positive effect on carbon emission disclosure. Meanwhile, company size, profitability, and media exposure do not affect on carbon emission disclosure. Then, institutional ownership weakens the effect of environmental performance on carbon emission disclosure. Institutional ownership also cannot moderate the effect of company size, profitability, and media exposure on carbon emission disclosure. Based on the results of the study, it can be concluded that the factor that is proven to affect carbon emission disclosure is environmental performance. Further researchers are advised to use other measuring devices so that they can get results from other perspectives.

© 2019 The Authors. Published by UNNES. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/)

INTRODUCTION

Indonesia as a large archipelagic country, is one of the countries vulnerable to the negative impacts of climate change National Development Planning Agency, 2014). Based on the observations from Air Visual (2018), Indonesia is a country with the number 1 pollution level in Southeast Asia with a drift dust particulate index or PM 2.5 of 42.0mg / m3 air, with a standard size of good air quality according to WHO stipulations is 12mg / m3 air. NASA (2019) also mentioned that the amount of CO^2 in the world always experiences a significant increase from year to year.

There needs to be awareness from various parties to reduce the increase of CO^2 gas. There is no exception for industry players. The high growth of the industry will result in a decline in environmental quality (Pratiwi & Sari, 2016). Setiawan et al., (2014) said that recently reducing carbon dioxide emissions from industry is an important requirement that must be considered by all of us. Therefore, in order to prevent the decrease of environmental quality caused by industrial activities, then industry players must pay attention to the amount of carbon emissions they emit.

The Government of the Republic of Indonesia has issued various policies to reduce the amount of carbon emissions. One of them is Law of the Republic of Indonesia Number 40 Year 2007 Article 74 Paragraph 1 concerning limited liability companies, that is, companies which carry out business in the field of natural resources are required to carry out social and environmental responsibilities. Regulations issued by the government aim to minimize environmental degradation caused by industrial activities. According to Giannarakis et al., (2017), companies have an important role to play in reducing their greenhouse gas emissions because stakeholders such as shareholders and consumers will put pressure on companies to reduce their greenhouse gas emissions. One of the ways to assess and evaluate a company's portfolio is to analyze the Carbon Emission Disclosure that they present (Ernest & Young, 2014).

Carbon Emission Disclosure is one of the forms of the company's contribution to the problem of global warming and is usually reported in annual reports or in sustainable reports. Through the disclosure of carbon

* E-mail: kkrisnawanto@gmail.com
Address: L2 Building 2nd floor, Campus Sekaran, Gunungpati, Semarang, Indonesia, 50229

DOI 10.15294/aaj.v8i2.32347 p-ISSN 2252-6765 e-ISSN 2502-6216

emissions, the stakeholders will assess that the company is capable of being responsible for delivering information about the environmental performance. However, in Indonesia, the practice of disclosure of carbon emissions is still voluntary disclosure or is done voluntarily and the practice is still rarely done by business entities (Jannah & Muid, 2014). So that not many companies want to disclose the carbon emissions they produce. Carbon Emission Disclosure has several benefits among others, obtaining legitimacy from stakeholders, improving company image, increasing company value, and being useful for the community because they can find out how much carbon emissions are produced, how the emissions management conducted by companies to control risk and the impact on the surrounding community.

Presentation of information regarding Carbon Emission Disclosure in accordance with theory of legitimacy which explains that the organization or company must ensure that its operations are still at the values and norms of the community that apply to the surrounding environment. Thus, to gain legitimacy from the community, the company must openly disclose company information relating to its business activities, including disclosure of carbon emissions so that the community knows and understands that its operations are in line with the values and norms prevailing in the surrounding environment. This theory can be used to explain the effect of company size, profitability, environmental performance, and media exposure on carbon emission disclosure.

Clarkson (1995) explained that a company is not an entity that only stands for its own interests, but must also provide benefits for its stakeholders. Stakeholder theory can be used to explain institutional ownership variable. The role of stakeholders in the company's activities is to carry out the supervisory function up to put pressure on the company's management.

Studies conducted by Jannah & Muid, (2014); Choi et al., (2013); Suhardi & Purwanto, (2015); Peng et al, (2014); Prafitri & Zulaikha, (2016); Halimah & Yanto, (2018); Salbiah & Mukhibad, (2018) show that company size has a significant effect on carbon emission disclosure. However, there are differences in the results of research conducted by Irwhantoko & Basuki, (2016); and Cahya, (2016). They found that company size has no effect on carbon emission disclosure.

Based on the studies conducted by Choi et al., (2013); Jannah & Muid, (2014); Peng et al., (2014); Akhiroh & Kiswanto, (2016); Halimah & Yanto, (2018) show that financial performance has a positive effect on Carbon Emission Disclosure. Different research results are shown by Irwhantoko & Basuki, (2016); Prafitri & Zulaikha, (2016); Pratiwi & Sari, (2016), which show there is no effect between profitability on Carbon Emission Disclosure.

The next factor that can affect carbon emission disclosure is environmental performance. Based on the studies conducted by Jannah & Muid, (2014); Suhardi & Purwanto, (2015); Akhiroh & Kiswanto, (2016); Cahya, (2016); and Giannarakis et al., (2017), show that environmental performance does not have a significant effect on environmental disclosure, including Carbon Emission Disclosure. As well as it is contrary to the result of research conducted by Prafitri & Zulaikha, (2016), which shows that financial performance has a positive influence on carbon emissions disclosure.

Based on the studies conducted by Jannah & Muid, (2014); and Safitri et al., (2018), they suggested that media exposure has a significant positive effect on carbon emission disclosure. Inversely proportional to the research conducted by Pratiwi & Sari, (2016); and Cahya, (2016), which state that media exposure has no effect on carbon emission disclosure

This study aims to examine the effect of company size, profitability, environmental performance, and media exposure on carbon emission disclosure with institutional ownership as a moderating factor in the non-financial companies in the 2014-2018. The novelty of this study is the presence of institutional ownership as a moderating variable. Institutional ownership is chosen as a moderating variable because institutional owners have advantages over individual owners that is institutional owners is able to conduct more stringent supervision over activities that occur in the company (Susanti & Mildawati, 2014).

Companies with a large size have a greater tendency to disclose environmental information, including carbon emissions disclosure. In accordance with what was said by Choi et al., (2013) that company size has a positive relationship with the disclosure of greenhouse gas emissions. This is because large companies will accept greater pressure from the community and from stakeholders. One of the pressures given by the community is environmental management by the company. The community has high hope for companies about managing the carbon emissions they produce. This is because operational activities carried out by the company directly or indirectly will have an impact on the environment. The bigger the company, the greater the operational activity and the impacts on the environment are also greater. Therefore, the community will supervise and put pressure on the company to act in accordance with the norms prevailing in the community.

The results of the studies conducted by Jannah & Muid, (2014) and Suhardi & Purwanto, (2015) show that company size has a significant positive effect on carbon emissions disclosure. This is in line with the findings from Choi et al.,(2013); Peng et al., (2014); Prafitri & Zulaikha, (2016); Halimah & Yanto, (2018); Salbiah & Mukhibad, (2018) also show the result that company size has a significant positive effect on carbon emission disclosure.

H_1: Company size has a significant positive effect on carbon emission disclosure

Profitability is one of the benchmarks of financial success of a company. Profitability is also a reflection of the ability of an organization or company to manage their resources. Companies with good financial performance can be said to have financial health. With such conditions, the community will assess that the increase in financial performance is not proportional to the en-

vironmental risks caused by the company's operational activities. Therefore, the community will demand the reciprocity of the environmental conditions around the company.

The community will pressure the company to disclose information on carbon emissions produced by the company in order to gain legitimacy from the community. In accordance with the theory of legitimacy put forward by Dowling & Pfeffer (1975), which states that an organization tries to build harmony of social values related to their activities and norms of behavior that can be accepted in a larger social system where the organization is located.

Several studies have been conducted such as research from Choi et al., (2013); Peng et al., (2014); Akhiroh & Kiswanto, (2016); Jannah & Muid, (2014); Cahya, (2016); and Halimah & Yanto, (2018) get result that profitability has a significant positive effect on carbon emissions disclosure.

H_2: Profitability has a significant positive effect on carbon emission disclosure

Law of the Republic of Indonesia Number 32 Year 2009 mentions that everyone who runs a business and / or business activity is required to be able to maintain environmental sustainability. Environmental performance can be presented as a form of corporate moral responsibility towards the preservation of the surrounding environment. According to Suratno et al., (2006), corporate environmental performance is the company's performance to create a good green environment. A good green environment means that there is hope for the company to be able to pay more attention to the environment as a form of responsibility and care for the surrounding environment. Environmental performance is an assessment on the company's activities in an effort to maintain and improve environmental sustainability.

Stakeholder theory states that a company does not only operate for its own interests, but must provide benefits to its stakeholders such as shareholders, creditors, consumers, suppliers, government, society, and other parties (Ghozali & Chariri, 2014). The better the environmental performance of a company, the better the company's image in the eyes of its stakeholders. One of the strategies used to improve environmental performance is to apply environmental management standards such as ISO 14001. Research conducted by Fontana et al.,(2015) and Prafitri & Zulaikha, (2016) provide empirical evidence that environmental performance has a positive effect on carbon emissions disclosure.

H_3: Environmental performance has a significant positive effect on carbon emission disclosure

Legitimacy theory extensively examines the role played by media reporting on the increase of pressure caused by public demands on companies (Jannah & Muid, 2014). Companies need to be aware of the media that oversees their activities because media exposure is related to the company's values and reputation (Solikhah & Winarsih, 2016). The media also has an important role in informing information to the public. Information regarding company activities related to the company's environmental activities is also included in information that can be shared with the public (Pratiwi & Sari, 2016). If there is good news from a company, then the community will accept and welcome well the news so that it is able to increase the value and reputation of the company in the eyes of the community. However, if there is bad news, the community will assume that the company is not able to maintain the trust that the community has given the company.

Research conducted by Nur & Priantinah, (2012) states that the more active the media is in monitoring the environment of a country, the more motivated companies will be to disclose their activities. This is in line with research conducted by Jannah & Muid, (2014); and Safitri et al., (2018), they get the result that media exposure has a positive effect on carbon emission disclosure.

H_4: Media exposure has a significant positive effect on carbon emission disclosure

The community will supervise and put pressure on the company to act in accordance with the norms prevailing in the community. If the pressure from the community is not responded to, then the company will not get legitimacy from the community. To support the company in order to do environmental disclosure, it is necessary to have pressure and supervision from both internal and external parties. One of the external parties that has the power to conduct supervision is institutional owner. Institutional ownership is one of the strengths to control management to make environmental disclosures that can affect the company's survival (Pratiwi, 2017). With the strict supervision from institutional owners, management will be demanded to be more productive, professional, and comply with all applicable regulations. Thus, institutional ownership will encourage the influence of company size to make disclosures of carbon emissions.

H_5: Institutional ownership strengthens the effect of company size on carbon emission disclosure

Large institutional ownership in a company will lead to tighter supervision on management performance. As said by Akhiroh & Kiswanto, (2016) that the greater the institutional ownership in a company, the greater the institutional encouragement to supervise the management of the company so as to optimize company performance. One of the benchmarks for company performance is financial performance. A company with good financial performance means that the company has good financial health. With good financial condition, the company also pays attention to the surrounding environmental problems. The form of corporate attention to the environment can be done by disclosing carbon emissions produced by the company. This is done to get legitimacy from the public that their business activities are in accordance with the prevailing norms. Therefore, with a large institutional ownership there will be strict supervision to management. So that, it will encourage companies to make disclosures of carbon emissions

H_6: Institutional ownership strengthens the effect of profitability on carbon emission disclosure

Environmental performance is presented as a form of corporate moral responsibility for environmental sustainability. As explained in Law of the Republic of Indonesia Number 32 Year 2009 which states that everyone who runs a business and / or business activity is required to be able to maintain environmental sustainability. The community has hopes for the company to be able to give more attention to the environment as a form of responsibility and care for the surrounding environment. That is what the owner of the institution does. High institutional ownership will provide strict supervision on the company's management so that the company will maximize its environmental performance. This is in line as said by Sujoko & Soebiantoro (2007), that the more concentrated ownership of a company's shares, the supervision conducted by the owner will be more effective because the management will be more careful. So that the company's environmental performance will improve along with the existence of strict supervision from institutional owners so that the company will have a tendency to make disclosure of carbon emissions.

H_7: Institutional ownership strengthens the effect of environmental performance on carbon emission disclosure

Institutional ownership is ownership of company shares owned by institutions such as insurance, banks, companies, and ownership of other institutions (Tarjo, 2008). Institutional ownership has an important task in monitoring management because with institutional ownership it will encourage increased and more optimal supervision to the company. As explained by Akhiroh & Kiswanto, (2016), that the greater the institutional ownership in a company, the greater the institutional encouragement to supervise management so as to optimize company performance. With the optimal performance of the company due to strict supervision from the owner of the institution, then management will also be more compliant with the disclosure of company information, including the disclosure of carbon emissions. So that the media exposure received by the company is related to positive things. Until finally because the community is increasingly convinced that the company has also implemented a good environmental management system, the community's legitimacy to the company is increasing.

H_8: Institutional ownership strengthens the effect of media exposure on carbon emission disclosure

RESEARCH METHOD

The population in this study were non-financial companies that published sustainability reports and listed on the Indonesia Stock Exchange (IDX) between 2014 and 2018. The sampling method in this study was a saturated sample that is the entire study population used as the research sample and selected 43 companies published sustainability reports between 2014 and 2018 with 132 analysis units. The overall variables used in the study are analyzed in Table 1.

This study was analyzed using descriptive statistics and inferential statistics. Descriptive statistics were used to describe the object under study, while inferential statistics were used as an analysis for testing research hypotheses. Quantitative data used in this study were secondary data in the form of sustainability reports and annual reports of the non-financial companies listed on the Indonesia Stock Exchange during 2014-2018.

RESULTS AND DISCUSSIONS

The results of the descriptive statistical analysis of variables of carbon emission disclosure, company size, profitability, environmental performance, media exposure, and institutional ownership are presented in Table 2.

Table 1. Operational Definitions and Variable Indicators

No	Variables	Variable Definition	Measurement
1	Carbon emission disclosure (CED)	The extent of environmental responsibility information disclosure undertaken by companies, in this case regarding carbon emissions	(Febriani & Devianti, 2018)
2	Company Size (UK)	The reflection of the resources owned and managed by the company, if the company has a large size, it means that the company owns and manages large resources, and vice versa. (Choi et al., 2013)	(Niresh & Velnampy, 2014)
3	Profitability (ROA)	Company's ability to generate profits or earnings in a certain period.	Irwhantoko & Basuki, (2016)
4	Environmental Performance (LING)	Assessment of company activities in an effort to maintain and improve environmental sustainability.	Dummy (Prafitri & Zulaikha, 2016)
5	Media (ME)	Media has an important role to inform information to a wider community. The company needs to monitor the media that oversees its activities because it is related to the company's values and reputation.	Dummy Pratiwi & Sari, (2016); and Safitri et al., (2018)
6	Institutional Ownership (INST)	Ownership of company shares owned by institutions or agencies such as insurance companies, banks, investment companies, and other institutional ownership (Tarjo, 2008)	(Pratiwi, 2017), Halimah & Yanto, (2018)

Table 2. Descriptive statistical analysis

	CED	UK	ROA	LING	ME	INST
Mean	0.327396	27.96895	0.057799	0.734848	0.954545	0.100082
Median	0.297300	30.33172	0.044655	1.000000	1.000000	0.075116
Maximum	0.783780	33.47373	0.526700	1.000000	1.000000	0.423710
Minimum	0.000000	19.29658	-0.558310	0.000000	0.000000	0.000112
Std. Dev.	0.211540	4.414469	0.115626	0.443095	0.209092	0.084539
Skewness	0.337169	-0.828970	0.255575	-1.064074	-4.364358	1.700822
Kurtosis	2.055483	1.992585	12.18769	2.132253	20.04762	6.207069
Jarque-Bera	7.407651	20.70006	465.7120	29.05099	2017.465	120.2106
Probability	0.024629	0.000032	0.000000	0.000000	0.000000	0.000000
Sum	43.21625	3691.902	7.629520	97.00000	126.0000	13.21079
Sum Sq. Dev.	5.862161	2552.867	1.751385	25.71970	5.727273	0.936240
Observations	132	132	132	132	132	132

Variables of carbon emission disclosure, company size, environmental performance, media exposure, and institutional ownership have a mean value more than the standard deviation value so that the distribution of data on these variables is homogeneous. This indicates that the data between one and another does not have a distant data deviation. Meanwhile, the mean value of profitability is smaller than the standard deviation so that the spread of data on these variables is heterogeneous.

Panel data analysis requires a model specification test consisting of a chow test, a hausman test, and a lagrange multiplier test to determine which the most appropriate model among Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (BRAKE). In this research, for panel data regression test found that the REM model is the most appropriate model used as indicated in Table 3 and Table 4.

Table 3. The Test Results of Unmoderated Panel Data Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.236239	0.142889	1.653309	0.1007
UK	0.001208	0.004233	0.285425	0.7758
ROA	0.266155	0.154481	1.722896	0.0873
LING	0.106629	0.037073	2.876209	0.0047
ME	-0.039860	0.066984	-0.595066	0.5529

Regression Equation 1:

CED = 0.236239 + 0.001208UK + 0.266155ROA + 0.106629LING – 0.039860ME

Table 4. The Test Results of Moderated Panel Data Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.172024	0.149437	1.151148	0.2519
UK	0.003082	0.004966	0.620689	0.5360
ROA	0.215699	0.232627	0.927231	0.3556
LING	0.191840	0.053160	3.608715	0.0004
ME	-0.085038	0.107609	-0.790253	0.4309
UK_INST	0.001809	0.036927	0.048988	0.9610
ROA_INST	0.405074	2.235648	0.181188	0.8565
LING_INST	-0.813144	0.403383	-2.015811	0.0460
ME_INST	0.515267	0.917447	0.561631	0.5754

Regression Equation 2:

CED = 0.172024 + 0.003082UK + 0.215699ROA + 0.191840LING – 0.085038ME + 0.001809UK*INST + 0.405074ROA*INST – 0.813144LING*INST + 0.515267ME*INST

The result of Adjusted R^2 has a value of 0.072584 or 7.2%, in other words it can be interpreted that 7.2% carbon emission disclosure value can be explained by the model. Meanwhile, the remaining 92.8% is explained by other variables outside this research model. The result of hypothesis testing can be presented in Table 5.

The Effect of Company Size on the Carbon Emission Disclosure

From the results obtained in this study, it is found that there is no effect between company size on carbon emission disclosure. The result of this study is not in line

Table 5. Summary of Hypothesis Test Results

	Variables	Sign Prediction	Coefficient	Prob α=0.05	Results
H_1	Company Size	Positive	0.001208	0.7758	Rejected
H_2	Profitability	Positive	0.266155	0.0873	Rejected
H_3	Environmental Performance	Positive	0.106629	0.0047	Accepted
H_4	Media Exposure	Positive	-0.039860	0.5529	Rejected
H_5	Company Size * Institutional Ownership	Positive	0.001809	0.9610	Rejected
H_6	Profitability * Institutional Ownership	Positive	0.405074	0.8565	Rejected
H_7	Environmental Performance * Institutional Ownership	Positive	-0.813144	0.0460	Rejected
H_8	Media Exposure * Institutional Ownership	Positive	0.515267	0.5754	Rejected

with the theory of legitimacy, which in this legitimacy theory provides the view that companies are trying to build harmony of social values related to their activities and acceptable social norms where the company is located. Legitimacy can be obtained if there is harmony between values and norms prevailing in society. An example which is done to get legitimacy is to make social contributions and environmental contributions. The result of descriptive statistical analysis shows that the level of corporate disclosure to the environment, in particular the disclosure of carbon emissions is quite low. This is assumed due to the company is more focused on the implementation of social and environmental responsibility compared to the disclosure of annual reports and sustainability reports. Only companies that are truly concerned about the environment have a high level of disclosure of carbon emissions.

The Effect of Profitability on the Carbon Emission Disclosure

From the results obtained in this study, it is found that there is no effect between profitability on the carbon emission disclosure. The result of this study does not support the theory of legitimacy which states that society will always exert pressure on companies to care about environmental issues so that companies with high profitability are easier to respond to pressures because they have more resources that can be used to make environmental disclosures compared to companies that have low profitability. In fact, companies that have high profitability and have sufficient resources do not affect the company's decision to disclose carbon emissions. In Indonesia, the disclosure of carbon emission is still voluntary disclosure so there is no need to make carbon emission disclosure. This is assumed that companies that have high profitability will tend to prioritize the company's economic performance so that activities to make disclosure of carbon emission are not a top priority.

The Effect of Environmental Performance on the Carbon Emission Disclosure

The result of this study proves that environmental performance has a significant positive effect on the carbon emission disclosure. This result supports the theory of legitimacy which states that companies will try to harmonize between values and norms prevailing in society. There is a tendency for companies that have good environmental performance to make environmental disclosures. This is done in order to public trust to the company is maintained and the community continues to provide full support to the company. Because the company has fulfilled its legitimacy, the community's trust and recognition to the company will be stronger in accordance with the results of research conducted by Prafitri & Zulaikha (2016).

The Effect of Media Exposure on the Carbon Emission Disclosure

From the result obtained in this study, it is found that there is no effect between media exposure on the carbon emission disclosure. The result of this study does not support the theory of legitimacy which states that the company will operate within the limits and values that can be accepted by the community in an effort to get legitimacy from the community. The media can broadly play people emotions on an issue or news presented. Companies need to be aware of their activities because media exposure is related to the company's values and reputations. However, many companies do not pay much attention to media exposure (Solikhah & Winarsih, 2016) because they are more focused on the fundamental performance such as the company's financial performance itself. This shows that the presence or absence of the media will not always motivate companies to make the disclosures of carbon emissions in their sustainability reports.

The Role of Institutional Ownership in Moderating the Effect of Company Size on the Carbon Emission Disclosure

This study does not support stakeholder theory, due to institutional ownership which acts as a party that monitors the company may not necessarily be able to provide good control over management actions in making carbon emission disclosures. This is assumed due to the quality of resources from institutional owners which have not prioritized the quality of corporate disclosure to the environment, in particular the disclosure of carbon emissions. The research data shows that institutional ownership is still low at an average of 10%, so that it is not yet able to supervise and control decisions taken by managers effectively with regard to carbon emission disclosure.

The Role of Institutional Ownership in Moderating the Effect of Profitability on the Carbon Emission Disclosure

This study does not support stakeholder theory, as institutional ownership which acts as a party that monitors the company may not necessarily be able to provide good control over management actions in making carbon emission disclosure. This can be caused by the number of shares owned by institutions is still relatively low. Companies with high profitability have opportunities to maximize value in the eyes of the public. Meanwhile, supervision conducted by institutional owners will force companies to try improving the quality of disclosure, including CED. However, in this research, low institutional ownership has not been able to exert higher pressure because management will prioritize the interests of majority shareholders. Institutional owners have not been able to supervise, control, and intervene in decisions taken by managers so that institutional ownership has not been able to moderate the effect of profitability on CED.

The Role of Institutional Ownership in Moderating the Effects of Environmental Performance on the Carbon Emission Disclosure

This study does not support the effect of institutional ownership that can moderate the effect of environ-

mental performance on the carbon emission disclosure. In this study, institutional ownership actually weakens the effect of environmental performance on the carbon emission disclosure. That is because the proportion of institutional ownership is still relatively low. This finding is assumed because institutional investors are more encouraging management to focus their attention on the performance of the company such as making financial performance that is considered more strategic and has a direct impact on its investment. Therefore, the pressure of institutional owners to the disclosure of carbon emissions is not to be a priority.

The Role of Institutional Ownership in Moderating the Effect of Media Exposure on the Carbon Emission Disclosure

This study does not support the effect of institutional ownership that can moderate the effect of media exposure on the carbon emission disclosure. That is because the proportion of institutional ownership is still relatively low. The direct effect of media exposure on the disclosure of carbon emission has also been unsuccessful in this study. The finding is in line with the result of study conducted by Brown and Deegan (1999) which found that in some industries, environmental disclosure is not related to positive or negative media exposure. The initial allegations of the researcher that the existence of institutional owners can increase the effect of media exposure on CED also cannot be proven in this study. Thus, institutional owners do not put more pressure on management in order to positive news from the media will whip up a high enthusiasm to be able to contribute more to the environment especially about carbon emissions disclosure. The finding of this study indicates that the media exposure has not been able to create shareholders' awareness regarding environmental issues of the companies including pressure from the owners of the institution.

CONCLUSION

Factors that have been proven to influence carbon emission disclosure are environmental performance. Whereas company size, profitability, and media exposure have not been proven to affect carbon emission disclosure. Institutional ownership can weaken the effect of environmental performance on carbon emission disclosure and institutional ownership is not able to moderate the effects of company size, profitability, and media exposure on carbon emission disclosure. This study measures the extent of carbon emission disclosure with the method of content analysis conducted by a single numerator, so there is a concern about the subjectivity of interpretation. So that further research is suggested to use numerator more than one to minimize the subjectivity and truly be able to represent the extent of carbon emissions disclosure.

REFERENCES

Air Visual. (2018). *World Air Quality Report*. Diakses dari https://www.airvisual.com/world-air-quality-ranking tanggal 2 Agustus 2018.

Akhiroh, T., & Kiswanto. (2016). The Determinant of Carbon Emission Disclosure. *Accounting Analysis Journal*, *5*(4), 326–336.

Badan Perencanaan Pembangunan Nasional (BAPPENAS). (2014). *Rencana Aksi Nasional Nasional Adaptasi Perubahan Iklim (RAN-API)*. Jakarta: Badan Perencanaan Pembangunan Nasional (BAPPENAS).

Brown, N. & Deegan, C. (1999). The Public Disclosure of Environmental Performance Information – A Dual Test of Media Agenda Setting Theory and Legitimacy Theory. *Accounting and Business Research,* 29(1), 21-41.

Cahya, B. T. (2016). Carbon Emission Disclosure: Ditinjau Dari Media Exposure, Kinerja Lingkungan dan Karakteristik Perusahaan Go Public Berbasis Syariah di Indonesia. *NIZHAM*, *05*(02), 170–188.

Choi, B. B., Lee, D., & Psaros, J. (2013). *An analysis of Australian company carbon emission disclosures*. *25*(1), 58–79. https://doi.org/10.1108/01140581311318968

Clarkson, M.E. (1995). A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *Academy of Management Review*, 20(1). https://doi.org/10.5465/amr.1995.9503271994

Dowling, J., & Pfeffer, J. (1975). Organizational Legitimacy : Social Values and Organizational Behavior between the Organizations seek to establish congruence. *The Pacific Sociological Review*, *18*(1), 122–136.

Ernest&Young. (2014). *Tomorrow's Investment Rules*.

Febriani, C. N., & Devianti, A. (2018). Praktik Pengungkapan Emisi: Studi Empiris Lima Nominator ISRA Sepanjang 2007-2016. *Jurnal Perspektif Akuntansi*, *1*(1), 71–89. https://doi.org/https://doi.org/10.24246/persi.v1i1.p71-89

Fontana, S., Amico, E. D., Coluccia, D., & Solimene, S. (2015). Does environmental performance affect companies ' environmental disclosure ? *Measuring Business Excellence*, *19*(3), 42–57. https://doi.org/10.1108/MBE-04-2015-0019

Ghozali, I., & Chariri, A. (2014). *Teori Akuntansi: International Financial Reporting System (IFRS)*. Semarang: BP Undip.

Giannarakis, G., Konteos, G., Sariannidis, N., & Chaitidis, G. (2017). The relation Between Voluntary Carbon Disclosure and Environmental Performance: The Case of S&P 500. *International Journal of Law and Management*, 1–24. https://doi.org/https:// doi.org/10.1108/IJLMA-05-2016-0049

Halimah, N. P., & Yanto, H. (2018). Determinant of Carbon Emission Disclosure at Mining Companies Listed in Indonesia Stock Exchange. *International Conference on Economics, Business and Economic Education 2018, 2018*, 127–141. https://doi.org/10.18502/kss.v3i10.3124

Irwhantoko, & Basuki. (2016). Carbon Emission Disclosure : Studi pada Perusahaan Manufaktur Indonesia. *Jurnal Akuntansi Dan Keuangan*, *18*(2), 92–104. https://doi.org/10.9744/jak.18.2.92-104

Jannah, R., & Muid, D. (2014). Analisis Faktor-Faktor yang Mempengaruhi Carbon Emission Disclosure Pada Perusahaan di Indonesia (Studi Empiris pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Periode 2010-2012). *Diponegoro Journal Of Accounting*, *3*(2), 1–11.

NASA. (2019). Atmospheric CO2 levels. Retrieved from https://climate.nasa.gov/vital-signs/carbon-dioxide/

Niresh, J. A., & Velnampy, T. (2014). Firm Size and Profitability : A Study of Listed Manufacturing Firms in Sri Lanka. *International Journal of Business and Management*,

9(4), 57–64. https://doi.org/10.5539/ijbm.v9n4p57

Nur, M., & Priantinah, D. (2012). Analisis Faktor-Faktor Yang Mempengaruhi Pengungkapan Corporate Social Responsibility di Indonesia. *Jurnal Nominal*, *1*(1), 22–34.

Peng, J., Sun, J., & Luo, R. (2014). Corporate Voluntary Carbon Information Disclosure: Evidence from China's Listed Companies. *The World Economy*, 1–19. https://doi.org/10.1111/twec.12187

Prafitri, A., & Zulaikha. (2016). Analisis Pengungkapan Emisi Gas Rumah Kaca. *Jurnal Akuntansi & Auditing*, *13*(2), 155–175.

Pratiwi, D. N. (2017). *Pengaruh Stakeholder Terhadap Carbon Emission Disclosure*. *2*(01), 288–300.

Pratiwi, P. C., & Sari, V. F. (2016). Pengaruh Tipe Industri , Media Exposure dan Profitabilitas terhadap Carbon Emission Disclosure. *WRA*, *4*(2), 829–844.

Safitri, R. H., DP, R. T., & R, A. A. (2018). Pengaruh Media Exposure terhadap Carbon Emission Disclosure (Studi Empiris pada Perusahaan Non Industri Jasa yang Terdaftar di Bursa Efek Indonesia Periode 2012-2016). *Simposium Nasional Akuntansi XXI2*, 1–22.

Salbiah, & Mukhibad, H. (2018). Carbon Emission Disclosure and Profitability – Evidence from Manufacture Companies in Indonesia. *International Conference on Economics, Business and Economic Education 2018*, *2018*, 53–67. https://doi.org/10.18502/kss.v3i10.3118

Setiawan, Y., Surachman, A., Asthary, P. B., & Saepulloh. (2014). Pemanfaatan Emisi Gas CO2 untuk Budidaya Spirulina Platensis Dalam Upaya Penurunan Gas Rumah Kaca Cultivation in Reducing Efforts of Greenhouse Gas (GHG). *Journal of Industrial Research*, *8*(2), 83–89.

Solikhah, B. & Winarsih, A.M. (2016). Pengaruh liputan media, kepekaan industri, dan struktur tata kelola perusahaan terhadap kualitas pengungkapan lingkungan. *Jurnal Akuntansi dan Keuangan Indonesia, 13(1), 1-22.*

Suhardi, R. P., & Purwanto, A. (2015). Analisis Faktor–Faktor Yang Mempengaruhi Pengungkapan Emisi Karbon di Indonesia (Studi Pada Perusahaan Yang Terdaftar di Bursa efek Indonesia Periode 2010 - 2013). *Diponegoro Journal Of Accounting*, *4*(2), 1–13.

Sujoko, & Soebiantoro, U. (2007). Pengaruh Struktur Kepemilikan Saham , Leverage , Faktor Intern Dan Faktor Ekstern Terhadap Nilai Perusahaan. *Jurnal Manajemen Dan Kewirausahaan*, *9*(1), 41–48.

Suratno, I. B., Darsono, & Mutmainah, S. (2006). Pengaruh environmental performance terhadap environmental disclosure dan economic performance. *Indonesia Journal of Accounting Research*, *10*(2).

Susanti, R., & Mildawati, T. (2014). Pengaruh Kepemilikan Manajemen, Kepemilikan Institusional dan Corporate Social Responsibility Terhadap Nilai Perusahaan. *Jurnal Ilmu & Riset Akuntansi*, *3*(1), 1–17.

Tarjo. (2008). Pengaruh Konsentrasi Kepemilikan Institusional dan Leverage Terhadap Manajemen Laba, Nilai Pemegang Saham, serta Cost of Equity Capital. *Simposium Nasional Akuntansi XI*.

Undang-Undang Republik Indonesia Nomor 32 Tahun 2009. , (2009).

Undang-Undang Republik Indonesia Nomor 40 Tahun 2007. , (2007).

The Determinants of Carbon Emission Disclosure Moderated by Institutional Ownership

ORIGINALITY REPORT

20%	15%	13%	7%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

#	Source	%
1	www.ojs.upj.ac.id Internet Source	1%
2	Submitted to Southeast Community College Student Paper	1%
3	Submitted to School of Business and Management ITB Student Paper	1%
4	journal.uinjkt.ac.id Internet Source	1%
5	ocs.upnvj.ac.id Internet Source	1%
6	Submitted to Universitas Negeri Surabaya The State University of Surabaya Student Paper	1%
7	Diamond Lianna Alifatmaya, Syaiful Syaiful. "The Effect of Company Size, Profitability, Liquidity, and Financial Leverage on Income Evaluation Action", INNOVATION RESEARCH	1%

JOURNAL, 2020
Publication

8	ejournal.umm.ac.id Internet Source	1%
9	ejournal.stiedewantara.ac.id Internet Source	1%
10	eprints.undip.ac.id Internet Source	1%
11	123dok.com Internet Source	<1%
12	www.ejournal.pelitaindonesia.ac.id Internet Source	<1%
13	ejournal3.undip.ac.id Internet Source	<1%
14	www.repository.trisakti.ac.id Internet Source	<1%
15	Ali Akbar Anggara, Bambang Agus Pramuka. "What is Behind Green Industry Motive to Maintain Rural Areas?", SHS Web of Conferences, 2020 Publication	<1%
16	I Putu Rasmadi Arsha Putra, I Ketut Tjukup, Dewa Gede Pradya Yustiawan. "Legal Protection of Labor in Employment for Termination of Employment Due to the	<1%

Acquisition of the Company", Substantive Justice International Journal of Law, 2020
Publication

17	www.virion-serion.de Internet Source	<1%
18	ijac.org.uk Internet Source	<1%
19	pure.uva.nl Internet Source	<1%
20	www.ijsr.net Internet Source	<1%
21	Syahril Syahril, Isnani Yuli Andini. "THE ROLE OF ACCOUNTANTS IN IMPLEMENTATION CORPORATE SOCIAL RESPONSIBILITY AT HOSPITAL Dr. H. MOH. ANWAR SUMENEP DISTRICT", JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen, 2017 Publication	<1%
22	islamicmarkets.com Internet Source	<1%
23	dspace.lib.uom.gr Internet Source	<1%
24	www.coursehero.com Internet Source	<1%
25	jurnal.unmer.ac.id	

Internet Source

<1%

26 Submitted to University of Malaya
Student Paper

<1%

27 Kamaliah Kamaliah. "Disclosure of corporate social responsibility (CSR) and its implications on company value as a result of the impact of corporate governance and profitability", International Journal of Law and Management, 2020
Publication

<1%

28 Rio Monoarfa. "The Role of Profitability in Mediating the Effect of Dividend Policy and Company Size on Company Value", Business and Management Studies, 2018
Publication

<1%

29 Ilham Hidayah Napitupulu, Anggiat Situngkir, Ferry Hendro Basuki, Widyo Nugroho. "Optimizing good Corporate Governance Mechanism to Improve Performance: Case in Indonesia's Manufacturing Companies", Global Business Review, 2020
Publication

<1%

30 Submitted to Udayana University
Student Paper

<1%

31 ejournal.unsrat.ac.id

	Internet Source	<1%
32	Submitted to Sriwijaya University Student Paper	<1%
33	www.emeraldinsight.com Internet Source	<1%
34	www.kingsgate.com.au Internet Source	<1%
35	trijurnal.lemlit.trisakti.ac.id Internet Source	<1%
36	virtusinterpress.org Internet Source	<1%
37	Submitted to STIE Perbanas Surabaya Student Paper	<1%
38	www.mdpi.com Internet Source	<1%
39	Putu Cita Ayu, Ni Komang Sumadi. "PENGARUH KEPEMILIKAN INSTITUSIONAL DAN KEPEMILIKAN MANAJERIAL TERHADAP NILAI PERUSAHAAN", Widya Akuntansi dan Keuangan, 2019 Publication	<1%
40	Edfan Darlis, Pipin Kurnia, Mudrika Alamsyah. "Carbon Emission Disclosure: A Study on	<1%

Manufacturing Companies of Indonesia and Australia", IOP Conference Series: Earth and Environmental Science, 2020
Publication

41 jurnal.untidar.ac.id <1%
Internet Source

42 ijpbaf.org <1%
Internet Source

43 www.lka.lt <1%
Internet Source

44 Submitted to Universitas Merdeka Malang <1%
Student Paper

45 eprints.mdx.ac.uk <1%
Internet Source

46 Lela Nurlaela Wati, Galang Raindo Syahdam, Bono Prambudi. "PERAN PENGUNGKAPAN CSR DAN MEKANISME GCG PADA KINERJA KEUANGAN TERHADAP NILAI PERUSAHAAN", Jurnal Ecodemica: Jurnal Ekonomi, Manajemen, dan Bisnis, 2019 <1%
Publication

47 H. Yanto, A Rofiah, Z A S Bahlawan. "Environmental Performance and Carbon Emission Disclosures: A case of Indonesian Manufacturing Companies", Journal of Physics: Conference Series, 2019 <1%

Publication

48	Dana Eka Setiawan, Ika Yustina Rahmawati. "THE EFFECT OF LIQUIDITY, PROFITABILITY, LEVERAGE ON CORPORATE VALUE WITH DIVIDEND POLICY AND BI RATE AS MODERATED VARIABLES (Study of Banking Companies Listed on the Indonesia Stock Exchange in 2014-2017)", Economics and Business Solutions Journal, 2020 Publication	<1%
49	www.emerald.com Internet Source	<1%
50	eprint.stieww.ac.id Internet Source	<1%
51	iassr2.org Internet Source	<1%
52	Joy Elly Tulung, Ivonne Stanley Saerang, Stevanus Pandia. "The influence of corporate governance on the intellectual capital disclosure: a study on Indonesian private banks", Banks and Bank Systems, 2018 Publication	<1%
53	journals.univ-danubius.ro Internet Source	<1%
54	vuir.vu.edu.au	

Internet Source

<1%

55 Anis Chariri, Indira Januarti, Etna Nur Afri Yuyetta. "Audit Committee Characteristics and Carbon Emission Disclosure", E3S Web of Conferences, 2018
Publication
<1%

56 www.aaanz.org
Internet Source
<1%

57 Herman Karamoy, Joy Elly Tulung. "The effect of financial performance and corporate governance to stock price in non-bank financial industry", Corporate Ownership and Control, 2020
Publication
<1%

58 Ain Hajawiyah, Agus Wahyudin, Kiswanto, Sakinah, Indra Pahala. "The effect of good corporate governance mechanisms on accounting conservatism with leverage as a moderating variable", Cogent Business & Management, 2020
Publication
<1%

59 Carmen Córdova, Ana Zorio-Grima, Paloma Merello. "Carbon Emissions by South American Companies: Driving Factors for Reporting Decisions and Emissions Reduction", Sustainability, 2018
<1%

Publication

60	www.amfiteatrueconomic.ro Internet Source	<1%
61	moam.info Internet Source	<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		

The Determinants of Carbon Emission Disclosure Moderated by Institutional Ownership

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

PAGE 8