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EMISSION CARBON DISCLOSURE AND FIRM VALUE: THE MODERATING ROLE OF MEDIA EXPOSURE

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ABSTRACT

The purpose of this study is to investigate and gather empirical data supporting the hypothesis that a Firm Value that discloses its carbon emissions is connected with its exposure to the media. This makes sense when considering the media's contributions to social mobilization campaigns like those of US environmental organizations. The public's access to information is greatly aided by the media. This study focused on manufacturing companies listed in the Consumer Goods Sub-Sector of the Indonesia Stock Exchange, using data from 2017 to 2021. Data from www.idx.co.id were used in this study, which ran from May 2023 to October 2023. The critical Descriptive analysis with the structural equation model statistical technique is the approach taken. For data analysis, the SmartPLS 3 application was utilized. Three factors were employed in this investigation. The variables that are used as moderators in the model are media exposure (Z), carbon emissions (X), and firm value (Y), which employs Tobin's Q table US as the dependent variable. In this examination, specifics of the variables employed by the researchers will be covered. Media exposure to carbon emissions has little effect on business value, even though the distribution of carbon emissions demonstrates a positive and substantial impact on firm value.

INTRODUCTION

Global environmental issues such as climate change are currently garnering a lot of attention. Climate change is occurring in many places, including Indonesia, as a result of the average world surface temperature rising at a rate of 0.740 C to 0.180 C, according to The Intergovernmental Panel on Climate Change (IPCC, 2018). According to Appenas (2017), Indonesia is experiencing several climate-related effects, such as rising sea levels, variable rainy seasons, elevated surface temperatures, an increase in extreme weather events, and an increase in temperature. Greenhouse gases produced by human activity are one of the causes of global climate change. By outlining the company's approach to carbon resulting from its operational activities in the annual report, disclosure of carbon emissions was developed as an accounting treatment for these issues. With this disclosure, the company can take preventative measures or find ways to reduce carbon emissions.

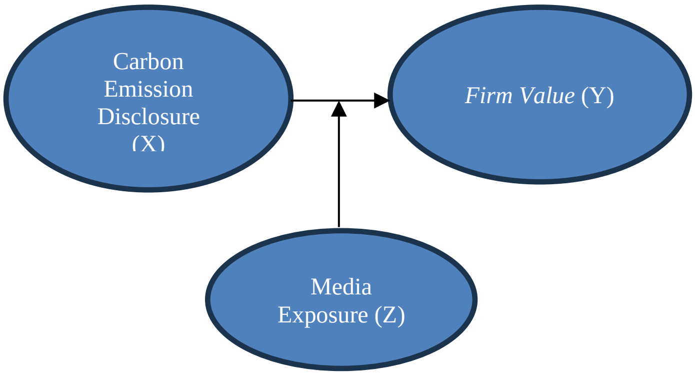
In her study, Rahmanita (2020) found that the Indonesian Accountants Association (IAI) has legislated environmental responsibility in emerging accounting practices in PSAK 01 (Indonesian Accountants Association 2014), paragraph 14. Reporting Corporate Social Responsibility (CSR), which is incorporated into revealing business actors' efforts to reduce Green House Gas (GHG) emissions, is one way that the firm can behave responsibly toward the environment. Although the Republic of Indonesia still only allows voluntary disclosure of carbon emissions, the government actively promotes social responsibility through initiatives such as the enactment of Law of the Republic of Indonesia Number 17 of 2004, which ratifies the Kyoto Protocol in an effort to reduce greenhouse gas emissions. Due to the Kyoto Protocol's consequences, businesses now have to identify, quantify, record, present, and disclose their carbon emissions through the practice of carbon accounting. According to Ratnatunga (2007), carbon accounting also has to do with labor expenses, manufacturing overhead costs, environmental overhead costs, and costs associated with managing carbon standards. There is also a connection between carbon emissions and the efficiency of raw material consumption.

The purpose of this study is to investigate and gather empirical data supporting the hypothesis that a company's media exposure value increases with its disclosure of carbon emissions, a relationship that may be strengthened or weakened. This and the media's role in social mobilization movements—like those of environmental interest groups, for instance—cannot be separated. Information dissemination to the public is facilitated by the media as well. Information that can be shared with the public includes details on the operations of the company. Because the media is interested in the company's reputation and values, businesses have to be cautious about them keeping an eye on their operations. Companies are more inclined to disclose their operations when the media actively tracks the environment of a nation. The carbon emission disclosure practices of businesses and scientific accounting research are related in that manufacturing companies that implement carbon emissions disclosure practices well will lessen the effects of greenhouse gases and show their concern for the environment; this aligns with their corporate social responsibility (CSR) efforts towards the community, which will hopefully boost their profits and reputation.

Rahmanita's earlier research (2020) is cited in this study. In the present study, the influence of carbon emissions disclosure on firm valuation is moderated by the media exposure variable, which is different. The impact of disclosure is the main emphasis of this study, which makes it intriguing to do even if it confirms the widely differing findings of earlier research on the variables influencing the practice of revealing carbon emissions. This study focuses on a manufacturing business listed in the Consumer Goods Sub-Sector of the Indonesian Stock Exchange for the years 2017 through 2021.

LITERATURE REVIEW

Framework



The general public will become more conscious of the harm that companies cause to the environment through their operations, such as air and environmental pollution. Entrepreneurs have personally witnessed the impact of socially conscious and ecologically aware tendencies. Stakeholders now think that aspects other than profit are considered while running a business, according to Limberg et al. (2009). Given that climate change is becoming a major worldwide issue that needs to be addressed, investors will consider funding a company that demonstrates sound environmental policies (Barthelot & Robert, 2011). Businesses are more valuable the more information they disclose about their carbon emissions. Enterprises voluntarily divulge personal information for diverse motives. This is due to the company's belief that the disclosure will be noticed by investors. As long as the signal a company sends out is positive or good news, it can experience prosperity through an increase in corporate value.

H1: Carbon Emission Disclosure has an effect on firm value .

"Promotion and/or publicity" is one definition of media exposure. A company's media relations strategy can affect investors' perceptions of the business. According to the signaling theory, businesses give information users signals about how well they are doing. Investors interpret media attention as a sign of strength from the company. In addition, organizations need to be able to meet the needs of their stakeholders and have an efficient means of communicating with them if they hope to be acknowledged, trusted, and supported by their surroundings. A crucial component of CSR management is communication (Nur and Priantinah, 2012). According to research by Majumdar & Bose (2019), manufacturing companies that were exposed to the media, particularly on Twitter, were able to generate value for their businesses. The study's findings show that media coverage increases a company's worth. Firm Value increases with increased media exposure.

H2: Media Exposure influences firm value.

Communication of information to the public is facilitated by the media as well. Included in the information that can be shared with the public is information about business operations. As media attention to a company's actions can impact its reputation and core values, businesses should be cautious about it. Businesses in this situation have a moral duty to disclose all of their operations, including social, environmental, and financial aspects. According to Nur and Priantinah (2012), companies are more inclined to disclose their operations when the media actively tracks the environmental conditions of their nation. This is consistent with research (Dawkins and Fraas, 2011) showing a direct relationship between the degree of voluntary disclosure of climate change and media visibility. The relationship between media exposure and CSR disclosure is also positive, according to research by Wang et al. (2013). Therefore, it is anticipated that this study will demonstrate how the media can mitigate the effect of CED on firm value.

H3 : Media Exposure can moderate the impact of Carbon Emission Disclosure on company value

RESEARCH RESULTS AND DISCUSSION

The Effect of Carbon Emission Disclosure on Company Value

The research results show that the significance value obtained is smaller than a=0.05, namely 0.011. From these results, it can be seen that $t_{count\ is}$ 2.548 > t_{table} 1.96 and the probability value (p) is 2.548 < 0.05 so that H_1 is accepted and it can be concluded that *carbon emission disclosure* which is proxied by the expression of business entities related to carbon emissions can cause changes The environment based on *the Carbon Disclosure Project (CDP)* information worksheet is influential, meaning that the results of this research indicate that the higher the *carbon emission disclosure* in a consumer goods company, the higher Firm Value. In line with research by Sari and Budiasih (2022), they explained their research findings that *carbon emission disclosure* had a positive effect on the value of manufacturing companies listed on the IDX in 2018-2019. This means that the greater the disclosure of *carbon emissions,* the greater the company value.

The Effect of *Media Exposure* on Company Value

The research results show that the significance value obtained is smaller than a=0.05, namely 0.379. From these results, it can be seen that $t_{count\ is}$ 0.881 < t_{table} 1.96 and the probability value (p) is 0.379 > 0.05 so that H_3 is rejected and it can be concluded that high or low disclosure of a company's *carbon emissions* does not necessarily guarantee an increase in company value. This could be because the nature of carbon emissions information disclosure in Indonesia is still classified as voluntary disclosure and requires large costs to implement. So whether or not there is disclosure of company carbon emissions information depends on the company's management decision. Lestari R.'s (2022) research is relevant that media exposure has no effect on the value of property and real estate companies listed on the IDX for the 2018-2020 period. Other research by Laksani and Kirana (2020) shows that media exposure has no influence on the disclosure of carbon emissions of non-financial sector companies whose shares are listed on the Indonesia Stock Exchange during the 2015-2018 period. The frequency of voluntary climate change disclosures by companies is directly associated with media visibility.

Media Exposure moderates the Effect of Carbon Emission Disclosure on Company Value

Media exposure cannot moderate the relationship between *carbon emission disclosure* and company value. The results of the indirect influence analysis test, the relationship between *carbon emission disclosure and company value, produces a moderated* $_{calculated}$ t value of 0.876 < t $_{table}$ 1.96 and a p value of 0.382 > 0.05. The results of a significance value greater than 0.05 indicate that media exposure cannot moderate the relationship between *carbon emission disclosure* and company value, so H $_4$ is rejected. This means that the company's efforts to disclose *carbon emissions* related to the environment coupled with the disclosure of information related to carbon emissions from online media published by external media cannot be used as a benchmark for increasing the performance or value of consumer goods companies. According to research by Balkis (2018), disclosure of carbon emission intensity has a negative moderating effect on the effect of carbon emission disclosure on the value of manufacturing companies listed on the Indonesia Stock Exchange for the 2015-2016 period.

CONCLUSION

Based on the results of research discussions carried out in this study, it was concluded that : 1) Carbon emission disclosure shows that the profitability value is 0.011 and the tcount value obtained is 2.548. This shows that H1 is accepted, which means that the carbon emission disclosure variable has a positive and significant effect on company value. 2) Carbon emission disclosure shows that the profitability value is 0.000 and the t-count value obtained is 20.396. This shows that H2 is accepted, which means that the Carbon emission disclosure variable has a positive and significant effect on media exposure. 3) Media exposure shows that the profitability value is 0.379 and the t-count value obtained is 0.881. This shows that H3 is rejected, which means that the media exposure variable has no effect on company value. 4) The profitability value of moderating carbon emission disclosure is 0.382 and the t-count value obtained is 0.876. This shows that H7 is rejected, which means that media exposure cannot moderate the relationship between carbon emission disclosure and company value.

REFERENCES

Andiningtyas, EDWI (2016). *Analysis of Factors That Influence Carbon Emission Disclosure in Companies in Indonesia Analysis of Factors That Influence Carbon Emission Disclosure* .

Balkis, A. (2018). The influence of carbon emission disclosure and environmental performance on company value with disclosure of carbon emission intensity as a moderating variable (study of manufacturing companies listed on the Indonesia Stock Exchange in 2015-2016). Thesis. Trisaksi University Faculty.

Bappenas, RAN-API. 2017. "MINISTER BAMBANG: INDONESIA CONTINUES TO OVERCOME DA MAKE CLIMATE CHANGE." (2):31936207.

Basuki and Patrioty. 2011. The Influence of Government Regulations, Public Pressure, Environmental Organizational Pressure, Mass Media Pressure, on Corporate Social Disclosure. Equity Journal of Economics and Finance. 15(1): 1-17.

Brigham, E.F., and J.F. Houston. 2010. Basics of Financial Management: Essentials of Financial Management. Jakarta: Salemba Empat.

Chariri, Imam G. And A. (2007). Accounting Theory (2012th Ed.). Semarang: Diponegoro University Publishing Agency.

Christiawan, YJ, and J. Tarigan. 2007. Managerial Ownership: Debt Policy, Performance and Company Value. Journal of Accounting and Finance 9 (1): 1-8.

Damayanthi, IGAE (2019). Phenomenon of Factors that Influence Company Value.

Scientific Journal of Accounting and Business, 208.

Indonesian Accountants Association. 2014. PSAK 01 Concerning the Presentation of Financial Statements. Accessed 16 October 2019, http://iaiglobal.or.id .

Jannah, R., & Muid, D. (2014). Analysis of Factors That Influence Carbon Emission Disclosghoure in Companies in Indonesia (Empirical Study of Companies Listed on the Indonesian Stock Exchange for the 2010-2012 Period). Diponegoro Journal Of Accounting, 3(2),2337–3806. RetrievedFrom Http://EjournalS1.Undip.Ac.Id/Index.Php/Accounting

Carbon, E., Reaction, AND, & On, S. (2019). *Factors Influencing Manufacturing Disclosures in Indonesia* . *8* , 1–11.

Laksani, SA, Andesto, R., and Kirana, DJ (2020). Carbon Emission Disclosure Viewed from Company Value, Leverage and Media Exposure. Indonesian Accounting and Finance Studies, 3(2), 145-164.
Lestari R. (2022). The Influence of Corporate Social Responsibility, Free Cash Flow, Media Exposure, and Company Size on the Value of Property and Real Estate Companies Listed on the Indonesian Stock Exchange for the 2018-2020 Period. Thesis. Faculty of Economics and Business, Multi Data University, Palembang, Palembang. http://rama.mdp.ac.id:85/337/1/Ria%20 Lestari_ 1822210 021.pdf.
Majid, RA (2015). Analysis of Factors That Influence Disclosure of Greenhouse Gas Emissions in Companies in Indonesia. Thesis. Faculty of Economics and Business, Diponegoro University, Semarang. http://eprints.undip.ac.id/47029/1/02_MAJID.pdf
Indonesian Accountants Association. 2014. "Statement of Financial Accounting Standards No. 1 Presentation of Financial Reports." *Jakarta: Financial Accounting Standards Board* (1):h. 1-1.17.
IPCC. 2018. "The Intergovernmental Panel on Climate Change." *The Intergovernmental Panel on Climate Change* . Retrieved (https:/ /www.ipcc.ch/2018/10/#:~:text=The report highlights a number, compared with 2°C.).
Kelvin et al. 2017. "Environmental Performance Disclosure as a Performance Improvement Mechanism for Creating Corporate Value." *Owner* 6(4):1–18. doi: 10.33395/owner.v6i4.1086.
Rahmanita, Sheila Ayu. 2020. "ACCOUNTING: Journal of Integrative Accounting. THE EFFECT OF CARBON EMISSION DISCLOSURE ON VALUE." *Journal of Integrative Accounting* 6(1):53–70.
Sari, Kadek Heni Vitrya, and I. Gusti Ayu Nyoman Budiasih. 2022. "Carbon Emission Disclosure and Company Value." *E-Journal of Accounting* 32(1):3535. doi: 10.24843/eja.2022.v32.i01.p16.
Law of the Republic of Indonesia Number 17 of the Year. 2004. "Law of the Republic of Indonesia Number 17 of 2004 concerning Ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change." *State Secretariat : Jakarta* 1–3.
Singarimbun, Masri and Sofian Effendi. 2011. Survey Research Methods. Jakarta: Indonesian LP3ES Library.
Tjahjono, MES (2013). The Influence of Environmental Performance on Company Value. Journal of Economics, 4(1), 39–46.
Wang et al. (2013). *Determinants of Carbon Emission Disclosure in Mining Companies Listed on the Indonesian Stock Exchange* . 9(2), 112-119.
Sari, KHV, Budiasih, I GAN (2022). Carbon Emission Disclosure and Company Value.
Accounting E-Journal, 32(1), 222-228.
Ulfa, FNA and Ermaya, HNL (2019). Effect of Media Exposure, Environmental Performance and Industrial Type on Carbon Emission Disclosure. Pamulang University Accounting Scientific Journal, 7(2), 149-158.