

## **Will The Firm Value Increase As A Result Of Disclosing Carbon Emissions?**

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*Abstract:* - The purpose of this study is to investigate and gather empirical data supporting the hypothesis that a company's 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](http://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, despite the fact that the distribution of carbon emissions demonstrates a positive and substantial impact on firm value.

*Key-Words:* - Carbon Emissions Disclosure, Firm Value, Media Exposure

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## 1 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 a number of 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.

Given the preceding context, the following quantitative questions are developed to represent the difficulties to be investigated in this study:

1. Does a company's worth change when its carbon emissions are disclosed?
2. Does Media Coverage Affect a Company's Worth?
3. Does Media Exposure mitigate the impact of Carbon Emission Disclosure on the valuation of companies?

## **2. Literature Review and Hypothesis Development**

### **2.1 Agency Theory**

According to Brigham and Houston (2010), an agency relationship is created when one or more people, known as principals, appoint another person or organization, known as an agent, to carry out a variety of tasks and give the agent the power to make choices. When there are conflicting objectives amongst the persons involved in an agency partnership, issues may arise. A conflict of interest develops between the owner or principal (investor) and the management (agent) because capital owners want greater wealth and prosperity for themselves, while managers also want increased welfare for themselves. Three categories of agency relationships exist within the framework of agency theory, according to Purwandari and Purwanto (2012). These are the following:

1. agency relationships between managers and owners;
2. agency relationships between managers and creditors; and
3. agency relationships between managers and the government.

In order to maximize their value in terms of their relationships with owners, creditors, and the government, managers have a tendency to report things in particular ways. The agency contract stipulates that information sharing shall be as transparent and complete as possible. By aligning these connected interests through monitoring, conflicts of interest between managers and shareholders can be reduced. The

establishment of this monitoring mechanism results in the formation of an expense known as an agency cost, which is made up of monitoring expenses, bonding expenses, and residual losses.

The principal incurs and bears the costs of monitoring the agent's actions. Bonding costs are the expenses that agents bear to set up and adhere to procedures that ensure the agent will operate in the principal's best interests. The amount of losses incurred by the principle as a result of the agent's judgments differing from the principal's decisions is known as residual loss. Agency theory and firm value are related because there is a conflict of interest that develops in an agency relationship between the principal and the agent. Therefore, it is envisaged that disclosure of carbon emissions will be able to satisfy investors' desires to preserve business wealth, thereby increasing the value of the company.

### **2.2 Signal Theory**

Signal theory serves as the foundation for this study. In his work *Job Market Signaling*, Spence proposed the concept of signal theory for the first time. Management can provide investors with hints about their outlook for the company by using a strategy known as "signal theory." The motivation behind businesses' inclination to tell outside parties about their financial reports can be explained by this notion. According to Bergh et al. (2014), there is an information asymmetry between the management of the company and external parties, which gives rise to the desire to communicate or disclose financial report information to them. Compared to external parties like investors, creditors, underwriters, and other information consumers, companies and company management have access to greater information about the operations of the business and its prospects for the future. As a result, in order to address these issues and decrease the information asymmetry that arises, signals to external parties can be sent through company financial reports, which include reliable and trustworthy financial data and will provide assurance about the sustainability prospects of the company going forward.

Investor decision-making is known to be influenced by information, and this will increase the value of the company. In terms of signal theory and corporate value, a company will have a mismatch in its position if it is unable to effectively communicate its value, which could result in a value that is either above or below its genuine value. It is believed that letting businesses know about their carbon footprints will send a message that they are accountable for the effects of their operations. After that, this signal will be turned into something that could pique investors' interest and raise the company's worth.

### **2.3 Carbon Emission Disclosure**

The release of carbon into the atmosphere is known as carbon emissions. According to ecolife.com, carbon emissions are a significant contributor to climate change and are associated with greenhouse gas emissions. Over time, CO<sub>2</sub> emissions have increased on a local, regional, national, and worldwide scale. This is brought about by an increase in anthropogenic activities, changes in land use, forest fires, and the growing consumption of energy derived from organic materials (fossils) (Slamet S., Lapan Researcher). The operational operations of the company are one of the factors that contribute to carbon emissions. Businesses that are affected by climate change are required to declare their actions, such as the disclosure of carbon emissions, that contribute to the phenomenon. A number of regulations pertaining to this subject are also observed. As a result of demands from various company stakeholders and government regulations like Presidential Regulation No. 61 of 2011 concerning the National Action Plan for Reducing Greenhouse Gas Emissions and Presidential Regulation No. 71 of 2011 concerning the Implementation of the National Greenhouse Gas Inventory, disclosure and reporting of this information are beginning to take shape in Indonesia. According to Probusari and Kawedar (2019), the purpose of these rules is to lower carbon emissions. Businesses are now expected to provide greater transparency regarding their firm information. Companies show their transparency and responsibility by

providing information in their annual reports. There are two categories of information disclosed in the annual report: required disclosure and voluntary disclosure.

### **2.4 Firm Value**

For investors, the idea of firm value is crucial since it serves as a gauge for how the market views the business overall. Nominal value, market value, inherent value, book value, and liquidation value are some of the divisions of firm value (Christiawan & Tarigan, 2007). Brimingham asserts that firm value is significant because maximizing firm value is the company's primary objective in all of its operations (Tjahjono, 2013). Market value is the definition of firm value used in this study. Because if the company's share price rises, firm value can maximize shareholder prosperity. The wealth of shareholders increases with a greater share price.

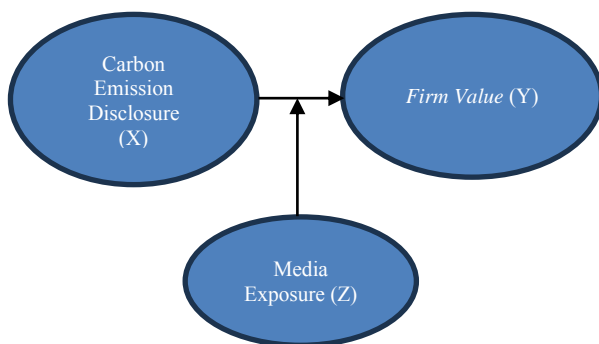
Investors often assign professionals to run the firm in order to maximize its worth. Managers and commissioners are the roles that experts occupy. Profits distributed to shareholders or the share price are typically used to calculate a company's value (Carningsih, 2009) in (Tjahjono, 2013).

### **2.5 Media Exposure**

One factor that could affect a company's value and the disclosure of carbon emissions is media exposure. Seeing if a business posts information on its social responsibility on its website or another online platform, like in its sustainability report, is one approach to gauge how much media attention it receives in the context of corporate social responsibility, or CSR. Pratiwi (2016) asserts that media exposure is meant to help companies disclose their carbon emissions and play a proactive role by showcasing data that demonstrates a company's value. According to Singarimbun and Effendi (2011), "media touch" is the definition of media exposure. Paramadini (2009) defines media exposure within a corporation as the organization's acknowledgement of the importance of mass media coverage of its business practices, which in turn impacts public opinion. Furthermore, the role that the media plays in social mobilization

movements is notable, especially those that are spearheaded by environmental interest organizations.

In significant part, the media facilitates the public's access to information. Details on how businesses are run are among the information that can be made publicly available. Businesses should proceed with prudence as media coverage of their operations may have an impact on their reputation and important values. If the media closely follows a country's environmental changes, businesses will be more likely to expose their practices.



**Figure 1. Research Model**

## 2.6 Hypothesis

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. The value of the company 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.**

**3. Method**

The study employs a quantitative research design, utilizing media disclosure, company value, and carbon emissions disclosure as research variables. The study is limited to manufacturing companies listed on the IDX

between 2017 and 2021. Purposive sampling was the sample technique employed. 54 businesses that matched the requirements were included in the research sample. Descriptive analysis and multiple linear regression analysis are the methods of analysis employed. www.idx.co.id is used to access or obtain this data.

Kategori	Item	Keterangan
Perubahan iklim: Risiko dan peluang	CC1	Penilaian/deskripsi terhadap risiko (peraturan/regulasi baik khusus maupun umum) yang berkaitan dengan perubahan iklim dan tindakan yang diambil untuk mengelola risiko tersebut.
	CC2	Penilaian/deskripsi saat ini (dan masa depan) dari implikasi keuangan, bisnis dan peluang dari perubahan iklim.
Emisi Gas Rumah Kaca (GHG/Greenhouse Gas)	GHG1	Deskripsi metodologi yang digunakan untuk menghitung emisi gas rumah kaca (misal protocol GRK atau ISO).
	GHG2	Keberadaan verifikasi eksternal terhadap penghitungan kuantitas emisi GRK oleh siapa dan atas dasar apa.
	GHG3	Total emisi gas rumah kaca (metrik ton CO <sub>2</sub> -e) yang dihasilkan.
	GHG4	Pengungkapan lingkup 1 dan 2, atau 3 emisi GRK langsung.
	GHG5	Pengungkapan emisi GRK berdasarkan asal atau sumbernya (misal: batu bara, listrik, dll).
	GHG6	Pengungkapan emisi GRK menurut fasilitas atau tingkat segmen.
	GHG7	Perbandingan emisi GRK dengan tahun-tahun sebelumnya.
Konsumsi Energi (EC/Energy Consumption)	EC1	Jumlah energi yang dikonsumsi (misalnya tera-joule atau Peta-joule).
	EC2	Penghitungan energi yang digunakan dari sumber daya yang dapat diperbaharui.
	EC3	Pengungkapan menurut jenis, fasilitas atau segmen.
Pengurangan Gas Rumah Kaca dan Biaya (RC/Reduction and Cost)	RC1	Perincian dari rencana atau strategi untuk mengurangi emisi GRK.
	RC2	Perincian dari tingkat target pengurangan emisi GRK saat ini dan target pengurangan emisi.
	RC3	Pengurangan emisi dan biaya atau tabungan ( <i>costs or savings</i> ) yang dicapai saat ini sebagai akibat dari rencana pengurangan emisi.
	RC4	Biaya emisi masa depan yang diperhitungkan dalam perencanaan belanja modal ( <i>capital expenditure planning</i> ).
Akuntabilitas Emisi Karbon (AEC/Accountability of Emission Carbon)	ACC1	Indikasi bahwa dewan komite (atau badan eksekutif lainnya) memiliki tanggung atas tindakan yang berkaitan dengan perubahan iklim.
	ACC2	Deskripsi mekanisme bahwa dewan (atau badan eksekutif lainnya) meninjau perkembangan perusahaan yang berhubungan dengan perubahan iklim.

Sumber: Choi et al. (2013)

**Figure 2. Carbon Emission Disclosure Checklist**

**4. Result and Discussion**

**4.1 Descriptive statistics**

The results of descriptive statistical analysis in this research are shown in Table 1 below:

**Table 1 Descriptive Research Data Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std, Deviation
Carbon Emission Disclosure (X)	210	0,000	0,788	0,288	0,360
Media Exposure (Z)	210	0,000	1,000	0,529	0,499
Nilai Perusahaan (Y)	210	0,190	9,780	3,294	2,217

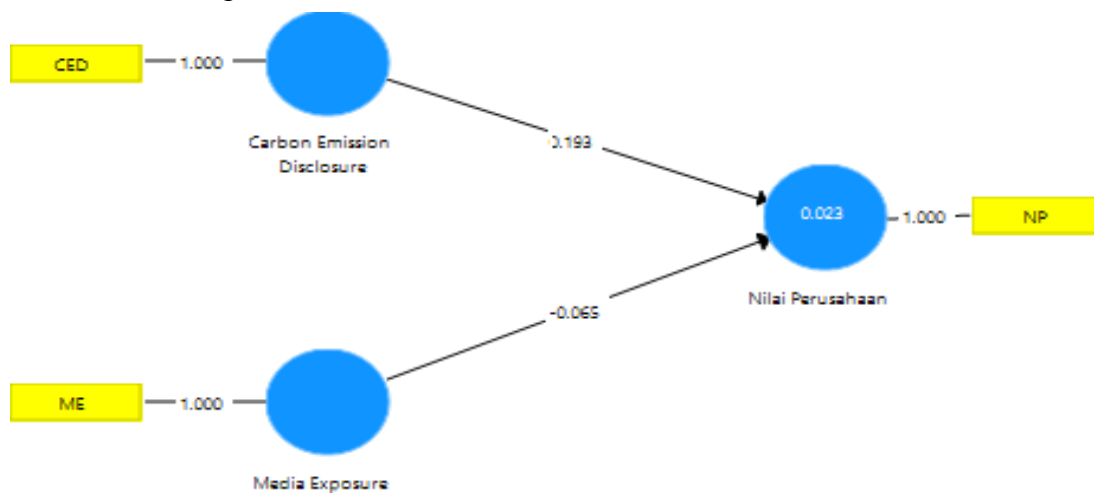
Source: Data processing results, 2023

Based on the results of descriptive statistics in table 1, information on each variable can be found regarding the minimum, maximum, *mean* (average) and *standard deviation* values which are described as follows: The results of descriptive statistical analysis on the *carbon emission disclosure* variable show that the minimum value is 0.000 and the maximum value is 0.778. Meanwhile, the average value (*mean*) is 0.288 with a standard deviation of 0.360. The results of descriptive statistical analysis on the media exposure variable show

maximum value is 1.000. Meanwhile, the average value (*mean*) is 0.529 with a standard deviation of 0.499. The results of descriptive statistical analysis on the company value variable show that the minimum value is 0.190, and the maximum value is 9.780. Meanwhile, the average value (*mean*) is 3.294 with a standard deviation of 2.217.

Evaluation of Measurement Models

The following is a display of the SmartPLS output results:



that the minimum value is 0.000, and the

**Figure 3. SmartPLS Outputs**

Source: Data SmartPLS processing, 2023

The outer model is assessed by looking at convergent validity (the size of the loading factor for each construct). Convergent validity of the reflexive indicator measurement model is assessed based on the correlation between the item score/component score and the construct score calculated using PLS. An individual

reflexive measure is said to be high if it correlates more than 0.70 with the construct to be measured. However, for research in the initial stages of developing a measurement scale, a loading factor value of 0.50 to 0.60 is considered sufficient (Chin, 1998 in Sholekha, 2018).

**Table 2. Outer Loadings (Measurement Model)**

	<i>Carbon Emissions Disclosure (X)</i>	Media Exposure (Z) <sup>Ni</sup>	lai Company (Y)
<i>Carbon Emissions Disclosure (X)</i>	1,000		
Media Exposure (Z)		1,000	
Mark Company (Y)			1,000

Source: SmartPLS Processed Data, 2023

From the results of the test output above, *the loading factor obtained* from each relationship between the indicators and the construct has an indicator value of 1,000 so that all indicators

can be said to be valid. The next stage is the second examination by looking at the composite reliability and Cronbach's alpha values. Based on the calculation results, *the composite reliability obtained* is as follows.

**Table 3. Composite Reliability**

	<i>Composite Reliability</i>
<i>Carbon Emission Disclosure (X)</i>	1,000
Media Exposure (Z)	1,000
Company Value (Y)	1,000
Mark Company (Y)	1,000

Source: Data Processed SmartPLS, 2023

From the *composite reliability values* for all exogenous constructs, all of them are very endogenous reliable because the value is above 0.70 so it can be said that carbon emissions disclosure,

media exposure and company value have validity and reliability Which good like in the table 2 above

**Table 4. Cronbacks Alpha**

	<i>Cronbach's Alpha</i>
<i>Carbon Emission Disclosure (X)</i>	1,000
Media Exposure (Z)	1,000
Company Value (Y)	1,000

Source: Data Processed SmartPLS, 2023

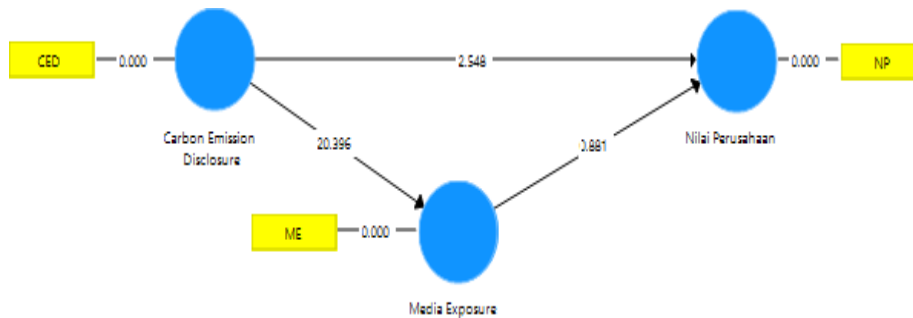
From the *Cronbach's alpha values* for all exogenous and endogenous constructs, all are very reliable because the values are above 0.70, the same as in

table 4.2 previously, it can be concluded that *carbon emission disclosure* , *media exposure* and company value have good validity and reliability.



Next, do a *calculating algorithm* to find out the *convergent validity moderating value*. The following are the results of *convergent validity moderating*.

**Figure 5**



Source: SmartPLS Processed Data, 2023

still in the development stage. From the *output image* above, the *loading factor* for each variable is quite reliable and there are no values below 0.60.

The *outer model* is assessed by looking at *convergent validity* (the size of the *loading factor* for each construct). A *loading factor* above 0.70 is highly recommended, however a *loading factor* of 0.60 can still be tolerated as long as the model is

The second test looks at the *composite reliability* and *Cronbach's alpha values*. Following are the calculation results

**Table 5 Composite Reliability**

	<i>Composite Reliability</i>
<i>Carbon Emission Disclosure (X)</i>	1,000
<i>Media Exposure (Z)</i>	1,000
<i>Company Value (Y)</i>	1,000

Source: SmartPLS Processed Data, 2023

**Table 6. Cronbach's Alpha**

	<i>Cronbach's Alpha</i>
<i>Carbon Emission Disclosure (X)</i>	1,000
<i>Media Exposure (Z)</i>	1,000
<i>Mark Company (Y)</i>	1,000

Source: Data Processed SmartPLS, 2023

From the results of calculating the *PLS algorithm* for the outer model, it shows that the *composite reliability value* in table 4.5 for each of the constructs above is very good, namely above 0.90.

Furthermore, it can be seen from the results of table 4.6 for the *Cronbach's alpha value* that where each construct is the same, it shows a value above 0.90.

**Table 7. Average Variance Extracted**

	<i>Average Variance Extracted (AVE)</i>
<i>Carbon Emission Disclosure (X)</i>	1,000
Media Exposure (Z)	1,000
Mark Company (Y)	1,000

Source: Data Processed SmartPLS, 2023

*Average Variance Extracted (AVE)* value, where a construct with good validity, namely the AVE value, must be above 0.50. It can be seen that from table 7 above it shows that the AVE value for each construct is above 0.50. After the evaluation for

*convergent validity* is fulfilled, the next step is to test *discriminant validity*. *Discriminant Validity* is carried out to ensure that each concept of each latent variable is different from other variables. The following are the calculation results of *discriminant validity*.

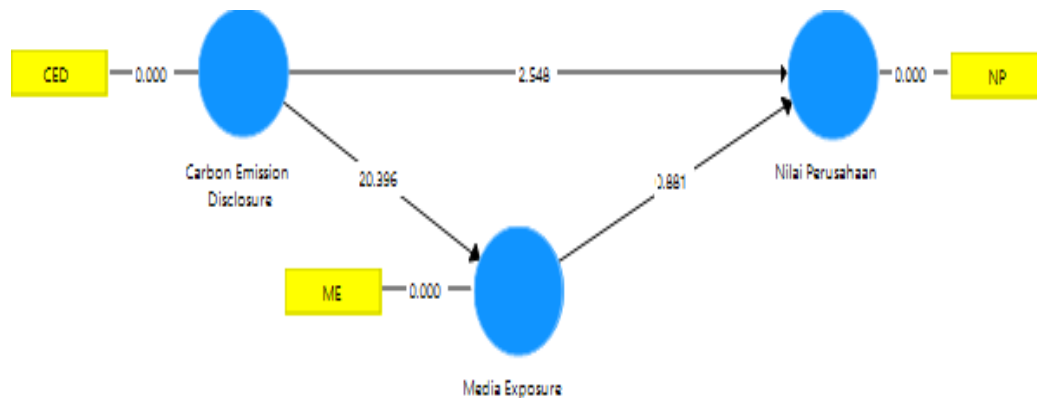
**Table 8. Output Discriminant Validity**

	<i>Carbon Emissions Disclosure (X)</i>	Ni Media Exposure (Z)	lai Company (Y)
<i>Carbon Emissions Disclosure (X)</i>	1,000		
Media Exposure (Z)	0.757	1,000	
The value of the company (Y)	0.150	0.081	1,000

Source: SmartPLS Processed Data, 2023

From Table 8 above it can be seen that there are several *loading factor values* variable latent own mark *loading factors* from construct Which aimed more big compared loading value of other constructs when connected to other latent variables. This matter means that each latent variable has good *discriminant validity because*

*of the value* The indicator correlation with the construct is higher than the indicator correlation value with other constructs. The *loading factor* value criteria can be said to be good if the value the above 0.5 (Ghozali, 2014).



**Figure 6. SmartPLS Bootstrapping Structural Model Output**

Source: SmartPLS Processed Data, 2023

The inner model shows the existence of a relationship between constructs and the significance value and *R-Square value*. Based on the output results above, an *R-square* value of 0.023 is obtained, indicating that the variability of the firm value construct which can be explained by the carbon emission disclosure, media exposure and firm value constructs with their interaction is 2.3% for the endogenous

latent variable in the structural model, identifying that the model is very weak. According to Ghozali (2018), an *R Square* value of 0.67 is interpreted as good, 0.33 is interpreted as moderate or medium, and 0.19 is interpreted as weak. Meanwhile, 97.7% is explained by other variables not included in this study.

**Table 9. Output Path Coefficients**

	Original Samples (O)	Samples Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Carbon Emissions Disclosure (X) -> Mark Company	0.193	0.197	0.076	2,548	0.011
Carbon Emissions Disclosure (X) -> Media Exposure (Z)	0.757	0.757	0.037	20,396	0,000
Media Exposure (Z) -> Mark Company(Y)	-0.065	-0.064	0.073	0.881	0.379
Carbon Emissions Disclosure -> Media Exposure (Z) -> ValueCompany (Y)	-0.049	-0.048	0.056	0.876	0.382

Source: Data SmartPLS processing, 2023

Based on the test results in Table 9 above, it can be explained that:

1. The relationship between the carbon emission disclosure constructs has a

positive effect on company value at 5% ( $t_{\text{count}} 2.548 > 1.96$ ) and  $p \text{ value} = 0.011 < 0.05$ .

2. The relationship between constructs shows that the *carbon emission disclosure construct* has a positive effect on *media exposure* at 5% ( $t_{\text{count}} 20.396 > 1.96$ ) and  $p \text{ value} = 0.000 < 0.05$ .
3. *the media exposure* construct shows that the results do not have a positive effect on company value at 5% ( $t_{\text{count}} 0.881 < 1.96$ ) and  $p \text{ value} = 0.379 > 0.05$ .
4. The moderating construct of carbon emission disclosure does not show a positive influence on company value with ( $t_{\text{count}} 0.876 < 1.96$ ) and  $p \text{ value} = 0.382 > 0.05$ . So, it can be concluded that the results of this research indicate that media exposure cannot moderate the relationship between carbon emission disclosure and company value.

## 4.2 Discussion

### The Effect of Carbon Emission Disclosure on Company Value

The research results show that the significance value obtained is smaller than  $\alpha=0.05$ , namely 0.011. From these results, it can be seen that  $t_{\text{count}}$  is  $2.548 > t_{\text{table}} 1.96$  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 the value of the company. 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  $\alpha=0.05$ , namely 0.379. From these results, it can be seen that  $t_{\text{count}}$  is  $0.881 < t_{\text{table}} 1.96$  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  $0.876 < t_{\text{table}} 1.96$  and a  $p \text{ value}$  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.

## 5. 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.

### 5.1 Suggestion

Based on the conclusions above, it can be recommended: 1) Manufacturing companies listed on the Indonesia Stock Exchange should pay more attention to the factors that can influence the value of the company, so that later it will be able to increase investor and stakeholder confidence in the company which will also increase the value of the *company* ., 2) Future researchers are also advised to develop indicators based on the *Carbon Disclosure Project* questionnaire which are newer and have wider coverage of carbon emission disclosures

as well as conducting research on other company sectors that have different levels of environmental sensitivity so as to produce more diverse results, 3) Researchers You can then carry out research on other company sectors that have different levels of environmental sensitivity, thereby producing more diverse results.

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