

WILL THE FIRM VALUE INCREASE AS A RESULT OF DISCLOSING CARBON EMISSIONS?

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Abstract

The objective of this project is to empirically examine the premise that a company's disclosure of its carbon emissions is correlated with its media exposure, with the aim of gathering supporting data. This is logical when considering the media's role in promoting social mobilization efforts, such as those conducted by environmental organizations in the United States. The media significantly enhances the public's access to information. The scope of this study was limited to manufacturing companies that are publicly traded in the Consumer Goods Sub-Sector of the Indonesia Stock Exchange. The data used for analysis spanned from 2017 to 2021. The study utilized data obtained from the website www.idx.co.id, spanning from May 2023 to October 2023. The chosen approach is the critical Descriptive analysis using the structural equation model statistical technique. The SmartPLS 3 application was employed for data analysis. This analysis utilized three factors. The model incorporates media exposure (Z), carbon emissions (X), and firm valuation (Y) as moderator factors, with Tobin's Q table US serving as the dependent variable. This analysis will include the exact details of the variables utilized by the researchers. Despite the favorable and significant impact of carbon emissions on firm value, media exposure to these emissions has minimal influence on corporate value.

Keywords: Carbon Emissions Disclosure, Firm Value, Media Exposure.

INTRODUCTION

Presently, there is a significant amount of focus on global environmental concerns, particularly climate change. to the Intergovernmental Panel on Climate Change (IPCC, 2018), climate change is happening in several locations, including Indonesia, due to the average global surface temperature increasing at a rate of 0.740°C to 0.180°C. to Appenas (2017), Indonesia is currently facing many climate-related impacts including the rise in sea levels, unpredictable rainy seasons, higher surface temperatures, more frequent extreme weather events, and an overall increase in temperature. Anthropogenic greenhouse gases are a contributing factor to global climate change. The company's annual report included a detailed explanation of how it addresses carbon emissions coming from its operational activities. This disclosure of carbon emissions was established as a method of accounting for these difficulties. By making this report, the corporation can proactively implement steps or identify strategies to mitigate carbon emissions.

Rahmanita (2020) discovered that the Indonesian Accountants Association (IAI) has mandated environmental responsibility in growing accounting practices through PSAK 01 (Indonesian Accountants Association 2014), paragraph 14. One approach for a company to demonstrate responsible behaviour towards the environment is by reporting on their Corporate Social Responsibility (CSR) efforts, which include disclosing their initiatives to minimise Green House Gas (GHG) emissions. While the Republic of Indonesia currently only permits the voluntary reporting of carbon emissions, the government actively encourages social responsibility through various measures. One such measure is the implementation of Law of the Republic of Indonesia Number 17 of 2004, which officially adopts the Kyoto Protocol with the aim

of decreasing greenhouse gas emissions. As a result of the repercussions of the Kyoto Protocol, businesses are now required to engage in the process of carbon accounting, which involves identifying, quantifying, recording, presenting, and disclosing their carbon emissions. Ratnatunga (2007), carbon accounting encompasses labour charges, manufacturing overhead costs, environmental overhead costs, and costs related to carbon standards management. There is a correlation between carbon emissions and the effectiveness of utilising raw materials.

The objective of this study is to examine and collect empirical evidence to support the idea that a company's media exposure value is influenced by its disclosure of carbon emissions, and this relationship may either be reinforced or weakened. The interconnectedness between this and the media's role in social mobilisation campaigns, such as those led by environmental interest groups, is inseparable. The media also plays a role in facilitating the distribution of information to the public. Publicly shareable information encompasses specific insights into the company's operations. Due to the media's interest in a company's reputation and values, businesses must exercise caution and closely monitor their activities. Companies are more likely to reveal their operations when the media closely monitors the state of a nation's environment. The carbon emission disclosure practices of businesses and scientific accounting research are interconnected. Manufacturing companies that effectively implement carbon emissions disclosure practices will reduce the impact of greenhouse gases and demonstrate their commitment to the environment. This is consistent with their corporate social responsibility (CSR) initiatives towards the community, which can potentially enhance their financial performance and reputation. The paper references Rahmanita's previous research conducted in 2020. The current study examines how the disclosure of carbon emissions affects the value of a company, with the variable of media exposure acting as a moderator, which is distinct. The primary focus of this study is to examine the effect of disclosure, which adds interest even if it corroborates the divergent results of previous research on the factors that influence the disclosure of carbon emissions. This study specifically examines a manufacturing company that is included in the Consumer Goods Sub-Sector of the Indonesian Stock Exchange for the period spanning from 2017 to 2021.

LITERATURE REVIEW

Agency Theory

Brigham and Houston (2010), an agency relationship is established when one or more individuals, referred to as principals, designate another individual or organization, known as an agent, to perform various responsibilities and grant the agent the authority to make decisions. Conflicting objectives among individuals in an agency partnership might lead to the emergence of difficulties. A conflict of interest arises between the owner or primary (investor) and the management (agent) due to divergent goals. Capital owners seek to maximize their wealth and prosperity, while managers likewise strive for enhanced welfare for themselves. Purwandari and Purwanto (2012), there are three distinct categories of agency connections within the framework of agency theory. The following items are:

- 1) The interactions between managers and owners in terms of agency.
- 2) The relationships between managers and creditors in terms of agency.
- 3) The interactions between managers and the government in terms of agency.

Managers often have a predisposition to present information in specific ways in order to optimize their value in terms of their relationships with owners, creditors, and the government. The agency contract mandates that information exchange must be conducted with utmost transparency and comprehensiveness. By matching these interconnected interests through surveillance, conflicts of interest between management and shareholders can be minimized. The implementation of this monitoring system leads to the creation of a cost referred to as an agency cost, which comprises monitoring costs, bonding costs, and residual losses. The principal assumes and covers the expenses associated with monitoring the agent's activity. Bonding costs refer to the financial obligations that agents incur in order to establish and comply with protocols that guarantee the agent's commitment to act in the principal's utmost advantage. Residual loss refers to the financial losses that the principal experiences when the agent's judgements deviate from the principal's decisions. The relationship between agency theory and company value is interconnected due to the emergence of a conflict of interest within the agency relationship between the principal and the agent. Thus, the disclosure of carbon emissions is expected to meet investors' aspirations to protect business assets, consequently enhancing the company's worth..

Signal Theory

The study is based on signal theory. Spence introduced the notion of signal theory in his work Job Market Signaling. Management can convey their perspective on the company's future to investors by employing a technique referred to as "signal theory." The rationale for firms' tendency to provide their financial reports to external parties can be elucidated by this concept. Bergh et al. (2014), there is a lack of equal information between the company's management and external parties, which leads to the need to communicate or provide financial report information to them. Companies and company management have more extensive access to information about the business's activities and future prospects compared to external parties such as investors, creditors, underwriters, and other information consumers. To mitigate these problems and reduce the imbalance of information, companies can communicate with external stakeholders by means of their financial reports. These reports contain accurate and dependable financial information, which in turn instills confidence in the company's future prospects. Investor decision-making is influenced by knowledge, which subsequently enhances the value of the company. From the perspective of signal theory and corporate valuation, a firm will experience a discrepancy in its position if it fails to efficiently convey its worth, leading to a value that is either higher or lower than its true value. Informing businesses on their carbon footprints is thought to convey the message that they are responsible for the impacts of their operations. Subsequently, this signal will be transformed into a stimulus that has the potential to captivate investors' attention and enhance the value of the company.

Carbon Emission Disclosure

Carbon emissions refer to the process of releasing carbon into the atmosphere. ecolife.com, carbon emissions play a major role in causing climate change and are linked to the release of greenhouse gases. Over the course of time, carbon dioxide (CO₂) emissions have experienced a gradual rise at the local, regional, national, and global levels. This phenomenon is caused by a rise in human activities, alterations in land use, forest fires, and the escalating consumption of energy obtained from organic

substances (fossils) (Slamet S., Lapan Researcher). The company's operating activities are a contributing factor to carbon emissions. Businesses impacted by climate change must publicly disclose their actions, including the reporting of carbon emissions, that contribute to the problem. Several regulations regarding this subject are also adhered to. In Indonesia, the disclosure and reporting of information related to greenhouse gas emissions are starting to develop due to pressure from different company stakeholders and government regulations such as Presidential Regulation No. 61 of 2011 and Presidential Regulation No. 71 of 2011. Probusari and Kawedar (2019), the objective of these regulations is to reduce carbon emissions. Businesses are now required to offer increased transparency on their company information. Companies demonstrate their openness and accountability by furnishing information in their annual reports. The annual report contains two distinct types of information: mandatory disclosure and discretionary disclosure.

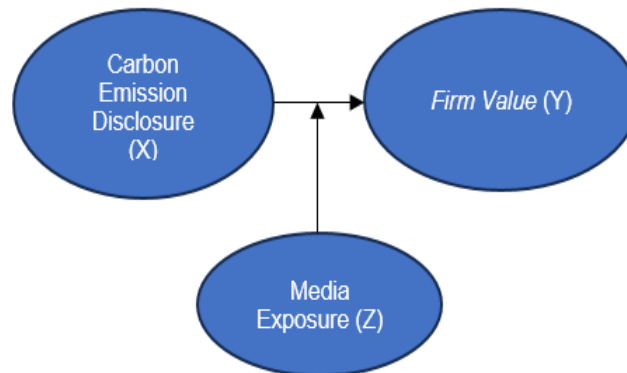
Firm Value

For investors, the concept of firm value is essential as it acts as a measure of how the market perceives the corporation as a whole. The divisions of company value include nominal value, market value, inherent value, book value, and liquidation value (Christiawan & Tarigan, 2007). Brimingham argues that firm value is crucial as it represents the core goal of the corporation in all of its activities (Tjahjono, 2013). The term "market value" refers to the valuation of a company that is being utilised in this particular research. When the share price of a company increases, it can enhance the overall value of the corporation and benefit the shareholders by maximising their prosperity. The shareholders' wealth is positively correlated with a growth in the share price. Investors frequently choose professionals to manage the company with the aim of optimising its value. Experts assume the responsibilities of managers and commissioners. The valuation of a firm is commonly determined by either the dividends paid to shareholders or the market price of its shares (Carningsih, 2009) as stated in (Tjahjono, 2013).

Media Exposure

Media exposure is a potential factor that can impact a company's value and the transparency of its carbon emissions. One way to measure the level of media attention a firm receives about its corporate social responsibility (CSR) is by checking if it publishes information about its social responsibility on its website or other online platforms, such as its sustainability report. Pratiwi (2016), media exposure serves the purpose of assisting companies in revealing their carbon emissions and taking an active part by presenting data that highlights a company's worth. Singarimbun and Effendi (2011), "media touch" refers to the concept of media exposure. Paramadini (2009), media exposure within a corporation refers to the organization's recognition of the significance of mass media coverage of its business operations, which subsequently influences public opinion. Moreover, the significant impact of the media on social mobilisation campaigns, particularly those led by environmental interest organisations, is worth mentioning. The media plays a crucial role in enabling the public to access information. Information regarding the operational aspects of enterprises can be disclosed to the public. Businesses should exercise caution as media coverage of their operations can significantly affect their reputation and core principles. If the media closely monitors a country's environmental changes, firms are more willing to reveal their practices.

Framework



Hypothesis

The awareness of the detrimental impact that companies have on the environment, including air and environmental pollution, will increase among the general people. Entrepreneurs have directly observed the influence of socially responsible and environmentally conscientious inclinations. Limberg et al. (2009), stakeholders now recognize that factors beyond profit are taken into account while operating a business. Considering the increasing significance of climate change as a global concern that requires attention, investors will take into account the possibility of providing financial support to a company that exhibits strong environmental practices (Barthelot & Robert, 2011). The value of businesses increases in proportion to the extent of information they disclose regarding their carbon emissions. Enterprises willingly disclose personal information for several reasons. The corporation believes that disclosing this information will attract the attention of investors. If a corporation consistently communicates positive or favorable information, it has the potential to achieve prosperity by increasing its corporate value.

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

Media exposure can be defined as the act of promoting and/or publicizing anything. The media relations approach of a firm can impact the way investors perceive the business. The signaling hypothesis, firms provide signals to users that convey information about their performance. Investors perceive media attention as an indication of the company's robustness. Furthermore, for organizations to gain recognition, trust, and support from their surroundings, they must have the capability to fulfil the requirements of their stakeholders and possess an effective method of communication with them. Effective communication is an essential element in the management of corporate social responsibility (CSR) (Nur and Priantinah, 2012). a study conducted by Majumdar & Bose (2019), manufacturing companies that received media exposure, especially on Twitter, were able to create value for their enterprises. The study's findings indicate that media publicity positively impacts a company's value. The company's valuation rises in proportion to the extent of media coverage it receives.

H2: Media Exposure influences firm value.

The media also plays a role in facilitating the communication of information to the public. The information that can be disclosed to the public includes details regarding

corporate operations. Given that media coverage of a company's actions can have a significant impact on its reputation and fundamental principles, businesses should exercise caution in this regard. Businesses in this predicament have an ethical obligation to divulge all of their activities, encompassing social, environmental, and financial factors. Nur and Priantinah (2012), corporations are more likely to reveal information about their operations when the media closely monitors the environmental circumstances of their country. This finding aligns with a study conducted by Dawkins and Fraas in 2011, which shown a clear correlation between the extent of voluntary disclosure of climate change and the level of media attention it receives. Research conducted by Wang et al. (2013), there is a favourable correlation between media exposure and CSR disclosure. Hence, this study is expected to illustrate how the media might reduce the impact of CED on the value of a company.

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

METHODS

The study utilizes a quantitative research design, incorporating media disclosure, corporate valuation, and carbon emissions disclosure as research variables. The scope of the analysis is restricted to manufacturing companies that are publicly listed on the IDX (Indonesia Stock Exchange) throughout the period from 2017 to 2021. The sample technique used was purposive sampling. A total of 54 firms that met the specified criteria were included in the research sample. The methodologies utilized for analysis include descriptive analysis and multiple linear regression analysis. The website www.idx.co.id is utilized for accessing or acquiring this data.

Carbon Emission Disclosure Checklist

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/ <i>Greenhouse Gas</i>)	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 ₂ -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/ <i>Energy Consumption</i>)	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/ <i>Reduction and Cost</i>)	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/ <i>Accountability of Emission Carbon</i>)	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)

RESEARCH RESULTS AND DISCUSSION

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

The findings of descriptive statistics in table 1 provide information about each variable, including the minimum, maximum, mean (average), and standard deviation values. The descriptive statistical analysis of the carbon emission disclosure variable reveals that the minimum value is 0.000 and the greatest value is 0.778. Concurrently, the mean value is 0.288, while the standard deviation is 0.360. The descriptive statistical analysis of the media exposure variable reveals that the minimum value is 0.000, while the maximum value is 1.000. Concurrently, the mean value is 0.529 with a standard deviation of 0.499. The descriptive statistical analysis of the firm value variable reveals that the minimum value is 0.190, while the maximum value is 9.780. The average value, also known as the mean, is 3.294, and it has a standard deviation of 2.217.

Evaluation of Measurement Models

The following is a display of the SmartPLS output results:

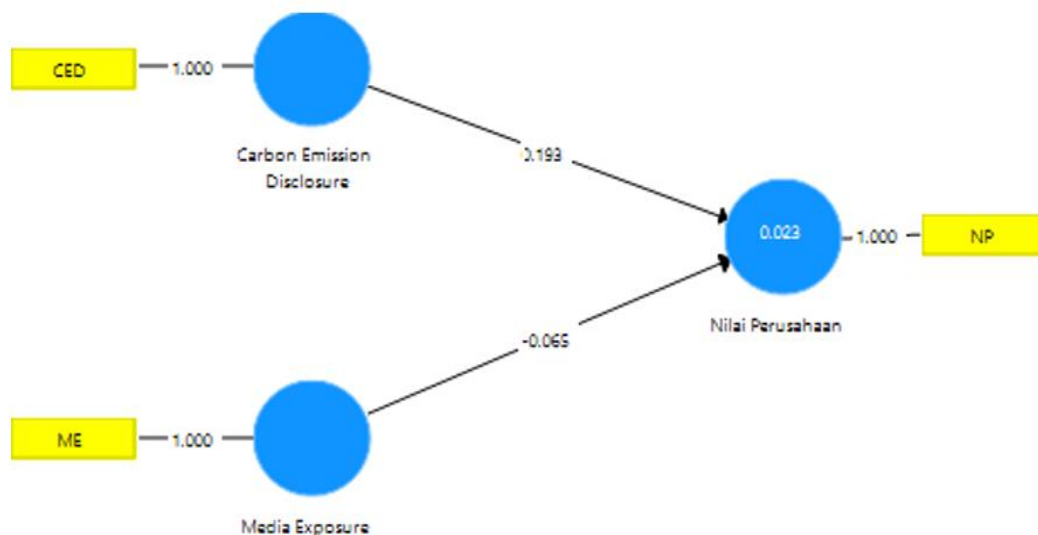


Figure 1: SmartPLS Outputs

Source: Data SmartPLS processing, 2023.

The evaluation of the outer model involves examining the convergent validity, which is determined by the magnitude of the loading factor for each construct. The convergent validity of the reflexive indicator measurement model is evaluated by examining the correlation between the item score or component score and the construct score, which is generated using Partial Least Squares (PLS).

An individual reflexive measure is considered high when it exhibits a correlation of over 0.70 with the construct being tested. Nevertheless, while doing research in the early phases of constructing a measurement scale, a loading factor value ranging from 0.50 to 0.60 is deemed satisfactory (Chin, 1998 in Sholekha, 2018).

Table 2: Outer Loadings (Measurement Model)

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

Source: SmartPLS Processed Data, 2023

Based on the test findings provided, the loading factor for each association between the indicators and the construct is 1,000, indicating that all indicators are legitimate.

The subsequent phase involves doing a secondary assessment by evaluating the composite reliability and Cronbach's alpha coefficients. The composite reliability obtained is as follows, based on the calculation findings.

Table 3: Composite Reliability

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

Source: Data Processed SmartPLS, 2023

All exogenous constructs in the study exhibit high reliability, as indicated by their composite reliability values exceeding 0.70. This suggests that carbon emissions disclosure, media exposure, and company valuation are both valid and trustworthy, as shown in Table 2.

Table 4: Cronbacks Alpha

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

Source: Data Processed SmartPLS, 2023

Based on the Cronbach's alpha values for both exogenous and endogenous constructs, it can be inferred that carbon emission disclosure, media exposure, and company valuation exhibit strong validity and reliability. This conclusion is supported by the fact that all the values exceed 0.70, as observed in table 4.2.

Next, perform a computational technique to determine the value that moderates the convergent validity. The subsequent outcomes of moderating convergent validity are as follows.

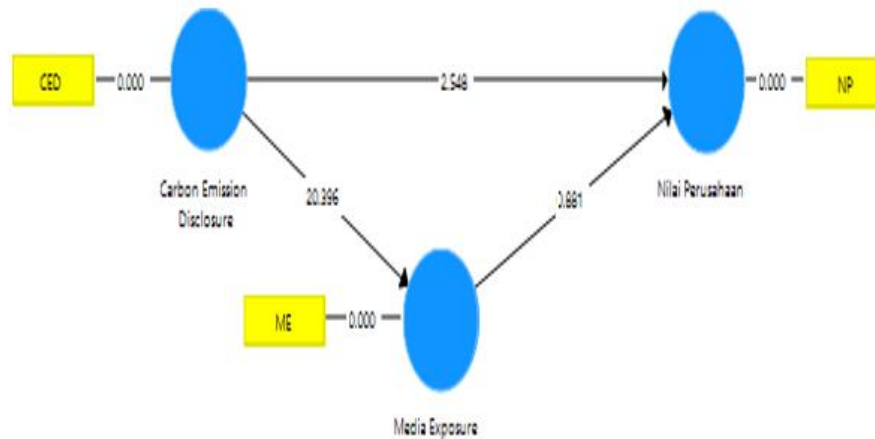


Figure 2

Source: SmartPLS Processed Data, 2023

The assessment of the outer model involves evaluating the convergent validity, which is determined by examining the magnitude of the loading factor for each construct. It is strongly advised to have a loading factor greater than 0.70, although a loading factor of 0.60 can still be acceptable throughout the model's development phase. The loading factor for each variable in the output image is highly dependable, with no values falling below 0.60.

The second test examines the composite reliability and Cronbach's alpha values. The computation findings are as follows:

Table 5: Composite Reliability

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

Source: SmartPLS Processed Data, 2023

Table 6: Cronbach's Alpha

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

Source: Data Processed SmartPLS, 2023

The findings of the PLS technique for the outer model indicate that the composite reliability value for each of the constructions mentioned in table 4.5 is excellent, exceeding 0.90. In addition, the results of table 4.6 indicate that the Cronbach's alpha value for each construct is consistently over 0.90.

Table 7: Average Variance Extracted

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

Source: Data Processed SmartPLS, 2023

The Average Variance Extracted (AVE) is a measure of construct validity. A construct is considered to have strong validity if its AVE value is more than 0.50. Table 7 clearly indicates that the AVE value for each component is more than 0.50. Once the examination for convergent validity has been met, the subsequent stage is to assess discriminant validity. Discriminant Validity is conducted to verify that each concept within a latent variable is distinct from other variables. Below are the computed results for discriminant validity.

Table 8: Output Discriminant Validity

	Carbon Emissions Disclosure (X)	Ni Media Exposure (Z)	lai Company (Y)
Carbon Emissions Disclosure (X)	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

Table 8 displays the variable latent own mark loading factors from construct, indicating that there are certain loading factor values that are significantly larger compared to the loading values of other constructions when connected to other latent variables. This indicates that each latent variable possesses strong discriminant validity due to its value. The correlation between the indicator and the concept is higher than the correlation value between the indicator and other constructs. The loading factor value is considered satisfactory if it exceeds 0.5 (Ghozali, 2014).

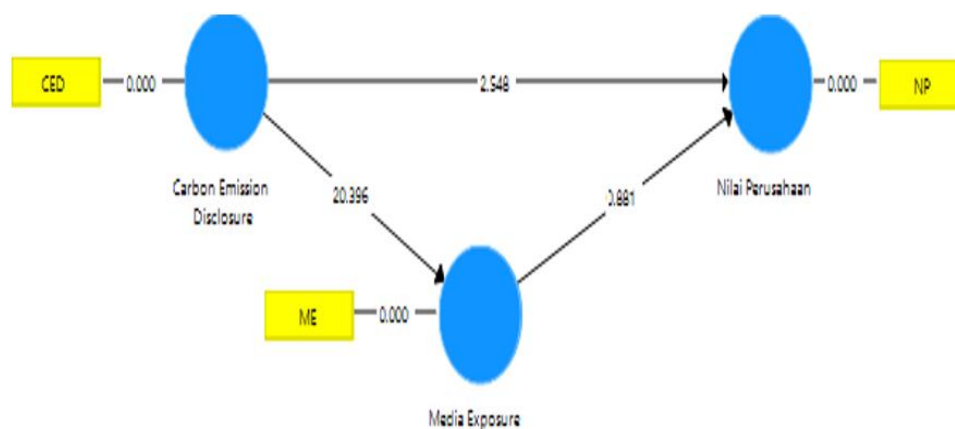


Figure 3: SmartPLS Bootstrapping Structural Model Output

Source: SmartPLS Processed Data, 2023

The inner model demonstrates a correlation between constructs and the statistical significance value and R-Square value. The output results indicate that the R-square value is 0.023, suggesting that only 2.3% of the variability in the firm value construct can be explained by the carbon emission disclosure, media exposure, and firm value constructs, along with their interaction. This indicates that the model is very weak in explaining the endogenous latent variable in the structural model. According to Ghozali (2018), a R Square value of 0.67 is considered to be high, 0.33 is considered to be moderate, and 0.19 is considered to be low. Furthermore, this study does not account for 97.7% of the variance, which can be attributed to other variables.

Table 9: Output Path Coefficients

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

Source: Data SmartPLS processing, 2023

The test findings in Table 9 indicate that there is a positive correlation between the carbon emission disclosure structures and company value. This correlation is statistically significant at a 5% level of significance (tcount 2.548>1.96) with a p-value of 0.011<0.05.

- 1) The relationship between constructs indicates that the carbon emission disclosure construct has a significant positive impact on media exposure, with a t count of 20.396, over the critical value of 1.96, and a p value of 0.000, which is less than the significance level of 0.05.
- 2) The analysis of media exposure indicates that there is no significant positive impact on firm valuation at a 5% level of significance (t count 0.881<1.96) and a p-value of 0.379>0.05.
- 3) The moderating effect of carbon emission disclosure does not have a significant positive impact on company value, as indicated by a t-value of 0.876 (which is less than the critical value of 1.96) and a p-value of 0.382 (which is greater than the significance level of 0.05).

Therefore, it can be inferred that the findings of this study suggest that media exposure does not have the ability to modify the correlation between carbon emission disclosure and firm valuation.

DISCUSSION

The Effect of Carbon Emission Disclosure on Company Value

The research findings indicate that the acquired significance value is less than the predetermined threshold of $\alpha=0.05$, specifically 0.011. Based on the data, it is evident that the t count value is 2.548, which is greater than the t table value of 1.96. Additionally, the probability value (p) is 2.548, which is less than 0.05. Therefore, we accept the alternative hypothesis (H1) and conclude that the disclosure of carbon emissions by commercial organizations can lead to changes. The Carbon Disclosure Project (CDP) information worksheet reveals that the environment has a significant impact. The findings of this study demonstrate a positive correlation between the level of carbon emission disclosure in a consumer products company and its value. According to a study conducted by Sari and Budiasih (2022), they found that disclosing

carbon emissions had a beneficial impact on the valuation of manufacturing firms listed on the IDX during the period of 2018-2019. Therefore, the more extensive the revelation of carbon emissions, the higher the worth of the enterprise

The Effect of *Media Exposure* on Company Value

The research findings indicate that the acquired significant value, namely 0.379, is lower than the predetermined threshold of $\alpha=0.05$. Based on the data, the t count is 0.881, which is less than the t table value of 1.96. Additionally, the probability value (p) is 0.379, which is greater than 0.05. Therefore, we reject the null hypothesis (H3) and conclude that there is no guarantee that a company's value will grow with high or low disclosure of carbon emissions. This may be attributed to the fact that carbon emissions information disclosure in Indonesia is currently categorized as voluntary and necessitates substantial implementation expenses. Whether or not a corporation discloses information about its carbon emissions depends on the decision made by its management. Lestari R.'s (2022) research indicates that media exposure does not have a significant impact on the valuation of property and real estate businesses listed on the IDX during the period of 2018-2020. Additional research conducted by Laksani and Kirana (2020) indicates that media exposure does not have any impact on the disclosure of carbon emissions from non-financial sector companies listed on the Indonesia Stock Exchange between 2015 and 2018. The frequency of firms' voluntary climate change disclosures is directly correlated with their level of media attention.

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

Media exposure lacks the ability to attenuate the correlation between carbon emission disclosure and company valuation. The findings of the indirect impact analysis test indicate that there is a moderated computed t value of 0.876, which is less than the critical t value of 1.96. Additionally, the p value is 0.382, which is greater than the significance level of 0.05. The results with a significance value more than 0.05 indicate that media exposure does not have the ability to regulate the relationship between carbon emission disclosure and company valuation. Therefore, hypothesis 4 (H4) is rejected. Consequently, the company's attempts to reveal environmental carbon emissions, along with the disclosure of carbon emissions information from external media's online publications, cannot serve as a standard for enhancing the performance or value of consumer goods companies. According to Balkis (2018), disclosing the intensity of carbon emissions has a negative moderating impact on the relationship between carbon emission disclosure and the value of manufacturing companies listed on the Indonesia Stock Exchange during the 2015-2016 timeframe.

CONCLUSION

The research discusses conducted for this study led to the conclusion that carbon emission disclosure has a profitability value of 0.011 and a tcount value of 2.548. This demonstrates the acceptance of H1, indicating that the variable of carbon emission disclosure has a noteworthy and favourable impact on the value of the company. The carbon emission disclosure indicates a profitability value of 0.000 and a t-count value of 20.396. This indicates that H2 is supported, indicating that the variable of Carbon emission disclosure has a positive and statistically significant impact on media exposure. The media exposure indicates a profitability value of 0.379 and a t-count value of 0.881. This indicates that H3 is invalidated, implying that the media exposure

variable does not have any impact on the value of the company. The carbon emission disclosure moderation has a profitability value of 0.382 and a t-count value of 0.876. This indicates that H7 is invalidated, implying that media exposure does not have the ability to attenuate the correlation between carbon emission disclosure and company valuation.

Based on the aforementioned conclusions, it is advisable to: Manufacturing businesses listed on the Indonesia Stock Exchange should prioritise elements that can impact their company's worth. This will help boost investor and stakeholder trust, ultimately leading to an increase in the company's overall value. 2) Future researchers should focus on creating indicators derived from the Carbon Disclosure Project questionnaire that are more recent and encompass a broader range of carbon emission disclosures. Additionally, they should explore conducting research on company sectors with varying degrees of environmental sensitivity to generate more diverse findings. 3) Scientists Subsequently, you can do research on various sectors of other companies that exhibit varying degrees of environmental sensitivity, so generating a wider range of outcomes.

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