Jurnal Riset Akuntansi Soedirman (JRAS)
Vol. 3 No. 2 Tahun 2024, Hal 29 – 42
ISSN 2830-571X

THE EFFECT OF PROFITABILITY AND LEVERAGE ON CARBON EMISSIONS DISCLOSURE WITH MEDIA EXPOSURE AS A MODERATING VARIABLE

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Abstract

This study aims to analyze the effect of profitability and leverage on carbon emissions disclosure with media exposure as a moderating variable. The data type used in this research is quantitative causal based on annual and sustainability reports. The objects in this study are companies listed on the Indonesian Stock Exchange (IDX) in the energy sector in the 2020-2022 period. The data analysis techniques are multiple linear regression and moderated regression analysis (MRA). In this study, profitability is measured using Return on Asset (ROA), Debt to Equity Ratio (DER) to measure leverage, and the dependent variable carbon emission disclosure (CED) is measured using the Carbon Disclosure Project taken from research by (Abdullah et al., 2020). The results showed that profitability has a positive effect while leverage has no effect on carbon emissions disclosure. Media exposure does not strengthen the effect of profitability but leverage is proven to strengthen the effect of leverage on carbon emissions disclosure.

Keywords: Carbon Emissions Disclosure, Profitability, Leverage, Media Exposure
JEL Code: M41, Q56, G14

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh profitabilitas dan leverage terhadap pengungkapan emisi karbon dengan media exposure sebagai variabel moderasi. Tipe data yang digunakan dalam penelitian ini adalah kausal kuantitatif yang berdasarkan laporan tahunan dan laporan keberlanjutan. Objek dalam penelitian ini adalah perusahaan yang terdaftar dalam Bursa Efek Indonesia (BEI) sektor energi pada periode 2020-2022. Teknik analisis data yang digunakan yaitu regresi linear berganda dan Moderated Regression Analysis (MRA). Dalam penelitian ini, profitabilitas diukur dengan menggunakan Return on Asset (ROA), Debt to Equity Ratio (DER) untuk mengukur leverage dan variabel dependen carbon emission disclosure (CED) diukur dengan menggunakan Carbon Disclosure Project yang diambil dari penelitian (Abdullah et al., 2020). Data dianalisis menggunakan aplikasi Eviews 12. Hasil penelitian menunjukkan bahwa profitabilitas berpengaruh positif sedangkan leverage tidak berpengaruh terhadap pengungkapan emisi karbon. Media exposure tidak memperkuat pengaruh profitabilitas namun leverage terbukti dapat memperkuat pengaruh leverage terhadap pengungkapan emisi karbon.

Kata Kunci: Pengungkapan Emisi Karbon, Profitabilitas, Leverage, Media Exposure
JEL Code: M41, Q56, G14

INTRODUCTION

The occurrence of natural disasters, climate change, and environmental problems is a consequence of environmental pollution resulting from the development of corporate activities in various countries (Titisari & Alviana, 2012). Key contributors to climate change include gas and oil exploration, coal mining, and power plants. Climate change remains a critical issue globally, and companies should avoid activities that destroy or disrupt their surrounding environments. Thus, annual reports should include information on resource utilization and environmental protection programs (Bahriansyah & Ginting, 2022).

According to the Global Risk Report from the World Economic Forum (2020), climate change is progressing rapidly, with global temperatures projected to rise by at least 3°C by the end of 2020. Efforts to mitigate climate change will require commitments from major emitters, with many governments setting long-term goals for net-zero emissions.

International efforts to address climate change began with the Kyoto Protocol in 1997. Indonesia ratified this through Law Number 17 of 2004, committing to global initiatives to reduce greenhouse gas emissions Irwhantoko & Basuki (2016). Presidential Regulation Number 61 of 2011 and Number 71 of 2011 underscore Indonesia's commitment, with businesses participating in carbon emission reduction through disclosures Jannah & Muid (2014).

Greenhouse gases can be direct (CO_2, CH_4, N_2O) or indirect (SO_2, NOx, NM-VOCs) (KLHK, 2013). In 2022, global greenhouse gas emissions reached 53.79 Gt CO_2e, with China being the largest emitter. Indonesia ranks seventh, contributing 1.24 Gt CO_2e (DataIndonesia.id, 2023). Meanwhile, in the Asia-Pacific region, the power sector is the largest emitter, followed by the industrial and transportation sectors. In Indonesia, non-renewable energy sources and land burning account for 50% of emissions (CNBC Indonesia, 2022).

The Paris Agreement, signed by 195 UN member countries including Indonesia, calls for reducing greenhouse gas emissions (CNBC Indonesia, 2023). Although carbon emission disclosure is still voluntary disclosure. Voluntary disclosure refers to information shared by companies that are not mandated by existing regulations. Because it is voluntary, many companies infrequently disclose their carbon emissions. However, disclosing carbon emission is part of corporate social responsibility (CSR) efforts. By minimizing the impact of their greenhouse gas emissions, companies can company's greenhouse gas emissions can also be minimized, and it can show their concern for the environment. Therefore, initiatives to reduce carbon emissions can align with the principles of CSR (Pratiwi, 2016).

Companies that disclose carbon emissions will face profits. The theory of legitimacy explains that an organization or company strives to ensure that the operations carried out are within the societal or environmental norms and values of the community in which it operates (Pratiwi dan Sumaryati, 2014). Thus, to gain legitimacy from the general public, the company will disclose its information, including the carbon emissions disclosure, so that the public knows that its operations are running with existing values.

Furthermore, stakeholder theory asserts that a company does not operate solely for its benefit but must also provide benefits to its stakeholders. The company's existence is significantly influenced by the support it receives from its stakeholders (Ghozali & Chariri, 2014 in Jannah & Muid, 2014). Therefore, the company will always strive to meet the interests of its stakeholders to ensure the continuity of its operations.

Profitability is a key factor influencing carbon emissions disclosure. It indicates the company's success in generating profit. Companies with higher profitability are generally more attentive to environmental concerns and more capable of effectively communicating their disclosure compared to less profitable companies (Lorenzo et al., 2009). Profitable companies can allocate sufficient resources to cover the cost associated with environmental disclosure. Conversely, less profitable companies are more likely to prioritize achieving financial goals, which can limit their capacity to engage in environmental initiatives.

Leverage is the next element that affects carbon emissions disclosure. The use of the DER ratio for leverage measurement is to assess the financial health of a company in paying off debt (one of which is debt financing corporate social responsibility activities) through company equity. Based on stakeholder theory, companies with large DERs will prioritize responsibility to creditors over disclosure. Based on research conducted by Nisak & Yuniarti (2018); Zahra & Aryati (2023); Ghomi & Leung (2013); and Mujiani et al. (2019), the increase in leverage in the company has a significant effect on emission disclosure when the company's leverage grows, so does the company's carbon emission disclosure. However, research by Ghozali & Chariri (2014) found the disclosure of carbon emissions is unaffected by that leverage.

The following variable that affects carbon emission disclosure is media exposure. Exposure to the media increases the impact of profitability and leverage on the disclosure of carbon emissions. Because the media plays a role in conveying information to the public, companies can benefit from media exposure when making disclosures. Research by Abdullah et al. (2020) media exposure reinforces the influence of leverage on carbon emission disclosure. In contrast, according to the study conducted by Larasati et al. (2020), find that media exposure augments profitability-carbon emission disclosure.

From the explanation above, this study was conducted to analyze the effect of profitability, and leverage on disclosure of carbon emissions, and add media exposure as a moderating variable in energy companies listed on the Indonesia Stock Exchange (IDX) in the period 2020-2022. The energy sector is considered as the main focus area due to its detailed involvement as one of the largest sources of carbon emissions in Indonesia.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Legitimation Theory

Legitimacy theory, as introduced by Dowling & Pfeffer (1975), emphasizes that organizations must align their activities with societal values and norms to maintain legitimacy, forming a "social contract" with their community (Ghozali & Chariri, 2014). This theory underscores the importance of disclosing nonfinancial information to gain public legitimacy, as organizations are integral parts of society and must adhere to its norms (Nurdiati et al., 2023). Transparency in environmental responsibility, such as carbon emission disclosures, is crucial for preventing a legitimacy gap, which occurs when there is a misalignment between community values and company actions, threatening business sustainability (Ghozali & Chariri, 2014). By disclosing carbon emissions, companies can demonstrate compliance with societal expectations, gain public support, and ensure their business continuity amidst environmental pressures (Cahya, 2017).

Stakeholder Theory

Stakeholder theory, articulated by Freeman & McVea (1984), defines stakeholders as groups or individuals who impact or are impacted by a company's goals, encompassing shareholders, lenders, employees, service users, suppliers, public interest groups, and the government. Clarckson (1995) categorizes stakeholders into primary, essential for the company's continuity, and secondary, influential but not critical. Companies must engage and satisfy stakeholders, especially those with significant leverage, to maintain support, often through social disclosures (Gray et al., 1995; Rusmana & Purnaman, 2022). Environmental disclosure, signaling responsible behavior, enhances stakeholder understanding and leads to better performance (Ardini, 2019). Carbon emissions, from burning carbon, threaten sustainability, prompting regulatory disclosures. Indonesian regulations like Presidential Regulation No. 61 and No. 71 of 2011 mandate carbon emission disclosures to mitigate environmental impact (Widiyani, 2022; Sari et al., 2023)

Carbon Emissions
Carbon emissions are gases released into the atmosphere from burning carbon-based fuels, posing significant environmental threats (Widiyani, 2022). Companies' operational activities are major contributors, and disclosing these emissions is crucial due to their impact on reputation, costs, and competitiveness Sari et al., 2023)

Carbon Emission Disclosure
Carbon emission disclosure is a voluntary practice where companies report their carbon emissions in annual reports to reduce information asymmetry in the capital market (Octisari et al., 2023). This practice legitimizes company activities but is not mandatory, with no specific international standards requiring it (Puspita, 2015). Sustainability reports, detailing social and environmental activities, are now as crucial as financial reports, serving as a communication tool with stakeholders to gain their support. Companies are expected to be transparent, balancing profit with environmental and social responsibilities in line with sustainable development goals (Akhiroh, 2016). Carbon emission disclosure is measured using indices like the Carbon Disclosure Project questionnaire and Choi et al., (2013) Carbon Emission Disclosure Checklist, covering climate risks, emissions, energy use, reduction efforts, costs, and accountability.

Profitability
Profitability reflects a company's financial performance and ability to generate profits (Latif et al., 2023). It is also a benchmark for encouraging voluntary disclosure of information, including carbon emissions (Wiratno & Muaziz, 2020). Companies with higher profitability are better positioned to handle societal pressure and disclose environmental impacts due to their greater financial resources. Thus, profitable companies are more likely to disclose carbon emissions, enhancing their legitimacy within the community (Putri, 2013).

Leverage
Leverage measures how much a company relies on debt compared to equity to finance its assets. It is assessed by comparing total debt to total assets, indicating the proportion of financing from creditors (Febriani et al., 2016). High leverage means that a larger portion of the company's assets is financed by debt, influencing company decisions and risk levels (Ardini, 2019). Firms with significant leverage may adopt conservative spending practices, including cautious approaches to carbon reduction (Ardini, 2019). However, higher leverage also increases financial risk due to higher fixed costs and potential bankruptcy if the company struggles to meet interest payments (Wulansari, 2009).

Media Exposure
The media significantly influences stakeholder perceptions and decisions by shaping views on Corporate Social Responsibility (CSR) (Reverte, 2009). Increased media coverage of environmental issues enhances public scrutiny and NGO influence, prompting companies to improve their disclosure practices. Media exposure thus plays a vital role in informing stakeholders and driving corporate transparency on climate change and carbon emissions.

Hypothesis Formulation
According to legitimacy theory, companies are pressured by societal expectations to fulfill environmental responsibilities, and high profitability enhances their capacity to do so (Roberts, 1992; Herinda & Wijayanti, 2021). Profitability reflects a company’s financial health and ability to manage additional costs associated with environmental transparency (Choi et al., 2013). Companies with strong financial performance are better positioned to allocate resources for comprehensive carbon emission disclosures, aligning with societal norms and enhancing their corporate image (Latif et al., 2023; Tana & Diana, 2021). Thus, profitable companies are more likely to engage in detailed environmental disclosures, including carbon emissions.

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H1: Profitability has a positive effect on carbon emission disclosure

The stakeholder theory posits that companies with high leverage face increased pressure from creditors and other stakeholders, making them prioritize debt repayment over voluntary disclosures (Choi et al., 2013). High leverage limits the funds available for additional activities such as carbon emission reporting, as resources are primarily allocated to servicing debt obligations rather than enhancing transparency (Luo et al., 2012). Empirical studies, including those by Ghomi & Leung (2013) and Jannah & Muid (2014), have shown that firms with higher leverage are less likely to engage in comprehensive carbon emission disclosure due to the financial constraints imposed by their debt (Astiti & Wirama, 2020; Setiadi, 2021). Thus, the high debt burden of leveraged firms restricts their capacity to voluntarily disclose environmental information, leading to a negative relationship between leverage and carbon emission disclosure.

H2: Leverage has a negative effect on carbon emission disclosure

According to legitimacy theory, companies face societal pressure to address environmental issues and maintain legitimacy. Media plays a critical role by increasing public awareness and scrutiny of corporate activities. Companies with higher profitability are better positioned to allocate resources toward environmental initiatives, responding effectively to societal demands (Jannah & Muid, 2014). Increased media exposure amplifies this effect by motivating companies to enhance their environmental disclosures to maintain a positive public image and secure stakeholder support (Nur & Priantinah, 2012; Dawkins & Fraas, 2011). Therefore, media exposure strengthens the positive relationship between profitability and carbon emission disclosure, driving companies to meet societal expectations and maintain legitimacy through transparent reporting.

H3: Media exposure can strengthen the effect of profitability on carbon emissions disclosure

According to stakeholder theory, companies must maintain trust and support from stakeholders, especially when leverage is high, as the company's survival depends on this support (Putri, 2013). Media plays a crucial role in monitoring and disseminating information about company activities related to climate change. Increased media exposure prompts stakeholders to be more responsive to environmental issues, pressuring companies to disclose more information. This relationship is supported by research indicating that media exposure enhances the impact of leverage on carbon emission disclosure, as companies seek to reassure stakeholders about their environmental responsibility (Abdullah et al., 2020; Wirawan & Setijaningsih, 2022). Thus, media exposure encourages companies with high leverage to be more transparent about their carbon emissions to maintain stakeholder trust and support.

H4: Media exposure can strengthen the effect of leverage on carbon emissions disclosure

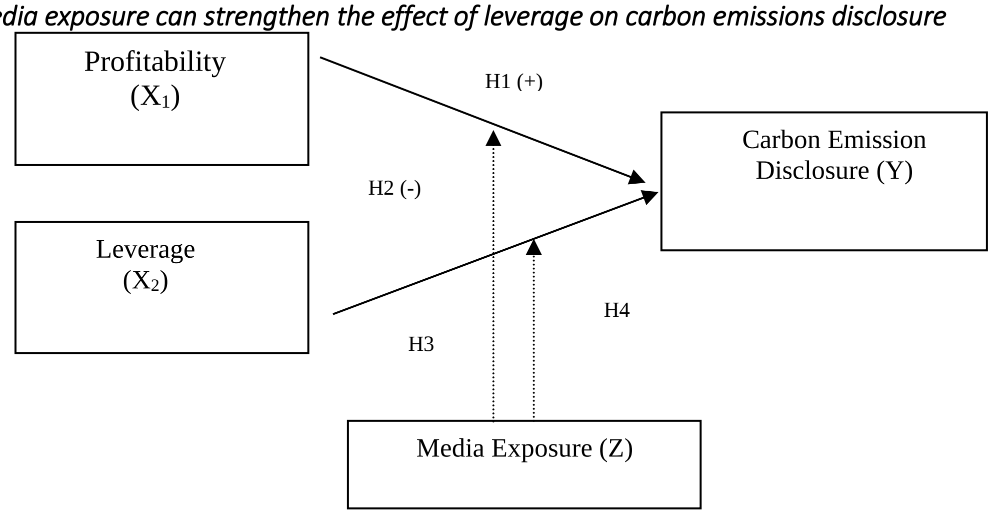

Figure 1. Reseach Model

RESEARCH METHODOLOGY

The population for this study comprises energy sector companies listed on the Indonesia Stock Exchange from 2020 to 2022.

a. Energy sector companies listed on the Indonesia Stock Exchange during 2020–2022
b. Energy sector companies that do not have an annual report available in full on the BEI website for the period 2020-2022
c. Energy sector companies that do not have a sustainability report or media related to carbon disclosure in full for the period 2020-2022.

Table 1. Criteria Used Sampling

No	Criteria	Total
1.	Energy sector companies listed on the Indonesia Stock Exchange from 2020 to 2022	82
2.	Energy sector companies that do not have an annual report available in full on the IDX website for the period 2020-2022	(23)
3.	Energy sector companies that do not have a sustainability report or media related to carbon disclosure in full on the IDX website for the period 2020-2020	(36)
	Total of companies that fulfill the sample criteria	23
	Number of Research Samples (23 x 3)	69

Research Model

This research uses multiple regression and MRA analysis techniques consists of descriptive statistics, classical assumption test, panel regression model test, model selection test, and hypothesis testing. The classic assumption test includes normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test, while the feasibility test model includes the coefficient of determination (R^2), F test, and t-test.

Conceptual and Operational Definitions of Variables

Profitability

Profitability is a ratio that determines a company’s effectiveness and efficiency, showing a company's financial success. In this research, profitability variables were measured using ROA. Profitability is measured using the following formula (Larasati et al., 2020).

$$ROA = \frac{Net\ Profit\ After\ Tax}{Total\ Asset}$$

Leverage

One way to assess which assets are financed by debt is to look at leverage (Febriani et al., 2016). Leverage is measured using Debt to Equity Ratio (DER) in Irwhantoko (2016) with the following formula:

$$Leverage = \frac{Total\ Debt}{Total\ Equity}$$

Media Exposure

The role of the media is very important along with the rapid communication tools and the internet circulating in society. Media exposure can influence public perceptions of a company, subsequently influencing stakeholders. Media exposure is measured using dummy variables, namely by giving a score of "1" to companies that disclose information about the firm's carbon emissions in the sustainability report on the company's website. Conversely, companies that do not disclose carbon emissions will be rated "0" (Jannah & Muid, 2014; Wirawan & Setijaningsih, 2022).

Carbon Emissions Disclosure

The dependent variable is the disclosure of carbon emissions. Voluntary disclosure of carbon emissions from a business's production process is known as carbon emission disclosure. This disclosure is measured using a checklist developed by Choi et al. (2013) in Abdullah et al. (2020) called the Carbon Disclosure Project (CDP) with details of 18 disclosure items. If the company discloses item, it will be given a score of "1" and if not, it will be given a score of "0".

$$CED = \frac{Total\ Items\ Disclosed}{Maximum\ Item\ Total\ Score}$$

RESULT AND DISCUSSION

Descriptive Statistics

Descriptive statistics involves analyzing data to describe collected data without making generalizations (Sugiyono, 2017). Descriptive analysis describes a variable such as the mean, standard deviation, minimal, and maximum values (Bahri, 2018). This research utilized descriptive statistical analysis to determine the description of data from variables, including profitability, leverage, media exposure, and carbon emission disclosure.

Table 2. Descriptive Statistics Analysis

	Minimum	Maximum	Mean	Std. Deviation
Carbon Emission Disclosure	0.166667	1.000000	0.753623	0.227167
Profitability	-0.098400	0.575100	0.088702	0.122006
Leverage	-0.400000	1.149000	0.291413	0.313477
Media Exposure	0.000000	1.000000	0.811594	0.393901

Classical Assumption Test

This study used two classic assumption tests: heteroscedasticity test and multicollinearity test.

Table 3. Heteroscedasticity Test

Variable	Prob.
PROF	0.5101
LEV	0.1133

Based on the test results, it can be seen that the probability value of the Glejser test of the independent variable is more than 0.05. So, it can be concluded that the data in this study have the same residual variance so there are no symptoms of that is heteroscedastic.

Table 4. Multicollinearity Test

	PROF	LEV
PROF	1.000000	0.139675
LEV	0.139675	1.000000

The table shows the results of the multicollinearity test, which indicates that there is less than 0.8 correlation between the independent variables. Thus, it may be said that there aren't any indications or symptoms of multicollinearity among the variables.

Regression Analysis Test

This study also uses panel data regression analysis. The selection of the panel data model in this study was carried out by testing three models: common effect model, fixed effect model, and random effect model. After conducting the Chow test, the Hausman test is continued with regression analysis. Based on Chow test results, Hausman test using Eviews software version 12.0, it is concluded that the most appropriate regression panel data model is used in this study is the fixed effect model.

Table 5. Multiple Linear Regression

Variable	Coefficient
C	0.627049
PROF	0.710390
LEV	0.218114

Equation 1:

$$Y = 0.627049 + 0.710390PROF + 0.218114LEV + e$$

Table 6. Moderated Regression Analysis (MRA)

Variable	Coefficient
C	0.505609
PROF	0.322019
LEV	-0.598826
ME	0.322364
PROF*ME	-0.017394
LEV*ME	0.526266

Equation 2:

$$Y = 0.505609 + 0.322019PROF - 0.598826LEV + 0.322364\text{ME} \\ -0.017394PROF * ME + 0.526266LEV * ME$$

Coefficient Determination R^2

Table 7. Coefficient Determination Result

Regression Equation	Adjusted R-squared
1	0.713019
2	0.899024

Based on the results of test above, the Adjusted R-square value of regression equation 1 is 0.713019. This shows that the profitability and leverage variables account for 71.3% of carbon emission disclosure and the remaining 28.7% is affected by factors that this study does not explain. Meanwhile, the Adjusted R-square value for regression equation 2 is 0.890300. This shows that profitability, leverage, media exposure, the interaction between media exposure and profitability and the interaction between media exposure and leverage explain 89.9% of carbon emission disclosure and the remaining 10.1% is impacted by factors that this study does not address.

Simultaneous Significance Test

Table 8. F test Result

Regression Equation	Prob. F-statistic
1	0.000000
2	0.000000

Based on the table, the probability value (F-statistic) for both regression equations is 0 or less than 0.05. This means that this research model has a regression equation that has an impact on carbon emission disclosure.

Hypothesis Test

Table 9. T-test Result

Variable	Prob. Regression 1	Prob. Regression 2
C	0.0000	0.0000
PROF	0.0006	0.4528
LEV	0.1343	0.0406
ME	-	0.0000
PROF*ME	-	0.9688
LEV*ME	-	0.0491

Based on table 9, the probability value of profitability is 0.0006, it is concluded that profitability has an effect on carbon emissions disclosure. The probability value of leverage is 0.1343 and it is concluded that leverage has no effect on carbon emissions disclosure. Meanwhile, the probability value of the interaction between profitability and media exposure is 0.9688 and it is concluded that media exposure cannot moderate profitability on carbon emissions disclosure. The probability value of the interaction between leverage and media exposure is 0.0491. It can be concluded that the interaction between leverage can moderate media exposure on carbon emissions disclosure.

Discussion

Table 10. Summary Hypothesis Test Result

Hypothesis		Coefficient	Probability	Result
H1:	Profitability has a positive effect on carbon emission disclosure	0.710390	0.0006	H1 Accepted
H2:	Leverage has a negative effect on carbon emission disclosure	0.218114	0.1343	H2 Not accepted
H3:	Media exposure can strengthen the effect of profitability on carbon emissions disclosure	-0.017394	0.9688	H3 Not accepted
H4:	Media exposure can strengthen the effect of leverage on carbon emissions disclosure	0.526266	0.0491	H4 Accepted

The study finds that return on assets (ROA), a measure of profitability, significantly influences the disclosure of carbon emissions among energy sector companies listed on the Indonesian Stock Exchange (IDX) from 2020 to 2022. Companies with higher profitability are more likely to disclose carbon emissions, supporting previous research by Nastiti & Hardiningsih (2022), Az-Zahra (2023), Tana & Diana (2021), and Widiyani (2022). This correlation indicates that as profitability increases, so does the company's ability to generate earnings and manage public pressure, allowing for greater transparency in carbon emissions reporting (Irwhantoko & Basuki, 2016; Herinda & Wijayanti (2021). These findings align with legitimacy theory, which suggests that businesses under community pressure to address environmental issues are more likely to disclose such information to demonstrate their commitment and enhance public trust (Choi et al., 2013 in Jannah & Muid, 2014).

The leverage variable in this study is measured by the debt-to-equity ratio (DER). Hypothesis testing indicates that the second hypothesis, which posited a significant impact of leverage on carbon emission disclosure, is rejected. The results demonstrate that leverage does not significantly affect the disclosure of carbon emissions among energy sector companies listed on the Indonesian Stock Exchange (IDX) from 2020 to 2022. The analysis reveals a significant value of debt level greater than 0.05, suggesting that leverage does not influence environmental impact disclosure. These findings contradict the stakeholder theory, which suggests that higher debt levels increase obligations to creditors, prompting more extensive disclosures. However, companies with high debt levels focus on repaying obligations and may avoid additional voluntary disclosures, such as carbon emissions, to minimize operational costs. Consequently, leverage has little beneficial impact on carbon emission disclosure, as companies prioritize financial performance over social responsibilities, particularly in disclosing carbon emissions. Companies with low leverage maintain good stakeholder relationships and do not feel compelled to disclose carbon emissions extensively, as stakeholders focus more on financial aspects (Choi et al., 2013).

The hypothesis testing results indicate that media exposure does not strengthen the effect of profitability on carbon emission disclosure, deviating from Larasati et al. (2020), who found that media exposure enhances disclosure in annual and sustainability reports. However, this finding aligns with Wirawan & Setijaningsih (2022), who also noted that media exposure does not moderate the relationship between profitability and carbon emission disclosure. Media exposure does not significantly impact carbon emission disclosure because news about emissions on company websites does not alter the company's commitment to transparency regarding environmental impacts. Abdullah et al. (2020) support this, stating that media coverage does not enhance transparency on environmental issues. Companies with high profitability may not report carbon emissions to the media to protect their financial success (Nur & Priantinah, 2012). These results contradict stakeholder theory, which suggests that profitable companies should use strategies to influence stakeholder relationships, and legitimacy theory, which posits that environmental disclosures help companies gain community legitimacy. In Indonesia, companies still prioritize shareholder interests and are profit-oriented, meaning media information does not significantly impact stakeholder perceptions (Wirawan & Setijaningsih, 2022).

The hypothesis test findings clarify that media exposure enhances the impact of leverage on carbon emission disclosure. This aligns with Abdullah et al. (2020), who found that media exposure strengthens the relationship between leverage and carbon emission disclosure. Leveraged firms face more external pressure to reveal their operations, demonstrating that a company's willingness to disclose carbon emissions increases with leverage. Media exposure heightens public attention, particularly on highly leveraged companies due to their greater financial risk. Active media reporting increases the pressure on these companies to disclose carbon emissions, aligning with stakeholder theory, which posits that companies disclose more information to secure their existence, influenced by stakeholder support (Putri, 2013). According to legitimacy theory, media exposure can amplify leverage's influence on carbon emissions disclosure by heightening public and market pressure. Highly leveraged companies, already under financial strain, are more likely to respond to media scrutiny by increasing their transparency on carbon emissions to manage reputational risk and maintain stakeholder support.

Overall, this study largely supports legitimacy theory and stakeholder theory, particularly regarding how profitability affects carbon emissions disclosure. However, media exposure cannot fully moderate this relationship, only the leverage variable. Highly leveraged companies tend to be more responsive to pressure from the media and the public to disclose environmental information, which helps them maintain legitimacy and fulfill stakeholder information needs. This suggests limitations in the application of such theories in the context of environmental disclosure in Indonesia and contextual factors such as prioritization of shareholder interests and profitability orientation are still dominant in corporate disclosure decisions.

CONCLUSIONS AND SUGGESTIONS

The result of the research and discussion that have been carried out regarding carbon emissions disclosure on company performance can be concluded as follows: 1) Profitability has a positive effect on carbon emission disclosure, It is interpreted that companies that have good profitability will make carbon emission disclosures; 2) Leverage does not have a positive effect on carbon emission disclosure, it is interpreted that firms, regardless of their amount of leverage, do not necessarily make carbon emission disclosures. A company will prefer to be cautious in making decisions to make carbon emission disclosures; 3) Media exposure cannot strengthen the effect of profitability on carbon emissions disclosure. Media exposure can increase public awareness and pressure companies to be more transparent about carbon emissions, but high profitability does not necessarily encourage companies to increase these disclosures. 4) Media exposure can strengthen the effect of leverage on carbon emission disclosure. Companies may be encouraged to report their carbon emissions by media attention in annual reports or sustainability reports.

The implications of this research are as follows: 1) This research shows that corporate profitability positively impacts carbon disclosure, while media exposure can moderate this relationship. These findings support the legitimacy theory, indicating that successful businesses are more likely to disclose environmental information to maintain credibility; 2) For business practitioners, profitability is a key driver of environmental disclosure. Companies with high profitability should proactively disclose carbon emissions to boost reputation and stakeholder confidence; 3) Companies with high leverage should consider effective communication strategies, as media exposure can influence their carbon disclosure efforts; 4) For the community, transparent information on carbon emissions from profitable companies can raise environmental awareness and encourage responsible consumer behavior. High media exposure can drive companies to be more environmentally responsible. 5) For governments, these findings highlight the need for regulations promoting transparency in environmental disclosures, especially for profitable companies. Media plays a crucial role in enhancing transparency and corporate accountability in carbon disclosures.

Suggestions for the next research are that it is expected to expand the research sector such as all companies listed on the IDX. The research period is only limited to 3 years, namely 2020-2022. The result of the study is not fully significant. So, further research is expected to expand the research period to strengthen the accuracy and reliability of the research. The results of the determination coefficient test showed that the carbon emission disclosure variable only explained 71.3%. Other variables can affect the disclosure which are not included in this study as much as 28.7%. Further research is expected to consider adding other variables such as ROI, company size, environmental performance, company age, or others.

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