

GOOD CORPORATE GOVERNANCE ON CARBON EMISSION DISCLOSURE AND COMPANY PERFORMANCE

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Article Info	ABSTRACT
<p>Article history: Received Sep, 22 2024 Revised Sep, 25 2024 Accepted Sep, 30 2024</p> <p>Keywords: <i>Structur Institutional, A Board of Independence Commisioners, Nationality Diversity, Carbon Emission Disclosure, Corporat Performance</i></p>	<p>General Background: Climate change and carbon emissions have become pressing global concerns, requiring companies to adopt transparent carbon emission disclosure practices. Specific Background: In Indonesia, the impact of such disclosures on corporate financial performance, particularly in the manufacturing sector, is of growing interest. Corporate governance mechanisms, such as institutional ownership, independent boards of commissioners, and nationality diversity, may influence carbon emission disclosure practices. Knowledge Gap: Limited research has explored the combined influence of these governance variables on both carbon emissions disclosure and financial performance in Indonesia's food and beverage manufacturing sector. Aims: This study aims to analyze the effects of institutional ownership, independent boards of commissioners, and nationality diversity on carbon emissions disclosure and financial performance. Results: The results show that while institutional ownership has no significant effect on carbon emission disclosure or financial performance, both independent boards of commissioners and nationality diversity have a positive influence on carbon emission disclosure. Additionally, independent boards positively affect financial performance, while nationality diversity does not. Novelty: This study highlights the pivotal role of board independence and nationality diversity in promoting environmental transparency, revealing that institutional ownership does not play as crucial a role as expected in either carbon emission disclosure or financial performance. Implications: The findings suggest that enhancing board diversity and independence may improve corporate environmental practices, but more strategic oversight is needed to translate these practices into financial performance improvements.</p> <p style="text-align: right;">This is an open-acces article under the CC-BY 4.0 license.</p> <div style="text-align: right;">  </div>

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INTRODUCTION

Climate change is a topic of interest to the wider community, and not only in Indonesia, because rising global temperatures have caused climate change in various parts of the world. According to the World Economic Forum's Global Risk 2020 report, climate change is happening faster than expected. In the past five years, the global climate has

become warmer than ever, unprecedented extreme events have occurred around the world, and the intensity of natural disasters has increased. Global temperatures are expected to increase by at least 3 degrees Celsius by the end of 2020. The direct impacts of climate change can cause planetary emergencies, such as loss of life, social and geopolitical tensions, and negative economic impacts (World Economic Forum, 2020).

In Indonesia, the disclosure of carbon emissions by companies has not been widely implemented by companies because the disclosure is still voluntary or voluntary disclosure [1]. In addition, companies consider the cost of carbon emission disclosure only as an additional cost, so there are still many companies that have not fully disclosed their carbon emissions [2]. In an effort to increase capital and maximize profits, some companies still ignore the environmental and social impacts of their production processes [2]. Even though by doing it carbon emission disclosure can convince shareholders and the public that the company is able to minimize or even eliminate the negative environmental impact caused by its operations so that they will not hesitate to continue to buy the products produced by the company. Thus, the company's profits will tend to be stable or even increase.

In line with the current industrial growth, global warming and carbon emissions from economic activities will also increase in Indonesia. In its latest report, the Global Carbon Project indicates that global carbon emissions will remain at record highs in 2022 and 2021. Indonesia will even be ranked 10th in the list of the world's largest emitters [3]. Therefore, disclosure of carbon emissions is a mandatory thing for every company. Carbon emission disclosure is regulated in Law No. 40 of 2007 concerning Limited Liability Companies (PT) in Article 66c which requires universities to report social and environmental responsibility activities in annual reports and OJK Circular Letter No. 30/SEOJK.04/2016 which regulates the obligation of issuers or public companies to include social and environmental responsibility reports in annual reports or sustainability reports. The theory used in this study as the basis for carbon disclosure is the theory of legitimacy. This theory states that organizations are part of society and therefore must conform to social norms in society. Legitimacy theory recommends companies can ensure that their activities and results are socially acceptable so that the business can continue to be sustainable [4].

Many factors can affect carbon emission disclosure One of them is with institutional ownership. Institutional ownership in a company is aimed at effectively regulating and supervising management, as well as responding to repression in carrying out disclosures related to environmental and social responsibilities around it [5]. A high level of institutional ownership is expected to further increase the influence and control over the company's management in the disclosure of the company's operations, especially social and environmental related information, such as carbon emission disclosure, so that the company can meet the expectations and values that stakeholders want to shape, as well as ensure that the company has a good image and legitimacy from the public and the public [6].

Institutional ownership can function as the controlling party of the company. With institutional ownership, it is hoped that management supervision will be more optimal. Institutional investors who have large financial resources usually put pressure on companies to disclose related carbon emissions. This is done to create a positive image

for stakeholders and the company as a form of responsibility to the environment and can be a positive signal for new investors, that institutional ownership has an effect on CED [7]. Stakeholder theory states that companies operate not only for their own interests, but also for the benefit of stakeholders. The greater the institutional ownership, the greater the incentive for the financial institution to monitor and control management in order to maximize its performance. The company is considered good, one of which is by making disclosures. The amount of disclosure made by the company is considered in determining investment decisions for institutional investors. With the disclosure of carbon emissions made by the company, institutional investors will be more confident in the decision to invest in the company, because the company not only pays attention to its financial performance, but also pays attention to the surrounding environmental conditions. These results are supported by research that states that institutional ownership has no effect on carbon emission disclosure [8]. Meanwhile, the results of the study are supported by research that states that there is an influence of institutional ownership on carbon emissions disclosure [5], [7].

Besides Institutional ownership There are other factors that can affect carbon emission disclosure namely the independent board of commissioners. A well-functioning independent board of commissioners ensures that the company's management effectively fulfills its responsibilities and monitors that the company complies with applicable regulations, including carbon emissions disclosure [9]. This can help increase the reported carbon emission disclosure. Oversight carried out by the independent board of commissioners also ensures that the reports published by the company are transparent, and meet applicable regulatory requirements, thereby improving the quality of carbon reports emission disclosure [5]. Lack of oversight, and internal controls carried out by the independent board of commissioners can result in failure to act in accordance with applicable regulations, such as not disclosing carbon emissions in accordance with government-approved limits, thereby reducing the quality of carbon disclosure reports [10]. These results are supported by research that states that the board of commissioners has a positive effect on carbon emission disclosure [11]. Meanwhile, this result is supported by research that states that the board of commissioners is independent has no effect on carbon emission disclosure [12].

Other factors that can affect carbon emission disclosure besides Institutional ownership and Independent board of commissionersthat is Nationality diversity. Nationality diversity is one of the aspects of board diversity which refers to the number of foreign directors in the composition of the board of directors. The presence of foreign directors will add to the heterogeneity of the board as well as be a tool that helps entities explore international markets [13]. The results of the study stated that the diversity of nationalities in the board of directors can manage better relationships with stakeholders who have various needs and interests [14]. Because, with the existence of national diversity, it will represent diverse characteristics and perspectives. The existence of differences in language and cultural backgrounds in the board of directors will increase the efficiency of decision-making by the board of directors, and increase the value of the company [14]. The board of directors, which has a stronger diversity of backgrounds and ethnicities, is considered more active. And with the diversity of the board of directors, it

will improve the company's relationship with suppliers, customers, and the board of directors of other companies which is useful for the company [14]. The presence of foreign councils in the composition of the board of directors also increases the heterogeneity of the board of directors so as to ensure that the interests of various stakeholders are also considered in decision-making. In line with the theory of legitimacy, foreign councils are of the view that environmental disclosure, such as carbon emission disclosure, is a communication tool that can meet the interests of stakeholders in environmental transparency while also helping to maintain the legitimacy of the entity. These results are supported by research that states that nationality diversity has a positive effect on carbon emission disclosure [15]. On the other hand, the results of the study show that nationality diversity has no effect on carbon emission disclosure [16].

Not only carbon emission disclosure just financial performance is a company's financial statement that shows the company's condition which is the basis for the company to take further action and for the community to assess the smooth running of the company before taking action [17]. As a company manager, the manager knows more about the company's prospects and internal information than the owner or (shareholder). Managers have the task of signaling the state of the company to the owners of the company. All companies from various sectors will certainly compete to be the best in their fields. One way is to improve financial performance company, because financial performance is a sign that the company is successful in terms of finance and is a form of good corporate governance. The better the financial performance, the better the welfare of shareholders. Financial performance is measured by the profitability ratio, the profitability ratio used in this study is Return on Equity (ROE) which is the ratio of after-tax profit to equity [18]. The results of these measurements can be used to evaluate the performance of the company's management over a certain period of time and evaluate whether the company has performed well or not.

There are several factors that can affect financial performance, the first factor is institutional ownership. Institutional ownership is a percentage of shares owned by the institution that can be used to monitor and control the company's performance. A high level of institutional ownership will lead to greater scrutiny by institutional investors to prevent deviant behavior carried out by management. Institutional ownership is the percentage of shares owned by the institution at the end of the year that can be owned by various institutions such as NGOs, banks, insurance companies, pension funds, and investment companies, both domestic and foreign [19]. Institutional ownership is ownership shares by institutions outside the company such as insurance companies, investment companies, and other institutional ownership. Institutional ownership can reduce conflicts through effective monitoring, thereby improving financial performance, and increasing public trust in the company [20]. Institutional ownership in the ownership structure of a company plays the role of a party that supervises and monitors the performance of the company's management. With institutional ownership in the company structure, this can reduce the manager's opportunistic behavior in committing fraud that can cause agency conflict. The larger the percentage of institutional ownership in the

company structure, the greater the influence and encouragement from the institution in the company's decision-making process to supervise management. This can provide a stronger impetus to optimize the company's performance [21]. The results of previous research show that institutional ownership structure has a positive effect on the company's financial performance [22]. On the other hand, the results of the study show that institutional ownership has no effect on the company's performance [23].

Besides institutional ownership There are also other factors that can affect the company's financial performance, namely the independent board of commissioners. The independent board of commissioners is a member of the board of commissioners who has no family relationship with the company's management, other members of the board of commissioners and shareholders. With the existence of an independent board of commissioners, the interests of shareholders, both majority and minority, are not ignored because the independent board of commissioners is more neutral to management decisions [24]. The primary responsibilities of the independent board of commissioners include advising the board, monitoring the performance of the board, and ensuring that the company operates in accordance with good corporate governance practices. In carrying out its duties, the independent board of commissioners shall not take sides and shall not be influenced by other parties, including the company's major shareholders. In order to make optimal decisions and improve company performance, the independent board of commissioners must also have the necessary corporate governance experience intelligence. With the increasing number of independent boards of commissioners, supervision of financial statements should be stricter and more objective [25].

Independent boards of commissioners have an important role in ensuring better corporate risk management. They are tasked with identifying the risks faced by the company and preventing unwanted losses. The independent board of commissioners is also responsible for handling conflicts of interest that may arise within the company, such as conflicts between majority and minority shareholders, as well as between the owners and management of the company. Additionally, by ensuring transparency and accountability in the company's decision-making process, an independent supervisory board can increase the company's credibility in the eyes of investors and the wider public [25]. This result is supported by research that states that the independent board of commissioners has an effect on the company's performance [26], the statement contradicts research that states that the independent board of commissioners does not affect the performance of company [27].

Other factors that can affect financial performance other than institutional ownership and independent board of commissioners, i.e. nationality diversity. The results of previous research stated that the diversity of the board will improve the company's financial performance. This is because: first, diversity can promote a better understanding of the market. Second, diversity can increase creativity and innovation. Third, diversity can result in more effective problem-solving. Fourth, diversity can increase the effectiveness of corporate leadership [28]. The nationality of the board of directors is measured by the number of foreign directors in the annual report [29]. In accordance with stewardship theory, the characteristics of the board, including the diversity of

nationalities, are one of the triggers for the success of the company with the difference in characteristics in it. The characteristics of the board seen from the nationality or nationality that is different from the company's country of origin is the meaning of national diversity [30]. Previous research has shown that culture is the collective programming of the mind that distinguishes members of one group or category of people from others [31]. The results of the study stated that analyzing the contribution of nationality to company performance, the results showed that nationality had an effect on company performance as measured by ROA [31]. Ethnic diversity has a significant positive influence on company performance, as measured by ROA [31]. Organizational outputs such as company performance, strategic orientation, innovation, creativity, and diversification are influenced by the demographic diversity of directors such as education level, citizenship and gender [31]. The results of previous research stated that the proportion of foreign workers in a company can have an influence on the implementation of corporate governance. The existence of the diversity of the board and the company's code of ethics is a consideration when assessing the effectiveness of the company's decision-making [30]. In addition, the diversity of the board is used as an indicator of independence and accountability in decision-making. The right decision will lead to higher profit achievements. This result is supported by research that states that national diversity has a positive effect on company performance [28] Meanwhile, the results of the study stated that national diversity had no effect on the company's performance [31].

Hypothesis Development

The Effect of Institutional Ownership on Carbon Emission Disclosure

Institutional ownership is the ownership of all outstanding shares by the institution. Stakeholder theory explains the relationship between a company and its stakeholders. The existence of this relationship causes the company's management to be open to all company activities [5]. The purpose of stakeholder theory is to assist company managers in increasing the value of the impact of company activities and minimizing losses for stakeholders (France 2020). Thus, the existence of a company is greatly influenced by the support given by stakeholders to the company. Based on previous research, it was stated that institutional ownership was proven to have an effect on carbon disclosure [7]. The company is responsible for providing good information and a good image to shareholders. The high level of ownership by institutional investors strengthens their oversight and prevents deviant behavior in the company's management. Institutional ownership can act as a party that monitors the company. With institutional ownership, it is hoped that the supervision carried out by the management will be more optimal. The higher the institutional ownership, the greater the pressure on the company's management. Institutional investors who have large funding usually put pressure on companies to make disclosures related to carbon emissions. This is done to create a positive image for stakeholders and companies as a form of responsibility for the environment and can also be a positive signal for new investors, which means that institutional ownership affects

CED [7]. Therefore, based on these considerations, a hypothesis is formulated in this study:

H1: Institutional ownership has a positive effect on carbon emission disclosure.

The Influence of the Independent Board of Commissioners on Carbon Emission Disclosure

According to Law No. 40 of 2007 Article 1 paragraph 6, the board of commissioners is responsible for conducting general and special supervision in accordance with the articles of association and providing input to the board of directors. Based on previous research, it is stated that the size of the board of commissioners has a positive influence on the level of carbon emission disclosure [10]. One of the roles of the board of commissioners is to mediate the relationship between management and shareholders. The main task of the board of commissioners is to formulate strategies that will be implemented by the management. Therefore, the board of commissioners can also function to provide policies related to disclosure, especially environmental disclosure. Previous research has stated that the size of the board of commissioners has a positive influence on carbon emission disclosure because of the ability of the board of commissioners to carry out the supervisory function of carbon emission disclosure and participate in the supervision of activities that show the company's concern for the environment [33]. The hypothesis in this study is stated as follows:

H2: The independent board of commissioners has a positive effect on carbon emissions disclosure.

The Effect of Nationality Diversity on Carbon Emission Disclosure

The existence of a foreign board of directors is considered to be able to provide various benefits for the company. This is due to the nature of foreign councils tending to have a wider view and network as well as deeper knowledge that allows them to make better decisions [13]. The presence of foreign councils in the composition of the board of directors also increases the heterogeneity of the board of directors so as to ensure that the interests of various stakeholders are also considered in decision-making. In line with the theory of legitimacy, foreign councils are of the view that environmental disclosure, such as carbon emission disclosure, is a communication tool that can meet the interests of stakeholders in environmental transparency while helping to maintain the legitimacy of the entity. Several studies have shown that the nature of foreign boards that are stakeholder oriented, seems to influence companies' decisions to conduct carbon emission disclosure to improve transparency and reputation [34] and [13].

H3: Nationality diversity has a positive effect on carbon emission disclosure.

The Effect of Institutional Ownership on Company Performance

Institutional ownership is the shareholder of a company owned by entities such as banking, insurance, pension funds, mutual funds, and other institutions. Generally, institutional investors have large funding as company owners. Based on stakeholder theory, management is expected to carry out activities that are considered important by

their stakeholders and report those activities to stakeholders [6]. Stakeholders aim to assist management in improving company performance and minimizing losses for stakeholders. This is done by utilizing all the resources and potentials owned by the company such as Human Capital, Customer Capital, and Structural Capital. The higher the institutional ownership, the greater the monitoring to prevent opportunistic behavior carried out by management [35]. The existence of Institutional Ownership will activate supervision through investors. This is because every company always wants to show its good side to investors to show that the company is a decent company to the right place to invest. Management is expected to be able to send positive signals to potential investors [36]. The existence of institutional ownership encourages the implementation of a more optimal supervisory mechanism that can ensure the prosperity of shareholders [37]. Institutional ownership provides a positive signal for investors so that they are interested in investing in the company. Institutional ownership makes companies have to implement policies and strategies that support internal and external parties. This is in line with the stakeholder theory which states that companies are established and provide benefits to various parties [35]. Therefore, based on these considerations, a hypothesis is formulated in this study:

H4: Institutional ownership has a positive effect on the company's performance.

The Influence of the Independent Board of Commissioners on the Company's Performance

The independent board of commissioners is a member of the board of commissioners who meets the criteria of competence, honesty, integrity, and independence and has no relationship with the company, other members of the board of commissioners, members of the board of directors, or controlling shareholders. The independent board of commissioners plays an important role in ensuring better risk management by identifying the company's risks and preventing unwanted losses. The independent board of commissioners also has the task of dealing with conflicts of interest that may arise within the company, such as conflicts between majority and minority shareholders, as well as between the owners and management of the company. In addition, the existence of an independent board of commissioners can also increase the company's credibility in the eyes of investors and the public because it provides a guarantee of transparency and accountability in the company's decision-making. Thus, it is expected to improve the company's performance and strengthen the trust of stakeholders in good and professional corporate governance [25]. The main role of the independent board of commissioners is to reduce agency conflicts that arise within the company due to the separation of ownership and control within the company [26]. An independent commissioner is a member of the board of commissioners who does not have a financial, management, shareholding and/or family relationship with other members of the board of commissioners, directors and/or controlling shareholders or other relationships that may affect his or her ability to act independently [24]. Previous research

explained that in a company with a minimum of an independent board of commissioners, there are 30% of all parties from the board of commissioners who have the function of protecting shareholders from fraudulent acts and conflicts between minority and majority shareholders [38]. According to previous research, it was revealed that the independence of the board of commissioners has an effect on the company's performance [26]. Therefore, based on these considerations, a hypothesis is formulated in this study:

H5: The independent board of commissioners has a positive effect on the company's performance.

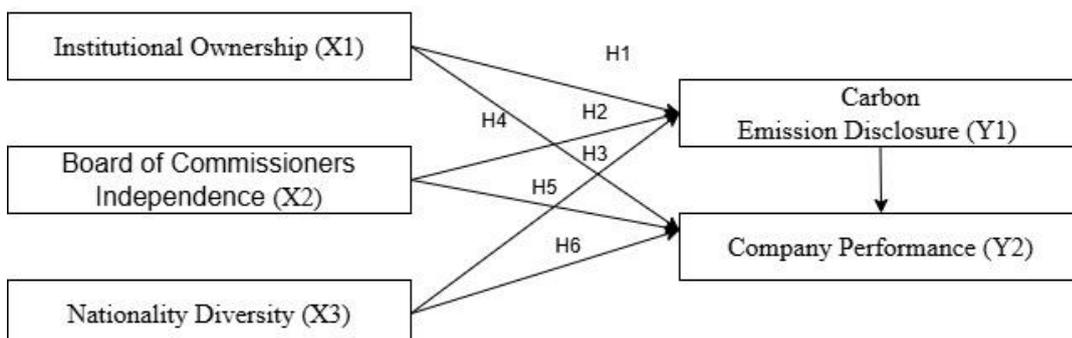
The Effect of Nationality Diversity on Company Performance

Ethnic diversity is the third variable in this study. Relevant credibility, skills, and experience are required by the company's board members in order to provide an independent assessment of the company's strategy, performance, and resources [39]. Previous research perspectives have shown that diversity in board composition provides a thorough understanding of the market, customers, employees, and business opportunities, which positively impacts a company's financial success [40]. For example, diverse boards tend to have a better understanding of customer groups because they have different points of view. In addition, the study also indicates that diverse boards have diverse knowledge and skills [28]. In accordance with stewardship theory, the characteristics of the board, including the diversity of nationalities, are one of the triggers for the success of the company with the difference in characteristics in it. The characteristics of the board seen from the nationality or nationality that is different from the company's country of origin is the meaning of national diversity [30]. Previous research has shown that the proportion of board of commissioners members from abroad contributes positively to the company's valuation through the application of the Tobin's Q method [41]. The results of the study indicate that the more foreign board of commissioners are present, the higher the level of discipline and detail in handling problems. Thus, this phenomenon shows that foreign parties are considered to have a higher level of discipline and detail in solving problems. The hypothesis can be formulated based on the explanation above as below:

H6: Nationality diversity has a positive effect on company performance.

Conceptual Framework

The following is a conceptual framework image related to Good Corporate Governance (GCG) on Carbon Emission Disclosure (CED) and Company Performance :



METHOD

The type of research used is the quantitative method. A research method in which many numbers are used. The type of data used in this study is secondary data in the form of annual reports of companies listed on the Indonesia Stock Exchange (IDX) obtained through the website (www.idx.co.id). The population and sample of the study are manufacturing companies in the food and beverage sub-sector listed on the IDX in 2019-2023. The sample selection method uses the purposive sampling method, which is a method of taking samples based on certain considerations and criteria, and is adjusted to the problem and purpose of the study. Some of the criteria used in the selection of the sample are as follows:

Table 1. Sample Criteria

Research Sample Criteria	Sum
Food and beverage sub-sector manufacturing companies listed on the IDX in 2023	25
1) Food and beverage companies that have published annual reports for 5 consecutive years from 2019-2023.	25
Research Sample	25
Observation Period	x5
Total Observation Data	125
Abnormal Data	10
Number of samples	115

Source : Summarized by the researcher

The dependent variables in this study are Carbon Emission Disclosure and Company Performance. Meanwhile, the independent variables in this study are Institutional Ownership, Independence Board of Commissioners, and Nationality Diversity. The following is a table of variable operations:

Table 2. Variable Operations

Variable	Definition	Indicator	Scale
Institutional Ownership (X1)	Institutional ownership is the amount of shares owned by institutional investors compared to the outstanding amount [24]	Institutional Ownership = $\frac{\text{Number of institutional shares}}{\text{Number of shares outstanding}} \times 100\%$ [42]	Ratio
Board Of Commissioners Independence (X2)	An independent commissioner is a member of the board of commissioners who does not have a financial, management, shareholding and/or family relationship with other members of the board of commissioners, directors and/or controlling	Board Of Commissioners Independence = $\frac{\text{Number of independent commissioners}}{\text{Total number of members of the board of commissioners}}$ [43]	Ratio

	shareholders or other relationships that may affect his or her ability to act independently [24]		
Nationality Diversity (X3)	Nationality diversity is one of the aspects of board diversity which refers to the number of foreign directors in the composition of the board of directors. The presence of foreign directors will add to the heterogeneity of the board as well as be a tool that helps entities explore international markets [13].	Nationality Diversity = $\frac{\text{Number of foreign directors}}{\text{Total number of directors}}$ [13].	Ratio
Carbon Emission Disclosure (Y1)	Carbon Emission Disclosure is the extent of carbon emission disclosure. Assign a score to each disclosure item (<i>Carbon Emission Disclosure Checklist</i>) with a dichotomous scale. The maximum score is 18, while the minimum score is 0. Each item is worth 1 so that if the company fully discloses the items in its report, the company's score is 18, then add up each company's score. Carbon emission disclosure items are shown in table 3 by Choi et al.[44]	$CED = \frac{(\sum di)}{M} \times 100\%$ <p>Information: CED = Carbon Emission Disclosure $\sum di$ = total overall score of 1 obtained by the company M = total maximum items that can be disclosed (18 items) [45]</p>	Ratio
Company Performance (Y2)	Return on total equity (ROE) is used to measure the rate of return on capital (equity) owned by a company. Return on total equity (ROE) is calculated by the formula [18]	Return on total equity (ROE) = $\frac{\text{Net profit after tax}}{\text{Total equity}}$ [18]	Ratio

Table 3. Carbon Emission Disclosure Checklist

Category	Items	Information
Climate change: Risk and opportunity	CC1	Assessment or description of risks (rules/regulations, both specific and general) related to climate change and decisions taken to manage those risks.

	CC2	An assessment or description of the current (and future) financial, business and opportunity implications of climate change.
Greenhouse Gas Emissions (GHG or Greenhouse Gas)	CHG1	The description methodology used to calculate greenhouse gas emissions (e.g. GHG or ISO protocols).
	CHG2	The existence of external verification of the calculation of GHG emissions quantities by whom and on what basis
	CHG3	Total greenhouse gas emissions (metric tons of CO ₂ -e) produced.
	CHG4	Scope 1 and 2, or 3 disclosures of direct GHG emissions.
	CHG5	Disclosure of GHG emissions based on their origin or source (e.g., coal, electricity, etc.).
	CHG6	GHG emission disclosure by facility or segment level.
	CHG7	Comparison of GHG emissions with previous years.
Energy Consumption (EC)	EC1	<i>Total energy consumption</i> (e.g. tera-joule or Peta-joule).
	EC2	Calculation of energy used from renewable resources.
	EC3	Disclosure by type, facility or segment.
Greenhouse Gas Reduction and Cost (RC)	RC1	Details of plans or strategies to reduce GHG emissions.
	RC2	Details of the current GHG emission reduction target level and emission reduction target.
	RC3	Emissions reduction and costs or savings achieved today as a result of emission reduction plans.
	RC4	Future emission costs are taken into account in capital expenditure planning.
Accountability of Carbon Emissions (AEC)	ACC1	Indications that the committee board (or other executive body) has responsibility for actions related to climate change.
	ACC2	A description of the mechanism by which the board (or other executive body) reviews the company's developments related to climate change.

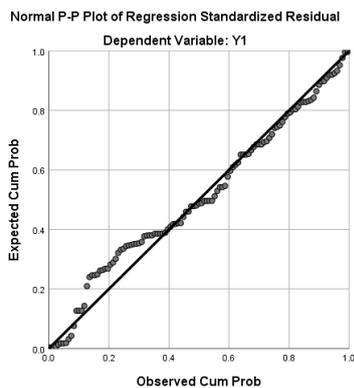
Source: Choi et al. (2013)

RESULTS AND DISCUSSION

Statistical Descriptive Test

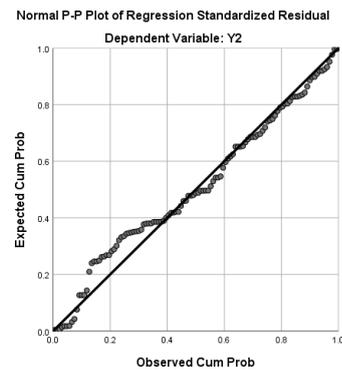
Normality Test

Figure 1. Normal Probability Plot Test Carbon Emission Disclosure (Y1)



Source : SPSS Output

Figure 2. Normal Probability Plot Test Company Performance (Y2)



Source : SPSS Output

As per the figure above, it can be explained that the normality test based on the pp-plot graph is [46] :

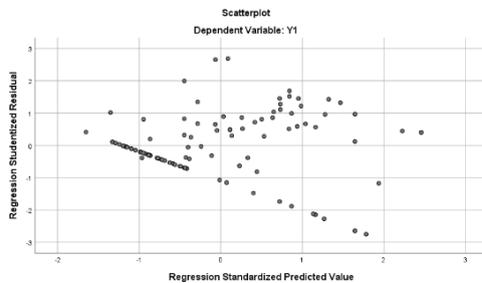
a. If the dots spread around the line and follow the diagonal line then the residual values have been distributed normally. Indicates that the regression model meets the assumption of normality.

b. If the points spread far from the line and do not follow the diagonal line, then the residual value is not normally distributed. Indicates that the regression model does not meet the assumption of normality.

Based on the results of the normality test graph in figure 1, it can be seen that the carbon emission disclosure (Y1) can be seen that the data spreads around the diagonal line and follows the direction of the diagonal line. This shows that the distribution of data is normal. In the Normality Test graph in figure 2, it can be seen that the company's performance (Y2) can be seen that the data spreads around the diagonal line and follows the direction of the diagonal line. This shows that the distribution of data is normal.

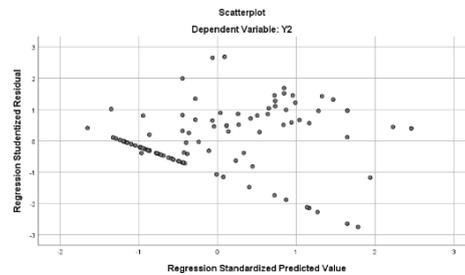
Heteroscedasticity Test

Figure 3. Carbon Emission Disclosure Y1 Heteroscedasticity Test



Source : SPSS Output

Figure 4. Y2 Enterprise Performance Heteroscedasticity Test



Source : SPSS Output

The Heteroscedasticity test in this study can be seen on the scatter plot whether it is widely spread or forms a certain pattern on its residuals. If the dots do not spread evenly and form a pattern, then there is a symptom of heteroscedasticity. If the point has spread thoroughly, it can be concluded that the regression model is good and there is no heteroscedasticity [47]. Based on this explanation, it can be used as a guide in figure 3. The results of the heteroscedasticity test below state that the scatter plot has spread thoroughly and does not form a certain pattern, meaning that there is no heteroscedasticity in this study. In figure 4, the results of the heteroscedasticity test below state that the scatter plot has spread thoroughly and does not form a certain pattern, meaning that there is no heteroscedasticity in this study.

Autocorrelation Test

The Autocorrelation test is one of the components of the classical assumption test, which includes normality, multicollinearity, linearity, and heteroscedasticity tests, in both simple and multiple linear regression analysis. The purpose of the autocorrelation test is to determine whether there is a correlation between the error in a period of t and the error in the previous period of $t-1$ in the linear regression model. To identify the presence of autocorrelation, the Durbin Watson test can be used. The criteria for determining the presence or absence of autocorrelation are as follows [48] :

- The DW number is below -2 , then there is a positive autocorrelation
- The DW number is between -2 to $+2$, so there is no autocorrelation
- If the DW number is above $+2$, then there is a negative autocorrelation

The following are the results of the autocorrelation test:

Table 1. Autocorrelates Test Carbon Emission Disclosure (Y1)

Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.670 ^a	.449	.435	.06012	1.570	

- a. Predictors: (Constant), X3, X2, X1
- b. Dependent Variable: Y1

Source : SPSS Output

Table 2. Autocorrelation Test Corporate Performance (Y2)

Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.670 ^a	.449	.435	.06012	1.570	

- a. Predictors:(Constant), X3, X2, X1
- b. Dependent Variable: Y2

Source : SPSS Output

From the test results in table 1, it can be seen that the Durbin-Watson value is 1,570. Based on these results, it can be interpreted that there is no autocorrelation based on decision-making criteria, because the DW value is between -2 and +2, it is concluded that there is no autocorrelation. From the test results in table 2, it can be seen that the Durbin-Watson value is 1,570. Based on these results, it can be interpreted that there is no autocorrelation based on decision-making criteria, because the DW value is between -2 and +2, it is concluded that there is no autocorrelation.

Model R2 Feasibility Test

The R-squared test is used to see the value of the influence between the dependent and independent variables, which is shown by the adjusted R-squared presented in the study in the table below:

Table 3. Determination Coefficient Carbon Emission Disclosure (Y1)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670 ^a	.449	.435	.06012

- a. Predictors: (Constant), X3, X2, X1
- Source : SPSS Output

Table 4. Determination Coefficient Corporate Performance (Y2)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670 ^a	.449	.435	.12024

- a. Predictors:(Constant), X3, X2, X1
- Source : SPSS Output

In table 3, the value of the Adjusted R Square determination coefficient at Y1 shows a value of 0.435 or 43.5%. This shows that the ability of the variables of Institutional Ownership (X1), Board of Commissioners of Independence (X2), Nationality Diversity (X3) to the variables bound by Carbon Emission Disclosure is 43.5% while the remaining 56.5% is influenced by other factors that are not included in this study. In table 4, the value of the Adjusted R Square determination coefficient on Y2 shows a value of 0.435 or 43.5%. This shows that the ability of the variables of Institutional Ownership (X1), Board of Commissioners Independence (X2), Nationality

Diversity (X3) to the variables bound by Company Performance is 43.5% while the remaining 56.5% is influenced by other factors that are not included in this study.

The City of Heaven (T)

The T test was carried out to determine whether there was a partial influence between the independent variable and the dependent variable. The results of the t-test calculation are shown in the table below:

Table 5. Hypothesis Test (T-Test) Carbon Emission Disclosure (Y1)

Model		Unstandardized Coefficients		Coefficients ^a		t	Sig.
		B	Std. Error	Standardized Coefficients	Beta		
1	(Constant)	.872	.133			6.561	.000
	X1	.046	.026	.141		1.768	.080
	X2	.183	.070	.209		2.622	.010
	X3	.544	.059	.657		9.278	.000

a. Dependent Variable: Y1

Table 6. Hypothesis Test (T-Test) Corporate Performance (Y2)

Model		Unstandardized Coefficients		Coefficients ^a		t	Sig.
		B	Std. Error	Standardized Coefficients	Beta		
1	(Constant)	.743	.266			2.797	.006
	X1	.092	.052	.141		1.768	.080
	X2	.366	.140	.209		2.622	.010
	X3	1.088	.117	.657		9.278	.000

a. Dependent Variable: Y2

Source : SPSS Output

Source : SPSS Output

From the results of table 5 with Y1 is Carbon Emission Disclosure, it can be seen that the significant value of Institutional Ownership (X1) $0.000 < 0.05$ and Nationality Diversity (X3) $0.000 < 0.05$ then these two variables have an effect on Carbon Emission Disclosure, while the significant value of the Board of Commissioners of Independence (X2) is $0.010 > 0.05$, then these variables have no effect on Carbon Emission Disclosure. From the results of table 11 with Y2 is the Company's Performance, it can be seen that the significant value of Institutional Ownership (X1) is $0.080 > 0.05$ and the Board of Commissioners of Independence (X2) is $0.010 > 0.05$, then these two variables have no effect on the Company's Performance, while the significant value of Nationality Diversity (X3) is $0.000 < 0.05$, then these variables have an effect on the Company's Performance.

Multiple Linear Regression Test

$$CED = 0,872 + 0,046 KI + 0,183 DKI + 0,544 DN$$

From the included T test table, it can be seen that the coefficient value and significance of each independent variable can be seen. For the KI variable, the coefficient is 0.046 with a t-value of 1.768 and a significance value (Sig.) of 0.080. This suggests that although the KI coefficient is positive, a significance value above 0.05 indicates that the influence of KI on CED is not statistically significant at a significance level of 5%. For the DKI variable, a coefficient of 0.183 with a t-value of 2.622 and a significance value of 0.010 shows that the DKI variable has a significant influence on CED at a significance level of 5%. This means that changes in Jakarta significantly affect CED. As for the DN variable, a coefficient of 0.544 with a t-value of 9.278 and a very small significance value (0.000) shows that DN has a very significant influence on CED. A high t-value and a low significance value indicate that DN is a strong and significant predictor in this model. Overall, this regression model shows that the DKI and DN variables have

a significant influence on CED, while the KI variable does not show a significant influence on the 95% confidence level.

$$KP = 0,743 + 0,092 KI + 0,366 DKI + 1.088 DN$$

That the KI coefficient is 0.092 with a t-value of 1.768 and a significance value (Sig.) of 0.080. Because this significance value is higher than the general limit of 0.05, the influence of KI on the Company's Performance is not statistically significant. On the other hand, the DKI variable shows a coefficient of 0.366, a t-value of 2.622, and a significance value of 0.010, which means that DKI has a statistically significant influence on the Company's Performance. The DN variable, with a coefficient of 1.088, a t-value of 9.278, and a very small significance value (0.000), shows a very significant influence on the Company's Performance. These results confirm that DKI and DN are important and significant predictors in influencing the Company's Performance, while KI does not make a significant contribution in this model.

RESULTS AND DISCUSSION

Institutional Ownership of Carbon Emission Disclosure

Based on table 10, it shows that institutional ownership has no influence on carbon emission disclosure, which is obtained through sig. 0.080 (> 0.05) and the regression coefficient is 0.046. So it can be concluded that the hypothesis is rejected. Based on stakeholder theory, it explains the relationship between the company and stakeholders. The existence of this relationship causes the company's management to be open to all company activities [5]. Institutional ownership is an external party that has no influence on the supervision and control of the company's management. The amount of institutional ownership is usually larger than public shareholding, but there is a possibility that institutional shareholding is only limited to investment and does not supervise afterwards because it is preoccupied with activities within its own institution, so that the institution does not control the company and hands over all supervision and control of the company's activities to the company's management in terms of control carbon emission disclosure (France 2020). The results of this study are in line with previous research which stated that institutional ownership has no effect on carbon emission disclosure [6] and [8].

Board of Commissioners on Independence of Carbon Emission Disclosure

Based on table 10, it shows that the board of commissioners of independence has an influence on carbon emission disclosure, which is obtained through sig. 0.010 (< 0.05) and the regression coefficient is 0.183. So it can be concluded that the hypothesis is accepted. Based on stakeholder theory, it explains the relationship between the company and stakeholders. The existence of this relationship causes the company's management to be open to all company activities [5]. One of the roles of the board of commissioners is to mediate the relationship between management and shareholders. The main task of the board of commissioners is to formulate strategies that will be

implemented by the management. Therefore, The board of commissioners can also function to provide policies related to disclosure, especially environmental disclosure [49]. These results are supported by research that states that the board of commissioners has a positive effect on carbon emission disclosure [11].

Nationality Diversity on Carbon Emission Disclosure

Based on table 10, it shows that nationality diversity has an influence on carbon emission disclosure, which was obtained through sig. 0.000 (< 0.05) and its regression coefficient is 0.544. So it can be concluded that the hypothesis is accepted. Based on the theory of legitimacy, it states that there is a "social contract" relationship between entities and the wider community, where entities not only operate for their own interests but also have social responsibilities. Entities must follow societal values to gain support and legitimacy [13]. The nature of foreign councils tends to have a wider view and network as well as deeper knowledge that allows them to make better decisions. Meanwhile, a company's board made up of foreign members has a broader outlook as well as a more diverse global network, giving them access to information and insights that may not be available in the company's home country. This in-depth knowledge and international experience allows them to make better and strategic decisions, as they can consider a variety of perspectives and global trends that may affect the business [13]. These results are supported by research that states that nationality diversity has a positive effect on carbon emission disclosure [15].

Institutional Ownership of Company Performance

Based on table 10, it shows that institutional ownership has no influence on the Company's Performance, which is obtained through sig. 0.080 (> 0.05) and the regression coefficient is 0.092. So it can be concluded that the hypothesis is rejected. By stakeholder theory, management is expected to carry out activities that are considered important by their stakeholders and report those activities to stakeholders [6]. Institutional ownership has no significant effect on the company's performance. In agency theory, institutional ownership in a company is a higher monitoring mechanism than the company's manager so that the manager will be more careful in managing the company's finances. This shows that institutional ownership has the ability to provide good supervision so that it can provide good financial performance to the company but does not always affect the company's performance. This can be due to several factors, such as institutional focus on short-term results that are not always aligned with the company's long-term strategy, inactive institutional involvement in operational oversight, and differences in oversight capacity among institutions [50]. The results of the previously supported research stated that institutional ownership has no effect on institutional ownership on the company's performance [51]. This result is supported by research that states that institutional ownership has no effect on the company's performance because institutional owners will sell their shares to the market if the institution is dissatisfied with managerial performance. Managers will act more carefully in carrying out company activities when institutional ownership undergoes a change in behavior from passive to active which can increase managerial accountability [38].

Board of Commissioners Independence from Corporate Performance

Based on table 10, it shows that the board of commissioners of independence has an influence on the company's performance, which is obtained through sig. 0.010 (< 0.05) and the regression coefficient is 0.366. So it can be concluded that the hypothesis is accepted. By stakeholder theory, management is expected to carry out activities that are considered important by their stakeholders and report those activities to stakeholders [6]. The independent board of commissioners has the important task of dealing with conflicts of interest that may arise within the company, such as conflicts between majority and minority shareholders, as well as between the owners and management of the company. This conflict can occur because the majority shareholder may make a decision that benefits them but harms the minority shareholder, or the company's management may make a decision that benefits them personally but harms the company's owner. The existence of an independent board of commissioners helps ensure that these decisions are overseen by a neutral party, so that the interests of all parties can be protected. Result This is supported by research that states that the independent board of commissioners has an effect on the company's performance [26].

Nationality Diversity to Company Performance

Based on table 10, it shows that nationality diversity has an influence on the company's performance, which is obtained through sig. 0.000 (< 0.05) and the regression coefficient is 1.088 So it can be concluded that the hypothesis is accepted. Based on stewardship theory, the characteristics of the board, including ethnic diversity, are one of the triggers for the success of the company with the difference in characteristics in it. The characteristics of the board seen from the nationality or nationality that is different from the country of origin of the company is the meaning of national diversity. This can be due to a variety of factors, such as the company's efforts to gain an international perspective, expand its global business network, and take advantage of expertise that is not available in the home country. By having board members of different nationalities, companies can gain a broader insight into international markets, different business cultures, as well as innovative strategies that may not have been implemented before. This diversity can also enhance the company's reputation in the eyes of business partners and international customers, demonstrating a commitment to inclusivity and global cooperation [30]. This result is supported by research that states that nationality diversity affects company performance [30].

CONCLUSION

Fundamental Finding: This study reveals that the independent board of commissioners and nationality diversity positively influence carbon emission disclosure, while institutional ownership has no significant effect. Furthermore, the independent board of commissioners has a positive effect on corporate financial performance, whereas institutional ownership and nationality diversity do not. **Implication:** The findings emphasize the importance of an independent board in enhancing both environmental

transparency and financial performance, while nationality diversity contributes to broader decision-making but does not directly improve financial outcomes. **Limitation:** This study is limited to the food and beverage sub-sector in Indonesia, which may restrict the generalizability of the results to other industries or regions. **Further Research:** Future studies could explore other governance variables or sectors and assess the long-term impact of carbon emission disclosure on financial performance across different industries and global contexts.

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