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THE EFFECT OF GREEN INTELLECTUAL CAPITAL AND CARBON EMISSION DISCLOSURE ON FIRM SIZE LISTED ON THE INDONESIA STOCK EXCHANGE IN 2019-2021

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Abstract. For nearly half a century, global temperatures have increased significantly, and extreme weather events such as cold waves, heat waves, droughts and floods, and natural disasters have been frequent and serious. The purpose of this study was to determine the effect of Green Intellectual Capital and Carbon Emission Disclosure on the Value of Companies listed on the Indonesian Stock Exchange. This research is a quantitative research. This method is also called the discovery method, because with this method various new science and technology can be discovered and developed. This method is called the quantitative method because the research data is in the form of numbers and the analysis uses statistics. The results of the research results show that H1 is accepted, meaning that there is an influence between Green Human Capital on Firm Value. Green Human capital is defined as the ultimate presentation of knowledge, expertise, innovation and the ability of employees to achieve goals. Human capital is inherent in employees, not in the organization, so it can be lost when employees leave the company. These results are supported by previous research conducted by Indrajaya, (2015) that intellectual capital affects firm value as measured by Price to Book Value (PBV). The conclusions of this study are 1. There is a significant and positive effect of Green Human Capital on Firm Size Price to Book Value.

Keywords: Green Intellectual Capital; Carbon Emission Disclosures; **Content Indicators:** Research Implications** Practice Implications** Originality* Readability**

Introduction

Global temperatures have increased significantly in the last half century and extreme weather events, such as cold weather and heat waves, droughts and floods, and natural disasters, have become more frequent and severe (Kahn, et al., 2019). The Intergovernmental Panel on Climate Change (IPCC)—an institution formed as a result of a collaboration between the United Nations and the World Meteorological Organization—is dedicated to dealing with climate change issues. During 1906 to 2005, the IPCC has accumulated clear evidence that global temperatures have increased by an average of about 0.74 C, with land temperatures higher than oceans, and in the past 50 years, average temperatures have doubled compared to temperature in the oceans in the last 100 years (IPCC, 2007).

Climate change can affect output levels (by changing agricultural output, for example) or the economy's

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ability to grow in the long run if climate variables persist, through reduced investment and lower labor productivity in most sectors of the economy (Kahn, et al., 2019). Environmental changes, in the long run, will reduce company profitability, investment, and productivity (Rezai, Taylor, & Foley, 2018). This statement raises the attention of various parties related to environmental change, especially the governments of countries globally (Rezai, Taylor, & Foley, 2018).

However, although information about company policies and emission performance is very important, only a few companies in Indonesia provide carbon disclosures (Faisal et al., 2019; Hermawan, Aisyah, Gunardi, & Putri, 2019). The reason why many Indonesian companies do not publish carbon disclosures is because the information is still part of voluntary reporting and management cannot determine precisely whether the benefits are more significant than the costs incurred in making these disclosures (Muhammad & Aryani, 2021).

Increased attention from governments around the world made 196 countries sign the Paris Agreement, which stated that each participating country promised to contribute to reducing the pace of climate change by reducing their gas emissions and even trying to repair the damage starting in 2020 (United nation, 2020). The Paris Agreement is an important milestone in the multilateral climate change process because, for the first time, a binding agreement brings all countries under the common goal of undertaking ambitious efforts to combat climate change and adapt to its impacts (United nation, 2020). The most emphasized point in this agreement is the emission of carbon gas, where carbon gas is believed to be the main factor causing global warming and environmental change.

Indonesia is one of the countries that signed the agreement. Through Presidential Decree No. 61 (2011) on the National Action Plan for Reducing Greenhouse Gases (RAN-GRK), which was signed by Susilo Bambang Yudhoyono, former President of Indonesia, the Indonesian government encourages all people, especially industry to reduce their gas emissions. The agreement is starting to bear fruit. Ministry of Environment and Forestry (KLHK), Wednesday, 18 July 2019. The results of a national greenhouse gas (GHG) inventory show that Indonesia has contributed to reducing carbon emissions by 8.7% in 2016 (Ministry of Environment and Forestry, 2018). In 2020 Indonesia's carbon gas emissions can be reduced by at least 26% (Perpres No. 61, 2011). Despite the decline, Indonesia's carbon emission level chart still continues to show an increase and the number exceeds India and the Philippines

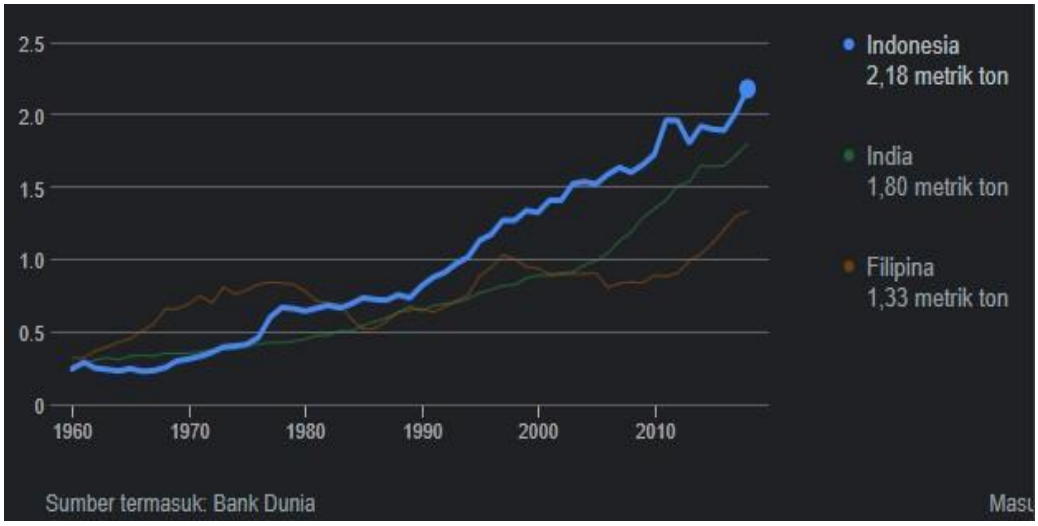

Figure 1
Graph of Indonesia, India and Philippines Carbon Emissions
Source: World bank

Not only the government, entrepreneurs are also starting to incorporate environmental aspects into their

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business decisions. The issue of climate change is one of the important agendas that must be resolved in the last few decades (Muhammad & Aryani, 2021). Increasing stakeholder awareness and concern for the environment creates new pressure on companies to change their operations to reduce the amount of their carbon emissions and disclose it as valuable information (Muhammad & Aryani, 2021). This information will be used by stakeholders in assessing the company's emission performance (Freedman & Jaggi, 2004) in (Muhammad & Aryani, 2021).

The equity market has realized that an economic transition to a low-carbon economy will have an impact on Firm Size in the long term (Muhamma, et al, 2021).

The Firm Size referred to in this study is the investor's perception of the level of success of a company which is often associated with stock prices. The value of the company can provide maximum prosperity for shareholders if the company's stock price increases. The higher the stock price, the higher the Firm Size (Suranto & Walandouw, 2017). Several ways to measure Firm Size are by using Price to Book Value and Earning per Share. Earnings per share (EPS) is the company's net profit divided by the number of outstanding shares – not including treasury stock. Earnings per share reflects the share of net income for the holder of 1 share of a company.

The ratio used to assess whether the price of a share of a company is cheap or expensive. However, while information on company policies and emissions performance is important, few companies in Indonesia provide carbon disclosures. One of the reasons why many companies in Indonesia do not disclose their carbon emissions is that regulations regarding motivation and incentives to carry out environmental activities or carbon emissions have not been properly regulated and procedures or guidelines for Indonesia (Muhammad & Aryani, 2021). One of the voluntary disclosure guidelines in Indonesia is GRI 4. The GRI standards only talk about how to report the environment, but not particularly carbon emissions. In addition, there is no information about Indonesian companies included in the CDP. This means that there are no official rules or organizations related to Indonesia's carbon emissions.

Responding to this problem, this research paper will examine the importance of awareness of the environmental effects caused by companies on Firm Size. One of them is related to the effect of carbon emissions on Firm Size. Disclosure of carbon emissions intended in this study is related to whether the company has disclosed carbon emissions produced by the company in the sustainability report and/or in the annual report.

Previous research related to the effect of disclosing carbon emissions has shown inconsistent results. Sudibyo (2019) reveals that disclosing carbon emissions has nothing to do with Firm Size. Muhammad and Aryani (2021) in their research explained that disclosure of carbon emissions has a negative effect on Firm Size. Rusamana and Purnaman (2020) reveal that carbon emissions have a positive effect on Firm Size.

Related to the company's attitude in dealing with environmental problems can also depend on the organizational identity of the company itself which is considered a collective identity. Organizational identity is a motivator in influencing the actions of the parties involved in the organization or it can be an actual phenomenon. Organizational identity plays an important role for companies/organizations in dealing with environmental problems, of course each company/organization has its own organizational identity. Companies that are successful and keep running are companies that can secure resources and develop competence in providing challenges to environmental problems (Menguc and Ozanne, 2005). The creation, transfer and application of knowledge allows the company to offer high added value, which will further be able to increase the market value.

The identity of a company that cares about the environment can be seen from the company's green intellectual capital. Environmental concept into intellectual capital to compensate for the previous insufficiency of environmental problems. Green intellectual capital reflects the company's intangible assets including knowledge, wisdom, experience, and innovation in the area of environmental

protection. Green intellectual capital enables companies to comply with stringent international environmental regulations and fulfill consumers' increasing environmental awareness and create value for companies.

Green intellectual capital consists of green human capital, green organizational capital and green relational capital. Human capital is defined as the final presentation of the knowledge, expertise, innovation and ability of employees to achieve goals (Dzikowksi, 2000). Human capital is inherent in employees not in organizations, so it can be lost if employees leave the company (Miller and Wurzburg, 1995). According to Chen (2008) green human capital is defined as the final presentation of employee knowledge, expertise, abilities, experience, behavior, wisdom, creativity and commitment to environmental protection or green innovation. Organizational capital is inherent in the organization and cannot be lost if the employee leaves the company. Organizational capital is defined as a reserve of patents, trademarks, hardware, software, databases, organizational culture and organizational capabilities in an organization. Green organizational capital according to Chen (2008) is a reserve of organizational capabilities, organizational commitment, knowledge management systems, managerial philosophy, organizational culture, corporate image, patents, copyrights and trademarks towards environmental protection or green innovation in the company. Relational capital is the presentation of relationships between companies and key stakeholders such as customers, suppliers and partners (Johnson, 1999; Chen et al., 2006). Green relational capital is defined as a reserve of a company's interactive relationships with customers, suppliers, network members, and partners for environmental management and green innovation.

This research, apart from examining the importance of awareness of the environmental effects caused by companies on Firm Size, will also examine the importance of green intellectual capital on Firm Size. Previous research related to green intellectual capital and Firm Size is still rarely done. Several studies examine the effect of green intellectual capital on other variables where these variables are indirectly related to firm value. Like money research conducted by Susandya (2019). This research examines the relationship between green intellectual capital and competitive advantage. The results show that green intellectual capital has a significant effect on competitive advantage.

Based on the background of the problems and phenomena that have been described, this research takes the title "The Influence of Green Intellectual Capital and Carbon Emission Disclosure on Firm Size listed on the Indonesia Stock Exchange in 2019-2021"

Research methods

This research is a quantitative research. This method is also called the discovery method, because with this method various new science and technology can be discovered and developed. This method is called the quantitative method because the research data is in the form of numbers and the analysis uses statistics (Sugiyono, 2013: 7). Quantitative research was chosen because this type of research is in accordance with the research objective, namely to test the truth of the hypothesis that has been made. Quantitative research was also chosen because this research uses numbers and statistical calculations to analyze hypotheses.

The location taken to conduct this research is in Indonesia. The research uses all companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 research year.

The population is the entire object to be studied and consists of a number of individuals (Sumarni and Wahyuni, 2005). The population in this study are all manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021. While the sample is part of the population that is used to estimate population characteristics (Sumarni and Wahyuni, 2005). The sample in this study was selected using a purposive sampling method, namely sampling from the population based on certain criteria (Jogiyanto, 2010).

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Results and Discussion

1. Research result

a. Descriptive statistics

Descriptive statistics relate to the application of statistical methods to collect, process, present, and analyze quantitative data descriptively. Descriptive statistics are statistical tools that provide an overview or description of the data under study as seen from the average value, standard deviation, maximum, minimum. Descriptive statistics were performed for all independent and dependent variables.

Table 1
Descriptive Statistics
Descriptive Statistics

Variable	Minimum	Maximum	Means	std. Deviation
PBV	,0013	9.7300	2.015519	1.2638940
EPS	1,010	2544,000	280.73878	152.607322
VAHU	,579	18,496	3.96222	3.411426
VACA	,020	4,723	,51317	,236080
STVA	.026	,946	,59103	,246422
VAICTM	1.143	24,165	5.07258	3.937987

Source: Data Processing, 2022

Based on the table above, it can be seen that the PBV variable has a minimum value of 0.0013; the maximum value is 9.73 the average value (mean) is 2.016 and the standard deviation is 1.264. the EPS variable has a minimum value of 1.01; the maximum value is 2,544 the average value (mean) is 280.738 and the standard deviation is 152.607. Furthermore, X1 in this study is Green Human Capital which has a minimum value of 0.579, a maximum value of 18.496 with an average price of 3.962 and a standard deviation of 3.41. Then X2 in this study, namely Green Organizational Capital, has a minimum value of 0.026, a maximum value of 0.946 with an average price of 0.591 and a standard deviation of 0.246.

b. Classic assumption test

Considering that the research data used is secondary, it fulfills the conditions specified before testing the hypothesis through the t test and F test, it is necessary to test some of the classical assumptions used, namely normality, multicollinearity, autocorrelation, and heteroscedasticity which can be explained in detail as follows:

a) Normality test

The normality test is needed because to carry out other variable tests by assuming that the residual values follow a normal distribution in this study using the Kolmogorov Smirnov Test as shown in the table below:

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Table 2
Kolmogorov Smirnov test

One-Sample Kolmogorov-Smirnov Test			
		Unstandardized Residual PBV	*Unstandardized Residual EPS*
N		180	180
Normal Parameters, b	Means	1.003655	3.652733
	std. Deviation	,2635931	08445759
Most Extreme Differences	absolute	.045	.072
	Positive	.033	.053
	Negative	-.045	-0.072
Test Statistics		.045	.072
asymp. Sig. (2-tailed)		,200	, 122

Based on the results of the normality test, it can be seen from the one-sample Kolmogorov-Smirnov test table above the Asymp value. Sig. (2-tailed) are 0.200 and 0.122 which means that the data has an Asymp value. Sig. (2-tailed) > 0.05 so that it can be concluded that the data used in the research data can be declared normally distributed.

b) Multicollinearity Test

The multicollinearity test aims to test whether the regression model found a correlation between the independent (independent) variables. A good regression model should not have a correlation between the independent variables. If the independent variables are correlated with each other, then these variables are not orthogonal, as shown in the table below.

Table 2
Multicollinearity Test Results

Variable	**PBV**		**EPS**		**Conclusion**
	Toll	**VIF**	***Toll***	**VIF**	
Green Human Capital(VAHU)	0.286	3,498	0.286	3,498	There is no multicollinearity
Green Organizational Capital(VACA)	0.586	1,707	0.586	1,707	Multicollinearity occurs
Green Relational Capital(STVA)	0.405	2,469	0.405	2,469	There is no multicollinearity
Carbon Emissions Disclosure(CED)	0.642	1,558	0.642	1,558	Multicollinearity occurs

Based on the table above, it can be seen that the tolerance of the independent variables in the data used in this study is > 0.10 and the independent variable VIF <10, so it can be concluded that the independent variables are not significantly correlated with each other. The results of this test indicate that the data being analyzed meets the assumption of multicollinearity.

c) Heteroscedasticity Test

The heteroscedasticity test aims to test whether the regression model has an inequality of variance from one residual observation to another. If the residual variance from one observation to another observation remains, then it is called Homoscedasticity and if it is different it is called Heteroscedasticity. A good

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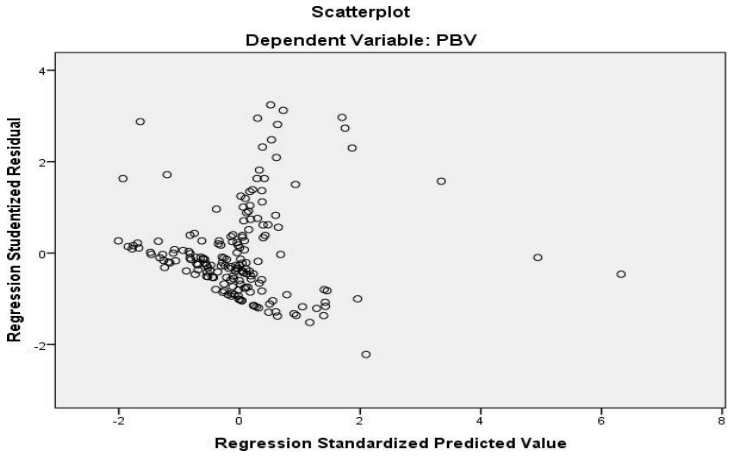
regression model is one that has homoscedasticity or does not have heteroscedasticity, in this study using the Glesjer test as shown in the table below:

Table 4
Heteroscedasticity Test Results

Variable	p sig PBV	p sig EPS	Information
Green Human Capital(VAHU)	0.169	0.068	There is no heteroscedasticity
Green Organizational Capital(VACA)	0.061	0.961	There is no heteroscedasticity
Green Relational Capital(STVA)	0.524	0.411	There is no heteroscedasticity
Carbon Emissions Disclosure(CED)	0.102	0.216	There is no heteroscedasticity

Source: Processed data, 2022

Based on the table above, it can be seen that all independent variables in the data used in the study have a significance p-value > 0.05. So it can be concluded that there is no heteroscedasticity.
The results of the heteroscedasticity test analysis illustrate the plot points do not form a specific pattern and spread above and below the number 0 on the Y axis, so it can be concluded that the dependent variable data in this study are free from heteroscedasticity.



d) Autocorrelation Test

The autocorrelation test aims to see whether or not there is a deviation from the classic assumption of autocorrelation, namely the correlation that does not occur between the residuals in one observation and other observations in the regression model. In this study the autocorrelation test used the Durbin Watson test as shown in the table below:

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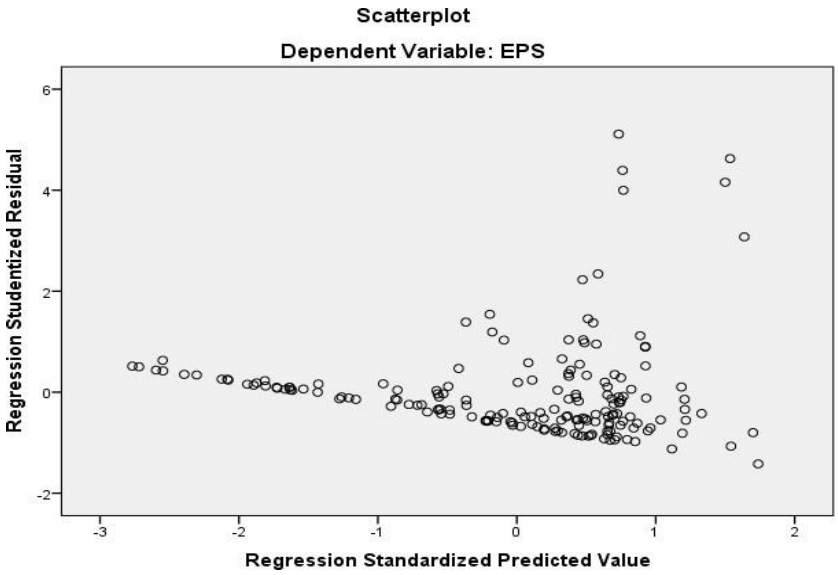
Table 5
Autocorrelation Test Results

Y variable	k	dL	dU	4-dU	4-dL	DW	Conclusion
PBV	3	1,738	1,799	2,201	2,261	1,821	There is no autocorrelation
EPS	3	1,738	1,799	2,201	2,261	2,021	There is no autocorrelation

Source: Processed data, 2022

Based on the table above, it can be seen that the Durbin-Watson test shows the magnitude of the Durbin-Watson autocorrelation test results of 1.821 and 2.021. using 3 independent variables or the constituent variables of the regression model with a sample of 180. From the Durbin-Watson table, the dL value = 1.738 and the dU value = 1.799. The dW value in the area dU < dw < 4-dU can be concluded that the regression model is free from autocorrelation problems and is feasible to use. In this study, the Durbin-Watson values of 1.821 and 2.021 were between 1.799 (dU) and 2.201 (4-dU) without experiencing autocorrelation problems, so it can be concluded that the data used in this study were free from autocorrelation.



c. Hypothesis Test (Multiple Linear Regression)

Multiple regression analysis is used to measure the effect of two or more independent variables on the dependent variable. This analysis aims to predict the value of the dependent variable if the value of the independent variable increases or decreases, and determines the direction of the variable's influence.
Testing the hypothesis in this study uses multiple linear regression analysis which is used to determine the effect of the moderating variable on the effect of the independent variables and the dependent variable. Multiple linear regression test consisting of 3 (three) parts of the results of hypothesis testing, namely the results of the coefficient of determination test (adjusted R2), statistical F test, and t test.

a) Determination Coefficient Test (R2)

The coefficient of determination essentially measures how far the model's ability to explain the variation in the dependent variable. The value of the coefficient of determination is between zero and one. The small value of R2 means that the ability of the independent variables to explain the variation in the

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dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the dependent variables.

Many researchers use the adjusted R2 value when evaluating which is the best regression model. In this reality, adjusted R2 can be negative, although what is desired must be a positive value. If the adjusted R2 value is negative in the test, then the adjusted R2 value is considered to be zero. The results of the test for the coefficient of determination (Adjusted R2) are presented in the following table.

Table 6
Determination Coefficient Test

Y variable	R square	*Adjusted R Square*	percentage
PBV	0.250	0.233	23.3%
EPS	0.155	0.135	13.5%

Based on the table above it is known that the Adjusted R-Square value is 0.233. This shows that the independent variable can explain the dependent variable by 23.3% while the remaining 76.7% of the dependent variable is explained by other variables outside the model.

Based on the table above it is known that the Adjusted R-Square value is 0.135. This shows that the independent variable can explain the dependent variable by 13.5% while the remaining 86.5% of the dependent variable is explained by other variables outside the model.

d. Partial Test (t test)

The t-test is a type of statistical test to find out whether there is a difference from the estimated value with the statistical calculation results. The t test basically shows how far the influence of one independent variable individually explains the variation of the dependent variable.

Table 7
Multiple Linear Regression t Test Results

Variable	Pre diction	B coefficient	t	Sig one tailed	Information
Green Human Capital(VAHU)→PBV	+	0.141	1,733	0.043	H1 is accepted
Green Organizational Capital(VACA)→PBV	+	1,891	5.109	0.000	H2 is rejected
Green Relational Capital(STVA)→PBV	+	3,258	3,443	0.001	H3 is accepted
Carbon Emissions Disclosure(CED) →PBV	+	0.013	3,162	0.013	
Green Human Capital(VAHU)→EPS	+	63,864	3,709	0.000	H4 is accepted
Green Organizational Capital(VACA)→EPS	+	151,952	1,939	0.027	H5 accepted
Green Relational Capital(STVA)→EPS	+	1094,289	5,465	0.000	H6 is accepted
Carbon Emissions Disclosure(CED) →EPS	+	1,348	1,957	0.029	

Source: Processed data, 2022

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Based on the data table it can be seen that:

1. The Effect of Green Human Capital on Firm Size

The test results show a significant value of 0.043 < from a significant level of 0.05, with a coefficient value of 0.141. The direction of positive influence means that the higher the Green Human Capital, the higher the Price to Book Value. So that H1 is accepted, which means that there is an influence between Green Human Capital on the Price to Book Value.

2. The Effect of Green Organizational Capital on Firm Value

The test results show a significant value of 0.000 < from a significant level of 0.05, with a coefficient value of 3.258. The direction of positive influence means that the higher the Green Organizational Capital, the higher the Price to Book Value. So that H2 is accepted, which means that there is an influence between Green Organizational Capital on Price to Book Value.

3. The Effect of Green Relational Capital on Firm Value

The test results show a significant value of 0.001 < from a significant level of 0.05, with a coefficient value of 1.891. The direction of positive influence means that the higher the Green Relational Capital, the higher the Price to Book Value. So that H3 is accepted, which means that there is an influence between Green Relational Capital on Price To Book Value.

4. The Effect of Green Human Capital on Firm Size

The test results show a significant value of 0.000 < from a significant level of 0.05, with a coefficient value of 63.864. The direction of positive influence means that the higher the Green Human Capital, the higher the Earnings Per Share Value. So that H4 is accepted, meaning that there is an influence between Green Human Capital on the Earnings Per Share Value.

5. The Effect of Green Organizational Capital on Firm Value

The test results show a significant value of 0.027 < from a significant level of 0.05, with a coefficient value of 1094.289. The direction of positive influence means that the higher the Green Organizational Capital, the higher the Earnings Per Share Value. So that H5 is accepted, which means that there is an influence between Green Organizational Capital on the Earnings Per Share Value.

6. The Effect of Green Relational Capital on Firm Value

The test results show a significant value of 0.000 < from a significant level of 0.05, with a coefficient value of 151.952. The direction of positive influence means that the higher the Green Relational Capital, the higher the Earnings Per Share Value. So that H6 is accepted, which means that there is an influence between Green Relational Capital on the Earnings Per Share Value.

e. Simultaneous Test (Test F)

The F statistical test basically shows whether all the independent or independent variables included in the model have a joint effect on the dependent variable. The degree of confidence used is 5%. To test this hypothesis, the F statistic is used with the decision-making criteria, namely if the F sig <0.05 then Ho is rejected, meaning that there is a significant influence of the independent variables on the dependent variable. The results of the F test in this study are presented in the following table.

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Table 8
Multiple Linear Regression F Test Results

Model	F value	p sig	Information
PBV	14,120	0.000	H7 accepted
EPS	8,000	0.000	H8 accepted

Source: Processed data, 2022

1. Green Intellectual Capital and Carbon Emission Disclosure have a simultaneous effect on Price to Book Value.

Based on the table above, it shows that the results of the F statistical test show an F value with a significant level of 0.000. Because the significance level is much smaller than the value of 0.05, it can be said that all independent variables affect the dependent variable or it can be interpreted that the model is feasible to use. This means that Hypothesis 7 is accepted, meaning that Green Intellectual Capital and Carbon Emission Disclosure have a simultaneous effect on Price to Book Value.

2. Green Intellectual Capital and Carbon Emission Disclosure has a simultaneous effect on Earnings Per Share.

Based on the table above, it shows that the results of the F statistical test show an F value with a significant level of 0.000. Because the significance level is much smaller than the value of 0.05, it can be said that all independent variables affect the dependent variable or it can be interpreted that the model is feasible to use. Hypothesis 8 is accepted, meaning that Green Intellectual Capital and Carbon Emission Disclosure have a simultaneous effect on Earnings Per Share.

2. Discussion

1. The Effect of Green Human Capital on Firm Size

The results show that H1 is accepted, meaning that there is an influence between Green Human Capital on Firm Value. Green Human capital is defined as the ultimate presentation of knowledge, expertise, innovation and the ability of employees to achieve goals. Human capital is inherent in employees, not in the organization, so it can be lost when employees leave the company. These results are supported by previous research conducted by Indrajaya, (2015) that intellectual capital affects firm value as measured by Price to Book Value (PBV).

The 4th hypothesis or H4 is accepted, which means that there is an influence between Green Human Capital on Firm Size as measured by Earnings Per Share, the findings of this study indicate that the more efficiently a company manages its intellectual resources, the company will provide increased results as indicated.

The results of this study are supported by research conducted by Indrajaya, (2015) that intellectual capital affects Firm Size as measured by Earnings Per Share (EPS). The findings of this study indicate that the more efficiently a company manages its intellectual resources, the company will provide increased results.

2. The Effect of Green Organizational Capital on Firm Value

The results of H2 are accepted, which means that there is an influence between Green Organizational Capital on Firm Size as measured by Price To Book Value. Likewise, the results of H5 are accepted, meaning that there is an influence between Green Organizational Capital on Firm Size as measured by Earnings Per Share.

Green Organizational Capital consists of processes and routine management that exist within the company. In addition, intellectual capital (IC) represents an intangible asset related to knowledge assets contained in an organization and is the dominant value driver for an organization (Edvinsson and

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Malone, 1997). Organizations with strong structural capital will have a supportive environment to motivate their employees to learn new knowledge (Yusoff, Omar and Zaman, 2019).

In previous research that according to (Dutton and Dukerich, 1991) that organizational identity can inhibit organizational action and interpretation, where the perception of members in an organization towards the identity of the company affects their interpretation of strategic issues, because the interpretation of strategic issues will influence the behavior of company members.

If things related to the environment affect organizational identity positively, then these things will create an emotional connection in the management of interpretation and will increase the search reflected in the behavior of members of the organization compared to avoidance of a threat (Fernandez et al., 2003).

3. The Effect of Green Relational Capital on Firm Value

H3 results are accepted, which means that there is an influence between Green Relational Capital on Firm Value as measured by Price to Book Value. Furthermore, the results of H6 are accepted, which means that there is an influence between Green Relational Capital on Firm Size as measured by Earnings Per Share.

According to research from Chen et al., (2006) that Green Relational Capital is used to explore the positive effect of relational capital associated with green innovation and environmental management on a company's competitive advantage. Therefore, the company's accumulative interactive influence related to corporate environmental management and green innovation can help companies generate competitive advantages for companies.

Social exchange theory posits a relationship between RC and transactions, which involve the evolution of complex organizational and personal structures between organizations. Dzhengiz and Niesten (2020) note that the relationship between organizations, governments and other institutions, results in a sustainable society. Green relational capital enables environmental sharing among partners which minimizes environmental uncertainty. Nelson and Winter (1982) argue that the higher the interaction between partners, the better the organizational routine.

4. Effect of Green Intellectual Capital (GIC) and Carbon Emission Disclosure (CED) on Firm Value Based on the results H7 and H8 are accepted, which means that there is a simultaneous influence between Green Intellectual Capital and Carbon Emission

Disclosure on Firm Size, Price to Book Value and Earnings Per Share. Because the significance level is less than 0.05, it can be said that all independent variables affect the dependent variable simultaneously or it can be interpreted that the model is feasible to use.

Based on the Signaling Theory, it is widely used for voluntary disclosure of carbon emissions in annual reports or sustainability reports. Signals will emerge from the information disclosed by the company. The information disclosed may be in the form of financial or non-financial information. Disclosure of information related to environmental performance can be a positive signal for stakeholders because the company has voluntarily disclosed the information needed by stakeholders.

Disclosure of carbon emissions will help the company to gain stakeholder support but also affect the value of the company. Therefore, this disclosure is considered as an expense because it increases the value of the company. Increasing carbon emissions has a positive impact on financial performance when using accounting-based measures (ROA), but has a negative impact on market-based measures of financial performance.

Firm value is the investor's perception of the company's success in managing the company which is related to the company's profitability. High Firm Size can be obtained from a high company stock price. Companies with high firm values will affect market response because investors assume that high firm values guarantee the company has good prospects.

Conclusion

Based on the research objectives, the conclusions that can be drawn in this study are as follows:

1. There is a significant and positive effect of Green Human Capital on Firm Size Price to Book Value.
2. There is a significant and positive effect of Green Organizational Capital on Firm Size Price to

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Book Value.

3. There is a significant and positive effect of Green Relational Capital on Firm Size Price to Book Value.
4. There is a significant and positive influence of Green Human Capital on Earnings Per Share Firm Size.
5. There is a significant and positive influence of Green Organizational Capital on Earnings Per Share Firm Size.
6. There is a significant and positive effect of Green Relational Capital on Earnings Per Share Firm Size.
7. There is a simultaneous influence between Green Intellectual Capital and Carbon Emission Disclosure on Firm Size Price to Book Value.
8. There is a simultaneous influence between Green Intellectual Capital and Carbon Emission Disclosure on Firm Size Price to Book Value.

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