



**THE EFFECT OF GREEN BANKING ON COMPANY VALUE  
IN THE INFOBANK 15 INDEX PERIOD 2020-2023**

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*The aim of the author in conducting this research is to determine the effect of green banking on company value in the 15th Infobank Index for the 2020-2023 period. The method used by the author in conducting this research is descriptive analysis method and simple regression analysis. Data processing was carried out using IBM SPSS STATISTIC 25. The population of this study was all companies in the INFOBANK 15 Index for the 2020-2023 period with the number of samples taken according to the researcher's criteria of 11 companies. Partial test results show that Green Banking has a positive and significant effect on company value on the INFOBANK 15 Index. This means that the higher the Green Banking contribution, the higher the company value on the INFOBANK 15 Index. The magnitude of the influence of Green Banking is 0.216 or equivalent to 21.6% in a positive direction, which means that if the Green Banking variable increases by 1%, the company value will increase by 21.6%.*

**Keywords:** *Green Banking, Company Value, INFOBANK 15 Index*

## **A. INTRODUCTION**

Sustainable environmental management is related to providing the necessary resources for current generations without affecting the needs of future generations (Sarma & Roy, 2021). Sustainability is discussed in a big way today due to the huge concerns about ongoing global climate change. In recent decades, awareness of environmental issues by governments, policy makers, advocacy groups, business companies, and society has been given much importance throughout the world (Hummel et al., 2021). There has been much debate about the issues of environmental degradation, climate change, ethics, social responsibility, marginalization, and the formation of strong group voices, radicalism, and protests against capitalism since society has paid more attention to environmental performance.

The INFOBANK15 index is a stock index that measures the price performance of 15 banking stocks listed on the Indonesia Stock Exchange (BEI). This index focuses on shares of banking companies with good fundamental factors and high trading liquidity. Financial institutions are entities that engage in financial transactions consisting of loans, investments, currency exchange, and deposits. They also operate in the financial sector such as banking, investment, etc. (Handajani, 2019). The government ensures that the country's financial institutions are well regulated because they play an important role in economic stability as many rely on them for transaction and investment operations.

The financial sector, especially banking, has the potential to play an important role in promoting ecological sustainability, which is one of the most important factors driving the business world policy-making process. However, through coordinated efforts between governments, the private sector, and individuals, the current situation of environmental destruction can only be improved. Banks and financial institutions support and complement these efforts aimed at a greener environment in various ways. Banks as part of the financial sector institutions cannot be separated from demands to change their business climate to more environmentally friendly practices.

As part of the financial sector, banks also have demands to change their business practices to be more environmentally friendly. One of the things that banks can do to minimize environmental pollution resulting from their business activities is to implement the green

banking concept. Implementing the green banking concept is one of the steps that can be taken by the banking sector to minimize environmental pollution resulting from its business activities. Therefore, banks need to be responsible for selecting and evaluating projects to be funded. Thus, financial institutions can play a role in encouraging ecological sustainability and reducing negative impacts on the environment through practices such as green banking (Alkaabi & Nobanee, 2019).

Green banking is a concept that has gained increasing attention in recent years as financial institutions seek to address environmental and social challenges while still generating profits. Green banking refers to the integration of environmental and social considerations into banking operations and services, with the aim of promoting sustainable development and mitigating climate change (Aracil et al., 2021).

The concept of Green banking emerged in the 1990s when environmental issues began to gain traction in the financial sector. The 1992 Rio Earth Summit highlighted the need for sustainable development, and banks began to recognize the potential risks and opportunities associated with environmental issues. In response, some banks have begun to develop environmental policies and programs, including adopting environmental management systems, green loans, and socially responsible investments (Nawaz et al., 2021).

In line with the rapid development of Indonesian banking activities, which is indicated by the continued increase in the value of banking assets and the financing disbursed, economic activity is also continuing. Applying the green banking concept can minimize risks in banking, such as legal risk, credit risk and reputation risk. This concept shows a new look for banking and is expected to increase profitability (Zyadat, 2017). Profitability levels are usually used to describe the performance or health of a bank. (Bachtiar & Nainggolan, 2023) defines profitability as the skill of a company to generate profits. When a company gets better at generating profits, investors' interest in investing also increases. The profitability of a bank can be influenced by various aspects, one of which is the implementation of green banking.

Green banking also plays an important role in global efforts to solve and achieve the climate change problem of the Sustainable Development Goals (TPB). In recent years, the role of the banking community in environmental preservation and sustainability has been highly highlighted in international forums such as the Paris Agreement, with the G20 group significantly considering the topic in plans. The ultimate goal of green banking itself is to protect and preserve the natural environment (Shaumya & Arulrajah, 2016). Green banking practices such as using online banking as a substitute for traditional banking systems, online bill payment systems as replacements for manual payment systems, etc. Likewise, behavioral and management innovations in banking practices can also contribute to reducing the negative impact of banks' environmental performance. For example, energy saving behavior of bank staff in their respective branches, waste reduction efforts of bank employees, environmentally friendly initiatives of bank employees, providing loans to environmentally friendly projects and so on. According to Rashid, (2018), banks must prioritize providing loans to sectors that promote various environmental protection activities, so that banking environmental performance can improve along with increasing company profits.

Company value is the strength possessed by a company that describes its condition to outside parties. These outside parties can be stakeholders, the general public, economic observers, and potential investors. Corporate value reflects the success of the company and is often related to share price. The higher the share price, the higher the company value. Some definitions of company value according to experts include: Nominal Value: The value stated in shares or financial instruments, Market Value: The value reflected in the price of shares traded on the stock market, Intrinsic Value: Value involving net cash flow, growth and cost of capital, Book Value: The value recorded in the company's financial statements, Liquidation Value: The value obtained if the company is forced to sell.

The relationship between Green Banking and Company Value, namely Company Value is an important indicator in the stock market that influences investors' perceptions. Green Banking focuses on environmentally friendly and sustainable practices, including lending to sectors that meet environmental, social and governance (ESG) standards. ), and Implementation of green banking can increase investors' positive perceptions of the company and, as a result, influence company value.

Based on the description provided above, this research was conducted to test "The Effect of Green Banking on Company Value in the INFOBANK 15 Index for the 2020-2023 period".

## **B. RESEARCH METHODOLOGY**

The data used in this research is the INFOBANK 15 Index for the 2020–2023 period. BEI was chosen as the research location because researchers consider BEI as a place to obtain the necessary data in the form of financial reports, annual reports, sustainability reports and stock prices as samples in this research. This research is located on the Indonesia Stock Exchange (BEI) by downloading the company's annual financial report at the website address [www.idx.co.id](http://www.idx.co.id).

Population is the entire collection of elements that show certain characteristics that can be used to make conclusions (Sanusi, 2011). In terms of quantity, population is a generalized area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Setyaningsih, 2009). The population is a collection of all objects of observation that are the center of attention in research, the population of observations is the companies in the INFOBANK 15 Index. The population is the entire collection of elements that have a number of general characteristics consisting of the fields to be researched (Sanusi, 2011).

A sample is everything that is made into a unit that will later be selected. A good sample is a sample that can represent the characteristics of the population as indicated by the level of accuracy and precision (Sanusi, 2011). Meanwhile, according to (Ferdinand, 2014), the sample is a subject from the population, consisting of several members of the population. According to (Sanusi, 2011), to determine the sample in research that tests hypotheses using quantitative methods, samples taken from the research population are at least 20% of the population based on Gay and Diehl or at least 30 samples that represent the research population. Saturated sampling is a technique for determining a sample when members of the population are used as samples. This is done if the population used is relatively small, namely less than 30 samples (sample data). The sample to be taken from the population must be truly representative or representative. The sample from this research is the company's financial reports in the INFOBANK 15 Index. The method that the researcher will use is the purposive sampling method, namely taking samples with certain considerations according to the researcher's interests or objectives to represent the population.

According to (Sugiyono, 2017) states that purposive sampling is a technique for determining samples with certain considerations. The reason researchers choose sampling is because not everything in the population can be used as research.

The data collection used by researchers in this research is the documentation method, namely the researcher collects data from documents of other parties or secondary data. The collection techniques referred to by the researcher include the following: 1) Literature study, namely by searching for information through other people's writings or reports that have been made by other people, such as books, research journals, and other sources that support the theoretical basis for the research object. 2) The field study carried out by the researcher was visiting the Indonesian Stock Exchange Investment Gallery at STIE Kertanegara Malang.

Data analysis technique

This research uses a simple regression analysis method, this method was chosen because this research consists of one independent variable. Data processing techniques were carried out using the SPSS 25 program to determine whether the data was normally distributed and there were no multicollinearity and heteroscedasticity problems. The analytical method used consists of Descriptive Data Analysis, Classical Assumption Test, Multiple Linear Regression Analysis, Hypothesis Testing and Coefficient of Determination (R<sup>2</sup>)

### C. RESEARCH RESULTS AND DISCUSSION

#### Descriptive Data Analysis

Descriptive statistical analysis tests are very necessary in research because the aim and function of descriptive statistical analysis tests is to provide an overview and measurement of data in numerical form that is generally applicable and will be used as research data. The results of the descriptive statistical analysis test will be displayed in the table below as follows:

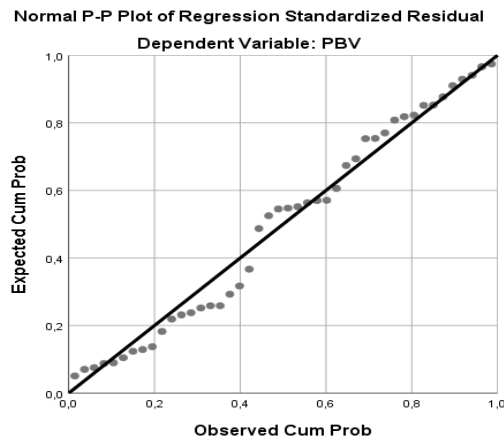
Table 1. Descriptive Analysis

		Descriptive Statistics					
		N	Mini mum	Maxi mum	Sum	Mean	Std. Deviation
PBV (Y)		44	-,84	2,28	25,05	,5693	,75210
GB (X)		44	-2,65	3,55	-9,44	- ,2145	1,25999
Valid (listwise)	N	44					

Source: SPSS 25 data, which was processed in May 2024

The sample used in this research was 44 samples from a calculation of 11 companies x 4 years. Based on the table above, the average value of the company is 0.5693, this value shows that during the period 2020 to 2023 the INFOBANK 15 Index in Indonesia has a Market Price per Share of 0.5693 units or 56.93% of the Book Price per Share. The minimum and maximum company values for the INFOBANK 15 Index are 0.84 and 2.28. This value shows that during the 2020 to 2023 period the INFOBANK 15 Index had the lowest company value of 0.84 units or 84%, namely at Bank Pan Indonesia for the 2021 period, and the highest was 2.28 units or 228% for Bank Aladin Syariah for the 2021 period. And the standard deviation is 0.75210.

Furthermore, the average Green Banking value is 0.2145, this value shows that during the period 2020 to 2023 the INFOBANK 15 Index has a total green banking disclosure of 0.2145 units or 21.45% of the total 21 green banking indices that must be disclosed. The minimum and maximum Green Banking Index INFOBANK 15 values are 2.65 and 3.55. This value shows that during the 2020 to 2023 period the INFOBANK 15 Index had the lowest Green Banking of 2.65 units or 265%, namely at Bank Negara Indonesia for the 2022-2023 period, Bank Syariah Indonesia for the 2020-2021 period, and 2022, Bank BTPN Syariah for the period 2023, and Bank Pan Indonesia for the 2020, 2021 and 2022 periods. The highest value is 3.55 units or 355% for Bank Mandiri for the 2022 period, and Bank Negara Indonesia for the 2020 period. And the standard deviation is 1.25999.



Source: SPSS 25 data, which was processed in May 2024

In the figure above, the normal probability plot graph shows that the points follow the direction of the diagonal line, meaning that the residuals are normally distributed.

### Heteroscedasticity Test

The heteroscedasticity test is used to test whether in the regression model there is inequality of variance from the residuals of one observation to another. To test whether there is heteroscedasticity or not, you can do this by looking at a scatterplot graph, where if the data is spread randomly then you can be sure that there is no heteroscedasticity problem. The following are the results of the heteroscedasticity test.

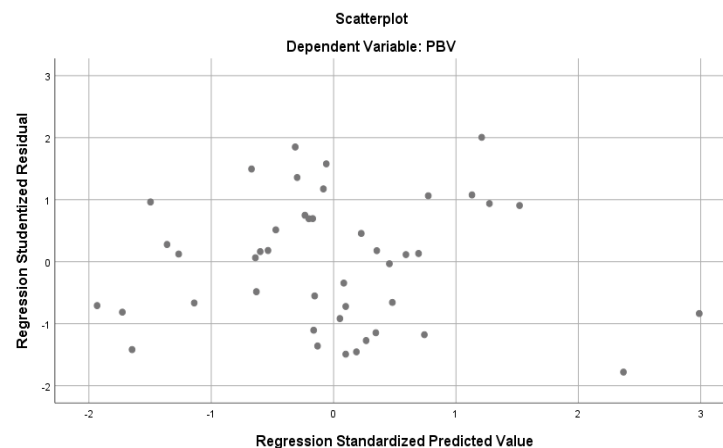


Figure 2. Heteroscedasticity Test (scatterplot graph)  
Source: SPSS 25 data, which was processed in May 2024

Based on the output image above, it is known that the points in the data are spread above and below, and the distribution of points is not patterned. Then according to the basis of decision making in the heteroscedasticity test using the scatterplot method, it can be concluded that there are no heteroscedasticity symptoms.

### Correlation Auto Test

This test is intended to see if there is a relationship between one data and another in one variable. The decision to make whether there is autocorrelation is if the DW (Durbin Watson) value lies between the upper bound (du) and (4-du) then the autocorrelation coefficient is zero, meaning there is no autocorrelation

Table 2. Correlation Auto Test

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,361 <sup>a</sup>	,130	,110	,70964	1,662

a. Predictors: (Constant), GB

b. Dependent Variable: PBV

Source: SPSS 25 data processed in May 2024.

Based on the output model summary table above, it is known that the Durbin – Watson (d) value is 1.662. By comparing the Durbin – Watson table values at 5% significance with the formula (K;N), the independent variable is 1 while the number of samples is 44, then (K;N) = (1;44). Based on the value distribution of the Durbin – Watson table, it is found that the dL value is 1.4692 and the dU is 1.5619. The Durbin – Watson (d) value of 1.662 is greater than the dL, which is 1.4692, and is smaller than the dU, which is 1.5619. From the results of decision making in the Durbin – Watson test, it does not produce definite conclusions. For this reason, it can be stated that there is no case of autocorrelation in the model.

### Simple Linear Analysis Test

The data analysis used is simple linear regression analysis. This analysis aims to measure the influence of the independent variables, namely; Green Banking (X) to company value (Y) which is formulated as follows:

$$Y = \alpha + \beta X + e$$

Where :

Y = Company Value

A = Constant

$\beta$  = coefficient of variable X (Green Banking)

e = Errors

Based on the calculation of simple linear regression between Green Banking and Company Value using SPSS, the following data are obtained:

Table 3. Simple Linear Regression Analysis Test

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,616	,109		5,670	,000
	GB	,216	,086	,361	2,510	,016

a. Dependent Variable: PBV

Source: SPSS 25 data processed in May 2024

Based on the test results data in the table above, the Multiple Linear Regression equation is as follows:

$$Y = 0,616 + 0,216X$$

Based on the above equation can be explained as follows:

1. The constant value is 0.616, which means that if the Green Banking variable has a value of 0, the company value variable will have a value of 0.616 units.

2. The Green Banking coefficient is 0.216, which means that if the Green Banking variable increases by 1 unit, the company value will increase by 0.216 units.

### Hypothesis testing

#### Partial Significance Test (t-test)

The t test is used to see the significant level of independent variables affecting the dependent variable individually or individually. To provide an interpretation of the results of the t test, it can be explained by looking at the calculated t value and the results of the significant value (5%). The technique is if the value of t counts against  $\alpha$  with the condition that if the value of t count  $\geq$  t table and the probability value  $\leq$  level of significance (Sig  $\leq$  0.05) means that it has a significant effect partially and vice versa.

Table 4. t-test  
Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1 (Constant)	,616	,109		5,670	,000
GB	,216	,086	,361	2,510	,016

a. Dependent Variable: PBV

Source: SPSS 25 data processed in May 2024

In this study there were 44 samples (n) and 1 independent variables (k). based on the results obtained t count of 2.510 for Green Banking and t table 2.018 from the formula  $t\text{-table} = t(\alpha/2; nk-1)$ . In the table above it can be explained as follows: Based on these provisions, it is found that  $t\text{-count} > t\text{-table}$  ( $2.510 > 2.018$ ) and a significant level of  $0.016 < 0.05$ , so  $H_0$  is rejected and  $H_a$  is accepted, so it can be concluded that the Green Banking variable has a partial effect on company value.

#### Determination Coefficient Test (R2)

The coefficient of determination determines how far the ability of the independent variable explains the dependent variable. The value of the coefficient of determination is between zero and one. The small value of the coefficient of determination means that the ability of the independent variables to explain the variation in the dependent variable is very limited. A value that is close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable (Ghozali, 2011).

Ghozali (Ghozali, 2011) also explained that the weakness of using the coefficient of determination is that it can affect the number of independent variables included in the model. Every additional one independent variable, it will definitely increase regardless of whether the variable has a significant effect on the dependent variable. Therefore this study uses the adjusted R2 value to evaluate the best regression model as suggested by the researchers. The value of adjusted R2 can increase or decrease if one independent variable is added to the model.

The adjusted R square value is used to determine the percentage effect of the independent variable multiple/simultaneously affecting the dependent variable. Based on the adjusted R square value, it can also be seen the magnitude of the influence of other variables outside the regression model.

Table 5. Test R2  
Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,361 <sup>a</sup>	,130	,110	,70964	1,662

a. Predictors: (Constant), GB

b. Dependent Variable: PBV

Source: SPSS 25 data processed in May 2024

From the table above, there is an R Square ( $R^2$ ) value of 0.130 or the equivalent of 13%, meaning that 13% of the dependent variable of company value can be explained by the independent variable, namely Green Banking. Meanwhile, the remaining 87% is explained by other factors not included in this research model.

### Discussion of Research Results

Based on the tests carried out above, it was found that all classical assumption tests, namely the normality test and autocorrelation test on the research data used in this research, have been fulfilled. Partial test results show that Green Banking has a positive and significant effect on company value on the INFOBANK 15 Index. This means that the higher the Green Banking contribution, the higher the company value on the INFOBANK 15 Index. The magnitude of the influence of Green Banking is 0.216 or equivalent to 21.6% in a positive direction, which means that if the Green Banking Disclosure variable increases by 1%, the company value will increase by 21.6%.

The results of this research are in accordance with the theory which states that the implementation of green banking is carried out as an effort by companies, especially in banking, to provide concern for the environment. The implementation of green banking is also carried out as an effort to ensure satisfaction of company stakeholders. Companies that have implemented green banking can be said to have carried out the mandate of stakeholders. Carrying out the mandate given to the company is in line with legitimacy theory. Legitimacy Theory is a theory that explains environmental and social disclosure (Mousa & Hassan, 2015). Nowadays, many companies realize that the sustainability of the company depends on the environmental relationship with the company.

Based on stakeholder theory, it is argued that disclosure of green banking information is to provide additional information for investors and reduce information asymmetry in the market (Moser & Martin, 2012). Thus, investors can assess a company's future financial position and associated risks more accurately, which in turn has a positive impact on share prices and contributes to higher company value (Bassetti et al., 2021); (Dhaliwal et al., 2011); (Moser & Martin, 2012). A company's good relationships and ongoing engagement with its stakeholders increase its market value in the long term because the company then tends to improve its green performance by continuing consultation with stakeholders (Choi & Wang, 2009).

Company value occupies a strategic position in the company because the growth in company value is followed by an increase in all divisions in the company and reflects the prosperity of the company owners. An increase in company value can show an increase in company performance so that it can be said to be an ability to increase the prosperity of company owners, which is one of the goals of the company. With an increase in company performance, investors' interest in investing in the company also increases (Winarto & Nurhidayah, 2021).

### D. CONCLUSION

Based on the results of the tests that have been carried out, a conclusion can be drawn that partially shows that Green Banking has a positive and significant effect on company value in the INFOBANK 15 Index for the 2020-2023 period. This means that the higher the contribution of



Green Banking Disclosure, the higher the company value of the INFOBANK 15 Index for the 2020-2023 period. The magnitude of the influence of Green Banking Disclosure is 0.216 or the equivalent of 21.6% in a positive direction, which means that if the Green Banking Disclosure variable increases by 1%, the company value will increase by 21.6%.

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