

## **Green Banking Practices in Indonesia: What is the Role of Corporate Governance?**

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### **ABSTRACT**

The aim of this research is to examine the role of corporate governance mechanisms in promoting the implementation of green banking disclosure practices in Indonesia. The corporate governance mechanism in this research is proxied by the size of the board of commissioners, the proportion of independent commissioners, the size of the board of directors, and institutional ownership. Using the purposive sampling method, 72 bank observations listed on the IDX were selected for the period of 2021-2022. The results of the research showed that the size of the board of commissioners, the proportion of the independent board of commissioners, and the size of the board of directors had a significant positive effect on green banking practices, while institutional ownership did not. Company characteristics, consisting of company size, profitability, capital structure and company growth, did not have a significant effect on green banking practices in Indonesia. The results of this research also showed that there was no influence of interaction variables on green banking practices in Indonesia. The findings of this research may help improve the implementation of green banking. Corporate governance mechanisms must be implemented effectively and efficiently by optimizing the role of the board of commissioners, independent board of commissioners, and board of directors.

**Keywords:** Board of Directors, Board of Commissioners, Corporate Governance, Green Banking.

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## **1. INTRODUCTION**

Green banking disclosure practices are a response to stakeholders' pressure for banks to practice more ethically (Handajani, 2019). According to Branco and Rodrigues (2006), the banking industry has a lower environmental impact compared to other industries,

such as chemical, manufacturing, mining and others. However, in reality banks can be seen as intermediaries whose financing of industrial activities may cause environmental damage. This is because banking is one of the main sources of finance for the development of various industries in Indonesia (Sahetapy *et al.*, 2018). The findings from a review of sustainable finance reforms in Indonesia conducted by RAN (2019) highlight the fact that banks are still unable to identify and mitigate environmental and social risks in their sustainable management strategy. The review found that since 2015 the banking sector had provided at least IDR 262 trillion, or US\$ 19 billion, in debt and guarantees to companies involved in forest fire incidents throughout 2019-2020 (Rosmayanti, 2020).

Khamilia and Nor (2022) state that one strategy that the banking sector can adopt to implement sustainability issues in their company activities is through the implementation of green banking. The term green banking or environmentally friendly banking became known in Indonesia in 2013 through the cooperation between Bank Indonesia and the Ministry of Environment. Lymperopoulos *et al.* (2012) define green banking as the accountability of banks to the environment through the development of inclusive strategies to ensure economic growth. Deka (2015) states that green banking is an effort to improve environmentally friendly operations and reduce the carbon footprints of all banking activities. This program allows banks to reduce their operational costs while also improving their standards.

Several studies have shown various positive impacts achieved by banks implementing the concept of green banking. Meena (2013) explains that the application of green banking will minimize the use of paper in banking operations, promoting a more paperless banking system, and make greater use of technological innovations. The application of the concept of green banking can minimize the risks that exist in banking operations, such as legal, credit, and reputational risks. In addition, the concept of green banking is expected to increase profitability (Dharwal & Agarwal, 2013). Asfahaliza and Anggraeni (2022) found that green banking practices of banking companies in Indonesia listed on the IDX between 2016 and 2021 had a significant positive influence on bank profitability. Sahetapy *et al.* (2018) state that the main goal of green banking is not only in the form of profit, but also responsibility for social welfare, environmental sustainability, and natural resource sustainability.

Several factors can be a driver for a bank to adopt the concept of green banking in its operational activities and disclose it to stakeholders in the form of sustainability reports as a form of responsibility. Handajani (2019) states that various factors that may lead banks to adopt the concept of green banking include regulatory pressures, ownership aspects, reputation maintenance, stakeholder demands, sustainability issues, and ethical business demands for the financial sector.

The empirical evidence on green banking practices in the early stages of their introduction and implementation in financial sector is still relatively limited, especially in developing countries (Handajani, 2019). The first regulation in Indonesia that focuses on green banking practices was issued by Bank Indonesia (2012) through Bank Indonesia Regulation Number 14/15/PBI/2012 concerning Asset Quality Assessment of Commercial Banks. In this regulation, national banks are required to consider and assess environmental factors as a condition for lending (Karyani & Obrien, 2020). The government of Indonesia emphasizes the role of banks in environmental and social issues in the Financial Services Regulation Number 51/POJK.03/2017 concerning the

application of sustainable finance for financial service institutions, issuers, and public companies (OJK, 2017). Article 10 of POJK Number 51/POJK.03/2017 stipulates the obligation to implement green banking practices and their disclosure in the sustainability reports that are made available to the public. These reports should detail the impacts of company operations and policies on the economic, social, and environmental sustainability as the bank conducts sustainable business operations.

Khamilia and Nor (2022) state that the period between the issuance of the Regulation Number 51/POJK.03/2017 and 2019 witnessed a significant increase in green banking disclosures. The total disclosure rate stood at 55.81% from 45 banks in 2019, dominated by banks with BUKU 3, BUKU 4, and foreign banks. The fundamental question of this study is the lack of optimal green banking implementation and disclosure of sustainability reports in the banking industry. Despite the presence of regulations and procedures for green banking implementation and reporting, especially the Regulation of Financial Services Authority Number 51/POJK.03/2017 and its accompanying technical guidelines, this issue remains a fundamental question that needs to be addressed. Therefore, this study seeks to examine the role of corporate governance in green banking disclosure practices in Indonesia.

Previous research examining the aspects of corporate governance in the implementation of green banking in Indonesia was conducted by Handajani (2019) who found an increasing trend of green banking disclosures from 2015 to 2017. Handajani (2019) also found that the size of board of commissioners had a significant effect on the disclosure of green banking practices. Nevertheless, independent commissioners and institutional ownership did not have any influence on green banking disclosure.

Ethical banking management practices that apply the concept of green banking require the role of corporate governance because corporate governance mechanisms could encourage bank practices that favor customers, society, the environment, and social causes, aligning with the demands of environmental and social responsibilities. As stated by Bose *et al.*, (2018) banks may face the risk of shareholder returns as a result of their involvement in green banking activities aimed at promoting long-term sustainable value creation for the company. In situations where banks are confronted with diverse stakeholder interests from stakeholders, a corporate governance mechanism is needed to ensure the equality of interests among stakeholders.

The aim of this research is to examine the role of corporate governance mechanisms in encouraging the implementation of green banking disclosure practices in Indonesia. In contrast to previous research, the novelty of this research is the examination of the influence of company characteristic variables, including company size and profitability, capital structure, and company growth as control variables. Apart from that, a study was also carried out on the interaction effect between ROA and the four variables measuring corporate governance mechanisms. The findings suggest that regulators and shareholders should pay attention to the number of board of commissioners, the proportion of independent commissioners and the optimal number of board of directors. This should be done while maintaining the effectiveness of corporate governance mechanisms in order to foster the implementation of green banking. Therefore, this research makes significant contribution by emphasizing the importance of improving the implementation of green banking. Corporate governance mechanisms should be implemented effectively and efficiently by optimizing the role of the board of commissioners, independent board of commissioners, and board of

directors. This article begins by providing an introduction, followed by literature review and development of hypotheses. It then proceeds to outline the research methods and analysis of the results and discussion. At the end of the article, conclusions, limitations and suggestions are presented.

## **2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **2.1 Institutional Theory**

Institutional theory posits that the actions of individuals and organizations can be attributed to external, social, and environmental factors (Handajani, 2019). Institutional theory describes the interrelationship between organizations and their environment and offers an understanding why and how organizations operate the structures and processes. DiMaggio and Powell (1983) argue that organizations that prioritize legitimacy have a tendency to try to conform to external expectations or social expectations to ensure the existence of the organization. The measures adopted by banks to implement and disclose business activities in accordance with environmental protection confirm that external institutional factors, such as pressure from potential stakeholders (Belal & Owen, 2007) and government regulatory pressure (Khan, Ali, & Fatima, 2014; Bose *et al.*, 2018), are the key drivers that encourage the adoption of green banking disclosure practices.

### **2.2 Good Corporate Governance (GCG)**

Corporate governance is a set of regulations used to control the relationship between several parties, including shareholders, company managers, creditors, government, employees, and stakeholders in both company's internal and external areas. It is intricately linked to their rights and obligations (Puspaningsih & Ristya, 2022).

As with other industries, the banking industry needs to implement good corporate governance to improve bank performance (Chen & Budidarma, 2022). The General Guidelines for Good Corporate Governance in Indonesia serve as the fundamental framework for companies to implement GCG in order to encourage corporate sustainability through governance based on GCG principles, including transparency, accountability, responsibility, independence and fairness, and equality.

### **2.3 Hypothesis**

#### **2.3.1 Board of Commissioners and Green Banking Practices**

The board of commissioners as an organ of a company is collectively responsible for supervising and advising the board of directors, while also ensuring the company's implementation of good corporate governance. The increasing size of board of commissioners allows it to have more diverse expertise and experience. The number of councils with diverse expertise and experience is directly linked to the communication of environmental information (Tauringana & Chithambo, 2015). De-Villiers *et al.* (2011) reveal that the growing size of the board also increases the access to company resources, including for activities related to environmental initiatives. Rahman and Barua (2016) state that an improved board role will be capable of prioritizing activities related to green banking. Therefore, the allocation of sufficient resources to implement green banking activities can be periodically overseen. Bose *et al.* (2018) found

evidence suggesting a positive correlation between higher levels of green banking disclosure in banking companies and the increasing size of their board of commissioners and institutional ownership. Therefore, the following hypothesis is formulated:

H1: Board of commissioners has a positive influence on green banking practices.

### **2.3.2 Independent Board of Commissioners and Green Banking Practices**

Independent commissioners are the members of board of commissioners who are not affiliated with the management, other members of the commissioners, and the shareholders. The independent board of commissioners have a role to supervise managerial performance in executing the company's operational activities, including activities and reporting related to environmental aspects (Handajani, 2019).

Bose *et al.* (2018) state that governments and regulators should provide support to independent members of board of commissioners as they have the potentials to drive initiatives to encourage banks to participate in green banking activities through their independent actions. Khan and Siddiqui (2013) found that the existence of independent board of commissioners affects green banking disclosure. The independent board of commissioners is expected to play a role in encouraging green banking disclosure. Therefore, the following hypothesis is formulated:

H2: Independent board of commissioners has a positive influence on green banking practices.

### **2.3.3 Board of Directors and Green Banking Practices**

Board of directors has a very important role in a company. With the separation of role from that of the board of commissioners, the board of directors wields significant authority in managing all resources of a company. Board of directors determines the direction of company policies and strategies using the resources owned by the company, both for the short and long terms (Sukandar & Raharja, 2021). With the larger size of the board of directors in a bank, the composition of directors will be more diverse with various experiences, expertise, and professionalism. Inevitably, this will encourage the board of directors to enhance their communication with external parties and more diverse and broader interest groups. The large number of directors also increases the access to company resources including for activities related to environmental initiatives, such as the implementation of green banking. Therefore, the hypothesis can be formulated as follows:

H3: Board of directors has a positive influence on green banking practices.

### **2.3.4 Institutional Ownership and Green Banking Practices**

An institutional investor can be a stakeholder that plays a pivotal role in determining bank strategies concerning environmental disclosure, such as green banking. Cotter and Najah (2012) state that institutional investors play a role in the management of companies pertaining to environmental disclosure because through their ownership, the institutional investors can become a powerful and legitimate stakeholder group that plays an important role in determining corporate strategies, including those related to environmental disclosure. Collective supervision from institutional investors is needed to improve the effectiveness of corporate performance in social and environmental issues (Muthuri & Gilbert, 2011).

Institutional investors typically seek broader information related to environmental risks and the performance of long-term oriented companies (Rupley & Marshall, 2012). Therefore, these investors will foster greater accountability and transparency with regard to corporate behavior, especially related to the environment and society. Additionally, they will promote disclosure practices such as green banking practices. Thus, the hypothesis can be formulated as follows:

H4: Institutional ownership has a positive effect on green banking practices.

### 3. RESEARCH METHODS

#### 3.1. Sample

This research approach employed in this research was descriptive quantitative, with primary objective of identifying and describing green banking disclosure practices in banks listed on the Indonesia Stock Exchange between 2021 and 2022. In addition, the effect of corporate governance mechanisms was also examined, which was proxied by the size of the board of commissioners, the number of independent commissioners, the size of the board of directors, and institutional ownership. The population of this study was banks listed on the Indonesia Stock Exchange. The research sample was banks that disclosed their information about green banking practices in the company's annual report for the periods 2021-2022. The sample selection process is presented in Table 1.

Table 1. Research Sample Selection Process

No	Description	Number
1	Number of banks listed on the Indonesia Stock Exchange (IDX) between 2021 and 2022	47
2	Banks that did not report green banking practices in their annual reports	(7)
3	Incomplete bank data	(4)
	Number of sample banks	36
	Number of observations over two years	72

Source: Secondary data processed

#### 3.2 Variable and Analysis Technique

The variables of this study consisted of a dependent variable, independent variables, and control variables. The dependent variable was green banking practices as measured by the green banking disclosure index (GBDI) developed by Bose *et al.* (2018). The measurement of the dependent variable was carried out using content analysis which described the green banking practices by referring the green banking disclosure items in the bank annual financial statements to the expected indicators. If the bank revealed the indicator, a score of 1 was given; however, if it did not disclose the indicator, a score of 0 was given. The independent variables consisted of the size of the board of commissioners (COMIS), the proportion of independent commissioners (COMISIND), the number of the board of directors (DIRECT), and institutional ownership (INST). Company characteristics as control variables were company size (SIZE), return on assets (ROA), debt to equity ratio (DER), and sales growth (GROWTH).

The analysis technique used to test this research hypotheses was multiple linear regression analysis with the following equation model:

$$GDBI = \alpha + \beta_1 COMIS + \beta_2 COMISINDEP + \beta_3 DIRECT + \beta_4 INST + \beta_5 SIZE + \beta_6 ROA + \beta_7 DER + \beta_8 GROWTH + e \quad (1)$$

Testing was also carried out on the interaction effect between the ROA variable and all independent variables with the following regression equation:

$$GDBI = \alpha + \beta_1 COMIS + \beta_2 COMISINDEP + \beta_3 DIRECT + \beta_4 INST + \beta_5 SIZE + \beta_6 ROA + \beta_7 DER + \beta_8 GROWTH + \beta_9 ROA * COMIS + \beta_{10} ROA * COMISINDEP + \beta_{11} ROA * DIRECT + \beta_{12} ROA * INST + e \quad (2)$$

## 4. RESULTS AND DISCUSSION

### 4.1 Descriptive Statistics

Descriptive statistics of all research variables consisting of minimum, maximum, mean, and standard deviation values are presented in Table 2.

Table 2. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Comis	72	1.00	7.00	2.89	1.15
ComissIndep	72	.25	1.00	.71	.25
Direct	72	3.00	13.00	6.15	2.57
Inst	72	42.00	100.00	76.30	17.56
SIZE	72	14.63	21.07	17.39	1.69
ROA	72	-14.75	11.43	.39	3.95
DER	72	.32	15.31	5.03	3.09
GROWTH	72	-1.00	3.60	.17	.52
GDBI	72	9.52	95.23	62.07	24.97

Source: Secondary data processed

Table 2 presents the data description of the corporate governance mechanism, consisting of the number of board of commissioners (COMIS), independent commissioners (COMISINDEP), board of directors (DIRECT), and institutional ownership (INST). The average number of board of commissioners in banking companies in Indonesia was around 2 to 3 people. The average proportion of independent commissioners was 71%. The average number of board of directors was 6 people. Average institutional ownership was 76.29%. It is anticipated that this corporate governance mechanism could play a significant role in the formulation of banking policies in Indonesia, including those related to the implementation of green banking. Table 2 also presents data description of banking characteristic variables, including SIZE, ROA, DER and GROWTH. Additionally, it also encompasses the dependent variable, namely the green banking disclosure index (GDBI).

#### 4.2 Green Banking Disclosures from 2021 to 2022

Green banking practices in this research were measured by the green banking disclosure index (GBDI) developed by Bose *et al.* (2018) which consists of 21 disclosure items. The average GBDI value was 62.02% with minimum and maximum values of 9.52% and 95.23% respectively. The results of the identification of green banking disclosures in bank annual reports are presented in Table 3.

Table 3. Green Banking Disclosure Items

No	Green Banking Disclosure Index	Percentage (%)
1	Bank policy toward environmental conservation and climate change	85
2	Financing of environmentally friendly projects and their monitoring activities	81
3	Reduction of paper use and waste treatment	72
4	Adoption of policies and technologies to reduce environmental damage caused by the bank's electronic internal operations within office facilities	86
5	Use of environmentally friendly materials	87
6	Energy conservation in business operations	32
7	Efforts made by employees to mitigate the impacts of climate change and reduce emissions	39
8	Information about bank's green products	58
9	Bank's initiatives and involvement in networking on environmental issues	85
10	Competently evaluate the impact of clients' business before sanctioning the financing facility	49
11	Organizing activities to raise environmental awareness within the community	89
12	Bank's role as an environmentally friendly bank, its contribution to environmental improvement, and its commendable practices in reporting on environmental matters	76
13	Award for initiatives in environmental conservation	28
14	Bank's involvement in supporting facilities that align with environmental programs	96
15	Information on the establishment of a climate change fund	22



16	Green branch arrangement for operational efficiency	70
17	Incorporation of green marketing into internal communication media or channels	57
18	Bank's initiatives and engagement to encourage and train its employees on green movement	67
19	The amount of budget <i>allocated</i> annually for green banking practices	67
20	The actual amount spent on various green banking programs	62
21	Use of a separate page for green banking reporting in annual reports	3

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Source: Secondary data processed

### 4.3 Classical Assumption Tests

Classic assumption tests include normality tests, multicollinearity tests and heteroscedasticity tests. The results of the normality test with Kolmogorov-Smirnov showed an Asymp value. Sig. (2-tailed) of 0.098, which means that the data was normally distributed. The results of the multicollinearity test showed that the tolerance value for all independent variables was greater than 0.1, and the VIF value was smaller than 10. These results indicate that there was no multicollinearity between independent variables. The results of the heteroscedasticity test with the Glejser test showed that the Sig. of all independent variables was greater than 5%. This suggests that heteroscedasticity did not occur in all independent variables in the regression model.

### 4.4 Hypothesis Testing Results

The results of hypothesis testing are summarized in Tables 4 and 5. Table 4 shows the results of multiple linear regression analysis of model 1, while multiple linear regression analysis of model 2 is presented in Table 5.

Table 4. Results of Multiple Linear Regression Analysis of Model 1

$$\text{GDBI} = 0.145 + 0.084 \text{Comis} + 0.098\text{ComisInd} + 0.020\text{Direct} + 0.035\text{Inst} + 0.005\text{SIZE} + 0.011\text{ROA} + 0.006\text{DER} + 0.040\text{Growth}$$

Variable	Predictions	Coefficients	t-statistic	Sig.	t
Contant		.145	.437	.663	
Comis	Positive	.084	2.934	.005*	
ComisInd	Positive	.098	2.791	.012*	
Direct	Positive	.002	2.659	.024*	
Inst	Positive	.035	.208	.836	
SIZE		.005	.284	.778	
ROA		.011	1.500	.139	

DER	.006	.561	.577
Growth	.040	.692	.491
F statistic= 2.512; sig F=0.031; Adj R Square=0.124			

Source: Secondary data processed

Table 5. Results of Multiple Regression Analysis of Model 2

$$\text{GDBI} = 0.171 + 0.090\text{Comis} + 0.096\text{ComisInd} + 0.005\text{Direct} - 0.006\text{Inst} + 0.003\text{SIZE} + 0.007\text{ROA} + 0.004\text{DER} + 0.047\text{Growth} - 0.021\text{ROA}*\text{Comis} - 0.028\text{ROA}*\text{Comisind} + 0.006\text{ROA}*\text{Direct} + 0.064\text{ROA}*\text{Inst}$$

Variable	Predictions	Coefficients	t-statistic	Sig. t
Contant		.171	.498	.620
Comis	Positive	.090	2.845	.006*
ComisInd	Positive	.096	2.766	.018*
Direct	Positive	.005	2.554	.031*
Inst	Positive	-.006	-.033	.974
SIZE		.003	.181	.857
ROA		.007	.107	.915
DER		.004	.443	.660
Growth		.047	.808	.422
ROA*Comis		-.021	-.866	.367
ROA*ComisInd		-.028	-.695	.490
ROA*Direct		.006	.917	.363
ROA*Inst		.064	1.137	.260
F statistic= 2.501; sig F=0.034; Adj R Square=0.126				

As shown in Tables 4 and 5, the two regression models had a statistical F value of 2.512 and 2.501 respectively with a significance of 0.031 and 0.034, meaning that the specified model met goodness of fit, so it could be used as a basis for analysis. The results of individual parameter testing for both model 1 and model 2 showed that the regression coefficients of the three independent variables, namely the number of board of commissioners (COMIS), the proportion of independent commissioners (COMISIND), and the number of board of directors (DIRECT), had a positive direction as predicted with a significance value of less than 0.05. This indicates that hypotheses 1, 2 and 3 were supported, signifying that the number of board of commissioners, the proportion of independent board of commissioners, and the number of board of directors were proven to have a significant positive effect on green banking disclosure.

Meanwhile, the institutional ownership variable (INST) was not proven to have a significant positive effect on green banking disclosure. Likewise, company characteristic variables, including ROA, SIZE, DER, and GROWTH, as well as the interaction effect between ROA and the four independent variables, did not show a

significant influence on green banking disclosure in Indonesia.

## **4.5 Discussion**

### **4.5.1 Board of Commissioners and Green Banking Practices**

The results showed that the first hypothesis (H1) was supported, meaning that the size of board of commissioners was proven to have a significant and positive effect on green banking practices. This result indicates that a large number of board of commissioners reflects diverse expertise and experiences, enabling communication with external parties and diverse interest groups, covering both financial and non-financial aspects such as bank's environmental initiatives. This finding supports the results of the research by Handajani (2019) and Tauringana and Chithambo (2015) which found that the characteristics of board of commissioners as the proxy of internal corporate governance mechanism had a positive impact on the practice of green banking disclosure by banks.

The size of board of commissioners with diverse expertise and experiences is closely linked to the environmental information communication. The results of this study are in accordance with those of the research conducted by Bose *et al.* (2018) which showed that higher levels of green banking disclosure in banking companies were related to the large size of the board of commissioners and high rate of institutional ownership. Through its supervisory function, board of commissioners will oversee the bank's commitment to green banking activities and the disclosure of information.

### **4.5.3 Independent Board of Commissioners and Green Banking Practices**

The results of this research showed that the third hypothesis (H2) was supported, meaning that the number of independent commissioners had a significant and positive effect on green banking practices. This shows that a large number of independent board of commissioners will have an impact on the increase in green banking disclosure. This result is in agreement with that of Brammer and Pavelin's (2008) study which emphasizes the obligation of independent board of commissioners to oversee the management performance with regard to environmentally friendly initiatives. This involves monitoring whether the company's current practices are in line with social and environmental guidelines. In addition, the result of this study also supports that of the research of Khan and Siddiqui (2013) which found that the presence of an independent board of commissioners affected the disclosure of green banking practices.

### **4.5.2 Board of Directors and Green Banking Practices**

Our findings showed that the second hypothesis (H3) was supported, meaning that board of directors had a significant and positive effect on green banking practices. This indicates that a large number of board of directors' members will drive the success of green banking practices in Indonesia. This result is in line with that of the previous research conducted by Wijayanti and Mutmainah (2012) which found that board of directors had a positive effect on company's financial performance.

### **4.5.4 Institutional Ownership and Green Banking Practices**

The test results in this study showed that the fourth hypothesis (H4) was not supported, meaning that institutional ownership did not have a significant and positive effect on green banking practices. This result, however, is contrary to that of the study of Cotter and Najah (2012) which found that institutional investors have a role in managing companies' environmental issue disclosure. According to their research, institutional investors, through their ownership, can become a powerful and legitimate stakeholder group that can determine the company's strategies related to environmental disclosure. This finding is in line with the finding of Handajani's (2019) research which concluded that institutional ownership did not have a positive effect on green banking practices in Indonesia, especially those listed on the IDX between 2015 and 2017. The low rate of institutional ownership which did not support the practices of green banking in this study was likely due to the proportion of institutional ownership where 74.30% was dominated by banks and other financial institutions. Banks and other financial institutions may prioritize financial achievements over environmental initiatives such as green banking practices in their policies (Handajani, 2019).

#### **4.5.5 Characteristics of Banking Companies and Green Banking Practices**

The results of this research showed that the characteristics of banks, including company size, profitability, capital structure, and company growth, did not have a significant influence on green banking practices. These results indicate that there are no significant differences in green banking disclosure between large and small banks, as well as banks with high and low profitability in Indonesia. Green banking disclosures also do not differ between high and low DERs and companies with high or low growth.

#### **4.5.6. Effects of Interaction Variable on Green Banking Practices**

Testing of the interaction effect between banking profitability (ROA) and the four independent variables was carried out to examine whether the ROA variable had the ability to strengthen or weaken the influence between corporate governance mechanisms and green banking disclosure in Indonesia. The results of the analysis showed that there was no interaction effect between ROA and the four independent variables. These results provide additional evidence to support the finding that the corporate governance mechanism, consisting of a board of commissioners, an independent board of commissioners, and a board of directors, has a significant positive influence on green banking practices in Indonesia.

### **5. CONCLUSION AND SUGGESTIONS**

The aim of this research is to examine the role of corporate governance mechanisms in supporting the implementation of green banking in Indonesia. The results of hypothesis testing showed that the size of the board of commissioners, the proportion of independent commissioners, and the size of the board of directors had a significant positive influence on green banking practices in Indonesia, while institutional ownership did not. Company characteristics, including company size, profitability, capital structure and company growth were not found to have a significant effect on green banking practices in Indonesia. Furthermore, the results of this research suggest that there is no influence of interaction variables on green banking practices in Indonesia.

These findings indicate that regulators and shareholders must pay attention to the number of board of commissioners, the proportion of independent commissioners, and the optimal number of board of directors while maintaining the effectiveness of corporate governance mechanisms to encourage the implementation of green banking. Therefore, this study's significance lies in enhancing the implementation of green banking. Corporate governance mechanisms must be implemented effectively and efficiently by optimizing the role of the board of commissioners, independent board of commissioners, and board of directors.

A limitation of this research is that it only examined green banking practices in Indonesia over a period of 2 years. To overcome the limitation of this research, future researchers could conduct an assessment of green banking practices for a longer observation period to obtain a larger sample size. Research development can also be carried out by examining the comparative implementation of green banking in several ASEAN countries. Apart from that, future researchers are also expected to add proxies for corporate governance variables, including managerial ownership and audit committee.

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