

From Green Banking Disclosure to Firm Value: Evidence on the Mediating Role of Bank Soundness

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Abstract

Green banking disclosure has become an important component of sustainable banking practices and is expected to provide positive signals to stakeholders regarding a bank's environmental commitment and long-term performance. This study aims to examine the role of bank soundness in mediating the relationship between green banking disclosure (GBD) and firm value (FV). A quantitative approach was employed using data from all banks listed on the Indonesia Stock Exchange during 2019–2024. Data were collected from Bloomberg and the Indonesia Stock Exchange website. Using purposive sampling, 144 firm-year observations from 24 banks were selected and analyzed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method with WarpPLS 8.0. The findings indicate that GBD has no direct effect on FV but has a positive effect on bank soundness. In addition, bank soundness positively affects FV and successfully mediates the relationship between GBD and FV. These results suggest that the contribution of GBD to firm value is realized indirectly through improvements in bank soundness. This study provides the first empirical evidence on the mediating role of bank soundness in the GBD–FV relationship and contributes to signaling theory by demonstrating the importance of sustainability-related information in stakeholders' fund placement decisions. Furthermore, bank core capital is incorporated as a control variable to capture banks' readiness to implement sustainability-related policies.

Keywords

Bank Group Based on Core Capital, Bank Soundness Level, Firm Value, Green Banking Disclosure



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INTRODUCTION

The 2015-2020 United Nations (UN) agenda discusses Sustainable Development Goals (SDGs) including equality and global warming (Gunawan et al., 2022). Since its adoption on September 25th, 2015, the SDGs concept has remained the primary goal of the UN until 2030 (Hira, 2024). The SDGs are a concept that contains a series of targets and indicators to be achieved in order to realize sustainable development (Hira, 2024). In 2015, Indonesia was known as the fourth largest producer of

greenhouse gases in the world, originating from deforestation, peat forest fires, and fossil fuel combustion for energy (Dunne, 2019). These efforts were made by the government to reduce the electricity gap in certain regions and islands, in order to create prosperity for all Indonesians. This phenomenon can have negative long-term impacts, therefore environmentally friendly and renewable energy sources are needed. The Indonesian government has committed to reducing emissions by 29-41% by 2030 to protect the environment (Dunne, 2019) and support the concept of profit, people, planet (3P concept).

The highest CO₂ emissions in Indonesia occurred in 2022 (Arif, 2023), so the air temperature is getting hotter over time. The average air temperature in Indonesia for the period 1981-2020 was 26.2°C (20.1°C to 28.6°C) and increased to 26.7°C in August 2023 (Meteorological Agency, 2023). Changes in air temperature must be mitigated and handled properly because they could potentially cause a 23% decline in Gross Domestic Product (GDP) by 2100 (Burke et al., 2015). Recent research by the Council on Foreign Relations (2025) even states that global climate change is expected to cause GDP losses of up to 40% (Prakoso, 2025). This condition is feared to have an impact on financial stability and cause a banking crisis. The increase in CO₂ is due to human activities that are less concerned about the environment, more and more human jobs are being replaced by machines and robots that are not environmentally friendly. The rapid growth of the industrial world cannot be separated from the role of banks as parties that support credit or financing as business capital and investment. So far, issues related to the environment can be mitigated by companies through corporate social responsibility (CSR) programs, but in reality, CSR ignores the fact that some industries cause environmental damage (Gunawan et al., 2022). While banking is considered safe because it provides services. However, on the other hand, it is the banking sector that provides funds for these industries, making the issue of green banking important (Gunawan et al., 2022).

The rapid growth of the industrial world cannot be separated from the role of banking as an intermediary institution that provides funds or credit support, so the issue of green banking is important (Gunawan et al., 2022). Green banking is disclosed in the sustainability report which is referred to as green banking disclosure. Based on the Sustainable Finance Plan (RAKB) phase II in 2021-2025 banks in Indonesia have committed to channeling credit to the green sector. In addition, green banking practices are implemented through environmentally friendly operational activities such as energy saving, paperless and utilization of technological advances for customer service (Kweeswara & Irawan, 2023). The contribution of banks to

protect the environment by modifying credit policies and adjusting risk management banks that reflect environmental concerns about world climate change.

Green banking disclosure to provide positive information that operational activities, distribution and collection of funds pay attention to the environment, not only profit oriented. This is done to provide a good view for investors, the public and other interested parties, so as to increase stock prices and company value (Khan et al., 2021; Murwaningsari & Rachmawati, 2023). Green Banking Disclosure is a signal for debtors that only customers who have environmentally friendly businesses (renewable sector) and have licenses can apply for financing, so that the Bank's Soundness Level is getting better. For depositors as a source of information, the funds they place are channeled into financing that is able to provide returns in the long term, so they want to increase their funds and are channeled back, can increase profits. Green Banking Disclosure is also related to good corporate governance, companies become compliant and support sustainable finance policies that are being intensified by the government.

Investor expectations of the company are influenced by the level of bank soundness, because it reflects the operational performance of banks for one year which can affect the value of the company in the long term (Maheswari & Suryanawa, 2016). Healthy banks have good performance, so the profits generated are higher (Maheswari & Suryanawa, 2016). The level of bank soundness can also affect the perception of investors/depositors towards the company and further investment plans. The increase in firm value is not only influenced by green banking disclosure, but based on theoretical studies, the increase in firm value is influenced by the level of bank soundness, in line with research (Anggarsini & Suprasto, 2018; Aprilia & Hapsari, 2021; Febrin & Sulhan, 2022; Irianti & Saifi, 2017). Financial and non-financial information can be an important signal for investors that can influence investment decisions.

This research is a compilation of Winarto et al., (2021), (Gaies & Jahmane, 2022) and (Anggarsini & Suprasto, 2018). The novelty of this research is that the results of previous studies are inconsistent and the first research on green banking disclosure on bank soundness levels. Previous studies were about corporate social responsibility (CSR), while CSR is part of green banking, there are other aspects that have not been discussed. The gap phenomenon underlying this research is the extreme increase in air temperature reaching 26.7°C, a significant increase compared to the average temperature 3 years ago, making it interesting to study. The implementation of green banking in Indonesia has not been maximized, seen from

the large number of branch offices and the percentage of green financing distribution compared to total financing. Based on statistical data from the Financial Services Authority (2023), obtained information on the number of branch offices is still large, the average lending to the green sector is still low, on average 25% (Irawan, 2023), besides that in March 2023 the green banking reporting guidelines are still in the initiation stage.

Signal theory forms the basis of this study, as financial information (company value and bank health in terms of risk profile, earnings, and capital) and non-financial information (green banking and bank health in terms of good corporate governance) are considered signals that can inform stakeholders of important news related to their investments. Both positive and negative information must be communicated transparently, accurately, and in a timely manner to prevent information asymmetry. Based on previous research, green banking disclosure has not been able to directly influence investor perceptions to increase company value, so it is predicted that the implementation of green banking is related to good bank health and has an effect on increasing company value. The implementation of green banking improves the quality of credit/financing, lowers reserves, thereby increasing profits and ensuring the bank is in a healthy condition. A healthy bank has a high value, which signals investors to invest because it is expected to provide high returns.

Based on the results of searches on Google Scholar and international journals accessible using Diponegoro University user accounts, such as JSTOR, ProQuest, ScienceDirect, Scopus, Emerald Insight, SpringerLink, and others, it was found that this paper is the first study to examine the relationship between green banking disclosure and the level of banking health. Previous studies conducted by Abdallah et al., (2020); Gaies & Jahmane, (2022) focused on CSR, which is part of green banking, so there are other aspects that have not been discussed. Practically, this study is expected to serve as material for evaluating and improving the Financial Services Authority Regulation (POJK) related to banking in Indonesia, in order to improve overall banking performance and as material for evaluating the implementation of SDGs and POJK 51/2017 related to sustainable finance. For companies, the results of this study are expected to provide information and material for evaluating existing policies and increasing company value.

Signal theory explains why it is important for a company to provide information to external parties (public), because there is information asymmetry between internal parties (management) and external parties (Spence, 1973). Capital

market investors require comprehensive (complete), timely, relevant and accurate information as an analysis material in making investment decisions (Sabatini & Sudana, 2019). Signaling theory can be used to explain how green banking disclosure becomes important information that shareholders and depositors must know as a positive signal if they want to invest their funds in the company safely and obtain maximum returns through increasing company value.

Green banking disclosure is the disclosure of all operational activities, fund raising, lending or financing that pay attention to aspects of profit, people and planet (3P) to environmentally friendly sectors and use renewable energy in accordance with the concept of green economy that supports sustainable development (Handajani et al., 2019). The concept of green banking can spur companies to implement technological innovations, such as the paperless concept by reducing the use of printed documents when opening an online account, online financing approval, online correspondence and many others. Banks that implement green banking can minimize legal, credit and reputational risks (Asfahaliza & Anggraeni, 2022).

The soundness level of a bank is defined as the result of an assessment calculated based on the risk and performance of the bank (Financial Services Authority, 2016). The assessment of a bank's soundness level uses a risk approach known as risk profile, good corporate governance, earning and capital (RGEC). Firm value can reflect the value of a business if it is to be bought or taken over by another party (Jihadi et al., 2021). The price of shares circulating in the stock market will form a price value that will be a measure of the company's value, especially for companies that have been listed on the Indonesia Stock Exchange (IDX), a significant increase in company value illustrates good company management. The better the management and performance carried out by all entities in the company will reflect that the company has succeeded in achieving the targets that have been set and shows that the objectives for the welfare of shareholders have been achieved.

Green banking disclosure indicates how widely the implementation of green banking has been disclosed by the company, so that the public is aware of this information (Winarto et al., 2021). In line with signal theory, green banking disclosure is submitted by companies as additional information for investors to reduce information asymmetry, so that investors can assess the company's future financial position based on environmental issues and in turn have a positive impact on stock prices and contribute to higher firm value (Khan et al., 2021). Investors will be attracted to companies that pay attention to financial and non-financial aspects

such as social and environmental concerns (Jihadi et al., 2021). Business objectives cannot be separated from the community and the environment in which the business operates, because failure to operate business processes in the long term affects business sustainability (Jihadi et al., 2021). This is in line with research Khan et al., (2021); Winarto et al., (2021); Hossain et al., (2020); Karyani & Obrien, (2020); Ramila & Gurusamy, (2015); Sahoo et al., (2016); Sudhalakshmi & Chinnadorai, (2014) that the implementation of green banking in terms of practices and disclosures by banks has a positive effect on company value. Banking concern for the environment can improve company performance through increased public trust. Banks that have a good reputation can attract investors and customers, thus having a positive impact on stock prices and company value in the long run (Khan et al., 2021).

H₁: Green Banking Disclosure has a positive effect on firm value.

Green banking disclosure is a source of information for customers that the company only lends to debtors who have licenses and environmentally friendly businesses, so that they have business continuity and are able to fulfill their obligations until they are paid off, so that the credit quality is good or the Non Performing Loan (NPL) is small. The better the quality of financing, the smaller the capital or Capital Adequacy Ratio (CAR) that must be provided by the company. Selective principles in the distribution of financing / credit to ensure that the customers financed have long-term business sustainability, so that they are able to fulfill their obligations and do not cause bad debts. A low bad debt ratio positively correlated with the allowance for impairment losses (CKPN). The smaller the CKPN, the greater the company's profit and the smaller the capital provision, so the better the level of banking soundness, in line with research (Gaies & Jahmane, 2022).

Green banking disclosure provides information to depositors that the funds they invest are channeled into environmentally friendly credit, making it safer and more profitable in the long run. Green banking disclosure encourages companies to carry out business activities in accordance with existing regulations and report the reality that exists in the company. Based on signal theory, green banking disclosure can be used as important information for companies related to business continuity because it considers the 3P aspects (Winarto et al., 2021). Healthy companies are able to survive in the long term and will provide better returns over time.

H₂: Green Banking Disclosure has a positive effect on bank soundness.

The level of bank soundness affects the expectations of external parties to the company's shares because in general the operational performance of the bank is

directly proportional to the value of the company in the long run (Maheswari & Suryanawa, 2016). The better the level of banking soundness, the better the company's performance and the higher the company's profit (Maheswari & Suryanawa, 2016). These conditions can increase stock prices (Maheswari & Suryanawa, 2016).

In line with signal theory, that the level of soundness is very influential on firm value. The level of bank soundness affects the confidence of depositors in placing their funds and ensuring that these funds are channeled appropriately in order to obtain optimal returns. Evaluating bank health is also a signal that the company can manage its capital well, thereby meeting capital requirements to prevent losses from banking activities (Anggarsini & Suprasto, 2018). The better the CAR, the more capable the bank is of meeting its capital requirements in lending activities, thereby increasing profitability and company value (Anggarsini & Suprasto, 2018). If risks are measurable and supervision is effective, this will result in maximum earnings and sufficient capital.

H₃: Bank Soundness Level has a positive effect on value

Based on signal theory, the delivery of information on green banking practices carried out by the company is positive information for investors which can improve the company's good image. A good image has an impact on increasing the share price, thus affecting the value of the company. The increase in firm value not only influenced by a good image due to green banking disclosure, but based on theoretical studies, the increase in firm value is influenced by the level of bank soundness, in line with research (Anggarsini & Suprasto, 2018; Aprilia & Hapsari, 2021; Febrin & Sulhan, 2022; Irianti & Saifi, 2017).

Investors are interested in companies that are able to provide high returns and last long term, so the level of bank soundness is very important in mediating the relationship between green banking disclosure and firm value. In relation to signal theory, green banking disclosure provides positive information to debtors, depositors, investors and other interested parties that the operational activities, distribution of financing and collection of funds carried out by the company pay attention to the 3P aspects, so that it has good financial and non-financial performance in the long term and in accordance with SDGs.

H₄: The role of bank soundness level in mediating the relationship between green banking disclosure and firm value.

METHODS

This research uses a quantitative approach with a hypothesis-testing study design. The population of this study are Commercial Banks and Islamic Commercial Banks (BUS) listed on the IDX in 2019-2024 totaling 47 banks. The research sample was selected based on the purposive sampling method with the criteria that the company is consistently listed on the IDX 2019-2024, publishes annual reports and / or sustainability reports and contains the data needed in the study. The research data was processed using warp PLS8.0 The endogenous variable in this study is firm value, while the exogenous variable is green banking disclosure and the level of bank soundness as an intervening variable. Table 1 presents details of the sample selection process. The research variables adopt the measurements of several previous studies, with the proxies shown in Table 2, while the research model is presented in Equation 1.

Outer			Model
Equation.....			1
Exogenous latent variable 1			
$X_1 = \lambda X_1 \xi_1 + \delta_1$			
Exogenous latent variable 2 (control)			
$X_2 = \lambda X_2 \xi_2 + \delta_2$			
Endogenous latent variable 1			
$Y_1 = \lambda Y_1 \eta_1 + \varepsilon_1$			
Endogenous latent variable 2			
$Y_2 = \lambda Y_2 \eta_2 + \varepsilon_2$			
Inner	Model	Equation	(direct
relationship).....			relationship).....2
$\eta_1 = \gamma_1 \xi_1 + \varsigma$			
$\eta_2 = \gamma_2 \xi_1 + \gamma_3 \xi_2 + \beta_1 \eta_1 + \varsigma$			

TABLE 1. SAMPLE CRITERIA

Sample Criteria	Number of Companies
Banking companies that have been listed on Indonesia Stock Exchange in 2024	47
Banking companies listed on the IDX after 2019	(4)
Did not issue AR/SR 6 consecutive years	(2)
Not submitting required data	(17)

Number of companies that can be sampled	24
Total Observations (6 years)	6
Total Data	144

Source: Processed secondary data (2026)

TABLE 2. VARIABLE MEASUREMENT

Variables	Definition	Indicator
Green Banking Disclosure	disclosure of the implementation of green banking in banks related to operational activities, distribution and collection of funds that have carried out the concept of environmentally friendly.	16 indicators (1 for reported and 0 for not reported) (Handajani et al., 2019; Shaumya & Arulrajah, 2016)
Bank Soundness Level	assessment results calculated based on the risk and performance of the bank	The results of the self-assessment are in accordance POJK No 4/POJK.03/2016 Composite rating 1 (very healthy) to 5 (unhealthy) and POJK no 17 of 2023 concerning the Implementation of Governance for Commercial Banks
Firm Value	reflects the value of a business if it were to be bought or taken over by another company	Tobin's Q = $\frac{MVE + BVD}{TA}$ (Hoyt & Liebenberg, 2011)
Tier 1 Capital Bank Group	capital grouping based on core capital owned	Based on core capital: (1) up to 6T, (2) >6T up to 14T, (3) >14T up to 70T and (4) >70T. (POJK Nomor 12/POJK.03/2021 pasal 147 tentang Bank Umum)

FINDINGS AND DISCUSSION

Based on the available data, companies that meet the sample criteria as shown in Table 2 are 24 companies, with the observation period used in this research being 6 years so that 144 companies are obtained.

TABLE 3. DESCRIPTIVE STATISTICAL ANALYSIS

Variables	N	Min	Max	Mean	Mode	Std
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	Deviation					
Green banking disclosure	144	0,19	1,00	0,75	1	0,21
Bank soundness level	144	3	1		2	0,33
Firms value	144	0,17	18,5	1,27		1,52
KBMI*	144	1	4		1	1,11

*core capital bank group (KBMI)

Based on Table 3, looking at the minimum and maximum values, there is a significant gap in terms of green banking disclosure. This indicates that companies' awareness of implementing and reporting green banking is still quite low and uneven. The bank with the lowest green banking disclosure score is PT Allo Bank Indonesia Tbk (KBMI 1), while 14 other banks have increased their awareness of green banking implementation, resulting in the highest score of 1. Banks with the highest green banking disclosure are dominated by state-owned banks KBMI 3 and 4, which have core capital of >Rp14 trillion. The minimum and maximum values for bank health scores have different meanings from green banking disclosure and company values. The lower the bank health score, the better, indicating a very healthy condition. Banks with a score of 3 (fairly healthy) are PT Bank Mayapada International Tbk (2023), PT Allo Bank Indonesia Tbk (2020), PT Bank Pan Indonesia Tbk (2019), and PT Bank Raya Indonesia Tbk (2019). The majority of other banks have a score of 2 (healthy).

Based on the Tobin's Q concept, a good company has a Tobin's Q value >1, meaning that the company's book value is higher than its total assets, and the company's management has the ability to manage the company's assets. The lowest Tobin's Q value is held by PT Bank Mayapada International Tbk (2024), meaning that the management of its assets is not yet optimal, while the maximum value of 18.5 is held by PT Allo Bank Indonesia Tbk (2021). The value of PT Allo Bank Indonesia Tbk rose significantly in 2021 because it was taken over by PT Mega Corpora to become part of the KUB Mega Corpora business group in March 2021 and there was an additional capital of IDR 1 trillion in July 2021. The average company value of 1.27 means that the majority of companies have a market equity value and book value of liabilities greater than the book value of total assets.

The KBMI value that often appears is 1, meaning that the majority of banks sampled have core capital of up to IDR 6 trillion. The size of banks based on KBMI can affect green banking disclosure and company value, because larger banks tend to have higher green banking disclosure scores and implement green banking better than smaller companies. This is related to the costs that companies must incur in

order to implement green banking. For example, the transition from conventional offices to green buildings requires large amounts of funds, and providing employees with training in sustainable finance and various related certifications also requires costs. The results of the Smart Equation Model-Partial Least Square (SEM-PLS) test using warp PLS 8.0 are presented in Figure 1. In the figure, information is obtained regarding p values, path coefficient and coefficient of determination.

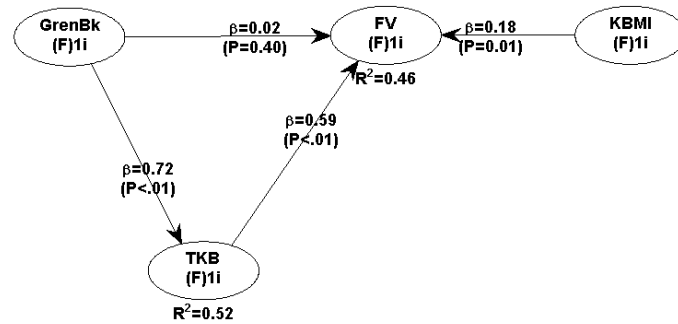


FIGURE 1. STRUCTURAL MODEL PATH DIAGRAM

Based on table 4, the bank soundness level variable has a contribution to explain the firm value variable due to an increase in R-Square. According to Hair et al., (2017) the R-square value in this study is moderate, in the range of 0.50.

TABLE 4. R² COEFFICIENT OF DETERMINATION

	R-Square	Adjusted R-Square	Description
Firm	0,465	0,454	Direct influence
Value	0,520	0,516	Indirect influence

Source: Processed secondary data (2026)

TABLE 5. Q² (PREDICTIVE RELEVANCE)

Variables	Q-Square
Company Value	0,453

Source: Processed secondary data (2026)

According to the information presented in table 5, this study has a Q² of 0,453>0, which means that the research model prepared has predictive relevance and has good Goodness of Fit. The selected exogenous variables correctly describe the endogenous variables.

TABLE 6. F² (EFFECT SIZE)

Variables	f-Square	Category
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Green Banking Disclosure - Firm Value	0,005	Weak
Green Banking Disclosure - Bank Soundness Level	0,520	Great
Bank Soundness Level - Firm Value	0,385	Great

Source: Processed secondary data (2026)

According to the information presented in Table 6, the effect of green banking disclosure on firm value is categorized as weak, while green banking disclosure on bank soundness and bank soundness on firm value are large.

TABLE 7. RESULTS OF PATH COEFFICIENTS AND P-VALUE

Variables	Path Coefficients	p-value	Description
Green Banking Disclosure - Firm Value	0,016	0,426	H1 not accepted
Green Banking Disclosure - Bank Soundness Level	0,721	<0,001	H2 accepted
Bank Soundness Level - Firm Value	0,585	<0,001	H3 accepted
Green Banking Disclosure - Bank Soundness Level - Firm Value	The effect of Green Banking Disclosure on Bank Soundness Level is significant (p < 0.001) at 0.721 and Bank Soundness Level on Firm Value is significant (p < 0.001) at 0.585.		H4 accepted (full mediation)

The direct effect of green banking disclosure on company value has a coefficient of 0.016 and a p-value of 0.426 (not significant), so H1 cannot be accepted because the p-value is >0.05. It can be concluded that green banking disclosure has no effect on company value. The direct effect of green banking disclosure on bank health has a coefficient of 0.721 and a p-value <0.001 (significant), so H2 is accepted because the p-value <0.05 and the coefficient is in line with the hypothesis. It can be concluded that green banking disclosure has a positive effect on company value. The direct effect of bank health on company value has a coefficient of 0.585 and p <0.001 (significant), so H3 is accepted because the p-value is <0.05 and the coefficient is in line with the hypothesis. It can be concluded that bank health has a positive effect on company value.

There is an indirect effect of green banking disclosure on company value mediated by bank health. This can be seen from the significant effect of green banking disclosure on bank health ($p < 0.001$) of 0.721 and the significant effect of bank health on company value ($p < 0.001$) of 0.585, so that it can be categorized as full mediation (Hair et al., 2017).

The Effect of Green Banking Disclosure on Firm Value

According to the information presented in table 7 green banking disclosure has no effect on firm value (H_1 cannot be accepted). This means that green banking disclosure in the annual report/sustainability report has not been able to increase the value of the company. The implementation of green banking delivered through green banking disclosure has not been responded directly by investors. Disclosure of green product indicators (implementation of digital banking, green projects, green financing), green operational (green building, use of energy-efficient equipment, paperless, waste recycling), green customer (providing education to customers for online transactions, utilizing technological advances to resolve customer complaints, providing online services) and green policy (training to employees and the community about environmental awareness, planning, commitment and company policies that support environmentally friendly concepts) did not experience a significant increase or decrease in company value.

The absence of the effect of green banking disclosure on firm value can be due to the lack of literature or information about green banking in Indonesia, so that investors do not know the importance of implementing green banking and have not made green banking one of the bases for decision making before buying shares (Tiara & Jayanti, 2022). This can be caused by the absence of clear rules regarding green banking or the socialization of green banking has not been accepted by the public and investors as a whole (Tiara & Jayanti, 2022). In addition, there are other considerations related to stock prices, profitability and financial performance (Tiara & Jayanti, 2022).

The company's good image for preserving the environment does not directly increase the company's value. This is in accordance with f^2 effect size table 6 that the effect of green banking disclosure on firm value is relatively weak. Green banking disclosure has not been able to attract investors and depositors to place their funds with the company. In line with the research of Anggarsini and Suprasto (2018), Tiara and Jayanti (2022) that firm value is not influenced by green banking disclosure.

Based on signaling theory, information on the implementation of green banking has not yet been received by new investors, as there is no national sustainable finance campaign. In addition, in April 2023, only the Indonesian Green Taxonomy pilot project was carried out on the 100 largest debtors of each KBMI 3 and 4 banks, for full implementation it is planned from January 2024. On this basis, green banking disclosure does not have an effect on firm value.

The Effect of Green Banking Disclosure on Bank Soundness Level

The test results presented in table 7 show the influence of green banking disclosure on the level of bank soundness (H_2 accepted). This is in accordance with f^2 effect size table 6 that the effect of green banking disclosure on the level of bank soundness is strong (large). Bank **soundness** level is proxied by risk profile, good corporate governance, earnings and capital (RGEC). Green banking disclosure is a source of information for investors that banks are very careful in lending, not only profit-oriented but prioritizing aspects of sustainability and the impact of company activities on the environment, thereby reducing problematic financing. Debtors who want to apply for financing must fulfill licenses and ensure that the business being run does not have a negative impact on the environment.

Green banking disclosure is able to increase transparency regarding the environmental impact of operational activities, fundraising and lending/financing, thus affecting sustainable development. The disclosure of this information can facilitate banks in measuring potential risks and threats as well as opportunities in the future, so that companies can calculate the adequacy of capital ratios. Green banking disclosure is the company's communication media to stakeholders regarding its concern for the environment which is considered important to improve the company's reputation and good image (Ernst & Young, 2013). In line with Wijayanti's (2014) research that green banking disclosure has a positive influence on return on assets (ROA). Stakeholders really need information on the company's concern for the environment, so that the policies that stakeholders will take benefit the company through improved performance that can be seen from the level of soundness. Banks that fulfill social and environmental responsibilities to society and then disclose them can also improve bank soundness (Gaies & Jahmane, 2022).

The Effect of Bank Soundness Level on Firm Value

Referring to table 7, it shows that there is an effect of bank soundness level on firm value (H_3 accepted). This is in accordance with f^2 effect size table 6 that the effect

of bank soundness level on firm value is strong (large). The level of bank soundness affects the expectations of external parties to the company's shares because in general the operational performance of the bank is directly proportional to the value of the company in the long run (Maheswari & Suryanawa, 2016). The better the level of banking soundness, the better the company's performance and the higher the company's profit (Maheswari & Suryanawa, 2016).

Assessment of the soundness level of the bank is a consideration in deciding on investment (Anggarsini & Suprasto, 2018). In line with signal theory, that the level of soundness is very influential on firm value. The level of bank soundness affects the confidence of depositors in placing their funds and ensuring that these funds are channeled appropriately in order to obtain optimal returns. Banking liquidity needs to be managed properly so that there are not many idle funds and too aggressive in lending, resulting in potential liquidity difficulties if there is a withdrawal of third party funds. Liquidity can increase investor confidence, so that investors will invest. The more capital invested, the higher the share price, the higher the company value (Irianti & Saifi, 2017). Financing distribution needs to be careful so that the quality of financing is good and able to provide high returns to investors.

The results of the good corporate governance self-assessment are a signal of improving management performance in optimizing existing resources to generate profits, reduce agency costs and increase investor confidence in company management (Anggarsini & Suprasto, 2018). One of the GCG practices carried out by banks is reflected in the quality of the financial statements presented and the accuracy of the information submitted (Anggarsini & Suprasto, 2018). These efforts are made to increase investor confidence, so that it has an impact on increasing share prices and firm value (Anggarsini & Suprasto, 2018). Earning generated by banks is an attraction and a signal for investors which shows the ability of management to manage assets well to generate profits (Anggarsini & Suprasto, 2018). The profit earned has an impact on increasing dividends. Information on profits and dividends distributed will be responded to by investors through the stock market price, so that an increase in the stock market price will be accompanied by an increase in firm value (Anggarsini & Suprasto, 2018). In line with Aprilia and Hapsari(2021), Irianti and Saifi (2017)'s research ROA is a positive signal for investors so that stock prices are higher and reflect high company value.

Capital adequacy ratio (CAR) is related to the adequacy of capital owned by banks in lending and the ability to bear the risks that may occur due to lending (Anggarsini & Suprasto, 2018). The better CAR means that the bank is able to meet

capital requirements in lending activities in such a way that profitability increases and company value increases (Anggarsini & Suprasto, 2018).

The Role of Bank Soundness Level in Mediating the Relationship between Green Banking Disclosure and Firm Value

The test results presented in table 7 indicate the role of the level of bank soundness in mediating the relationship between green banking disclosure and firm value (H₄ accepted). This is in accordance with f² effect size table 6 that the effect of green banking disclosure on the level of bank soundness and the level of bank soundness on firm value is strong (large). Green banking disclosure signals to debtors that banks only channel financing to companies engaged in environmentally friendly industries and have relevant licenses. These efforts are made so that financing is smooth until it is paid off, good financing quality, low CKPN and high profit. Creditors who do not have environmental licenses cannot apply for financing at banks that have implemented green banking policies.

Green banking disclosure for depositors is a source of information that the funds they save in the bank are safe, will get optimal returns in the long run because the quality of financing is good. These conditions make depositors interested in increasing their funds and ROA increases because the funds can be redistributed. Green banking disclosure is also related to good corporate governance, companies become compliant and support sustainable finance policies that are being intensified by the government. Based on signal theory, the delivery of information on green banking practices carried out by the company is positive information for investors which can improve the company's good image. A good image has an impact on increasing stock prices, thus affecting company value (Khan et al., 2021; Winarto et al., 2021). The increase in firm value is not only influenced by a good image due to green banking disclosure, but based on theoretical studies, the increase in firm value is influenced by the level of bank soundness, in line with research (Anggarsini & Suprasto, 2018; Aprilia & Hapsari, 2021; Febrin & Sulhan, 2022; Irianti & Saifi, 2017).

CONCLUSION

Investors' expectations of the company are influenced by the level of bank soundness, because it reflects the operational performance of banks for one year which can affect the value of the company in the long term (Maheswari & Suryanawa, 2016). Healthy banks have good performance, so the profits generated are higher (Maheswari & Suryanawa, 2016). The level of bank soundness can also

affect the perception of investors/depositors towards the company and further investment plans. The increase in company value not only influenced by a good image due to green banking disclosure, but based on theoretical studies, the increase in company value is influenced by the level of bank soundness, in line with research (Anggarsini & Suprasto, 2018; Aprilia & Hapsari, 2021; Febrin & Sulhan, 2022; Irianti & Saifi, 2017).

This study has several limitations that should be considered when interpreting the findings. First, green banking disclosure guidelines are still in the early stages of implementation, resulting in variations in reporting practices among banks. The lack of standardized disclosure formats may affect the consistency and comparability of the information presented by different institutions. Therefore, future research is encouraged to extend the observation period to include years following the mandatory implementation of sustainable finance regulations, enabling a more comprehensive assessment of green banking disclosure practices.

Second, differences in the presentation and reporting of sustainable finance data across companies may introduce subjectivity in the disclosure assessment process. Since the evaluation of green banking disclosure often relies on content analysis and disclosure checklists, variations in interpretation may affect the accuracy of the measurement. To improve the reliability of future studies, researchers are advised to compare their assessment results with disclosure evaluations conducted by independent parties or to employ alternative measurement approaches, such as using the proportion of green loans or green financing as a proxy for green banking disclosure. Finally, this study is limited by the variables included in the research model. Future studies are recommended to incorporate additional exogenous variables, particularly financial performance indicators, to provide a broader understanding of the factors influencing company value. Moreover, efficiency and profitability variables may be considered as intervening variables to examine indirect relationships among the constructs. Researchers may also utilize Price to Book Value (PBV) as an alternative proxy for measuring firm value, thereby enhancing the robustness and comprehensiveness of the analysis.

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