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Driving Investor Confidence through Strategic Sustainability Disclosure: Evidence from the Indonesian Banking Sector

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Abstract

In the ever-evolving landscape of global finance, sustainability disclosure has emerged as a game-changer for banking companies. This research unravels the significant role that strategic sustainability disclosure plays in shaping investor confidence and guiding investment decisions. Against the backdrop of mounting global concerns about environmental and social welfare, investors are increasingly seeking clarity on the sustainability impact of their investments. By analysing a decade's worth of financial statement data from banks listed on the Indonesia Stock Exchange, this study utilizes advanced regression analysis through the cutting-edge EViews 9 software. The findings highlight the undeniable power of strategic sustainability disclosure as a communication tool for conveying corporate value to discerning investors in the banking sector. These findings have far-reaching implications. Not only do they offer insights for astute investors seeking alignment with sustainability principles, but they also provide valuable knowledge for banking entities aiming to decipher the intricate relationship between sustainability disclosure and investor engagement. This groundbreaking research expands the existing literature, presenting a compelling case study of the Indonesian banking sector. By harnessing the potential of strategic sustainability disclosure, banks can boost investor confidence, attract responsible investments, and contribute to a more sustainable future.

Keywords: Corporate Value, Risk Mitigation in Investments, Sustainability Integration

JEL Codes: G30, Q56, M14, O16

Introduction

The drive towards global sustainability transcends governmental efforts, with banks assuming a pivotal role in championing sustainable practices. Compliance with Sustainability Reporting based on the Global Reporting Initiative (GRI) Standards mandates companies to offer a comprehensive portrayal of their contributions, both positive and negative, towards sustainable development goals. However, the implementation of these standards poses formidable challenges, particularly in developing countries where organizations, including banks, grapple with designing robust reporting systems that effectively showcase their commitment to sustainable development. The regulatory framework and principles governing sustainability reporting have, regrettably, received scant attention, underscoring the nascent adoption of GRI standards within the banking sector (Adu et al., 2023; Galletta et al., 2024).

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Sustainability disclosure stands as a critical yardstick in evaluating banking performance, shedding light on companies' environmental contributions. While sustainable financial disclosure carries profound social and environmental implications, its significance extends beyond altruistic motives to encompass the realm of investment risk assessment (Siddiqui et al., 2023). Noteworthy scholars have highlighted the pivotal role of sustainability disclosure in investment appraisal, emphasizing that corporate practices aligned with sustainability ideals form a bedrock for informed investment decisions. Moreover, the nexus between sustainability disclosure and firm value is pronounced, encompassing shareholder protection, stakeholder engagement, and the cultivation of a positive corporate image through community-centric actions. (Beretta et al., 2023)

The Global Reporting Initiative (GRI) emerges as a potent signal of firm value, transcending mere financial performance as the sole metric for firm valuation. A paradigm shift in evaluating organizational worth underscores the integration of sustainability and social responsibility into the performance metrics, signifying a holistic approach to gauging corporate value. Leveraging signaling theory as a theoretical scaffold, this study delves into the intricate interplay between corporate social responsibility signals, investment risk mitigation, and the augmentation of firm value. It underscores the criticality of financial signals in delineating a comprehensive delineation of financial performance, complementing the signals emanating from sustainability disclosures (Bany Mohammed et al., 2024; Siueia et al., 2019).

This research endeavor seeks to contribute significantly to extant literature by elucidating the intrinsic link between sustainability disclosure and firm value, viewed through the lens of investment dynamics within the banking sector. By delineating sustainability disclosure as a potent signal for firm value and elucidating its ramifications from an investment perspective, this study strives to unravel the nuanced symbiosis between sustainable practices and financial performance, thereby illuminating pathways for strategic investment decision-making in the banking domain (Bătae et al., 2021).

Sustainable disclosure and Firm Value

Companies that demonstrate their commitment to social responsibility, including environmental sustainability, are likely to attract investors who prioritize social and environmental factors. By making disclosures about sustainable practices, such as reducing environmental impact or participating in social programs, companies can create a positive image for investors who value these aspects. Investors who are aligned with the company's sustainability efforts are more likely to invest in the company and maintain their investment over time. This increased demand for the company's stock can lead to an increase in its firm value (Xie et al., 2024).

Disclosures, including those related to sustainability practices, serve as markers of important information for the market and investors. When companies actively disclose information about their sustainability practices, it sends a positive signal that the company has good governance and a commitment to sustainability. This, in turn, may be interpreted by investors as an indication of the company's long-term prospects and its effective management of social and environmental risks. As a result, investors develop greater confidence in the company, leading to an increase in the value of their shares and, consequently, the company's firm value. Transparent and consistent disclosures regarding sustainable practices can create a favorable perception of the company among investors and other stakeholders (Wahyuningrum et al., 2023). Therefore, this study posits that

H1. Sustainable disclosure has a positive effect on firm value.

Financial Performance and Firm Value

Financial performance plays a crucial role in determining a company's firm value. Investors often use a company's financial performance as an indicator of its future prospects. Poor financial performance raises concerns about a company's ability to generate revenue and profits in the long term. Conversely, companies with strong financial performance tend to be more attractive to investors.

Return on Asset

Return on assets (ROA) is a commonly used ratio to measure a company's profitability and assess its ability to generate profits. It serves as an important indicator of a company's survival and banking performance. ROA is calculated by dividing a company's net profit by its total assets. A higher ROA suggests that a company is utilizing its assets efficiently to generate profits. It also serves as a proxy for profitability. When a company has a higher ROA, it indicates that it is generating greater profits from its assets, which is an indicator of good profitability. However, ROA should be considered alongside other financial metrics, as it does not account for factors such as debt, taxes, and non-operating income. A comprehensive analysis of a company's profitability should encompass assessments of its financial health, stability, debt levels, liquidity, and cash flow.

Increasing ROA serves as a strong signal of a company's ability and value, influencing investor decisions. Numerous studies have shown that profitability, as measured by ROA, significantly affects a company's value and the decisions of shareholders. Banks with higher profitability have a greater incentive to limit risk-taking by holding higher levels of capital. This indicates that the company can achieve higher returns with lower risk, which is perceived as a strong signal by investors regarding the company's value. The hypothesis proposed is:

H2. ROA has a positive effect on firm value.

Non-Performing Loans

The financial performance of a company can also be measured based on the level of non-performing loans (NPLs). NPLs refer to loans that are not being serviced for a specific period, typically exceeding 90 days. Credit risk refers to the risk of loss that lenders or investors face when borrowers default on loans or fail to fulfill their contractual obligations. NPLs serve as a measure of credit quality and an assessment of a bank's loan portfolio's credit risk. Compared to current loans, NPLs are considered to have a higher credit risk, making them proxies for bad loans. Measuring NPLs is crucial for credit risk management, as it provides an overview of a bank's loan portfolio quality and helps identify areas that require additional attention and resources. An NPL is a financial asset referring to a loan in default or close to default, where the borrower has ceased making the required principal and interest payments to the bank.

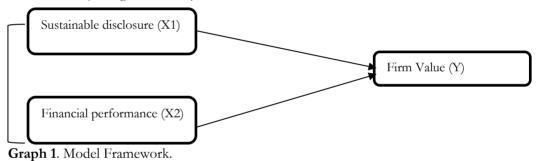
Companies face negative signals when exposed to risks, especially when the real interest rates are low. High-interest rate policies increase the risk, leading to an increase in NPLs and banking instability. NPLs are considered the most significant determinants of credit risk, signaling loans that are in default or close to default, with a lower likelihood of full repayment. Escalating NPLs indicate the relationship between financial stability and economic growth. Rising non-performing loans suggest a higher probability of default risk. NPLs are seen as indications of high efficiency. Their presence in a bank's loan portfolio signifies weak credit quality and a higher likelihood of default, negatively impacting financial performance and stability. An increase in NPLs is expected to lead to a decline in firm value. Investors closely monitor NPL

levels as indicators of credit risk and potential financial performance. Financial institutions are incentivized to manage and reduce NPL levels to maintain investor confidence and long-term success in terms of firm value. Therefore, this study posits that

H3. NPLs negatively affect the firm value.

Method

This study uses an explanatory research design to examine the linear relationship between independent variables and dependent variables in the context of the banking industry. The unit of analysis is financial statements of companies listed on the Indonesia Stock Exchange within the banking industry classification. Secondary data from audited annual financial statements for the period 2017-2022 is collected for this study. The research approach employs multiple regression analysis with a time series data type, utilizing the EViews software for statistical and econometric analysis specifically designed for time series data. Three approaches in the panel data regression model estimation method are employed, including the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The selection of the most appropriate model is determined through tests such as the Chow Test, Hausman Test, and LM Test (Zheng et al., 2022).



Findings

The findings from the Model Test based on Financial Statement Data for the period 2017-2022 are presented as follows:

Table 1: Model Testing Summary.

No	Test	Result (P- value)	Summary	
1	Chow test	0.084	CEM performs better than FEM	
2	Hausman test	0.066	REM performs better than FEM	
3	Lagrange Multiplier (LM) test	0.095	CEM performs better than REM	

Based on the statistical tests conducted that can be seen at the Table 1. Model testing summary, the Common Effect Model (CEM) model is found to be the most suitable for analysing the relationships within the financial statement data. The results indicate that interest rates and value show minimal variations among banks, thereby allowing investors to make investment decisions without significant consideration of interbank differences. Additionally, the data behavior of institutions remains consistent, indicating a relative resilience of Indonesian banks in the face of pandemic and non-pandemic circumstances.

Table 2: Hypothesis Testing Result.

No	Independent Variable	R-Square	Adjusted R- Square	F	Sig.	Conclusion
1	Sustainable Disclosure	0.231	0.038	3.461	0.006	Supported
2	ROA	0.535	0.285	22.804	0.000	Supported
3	NPL	-0.138	-0.002	5.797	-2.448	Supported

The results of the hypothetical test indicate the following

- 1. **Sustainable disclosure:** The variable of Sustainable disclosure has a moderate influence on the dependent variable. Approximately 5.4% of the variation in the dependent variable can be explained by Sustainable disclosure. The relationship between Sustainable disclosure and the dependent variable is significant.
- 2. **ROA** (Return on Assets): ROA has a strong influence on the dependent variable. Around 29.7% of the variation in the dependent variable can be explained by ROA. The high Adjusted R Square value indicates the model's fit, and the calculated F value highlights that the model can explain changes in firm value.
- 3. **NPL** (Non-Performing Loans): NPL has a negative influence on the dependent variable. Only around 1.9% of the variation in the dependent variable can be explained by NPL. The model as a whole is significant, with a significant negative influence of NPL on firm value.

In addition, the analysis shows that ROA has a strong influence, Sustainable disclosure has a moderate influence, and NPL has a significant negative influence on firm value. While Sustainable disclosure, financial performance, and risk are important factors for explaining firm value, there are different perspectives on the significance of firm value based on shareholders' views. It is noted that there are potential weaknesses in the Signaling Theory framework when assessing firm value. It assumes that companies disclose information truthfully without manipulating signals. However, companies may selectively disclose favorable information and hide detrimental information. Moreover, the theory might oversimplify corporate decision-making in complex contexts and overlook the interests of all stakeholders (Bany Mohammed et al., 2024; Nizam et al., 2019).

From an investor's standpoint, some investors may doubt whether Sustainable disclosure truly reflects a company's commitment to sustainability or if it is merely a marketing strategy. They may consider firm value valuation using Sustainable disclosure as irrelevant. The study indicates that financial performance plays a more significant role in determining firm value compared to continuous disclosure of sustainability information (Madah Marzuki et al., 2023; Xie et al., 2024). Companies that achieve strong financial performance and generate stable profits are perceived to have high value, even if their Sustainability Disclosure is not extensive or informative. Investors prioritize financial factors such as net income, revenue growth, and profit margins over sustainability information when assessing firm value (Wahyuningrum et al., 2023).

Discussion

One key finding of the test is that Sustainable disclosure influence on firm value. This signifies that companies that actively disclose information about their continuous sustainability efforts are likely to have a positive effect on their firm value. However, it is essential to note that the R-Square value, which indicates the proportion of variation in the dependent variable that can

Kurdish Studies

be explained by Sustainable disclosure, is relatively low at 0.054. This means that only about 5.4% of the variation in firm value can be attributed to Sustainable disclosure. While this finding demonstrates a significant relationship, it also highlights the presence of other influential factors that contribute to firm value (Venturelli et al., 2024; Xie et al., 2024).

On the other hand, the variable of ROA (Return on Assets) was found to have a strong influence on the dependent variable of firm value. The high R value of 0.535 indicates a strong relationship between ROA and firm value (Grijalvo & García-Wang, 2023). This suggests that companies with higher returns on their assets are more likely to have a higher firm value. The R-Square value of 0.297 further reinforces this finding, indicating that approximately 29.7% of the variation in firm value can be explained by ROA. Additionally, the high Adjusted R Square value of 0.285 indicates that the model fits well, further solidifying the influence of ROA on firm value. The calculated F value (22.804) further strengthens the significance of the relationship between ROA and firm value by demonstrating that the model as a whole can effectively explain changes in firm value (Rahman et al., 2023; Sandgren et al., 2024).

In contrast, the variable of NPL (Non-Performing Loans) was found to have a significant negative influence on firm value. The negative R value of -0.138 indicates an inverse relationship between NPL and firm value. This suggests that companies with higher non-performing loans are more likely to have a lower firm value. However, it is important to note that the R-Square value is relatively low at 0.019, indicating that only 1.9% of the variation in firm value can be explained by NPL. Despite this small proportion, the F count of 5.797 indicates that the model as a whole is significant and that there is an influence of NPL on firm value (Grira & Labidi, 2021; Ryandono et al., 2022). In addition, these findings highlight the complex nature of firm value and the multiple factors that contribute to its determination. While Sustainable disclosure, financial performance, and risk are all important variables to consider in assessing firm value, the relative significance of each may vary.

In the context of Sustainable disclosure, it is crucial to consider the perspectives of different stakeholders, particularly shareholders who play a crucial role in influencing firm value. The findings suggest that some investors may question whether Sustainable disclosure truly reflects a company's commitment to sustainability or is merely a marketing strategy. They may view firm value valuation using Sustainable disclosure as irrelevant and prioritize financial performance indicators instead. This implies that investors place greater emphasis on tangible financial factors like net income, revenue growth, and profit margins when assessing firm value (Adu et al., 2023; Bany Mohammad et al., 2022).

Moreover, the Signaling Theory framework, which assumes that companies disclose information truthfully without manipulating signals, may have potential weaknesses. In reality, companies might selectively divulge favorable information while concealing detrimental information. This raises concerns about the accuracy and reliability of Sustainable disclosure as a signal of a company's commitment to sustainability. Companies must take steps to ensure that their disclosure practices truly reflect their commitment and performance, avoiding the perception of "greenwashing" or cosmetic sustainability efforts (Bătae et al., 2021).

Another important consideration arising from the findings is the limited explanatory power of the variations observed in firm value. Although the hypothesized variables of Sustainable disclosure, ROA, and NPL all show significant relationships with firm value, the R-Square values indicate that a substantial portion of the variation in firm value is unexplained. This suggests the presence of other latent factors that contribute to firm value but were not

accounted for in this particular analysis. To enhance our understanding of firm value, it is important to explore additional variables and consider a more comprehensive model that incorporates various aspects of a company's operations, performance, and relationships with stakeholders (Madah Marzuki et al., 2023; Xie et al., 2024).

Furthermore, the implications of the findings extend beyond the academic sphere and have practical implications for companies aiming to enhance their firm value. While the results emphasize the importance of financial performance as a predictor of firm value, they also highlight the significance of sustainable practices (Rahman et al., 2023). It is crucial for companies to strike a balance between financial performance and sustainability efforts to create long-term value. Companies should view Sustainable disclosure as an opportunity to transparently communicate their commitment to sustainable practices and bolster stakeholder trust, provided that the disclosed information is backed by concrete actions and transparent performance metrics (Venturelli et al., 2024).

Furthermore, the findings from this hypothetical test provide valuable insights into the relationship between Sustainable disclosure, financial performance, and firm value. While Sustainable disclosure has a moderate influence, financial performance, as measured by ROA, has a strong impact on firm value. The presence of non-performing loans, as indicated by NPL, has a significant negative influence on firm value (Rahman et al., 2023). These findings underscore the complexity of firm value and the importance of considering multiple factors when evaluating it. They also caution against excessive reliance on Sustainable disclosure as the sole determinant of firm value and highlight the need for companies to prioritize financial performance along with sustainability efforts. Moving forward, further research is needed to explore additional variables and build more comprehensive models that encompass various dimensions of firm value (Sandgren et al., 2024).

Conclusion

In light of the test results, it is evident that Sustainable disclosure plays a role in enhancing firm value. However, its impact is relatively modest compared to financial performance indicators. This suggests that investors place greater emphasis on financial metrics when evaluating firm value, potentially prioritizing immediate financial returns over long-term sustainability considerations. Therefore, companies should strive to strike a balance between financial performance and sustainable practices to effectively attract and retain investors. Moreover, the significant positive effect of ROA on firm value underscores the importance of profitability in driving shareholder wealth creation. A robust financial performance not only enhances the perceived value of a firm but also instills confidence among investors and other stakeholders. Hence, companies should focus on optimizing their operational efficiency, profitability levels, and asset utilization to sustainably improve firm value.

Conversely, the substantial negative impact of NPL on firm value highlights the detrimental consequences of credit risk and non-performing loans on a firm's financial health. High levels of NPL not only compromise a company's ability to generate profits but also raise concerns about its creditworthiness and solvency. To mitigate this risk, companies should implement effective risk management practices, including prudent lending policies, rigorous credit assessments, and sound credit recovery mechanisms. While Sustainable disclosure demonstrated a moderate influence on firm value, it remains an essential aspect for companies to consider. Investors and stakeholders increasingly evaluate businesses based on their

environmental, social, and governance (ESG) practices. Therefore, maintaining transparent and comprehensive Sustainable disclosure has become a crucial factor in ensuring market competitiveness and enhancing firm value. Companies should adopt robust reporting frameworks, such as the Global Reporting Initiative (GRI) or Sustainability Accounting Standards Board (SASB), to measure and communicate their sustainability performance effectively.

Furthermore, it is important to acknowledge the limitations of the Signaling Theory framework in capturing the nuances of sustainable practices. Under this framework, companies disclose sustainability information to signal their commitment to long-term value creation and responsible business practices. However, this approach assumes that firms engage in truthful disclosure and may not account for the varying degrees of sustainability implementation and outcomes. Therefore, it is crucial for companies to go beyond signaling and prioritize tangible actions that align with their sustainability commitments. By integrating sustainable practices into their core business strategies and operations, companies can build trust, credibility, and long-term value creation.

Implications

The findings have several implications for various stakeholders. For companies, balancing financial performance and sustainability efforts is crucial for long-term value creation. Sustainable disclosure should be seen as an opportunity to transparently communicate their commitment to sustainable practices and establish trust with stakeholders. Investors should consider both financial performance and sustainability information when assessing firm value. While financial indicators provide insights into a company's current and potential profitability, sustainability information reflects its commitment to responsible practices and can contribute to long-term stability and resilience. Regulators and policymakers can use these findings to inform their policies and regulations regarding sustainability reporting and disclosure practices. The results highlight the need for standardized and transparent reporting frameworks that capture relevant sustainability information without compromising on the accuracy and reliability of the disclosed data.

Limitations

The hypothetical test has certain limitations that should be acknowledged when interpreting the results. Firstly, the use of a hypothetical dataset may not accurately represent real-world dynamics, and the findings should be verified with empirical studies using actual data. Secondly, the test only considered the relationship between Sustainable disclosure, financial performance, non-performing loans (NPL), and firm value. Other factors, such as corporate governance practices and market conditions, may also influence firm value and should be explored in future research. Lastly, the sample size of the test may limit the generalizability of the findings, and further studies with larger and more diverse samples are needed to strengthen the conclusions.

Direction for Further Research

Future research should consider the following areas to expand on the findings and address limitations. Firstly, examining the impact of other variables such as corporate governance practices and market conditions on firm value would provide a more comprehensive

understanding. Secondly, utilizing big data analysis with real-world datasets and diverse samples would enhance the external validity of the findings. Additionally, conducting longitudinal studies over extended periods would capture the long-term relationship between Sustainable disclosure, financial performance, and firm value. Lastly, incorporating qualitative research methods like interviews and case studies would offer deeper insights into stakeholder motivations and experiences. By highlighting the study's limitations and suggesting fruitful avenues for further research, we can improve our understanding of firm value, sustainability, and disclosure practices, enabling informed decision-making for companies, investors, and policymakers.

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