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The role of sustainable competitive advantage on sustainable finance and bank profitability

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Abstract

This study examines the moderating effect of sustainable competitive advantage on the relationship between sustainable finance and bank profitability of Indonesian conventional commercial banks from 2019 to 2022. The study has found that sustainable finance has a positive impact on bank profitability (ROA and ROE). However, the impact of sustainable competitive advantage on bank profitability was only positive with ROA, suggesting that ROA is a more effective indicator of bank profitability for this study. Furthermore, the study indicates that the impact of sustainable finance on bank profitability (both ROA and ROE) is diminished by the delay in the implementation of sustainability reporting during the COVID-19 reporting period. The results of this study are likely to encourage banks to increase their sustainable finance and focus on improving the quality of sustainability reporting in order to gain a competitive advantage in the current banking industry landscape in Indonesia.

Introduction

In a global context, awareness of the importance of sustainability issues is crucial in maintaining business profits. Sustainability is not only important for the environment but also for the economy and society. In terms of the financial sector, especially the banking sector, it has an important role in encouraging sustainability practices among corporations (Andaiyani et al., 2023). The banking sector, as one of the main pillars of the financial industry, has great potential to encourage ESG (Environmental, Social, and Governance) practices among corporate companies, which is an important step towards sustainable development (Andrieş & Sprincean, 2023). Sustainability issues that can impact corporate financial performance have been empirically investigated only recently and are still a matter of debate (Bommel, 2023). The majority of research conducted on ESG factors and performance relates to non-financial companies, while financial institutions have received less attention.

This study will confidently focus on the financial services sector, especially the banking sector, which plays a crucial role in the era of sustainable development. The distribution of funds from banks can greatly impact the potential and capacity of sectors that receive financing. Therefore, banks and financial markets are key sources of funding for green investments and are essential for the success of green finance policies. Additionally, the banking sector can support countries in adapting to climate change and increasing financial resilience to climate risks. This can be achieved by allocating bank financing to climate-sensitive sectors through various instruments, including green credit, green bonds, green sukuk, and blended finance, among others (Andaiyani et al., 2023).

The banking sector's increased funding for sustainable development financing, as evidenced by the Indonesia Finance Services Authority (2021), further supports this assertion.

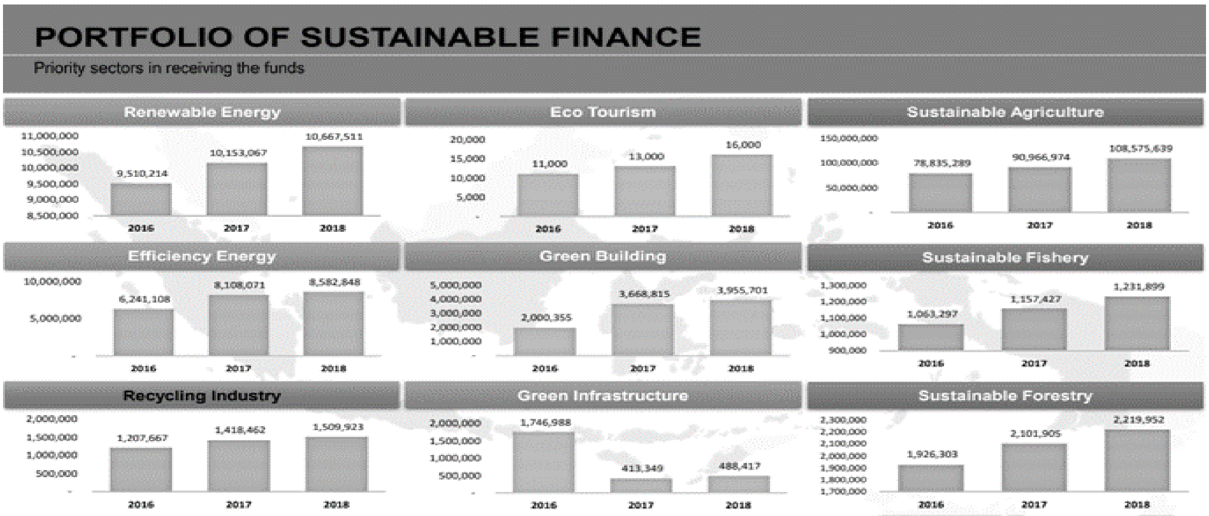

Figure 1: Portfolio of Sustainable Finance 2016-2018 Period
Source: Bank Indonesia

Indonesia is confidently advancing in the second phase of its Sustainable Finance Roadmap, which will create a more comprehensive sustainable finance ecosystem and accelerate the implementation of ESG principles in the country (Indonesia Finance Services Authority, 2021). Achieving an adequate balance of financing between economic, social, and environmental aspects, as stated in POJK No. 51/POJK.03/2017, is necessary to maintain financial stability. This regulation pertains to the implementation of sustainable finance for financial services institutions, issuers, and public companies.

Financial institutions can be impacted by the insolvency of borrowers, resulting in the closure or unfeasibility of their businesses (Zielińska-Lont, 2020). However, banks can advance sustainability through corporate finance, which is a substantial source of global capital (OECD, 2020). The IMF has confidently calculated that the lack of sustainable financing capacity for all developing countries until 2030 amounts to around USD 2.6 trillion. This lack of financing has hindered economic sustainability performance in Indonesia (Setiawan, 2021). Previous studies that examined financing in sustainable sectors and profitability performance yielded varying results. While a few studies have reported negative effects, the majority of research, including Belasri et al. (2020), Broadstock et al. (2020), Elalfy and Weber (2019), Nizam et al. (2019), and Pertseva (2022), have found a positive effect. Sustainable finance has been extensively researched, and the evidence overwhelmingly supports its positive impact on performance.

Researchers have explored the association between sustainability reporting and bank profitability performance from both theoretical and empirical perspectives. The relationship between sustainability reporting and bank profitability performance is complex and requires further investigation. However, the theoretical analysis has resulted in two contradicting hypotheses: the social impact hypothesis (positive association) and the trade-off hypothesis (negative association). Sustainability issues have intrinsic value as they are integrated with social impact and stakeholder theories (El Khoury et al., 2023; Freeman et al., 2004). ESG is a proven cause of competitive advantage (McWilliams & Siegel, 2001), and companies have a clear obligation to society (Carroll, 1999). High profitability can be maintained if the firm has a sustainable competitive advantage. The quality of sustainability reports can be used as a measure of sustainable competitive advantage (Healy et al., 2014). ESG reporting has a positive impact on company performance, as measured by return on assets (ROA), return on equity (ROE), and Tobin's Q (Buallay et al., 2020; Von Wallis

& Klein, 2015). Therefore, it is important to examine whether the quality of sustainability reports can affect bank profitability and strengthen the influence of sustainable financing on bank profitability.

This study examines the moderating effect of high-quality sustainable reports, indexed according to GRI and G4 standards in the current year, as a proxy for sustainable competitive advantage, on the association between sustainable finance and banking profitability. The original research aims to provide insights into sustainable finance and banking profitability. In this study, we used a different proxy for sustainable finance by calculating the percentage of sustainable finance disbursed out of total financing. This proxy is commonly used by banks to support current sustainability issues.

This research aims to encourage the banking industry to increase financing for sustainable businesses that prioritize social and environmental responsibility. This can increase banking profitability and support government programs toward a sustainable Indonesia in 2024. This study will investigate the potential for comprehensive sustainability reporting to enhance the positive impact of sustainable finance on profitability, providing a competitive advantage for the industry. The study will address persistent issues in the banking industry, with a focus on Indonesia.

Literature Review

Legitimacy Theory

Legitimacy Theory suggests that organizations may seek to legitimize their activities by following social norms and responding to changing societal expectations, to gain legitimacy that supports the sustainability of the company (Buallay, 2022; Crossley et al., 2021; Belal, 2016). This study examines sustainable financing activities provided by banks to Sustainable Business Activity Groups in environmentally conscious sectors and micro, small, and medium enterprises (MSMEs). The banks aim to gain legitimacy from investors and society by demonstrating their contribution to the implementation of Environmental, Social, and Governance (ESG) principles in Indonesia. The significant contribution of sustainable financing to society can increase investor confidence and public loyalty towards banking services, ultimately improving bank profitability.

Stakeholder Theory

Stakeholder theory emphasizes the importance of meeting the expectations and needs of various stakeholders such as customers, employees, investors, and the wider community who can influence or be influenced by an organization's goals (Buallay, 2022; Rendtorff & Bonnafous-Boucher, 2016; Freeman & McVea, 2001). Banks involved in sustainable financing practices are often considered more responsive to social and environmental needs because they can meet stakeholder expectations with sustainable and ethical practices. This can lead to increased trust, customer loyalty, and broader support from the community, ultimately contributing to the bank's performance.

According to stakeholder theory, organizations should be managed in a manner that considers the interests and well-being of all stakeholders rather than just shareholders. This perspective is particularly relevant in the context of sustainable finance and bank performance, as it suggests that banks can enhance their performance by addressing the needs and concerns of a wide range of stakeholders such as customers, employees, suppliers, communities, and the environment. Several studies have provided empirical evidence supporting the stakeholder theory within the banking sector. In a recent study, Ahmadzai et al. (2023) demonstrated that sustainable finance initiatives in Afghanistan's banking industry positively influence both firm reputation and financial performance, with servant leadership further moderating these relationships. Similarly, Malini (2021) found that CSR and green finance significantly impact financial decisions and corporate value in Islamic banks in Indonesia, although the relationship varies across quantiles.

Sustainable Finance and Bank Profitability

Organizations legitimize their activities by following social norms and responding to changing societal expectations, gaining legitimacy that supports the company's sustainability (Buallay, 2022; Crossley et al., 2021; Belal, 2016). To obtain legitimacy in line with current ESG issues, sustainable financing is key. This can be achieved through funding for green projects, energy conservation, and the development of environmentally friendly technology, as well as financing for SMEs.
Banks that engage in sustainable investment and financing generate stable long-term returns or greater benefits with lower risks, enhancing the bank's profitability. Sustainable financing also improves the bank's reputation and strengthens relationships with stakeholders such as customers, investors, and the community. Banks committed to sustainable practices gain a competitive advantage by understanding future risks and adapting to market changes. Customers prefer to transact with a sustainable bank, which ultimately supports revenue growth and profitability. Customers prefer to transact with a sustainable bank, which ultimately supports revenue growth and profitability. Previous studies (Pertseva, 2022; Belasri et al., 2020; Broadstock et al., 2020; Elalfy & Weber, 2019; Nizam et al., 2019) unequivocally demonstrate the positive impact of sustainable finance on bank profitability.
H1: Sustainable finance has a positive influence on bank profitability.

Sustainable Competitive Advantage and Bank Profitability

To improve profitability, banks must develop a competitive advantage that influences stakeholders, including customers, employees, investors, and the wider community. Stakeholder theory emphasizes the importance of meeting the expectations and needs of these groups (Buallay, 2022; Rendtorff & Bonnafous-Boucher, 2016). To improve a bank's reputation among stakeholders, including customers, investors, and regulators, provide a high-quality sustainability report. Aim for a logical flow of information with causal connections between statements, and ensure the report is free from grammatical, spelling, and punctuation errors. The report should be objective, clear, concise, and use precise technical terms when necessary. Follow conventional academic structure and formatting, adhere to style guides, and avoid biased or emotional language. Clear and accurate reports strengthen stakeholders' trust in the bank, increase customer loyalty, attract investors, and reduce reputational risks. Clear and accurate reports strengthen stakeholders' trust in the bank, increase customer loyalty, attract investors, and reduce reputational risks.

Quality sustainability reports reflect the bank's operational efficiency in integrating sustainable practices into day-to-day operations. High-quality reports reflect better risk management regarding environmental, social, and governance issues. The bank's ability to adapt and comply with regulations showcases its competence and expertise in the field. They are better prepared to meet increasingly stringent sustainability regulations, reducing the risk of unexpected legal complications and costs. Improved risk management will reduce the likelihood of losses that may affect the bank's profitability. High-quality sustainability reports serve as a tool to demonstrate commitment to socially and environmentally responsible practices, thereby enhancing the bank's reputation among stakeholders. This study aligns with the theory that emphasizes the positive impact of a good reputation on customer interest, investor attraction, and competitive advantage, which can support bank profitability. Previous studies (Buallay et al., 2020; Healy et al., 2014; Von Wallis & Klein, 2015) have consistently documented the positive association of sustainable competitive advantage on bank profitability.
H2: Sustainable competitive advantage has a positive influence on bank profitability.

Sustainable Finance, Sustainable Competitive Advantage and Bank Profitability

High-quality sustainability reports reflect the bank's commitment to sustainable practices, good risk management, and transparency in sustainable activities. A sustainability report provides a strong overview of how sustainable funds are invested effectively, efficiently, and with significant positive impact, enhancing the positive impact of these activities on profitability. Sustainability reports enhance a bank's reputation and credibility regarding its commitment to sustainability. A strong commitment to sustainable practices strengthens the bank's image in the eyes of customers, investors, and other stakeholders. Sustainable financing activities can significantly strengthen bank profitability by increasing market confidence through the bank's credibility in sustainability (Pertseva, 2022; Belasri et al., 2020; Broadstock et al., 2020). Transparency of information related to investments and sustainable activities funded by the bank can be enhanced through quality sustainability reports. This helps external parties better understand how sustainably invested funds impact a bank's financial performance (Buallay et al., 2020). A transparent and complete sustainability report provides a measurable and understandable relationship between the impact of sustainable financing activities on a bank's profitability.

H3: The competitive advantage strengthens the positive influence of sustainable financing on a bank's profitability.

Research Method

This study utilizes financial and non-financial data from Conventional Commercial Banks, as required by the Financial Services Authority Regulation No. 51/POJK.03/2017 on the Implementation of Sustainable Finance, which has been mandatory since 2019. This study utilized samples from Conventional Commercial Banks KBMI 3 and 4, as they have the largest contribution to financing distribution compared to KBMI 1 and 2. It is hoped that these samples will be representative of the entire population of conventional commercial banks in Indonesia.

$$PERF(ROA) = C + \beta1SF + \beta2SRQ + \beta3SF*SRQ + \beta4TA + \beta5NPL + e. \quad (1)$$

$$PERF(ROE) = C + \beta1SF + \beta2SRQ + \beta3SF*SRQ + \beta4TA + \beta4NPL + e. \quad (2)$$

Note: C: Constant, SF: sustainable finance; SRQ: sustainable competitive advantage; TA: natural logarithm of total assets; and NPL for non-performing loans.

Sustainable finance (SF) is defined as the independent variable measured by the amount of sustainable finance divided by the total financing disbursed during the current year by the Indonesia Financial Services Authority Regulation No. 51/POJK.03/2017 (Andaiyani et al., 2023). The sustainable competitive advantage variable (SRQ) is confidently measured by the company's disclosure of its sustainability performance following GRI and G4 standards, consisting of 174 items. This study uses profitability, with ROA and ROE proxies, as the dependent variable, while Total Assets and Non-Performing Loans serve as control variables.

Purposive Sampling

This study utilized purposive sampling of Conventional Commercial Banks with KBMI 3 and 4, resulting in a total of 52 data samples from the period of 2019-2022. The details are as follows:

Table 1. Purposive Sampling Method

Description	Number of Banks	Number of Data
Number of Conventional Commercial Banks in Indonesia Classified by KBMI 3 and 4 for the Period 2019-2022.	14	56
Number of conventional commercial banks did not have a specific sustainability report according to GRI and G4.	(1)	(4)
Total sample	13	52

Source: Processed Data by researchers

Results and Discussion

Descriptive Statistics

This research uses Eviews 10 software as a regression analysis tool, so the initial stage is to select the best model from 3 model tests in regression analysis.

Table 2. Model Selection Test

	Chow Test	Hausmann	LM Test
Prob. Value	0.0000	0.0001	N/A
Best Model	FEM	FEM	N/A

Source: Processed Data by researchers

This study will use the Fixed Effect model based on the model selection test in Table 2, as the probability values in the Chow test and Hausmann test are less than 0.05. Table 3 presents the mean, median, maximum, minimum, standard deviation, and sample size used in this study.

Table 3. Descriptive Statistics

	ROA	ROE	SF	SRQ	TA	NPL
Mean	1.0806	6.2827	0.2931	0.3777	33.5318	1.4785
Median	0.2900	1.7250	0.2525	0.3500	33.0967	0.3450
Maximum	4.2200	23.4900	0.7164	0.7300	35.2282	4.7800
Minimum	0.0106	0.0533	0.0016	0.0800	32.2442	0.0172
Std. Dev.	1.2886	7.5302	0.1858	0.1604	0.9018	1.5481
Observations	52	52	52	52	52	52

Source: Processed Data by researchers

Table 4 indicates no issues with multicollinearity in the data, as all independent variables have correlation values less than 0.70.

Table 4. Correlation Test

	SF	SRQ	TA	NPL
SF	1.0000			
SRQ	0.2101	1.0000		
TA	0.3417	0.2802	1.0000	
NPL	0.6147	0.0340	0.0988	1.0000

Source: Processed Data by researchers

Table 5 demonstrates that the hypothesis is both supported and contradicted regarding the moderation effect. Specifically, the first result of this study provides strong evidence that sustainable finance has a positive impact on bank profitability, as evidenced by both ROA and ROE (Model 1 and Model 2). The results of this study strongly support the legitimacy theory, which asserts that banks will always strive to legitimize their activities by engaging in business practices that follow social norms and respond to changing societal expectations. This enables companies to obtain the necessary legitimacy that supports their business sustainability (Buallay, 2022; Crossley et al., 2021; Belal, 2016). To obtain legitimacy in line with current ESG issues, sustainable financing is key. This can be achieved through funding for green projects, energy conservation, and the development of environmentally friendly technology, as well as financing for SMEs. Banks that engage in sustainable investment or financing generate stable long-term returns and greater benefits with lower risks. This enhances the bank's profitability, both in terms of ROA and ROE.

Sustainable finance are a type of financial product that encourages borrowers to meet specific environmental, social, and governance (ESG) objectives. The favorable effect of sustainable finance on bank performance (ROA and ROE) can be ascribed to various factors. Sustainable finance often come with beneficial terms, such as reduced interest rates or adaptable repayment schedules, to achieve ESG objectives. This can diminish the cost of capital and boost profitability, ultimately enhancing the bank performance. Furthermore, businesses that qualify for sustainable finance are typically involved in ESG practices that can lead to operational efficiency, cost savings, and improved brand reputation, all of which can contribute to better financial performance (Digar, 2023; Marliza, 2024; Ospina-Patiño et al., 2023).

In fact, some studies have found that while certain aspects of sustainability, such as social reporting, can have a beneficial impact on financial metrics, others, such as environmental reporting, may not have the same effect or may even exhibit an inverse relationship (Gutiérrez-Ponce & Wibowo, 2023; Maama, 2021; Shobhwani & Lodha, 2023). This suggests that the effects of sustainability-linked loans on financial performance, such as return on assets (ROA) and return on Equity (ROE), may vary depending on how well the ESG criteria align with the company's strategic and operational goals and that sustainability-linked loans can have a positive impact on financial performance by providing financial incentives to adhere to ESG standards, which can result in lower costs and improved profitability. However, the relationship between sustainability and financial performance is complex, and the benefits of sustainability-linked loans on bank performance may differ based on the specific ESG activities undertaken and the context in which the company operates. Companies must carefully consider how their ESG strategies align with their financial objectives to maximize the potential benefits of sustainability-linked loans on their performance (Digar, 2023; Gutiérrez-Ponce & Wibowo, 2023; Maama, 2021; Marliza, 2024; Ospina-Patiño et al., 2023; Shobhwani & Lodha, 2023).

The results of this study are consistent with previous research (Marliza, 2024; Digar, 2023; Ospina-Patiño et al., 2023; Gutiérrez-Ponce & Wibowo, 2023; Shobhwani & Lodha, 2023)Pertseva, 2022; Maama, 2021; Belasri et al., 2020; Broadstock et al., 2020; Elalfy and Weber, 2019; Nizam et al., 2019). This study suggests that sustainable sector financing does not have a negative impact on banking profitability performance, despite what other studies (Walzer et al, 2024; Mirovic et al, 2023; Cui et al., 2018; Dhaliwal et al., 2014) may have concluded.

Table 5. Moderated Regression Analysis

Variable	Model 1 (ROA)		Model 2 (ROE)		Model 3 ROA (KBMI 4)		Model 4 ROA (KBMI 3)	
	Coef.	**Prob.**	**Coef.**	**Prob.**	**Coef.**	**Prob.**	**Coef.**	**Prob.**
C	-4.7923	0.6734	-129.7332	0.0251	40.4241	0.0343	5.88954	0.0531
SF	2.5600	0.0171**	19.3679	0.0073***	10.4784	0.0034***	0.77508	0.1085
SRQ	0.8235	0.0457**	3.6745	0.2113	1.9990	0.0927*	0.37763	0.1297
SF*SRQ	-4.4608	0.0004***	-15.8600	0.0668*	-7.7425	0.0673*	-2.14744	0.0381**
TA	0.1965	0.5631	4.1197	0.0178**	-1.1576	0.0391**	-0.18090	0.0501*
NPL	-0.8489	0.0000***	-4.9626	0.0000***	-1.2728	0.0006***	0.33400	0.0000***
N	52		52		16		36	
Adj. R2	97.48%		43.43%		96.72%		96.25%	

Source: Processed Data by researchers

Notes: Prob.value: *prob. 0.1; **prob 0.05; ***prob 0.01 C: Constant, SF: sustainable finance; SRQ: sustainable competitive advantage; TA: natural logarithm of total assets; and NPL for non-performing loans.

Furthermore, this research confirms that sustainability reporting quality, as a proxy for sustainable competitive advantage, positively affects the first profitability measure (ROA). Sustainable disclosure refers to the reporting of a company's environmental, social, and governance (ESG) practices. The general hypothesis is that transparent ESG practices can lead to improved operational efficiencies, better risk management, and enhanced reputation, which in turn may positively influence a firm's ROA (Veeravel et al., 2024; Loan et al., 2024). However, it has no significant impact on the second profitability measure (ROE) (Model 2). It is worth noting that ROA is an effective indicator of a bank's net income generation from its assets. A higher ROA results in more earnings for the company with less investment. In the banking industry, obtaining as many deposits as possible and lending them at a higher rate of return is crucial for profitability, which is measured using return on assets (Aristei & Gallo, 2019). Therefore, banks must develop competitive advantages that can influence stakeholders and increase profitability. To improve a bank's reputation among stakeholders, including customers, investors, and regulators, provide a high-quality sustainability report. Aim for a logical flow of information with causal connections between statements, and ensure it is free from grammatical, spelling, and punctuation errors. The report should be objective, clear, and concise, and use precise technical terms when necessary. Enhancing the bank's reputation can have a significant impact on stakeholders, including customers, investors, and regulators. As emphasized by Rendtorff & Bonnafous-Boucher (2016) and Freeman et al. (2004), a good reputation can lead to increased customer interest, investor attraction, and competitive advantage, ultimately supporting the bank's profitability. These findings are consistent with previous research conducted by Buallay et al. (2020). Von Wallis & Klein (2015) assert that sustainable competitive advantages have a positive impact on profitability, despite conflicting research (Galant & Cadez, 2017) that suggests allocating resources to achieve social and environmental goals, which can constitute competitive advantages, may reduce a company's profitability.

The third hypothesis suggests that Competitive Advantage, as expressed through sustainability reporting quality, weakens the positive influence of sustainable finance on bank performance (Model 1 and Model 2). The statistical evidence shows that sustainability reporting quality has a lower coefficient and a higher probability than sustainable sector financing. Interacting with the system will weaken its results rather than strengthen them. This is evidenced by the mandatory sustainability reports for financial institutions and public companies in Indonesia since 2019 and for listed companies since 2020. Despite the postponement of implementation to 2021 due to COVID-19, 88% of listed companies in Indonesia submitted their sustainability reports for 2022 in the second year of implementation. The research period (2019-2022) has shown a disturbance in the quality and quantity of reporting, as noted by PricewaterhouseCoopers (2023). It is important to address this issue as it may have a negative impact on the positive effects of sustainable financing on banking profitability performance, specifically ROA and ROE.

On the other hand, sustainable competitive advantage is believed to have a negative impact on sustainable loan and bank performance, which is contrary to the notion that sustainable competitive advantage typically leads to improved performance and long-term viability (Alalie et al., 2018; Ferdinand, 2013; Mnjala, 2014). It is possible that an overemphasis on specific aspects of competitive advantage, such as product innovation or cost leadership, could result in neglect of other important factors, such as risk management or customer satisfaction, which could in turn harm loan performance (Saeed, 2023). Moreover, if banks overly concentrate on achieving sustainable competitive advantage by taking excessive risks in loan issuance, this could lead to higher default rates and weaken loan performance (Supriyadi et al., 2024). To address this issue, banks need to strike a balance between pursuing competitive advantage and maintaining strong risk management practices and customer relationships, in order to ensure that loan performance and overall bank performance are not adversely affected (Supriyadi et al., 2024; Saeed, 2023; Alalie et al., 2018).

Expansion Test

This section investigates whether there are any differences in the results of variable testing in banks categorized as KBMI 3 and 4 (Model 3 and Model 4), which are the samples used in this study. It is important to note that the performance of ROA in the banking sector is more relevant to this issue than the performance of ROE. Table 5 (Model 3 and Model 4) demonstrates a significant difference in the ROA research results between KBMI 4 and KBMI 3. It is noteworthy that two out of three hypotheses tested in banks with KBMI 3 did not yield significant results. This suggests that sustainability issues in KBMI 3 banks have not yet become the primary factor affecting banking profitability performance. It is important to note that the current focus of the banking industry in Indonesia is on this very issue. The national banking sector is fully committed to supporting the government's program to reduce carbon emissions by providing financing in the sustainability sector. The banks are actively working to increase their portfolio in this area. Notably, KBMI 4 bank has a higher value of sustainable sector credit disbursement on average compared to KBMI 3 bank (Simamora, 2023).

Table 6. Average Score of SF and SRQ

Bank Category	Average of SF	Average of SRQ
KBMI 3	0.2705	0.3564
KBMI 4	0.3439	0.4256
Grand Total	0.2931	0.3777

Source: Processed Data by researchers

This data strongly supports the conclusion that there is a significant difference in results for the researched issue between KBMI 3 and KBMI 4 banks. Based on the statistical data presented in Table 6, it is evident that banks with KBMI 4 qualifications outperformed those with KBMI 3 qualifications in terms of both the average financing value for the sustainable sector and the quality of sustainability reports. This data strongly supports the conclusion that there is a significant difference in results for the researched issue between KBMI 3 and KBMI 4 banks.

The presence of sustainable finance does not significantly impact the performance of small banks (KBMI 3) for several reasons. Firstly, the proportion of sustainble loans in the total credit portfolio of small banks may be relatively low, which would limit their influence on overall bank performance (Nugrahaeni & Muharam, 2023). Additionally, small banks (KBMI 3) may have limited resources to develop and market sustainable finance products effectively, which could hinder their ability to capitalize on the potential benefits of these loans. Moreover, small banks have demonstrated the ability to remain competitive and profitable by focusing on their strengths, such as earning high rates of return on loans and increasing the share of their portfolios devoted to loans (Bassett & Brady, 2001). In summary, the impact of sustainable loans on the performance of small banks is not significant, likely due to their small share in the overall credit portfolio and the challenges small banks face in leveraging these loans. Instead, bank-specific factors and the ability to earn high returns on traditional loan products are more influential in determining the financial performance of small banks (Bassett & Brady, 2001; Kamande et al., 2019; Nugrahaeni & Muharam, 2023).

In Addition, One possible explanation for the lack of impact of sustainable reporting quality on the performance of smaller banks is that these institutions may not have the same level of resources to effectively implement and leverage sustainability practices as larger banks do. Smaller banks might face a trade-off between the costs associated with implementing sustainable practices and the immediate financial benefits (Rifai et al., 2021). Additionally, the complexity and scale of sustainable initiatives may not align with the operational scope of smaller banks, which could lead to a negligible impact on their performance. Furthermore, the findings from studies in different geographical contexts suggest that the benefits of sustainability reporting on bank performance are more pronounced in developed countries, potentially due to more stringent regulatory environments and greater stakeholder pressure (Buallay et al., 2020). In contrast, smaller banks, especially in developing countries, may not experience the same level of scrutiny or demand for sustainability, which could diminish the perceived value of such reporting.

Conclusion

The study concludes that sustainable sector financing and sustainable competitive advantage positively impact bank profitability. However, the moderating effect of sustainable competitive advantage weakens the influence of sustainable sector financing on bank profitability, specifically ROA and ROE. As of 2022, sustainability reporting has only been implemented by around 88% of registered companies in Indonesia. This indicates that the quality of reporting during the research period (2019-2022) was disrupted in terms of both quantity and quality, as reported by PricewaterhouseCoopers (2023). These findings suggest that sustainable financing may have a reduced positive effect on bank profitability performance, specifically ROA and ROE.

This research demonstrates that sustainable sector financing and sustainable competitive advantage are better reflected in the ROA performance than in the ROE. In the banking industry, the priority is to obtain as many deposits as possible and then lend them at a higher rate of return, making profitability using return on assets more relevant (Aristei & Gallo, 2019). Moreover, the research findings demonstrate that banks with a KBMI 4 profitability level are significantly more associated with sustainability issues than banks with a KBMI 3. It is worth noting that this study has some limitations due to the limited availability of data, which may result in issues with data normality. Moreover, the research findings demonstrate that banks with a KBMI 4 profitability level are significantly more associated with sustainability issues than banks with a KBMI 3. It is worth noting that this study has some limitations due to the limited availability of data, which may result in issues with data normality. Moreover, the research findings demonstrate that banks with a KBMI 4 profitability level are significantly more associated with sustainability issues than banks with a KBMI 3. The impact of sustainable finance on the performance of small banks is not significant, likely because of their small share in the overall credit portfolio and the challenges small banks face in leveraging these loans. Instead, bank-specific factors and the ability to earn high returns from traditional loan products are more influential in determining the financial performance of small banks (Bassett & Brady, 2001; Kamande et al., 2019; Nugrahaeni & Muharam, 2023).

It is worth noting that this study has some limitations due to the limited availability of data, which may result in issues with data normality. Nevertheless, this does not impact the results as normality is not a prerequisite for BLUE in research (Basuki, 2016).

This study will encourage banks to increase financing for sustainable sectors in socially and environmentally responsible businesses, ultimately leading to increased profitability for the banks. The banking industry can improve the quality of comprehensive sustainability reporting to gain a competitive advantage amidst the current sustainability issues in Indonesia. Future studies should further develop this research to enable generalization and comparison with other developing countries at a similar level to Indonesia.

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