





“Banking on ESG: How ownership influences financial outcomes in 5-ASEAN countries”

AUTHORS	Ruri Nathania  Erni Ekawati  
ARTICLE INFO	Ruri Nathania and Erni Ekawati (2024). Banking on ESG: How ownership influences financial outcomes in 5-ASEAN countries. <i>Banks and Bank Systems</i> , 19(3), 121-132. doi: 10.21511/bbs.19(3).2024.11
DOI	http://dx.doi.org/10.21511/bbs.19(3).2024.11
RELEASED ON	Thursday, 12 September 2024
RECEIVED ON	Monday, 11 March 2024
ACCEPTED ON	Friday, 19 July 2024
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Banks and Bank Systems"
ISSN PRINT	1816-7403
ISSN ONLINE	1991-7074
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

44



NUMBER OF FIGURES

1



NUMBER OF TABLES

5

© The author(s) 2024. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 11th of March, 2024

Accepted on: 19th of July, 2024

Published on: 12th of September, 2024

© Ruri Nathania, Erni Ekawati, 2024

Ruri Nathania, MBA, Alumni Faculty of Economics and Business, Gadjah Mada University, Indonesia.

Erni Ekawati, PhD, Magister Management Department, Faculty of Business, Universitas Kristen Duta Wacana [Duta Wacana Christian University], Indonesia. (Corresponding author)



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Conflict of interest statement:

Author(s) reported no conflict of interest

Ruri Nathania (Indonesia), Erni Ekawati (Indonesia)

BANKING ON ESG: HOW OWNERSHIP INFLUENCES FINANCIAL OUTCOMES IN 5-ASEAN COUNTRIES

Abstract

This study investigates the effect of Environmental, Social, and Governance (ESG) scores on bank performance in five Association of Southeast Asian Nations (ASEAN) countries: Indonesia, Malaysia, Singapore, Thailand, and the Philippines. This study aims to examine the effect of ESG scores on bank financial performance and investigate whether the influence of bank ownership can strengthen both. This study uses a sample of 26 banks in 5-ASEAN countries during 2016–2021. This amount is the result of data sorting conducted on 86 banks by adjusting to the research sample criteria. Using multiple linear regression analysis, this study shows that ESG scores have a significant positive effect on bank financial performance as measured by Return on Assets (ROA), Return on Equity (ROE), and Price to Book Value (PBV). Furthermore, this study found that the positive impact of ESG scores on bank performance is stronger for state-owned banks compared to private banks. However, bank ownership does not affect the relationship between ESG scores and ROA. These findings suggest that law enforcement by the government through regulators plays an important role in encouraging banks to view ESG as a driving value to improve their performance.

Keywords

environmental, social, governance, sustainability, performance, private, state, banks, regulators

JEL Classification

Q56, G21, P27

INTRODUCTION

In recent years, the financial sector has received significant attention due to its significant impact on the environment, society, and governance. The global financial crisis in 2008 highlighted the importance of considering non-financial factors in business decision-making, and the concept of Environmental, Social, and Governance (ESG) has emerged as a key aspect of responsible banking (Zaitul et al., 2019). Banks provide important financial services related to economic growth and development, but their operations also contribute to social and environmental problems. ESG practices aim to minimize negative environmental impacts and promote sustainable development. For stakeholders like investors, this is an important consideration for investment decisions (Nemoto & Morgan, 2020).

In addition, implementing sustainability through government policies requires the banking industry to comply with regulations. In Indonesia, the government has implemented The Financial Service Authority No. 51/POJK.03/2017 (POJK 51), which requires financial institutions to apply sustainable finance principles and submit a sustainable finance action plan and sustainability report to the Financial Services Authority and the public (Rahmaniati & Ekawati, 2024). This policy aims to strengthen the financial sector and increase stability, transparency, and consumer protection. Singapore, Malaysia, the

Philippines, and Thailand have also implemented similar policies: Singapore requires listed companies to produce an annual sustainability report; Bursa Malaysia (2021) requires go-public companies to disclose risk management and ESG activities; SEC Philippines (2019) requires a joint sustainability report with an annual report; and SEC Thailand (2017) requires companies to ensure sustainability reporting in accordance with domestic and international frameworks.

Furthermore, depending on bank ownership, whether state-owned or private, there are differences in regulation and governance structure. This can affect their ability to implement ESG practices. State-owned banks are often under government oversight and may have a mandate to prioritize social welfare and public interest over profits. Private banks, on the other hand, are driven by market forces and may prioritize shareholder value above all else. Therefore, it is necessary to study how ESG implementation affects bank performance and further its impact on ownership structure.

1. LITERATURE REVIEW

During a time of globalization and heightened emphasis on corporate social responsibility, the evaluation of Environmental, Social, and Governance (ESG) factors is progressively emerging as a central concern in investment and financial decision-making. Various studies have revealed the significant impact of ESG on corporate performance and sustainability in global financial markets. In recent years, there has been a growing awareness of the importance of ESG in the banking sector, as banks play a crucial role in supporting sustainable economic growth. Currently, the world's financial markets are focusing on increasing transparency related to climate change risks and sustainability aspects (Prol & Kim, 2022; Bolton et al., 2020; Carney, 2015). Therefore, to measure the implementation of ESG in a company, an assessment through ESG scoring is needed as a consideration for investors and analysts in their investment decision-making process. Moreover, ESG scores have become an essential tool for companies to demonstrate their commitment to sustainability and corporate social responsibility. With the drive to integrate sectors, especially financial institutions, ESG analysis is currently a tool for decision-making related to finance, business, and consumption (Bağ & Cheba, 2020; Ahmad et al., 2024). The importance of ESG scores for corporate sustainability encourages various companies to publish their ESG scores. A study by Yoo and Managi (2022) found that consistent ESG implementation and publication of ESG scores have a positive impact on the company. Various studies show that ESG implementation in companies listed on the Australian Securities Exchange (ASX)

has a positive impact on financial sustainability and company performance (Munir et al., 2019). In the Abu Dhabi Securities Exchange (ADX) and Dubai Financial Market (DFM) financial markets, ESG also has a positive and significant effect on banking performance (Zaman & Ellili, 2022), although research using a sample of banks from 44 developing countries shows different results, namely no significant relationship between ESG and bank performance (Azmi et al., 2021; Ersoy et al., 2022). Other studies also show that the effect of ESG on bank value can be non-linear and not always consistent (Junius et al., 2020).

Therefore, to investigate the causal relationship between ESG implementation and bank performance and value, and to further examine its impact on bank ownership structure, this study focuses on stakeholder and legitimacy theories. Stakeholder theory is used to describe the relationship between companies and stakeholders. According to the perspective of this theory, companies are not only responsible for maximizing profits for shareholders but also for providing benefits to the entire community or stakeholders (Parmar et al., 2010). Companies will try to establish good relationships with stakeholders by meeting financial and non-financial needs and strengthening trust relationships in an effort to maintain the long-term interests of the company (Freeman et al., 2010). Efforts made by companies in establishing relationships with stakeholders are by publishing sustainability reports (Hayat & Orsagh, 2015; Bernow et al., 2017). Sustainability reports provide transparent information about the company's position and activities in ESG aspects (Barker & Eccles, 2019; Krasodomska & Cho, 2017; Arvidsson & Dumay,

2022). Therefore, by publishing a sustainability report, a company's performance can be directly evaluated by stakeholders, which in turn will directly affect stakeholders' decisions in contributing to the company. Contributions from stakeholders to the company are then expected to provide positive feedback on company performance. A study by Peng and Isa (2020) shows that the results of ESG implementation encourage more ethical, responsible, and transparent business practices. This impacts increasing stakeholder trust, which is expected to generate positive feedback on company performance.

In the banking industry, the implementation of ESG practices is essential to gain strong legitimacy from stakeholders. Companies gain legitimacy when they meet society's expectations, thus leading to a social contract that encourages acceptance (Deegan et al., 2020; Junius et al., 2020; Caesaria & Basuki, 2017; Sacconi, 2004). To maintain legitimacy, companies must ensure that their activities and performance are acceptable to society, which can be achieved through transparency and sustainability reporting (Hadjoh & Sukartha, 2013). By disclosing sustainability reports, companies can build a positive image among stakeholders, showing their concern for environmental and social issues (Prananingrum & Davianti, 2021; Juliana & Alfiannur, 2023). Moreover, this transparency allows stakeholders to hold companies accountable for their actions, promoting a culture of responsibility and trust. Additionally, ESG practices can also enhance stakeholder engagement and participation in decision-making processes, leading to more effective and sustainable business strategies.

Legitimacy theory supports stakeholder theory, emphasizing the need for companies to focus on stakeholder satisfaction. Banks must comply with the social contract by prioritizing stakeholder interests and implementing responsible business practices that create value for society (Alsayegh et al., 2020). The integration of ESG practices enables banks to develop a competitive advantage, improve operational efficiency and reputation, and reduce waste, which ultimately leads to improved performance and profitability (Herzig & Schaltegger, 2006; Ioannou et al., 2017; Sanchez et al., 2021). State-owned compa-

nies have been shown to excel in sustainability reporting due to their stronger focus on legitimacy and social responsibility (Kuswanto et al., 2022; Derry & Vinola, 2021). In addition, there are differences in strategic roles between state-owned and private companies in ESG implementation. Based on a study conducted by Kuswanto et al. (2022), state-owned companies are superior in conducting sustainability reporting compared to private companies due to the legitimacy aspect of maintaining a good reputation in the community. This highlights the importance of ESG practices in enhancing the reputation of banks and promoting a positive brand image. Moreover, banks that prioritize ESG practices are more likely to attract socially responsible investors who seek to align their investments with their values.

This study aims to analyze the effect of ESG scores on banking performance in 5-ASEAN countries and determine bank ownership's effect on the relationship between ESG scores and firm performance and value. ASEAN represents a collection of economically integrated countries with one of the fastest GDP growth rates in the world. The development of ESG in the 5-ASEAN countries is guided by the UN Sustainable Development Goals (UN SDGs) and ESG principles as a key measurement tool for resilience and sustainable development in the 5-ASEAN countries. Companies in the 5-ASEAN countries are encouraged to apply ESG aspects in their business and investment decisions. The 5 countries in ASEAN were chosen because of the quality and availability of the required data, making it easier to collect data and conduct analysis. In this study, banking performance is proxied by Return on Assets (ROA), Return on Equity (ROE), and Price to Book Value (PBV). This study also expands the scope of research to all types of banks operating in 5-ASEAN countries, especially those with ESG scores. Based on the theories, previous research, and aforementioned arguments, the hypotheses are developed as follows:

- H1: ESG scores have a positive effect on banking financial performance.*
- H2: State ownership strengthens the positive effect of ESG scores on banking financial performance.*

2. METHOD

This study uses the financial statements of banks in Indonesia, Malaysia, Singapore, Thailand, and the Philippines listed on each country's stock exchanges. The sample includes all state-owned and private banking sectors to analyze the effect of banking performance on ESG. The Purposive sampling method is applied to obtain a sample based on the following criteria:

- Companies in the banking sector in 5-ASEAN countries listed on the Malaysia Stock Exchange, Indonesia Stock Exchange, Singapore Stock Exchange, Philippines Stock Exchange, and Thailand Stock Exchange in the period 2016–2021.
- Banking in 5 ASEAN countries that have complete ESG scores during the period 2016–2021.
- Banks in 5 ASEAN countries with relevant and complete data, especially those related to the variables specified.

Based on Table 1 above, there are 86 banking companies in 5-ASEAN countries listed on the Stock Exchange of Malaysia, Indonesia, Singapore, the Philippines, and Thailand in the 2016–2021 period. Of these 86 banking companies, there are 60 banking companies that do not have complete ESG scores in the 2016–2021 period. Therefore, out of 86 banking companies, only 26 banking companies

are eligible to be used as a research sample with a period of 6 years, so the total data obtained is 156. Data were obtained from the Osiris database for financial data and the Thomson Reuters database for ESG score data.

This study uses ESG scores as an independent variable. The dependent variable is represented by banking performance proxied by Return of Assets (ROA), Return of Equity (ROE), and Price to Book Value (PBV). Furthermore, in the following hypothesis, banking ownership is used as a moderator to determine the strength and weakness of the influence between the independent and dependent variables. This study also has four control variables: age, size, leverage, and country (Figure 1). Table 2 shows all the variables used in this study, both in measurement and proxies. Multiple linear regression analysis was used to analyze the hypotheses in this study.

The statistical models used are as follows:

2.1. Model 1

$$\begin{aligned}
 ROA = & \alpha + \beta_1(ESG) + \beta_2(SIZE) \\
 & + \beta_3(AGE) + \beta_4(LEV) \\
 & + \beta_5(COUNTRY_1) + \beta_6(COUNTRY_2) \\
 & + \beta_7(COUNTRY_3) \\
 & + \beta_8(COUNTRY_4) + \varepsilon,
 \end{aligned}$$

Table 1. Description of sample criteria

Sampling Criteria	Number of Malaysian Companies	Number of Philippine Companies	Number of Singaporean Companies	Number of Indonesian Companies	Number of Thai Companies	Total Number of Companies
Banking sector companies listed on the Malaysia Stock Exchange, Indonesia Stock Exchange, Singapore Stock Exchange, Philippine Stock Exchange, Thailand Stock Exchange in the years (2016–2021)	11	14	3	47	11	86
Banks from 5 ASEAN countries with incomplete ESG scores over the period 2016–2021	3	9	1	41	6	60
Companies that do not meet the criteria for data completeness in measuring each variable in the research	0	0	0	0	0	0
Number of companies selected	8	5	2	6	5	26
Years of Observation (2016–2021)	6	6	6	6	6	6
Total number of observation samples	48	30	12	36	30	156

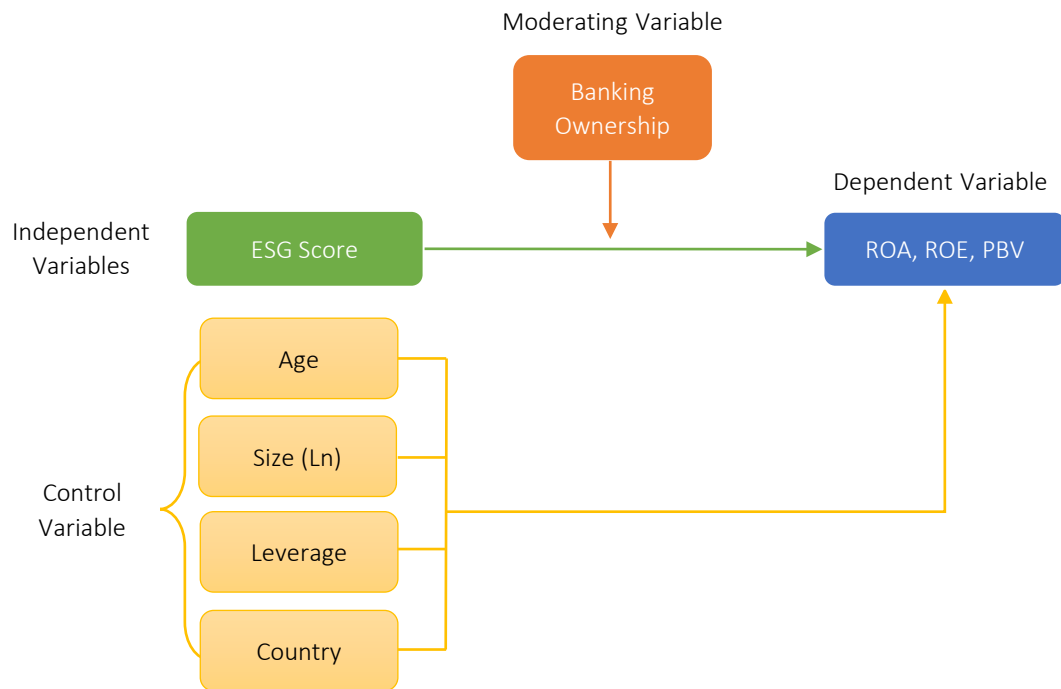


Figure 1. Research design

Table 2. Research variables

Type of Variables	Proxies	Measurement and Calculation
Dependent	Return on Assets (ROA)	To calculate company profitability
	Return on Equity (ROE)	
	Price to Book Value (PBV)	
Independent	ESG scores	Ranges between 0% and 100%, indicating the smallest and largest scores, respectively
	Banking Ownership	Companies in the government-owned banking sector will be given an indicator value of 1, while companies in the private banking sector will be given an indicator value of 0
Control	Company Size	Measured using the natural logarithm of total assets
	Company Age	Is the length of time a company operates, which can be calculated based on the date of establishment of the company until the time designated in the sample
	Leverage	Ability of long-term and short-term company debt to finance company assets
	Country	Dummy variables with category 1 indicated the respective country and 0 otherwise, are used to control the regression results to be free from country factors

$$ROE = \alpha + \beta_1(ESG) + \beta_2(SIZE) + \beta_3(AGE) + \beta_4(LEV) + \beta_5(COUNTRY_1) + \beta_6(COUNTRY_2) + \beta_7(COUNTRY_3) + \beta_8(COUNTRY_4) + \varepsilon,$$

$$PBV = \alpha + \beta_1(ESG) + \beta_2(SIZE) + \beta_3(AGE) + \beta_4(LEV) + \beta_5(COUNTRY_1) + \beta_6(COUNTRY_2) + \beta_7(COUNTRY_3) + \beta_8(COUNTRY_4) + \varepsilon.$$

H1 is supported if $\beta_1 > 0$ and significant.

The multiple linear regression equation with moderation is as follows:

2.2. Model 2

$$PBV = \alpha + \beta_1(ESG) + \beta_2(SIZE) + \beta_3(AGE) + \beta_4(LEV) + \beta_5(COUNTRY_1) + \beta_6(COUNTRY_2) + \beta_7(COUNTRY_3) + \beta_8(COUNTRY_4) + \varepsilon,$$

$$\begin{aligned}
 ROE = & \alpha + \beta_1(ESG) + \beta_2(OWN) \\
 & + \beta_3(ESG \cdot OWN) + \beta_4(SIZE) + \beta_5(AGE) \\
 & + \beta_6(LEV) + \beta_7(COUNTRY_1) \\
 & + \beta_8(COUNTRY_2) + \beta_9(COUNTRY_3) \\
 & + \beta_{10}(COUNTRY_4) + \varepsilon,
 \end{aligned}$$

$$\begin{aligned}
 PBV = & \alpha + \beta_1(ESG) + \beta_2(OWN) \\
 & + \beta_3(ESG \cdot OWN) + \beta_4(SIZE) + \beta_5(AGE) \\
 & + \beta_6(LEV) + \beta_7(COUNTRY_1) \\
 & + \beta_8(COUNTRY_2) + \beta_9(COUNTRY_3) \\
 & + \beta_{10}(COUNTRY_4) + \varepsilon.
 \end{aligned}$$

H_2 is supported if $\beta_3 > 0$ and significant.

Remarks: *ROA* = Banking Return on Assets; *ROE* = Banking Return on Equity; *PBV* = Banking Price to Book Value; α = Constant; β = Regression coefficient; *ESG* = Banking ESG scores; *SIZE* = Banking Size Variable; *AGE* = Banking Age Variable; *LEV* = Banking Leverage; *OWN* = Banking Ownership Variable; *COUNTRY_1* = Score 1 if the bank is in Malaysia, 0 if the bank is in another country; *COUNTRY_2* = Score 1 if the bank is in the Philippines, 0 if the bank is in another country; *COUNTRY_3* = Score 1 if the bank is in Singapore, 0 if the bank is in another country; *COUNTRY_4* = Score 1 if the bank is in Thailand, 0 if the bank is in another country; ε = Error Tolerance.

3. RESULTS

This section begins with descriptive statistics for all research data and then continues with the results of the regression analysis of the research hypothesis.

Table 3 shows the results of the descriptive statistics of the research data. The lowest *ESG* score is 14.8% for Singapore banks, while the highest score of 87.758% comes from Indonesian banks. This wide range shows that the *ESG* practices of banks in the 5 ASEAN countries studied vary widely. The high *ESG* score recorded by a bank in Indonesia suggests that some banks have adopted more sustainable practices, which may contribute to the success and competitiveness of these banks in the long run, and a high *ESG* score reflects better risk management. The low *ESG* score in Singapore could be due to the country's strict *ESG*-related standards and regulations. These standards require greater costs to meet *ESG* practices that comply with international requirements, such as Green Building Standards that encourage the development of green buildings with a focus on energy efficiency, water management, and indoor environmental quality (Jain et al., 2020; Hwang et al., 2017).

Table 4 shows that the *ESG* coefficient in each regression has a positive relationship with *ROA*, *ROE*, and *PBV* and is significant at 5%, 10%, and 1% alpha levels, respectively. The positive *ESG* score coefficients on *ROA*, *ROE*, and *PBV* indicate that as

Table 3. Descriptive statistics of research variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ESG	156	14.800	87.758	59.405	15.100
PBV	156	0.200	4.700	1.382	0.793
ROA	156	0.001	0.040	0.015	0.009
ROE	156	0.009	0.231	0.106	0.043
SIZE	156	20.761	36.410	28.541	3.445
AGE	156	10.000	126.000	59.154	31.931
LEV	156	0.765	0.916	0.867	0.040
OWN	156	0.000	1.000	0.577	0.496
COUNTRY_1	156	0.000	1.000	0.308	0.463
COUNTRY_2	156	0.000	1.000	0.192	0.395
COUNTRY_3	156	0.000	1.000	0.192	0.395
COUNTRY_4	156	0.000	1.000	0.077	0.267

Table 4. Regression results of Model 1

Independent Variables	Dependent Variables		
	ROA	ROE	PBV
(Constant)	-0.027	0.169	-4.440
t-stat	-1.231	1.660	-2.376
ESG	1.214·10 ^{-4**}	4.777·10 ^{-4*}	0.018***
t-stat	2.244	1.880	3.874
SIZE	0.010	-0.015	1.573**
t-stat	1.426	-0.433	2.480
AGE	-0.001	-0.002	-0.114
t-stat	-0.855	-0.299	-0.895
LEVERAGE	-0.013*	0.037	1.803**
t-stat	-1.695	1.057	2.818
COUNTRY_1	0.001	-0.034**	0.416**
t-stat	0.319	-3.046	2.038
COUNTRY_2	0.011***	-0.045**	0.565**
t-stat	3.967	-3.520	2.426
COUNTRY_3	0.000	-0.032**	0.032
t-stat	-0.061	-3.009	0.161
COUNTRY_4	0.000	-0.020	-0.034
t-stat	0.149	-1.335	-0.125
R-Squared	0.274	0.232	0.229
Adjusted R-Squared	0.235	0.190	0.187
F-Statistics	6.937	5.536	5.465
Prob. (F-Statistics)	0.000	0.000	0.000

Note: * Significant at the level alpha of 10%; ** level alpha of 5%; *** level alpha of 1%.

the ESG score increases, the company's financial performance increases. This is consistent with the idea that companies prioritizing ESG issues will have greater opportunities to be better managed, have lower operational risks, and have better access to resources, leading to improved financial performance. Overall, the results provide strong evidence that ESG scores positively impact financial performance, supporting the importance of incorporating ESG considerations into investment decisions. Thus, *H1* is supported.

The results in Table 5 show that the regression coefficient value of $ESG \cdot OWN$ on *ROE* and *PBV* is

0.121 and 0.016 with an alpha level of 1% and 5%, respectively. This indicates that government bank ownership strengthens the effect of ESG scores on *ROE* and *PBV*. On the other hand, the regression coefficient of $ESG \cdot OWN$ on *ROA* is 0.006 and insignificant. This means that state-owned banks have no significant effect in strengthening ESG scores on *ROA*. The results of this study support *H2* with statistical modeling of *ROE* and *PBV*, which states that State-Owned Enterprise (SOE) banks strengthen the positive influence of ESG scores on *ROE* and *PBV*. This means that SOEs are more likely to prioritize ESG issues due to government ownership, thereby improving financial

Table 5. Regression results of Model 2

Independent Variables	Dependent Variables		
	ROA	ROE	PBV
(Constant)	-2.419	-1.636	-0.552
t-stat	-4.121	-2.738	-0.602
ESG	0.281***	0.224***	0.317**
t-stat	3.789	4.089	3.093
OWN	-0.072	-0.038	0.283***
t-stat	-1.283	-1.014	4.403
ESG · OWN	0.006	0.121***	0.016**
t-stat	0.240	3.935	2.221

Table 5 (cont.). Regression results of Model 2

Independent Variables	Dependent Variables		
	ROA	ROE	PBV
SIZE	-0.469**	0.230	-0.328
t-stat	-2.144	1.189	-1.073
AGE	0.171**	0.021	0.120*
t-stat	3.481	0.715	1.750
LEVERAGE	1.031**	-0.739***	1.067**
t-stat	3.450	-3.740	2.572
COUNTRY_1	0.140*	-0.009	0.057
t-stat	1.746	-0.185	0.591
COUNTRY_2	0.514***	-0.012	0.349***
t-stat	7.118	-0.200	3.743
COUNTRY_3	0.222**	0.213***	0.008
t-stat	3.300	3.943	0.073
COUNTRY_4	-0.102	-0.050	-0.238
t-stat	-1.202	-0.713	-1.712
R-Squared	0.516	0.333	0.342
Adjusted R-Squared	0.483	0.286	0.297
F-Statistics	15.462	7.176	7.534
Prob. (F-Statistics)	0.000	0.000	0.000

Note: * Significant at the level alpha of 10%; ** level alpha of 5%; *** level alpha of 1%. Due to the violation of the homoscedasticity assumption, a Weighted Least Square Method with *Weight = Absolute Unstandardized Residual* is employed.

performance. However, insufficient evidence supports a significant positive influence between ESG scores and Return on Assets (ROA) in SOE banks. This suggests that, while SOE banks may have a strong focus on ESG issues, this influence is not always reflected in their performance in terms of ROA. This could be due to other factors beyond ESG scores that affect ROA, such as risk management or cost structure. Overall, these findings suggest that SOE banks have a stronger positive relationship between ESG scores and financial performance (expressed through *ROE* and *PBV*) compared to non-SOE banks. This may provide strong justification for the government or stakeholders to prioritize sustainable business practices in the country's banking sector.

4. DISCUSSION

This study's results indicate that ESG positively affects banking performance in 5 ASEAN countries. This finding is consistent with previous research conducted by Lucia et al. (2020), Buallay et al. (2020), and Peng and Isa (2020). The results show that implementing ESG in banking not only increases short-term banking profitability but also banking value. This is achieved by providing

credit to customers who seek to implement environmental and social changes, develop investment projects with low carbon emissions, and use environmentally friendly technologies (Sustainalytics, 2021). The discussion of these findings also aligns with stakeholder theory, which states that companies that implement ESG practices are more attractive to investors than companies that do not implement ESG practices. ESG implementation can increase firm value (Markovskaya et al., 2021) by increasing stakeholder confidence in the company through the implementation of a sustainable corporate strategy (Wardoyo et al., 2022).

This study also reveals that state-owned banks have a greater positive influence of ESG on banking performance in 5 ASEAN countries. This is in line with the research of Kuswantoro et al. (2022) and Derry and Vinola (2021), who suggest that state-owned companies are required to set an example and contribute to sustainability through ESG implementation. Since government-owned companies have various objectives, including social and political objectives, in addition to maximizing shareholder fulfillment (Shleifer, 1998; Huynh, 2020), they tend to engage in ESG implementation with the aim of social welfare (Ding et al., 2021).

This study's findings have significant implications for policymakers and regulators. The United Nations (UN) has called on the private sector to contribute to achieving the 17 Sustainable Development Goals (SDGs), and governments can play an important role in encouraging private companies to adopt ESG practices. The US Securities and Exchange Commission's proposal to standardize the disclosure of climate change-related risks and activities in the sustainability reports of privately owned companies is a step in the right direction. As such, the results of this

study are expected to serve as a reference for private companies to further advance in strengthening the positive relationship between ESG and corporate performance. Furthermore, this study highlights the importance of governments and regulators providing encouragement for private companies to consider ESG as a value driver and opportunity for competitive advantage. With the increasing recognition of the social role of companies, policymakers can play a more proactive role in encouraging sustainable business practices among private companies.

CONCLUSION

This study aims to examine the relationship between ESG scoring and banking performance in 5 ASEAN countries, with a particular focus on how government bank ownership affects this relationship. The results of the analysis show that ESG scores have a positive effect on banking financial performance in these countries. In addition, this study found that government bank ownership can enhance the positive impact of ESG assessment on banking performance in these countries. Based on these findings, it is concluded that ESG plays an important role in improving banking performance across the 5 ASEAN countries, particularly among state-owned banks. This highlights the importance of incorporating ESG principles into banking practices to improve financial performance and sustainability.

This study has limitations in the limited scope of analysis, which only examines ESG based on profitability and bank value considerations. In addition, this study only uses dummies 1 and 0 for the moderation of ownership of state-owned and private banks, resulting in overgeneralization, even though government involvement in each country varies. Future research that can be done is to test ESG on other aspects of banking performance by considering risk, such as the Risk-Adjusted Return on Capital (RAROC) variable. In addition, future research can also utilize these findings by testing the impact of ESG on other aspects of banking performance, such as risk management, and using a more diverse measure of ownership parameters. In addition, it can also be done by using a broader measurement of ownership parameters and considering other ownership structures. This study has implications for policymakers and regulators regarding the need for a more comprehensive approach to banking regulation considering ESG implementation. By implementing ESG, banks can improve their financial performance while contributing to sustainable development in their respective countries.

AUTHOR CONTRIBUTIONS

Conceptualization: Ruri Nathania, Erni Ekawati.

Data curation: Ruri Nathania.

Formal analysis: Ruri Nathania, Erni Ekawati.

Funding acquisition: Ruri Nathania, Erni Ekawati.

Investigation: Ruri Nathania.

Methodology: Ruri Nathania, Erni Ekawati.

Project administration: Ruri Nathania, Erni Ekawati.

Resources: Ruri Nathania.

Software: Ruri Nathania.

Supervision: Erni Ekawati.

Validation: Erni Ekawati.

Visualization: Ruri Nathania.

Writing – original draft: Ruri Nathania.

Writing – reviewing & editing: Ruri Nathania, Erni Ekawati.

REFERENCES

- Ahmad, H., Yaqub, M., & Lee, S. H. (2024). Environmental-, social-, and governance-related factors for business investment and sustainability: A scientometric review of global trends. *Environment, Development and Sustainability*, 26(2), 2965-2987. <https://doi.org/10.1007/s10668-023-02921-x>
- Alsayegh, M., Rahman, R. A., & Homayoun, S. (2020). Corporate Economic, Environmental, and Social Sustainability Performance Transformation through ESG Disclosure. *Sustainability*, 12(3910). <https://doi.org/10.3390/su12093910>
- Arvidsson, S., & Dumay, J. (2022). Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice? *Business Strategy and the Environment*, 31(3), 1091-1110. <https://doi.org/10.1002/bse.2937>
- Azmi, W., Hassan, M. K., Houston, R., & Karim, M. S. (2021). ESG activities and banking performance: International evidence from emerging economies. *Journal of International Financial Markets, Institutions and Money*, 70(101277). <https://doi.org/10.1016/j.intfin.2020.101277>
- Bak, I., & Cheba, K. (2020). ESG risk as a new challenge for financial markets. In *Finance and sustainable development* (pp. 21-39). Routledge. Retrieved from <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003011132-3/esg-risk-new-challenge-financial-markets-iwona-b%C4%85k-katarzyna-cheba>
- Barker, R., & Eccles, R. G. (2019). *Should FASB and IASB be responsible for setting standards for nonfinancial information?* Saïd Business School, University of Oxford. <https://doi.org/10.2139/ssrn.3272250>
- Bernow, S., Klempner, B., & Magnin, C. (2017). *From 'why' to 'why not': Sustainable investing as the new normal*. McKinsey & Company.
- Bolton, P., Despres, M., Da Silva, L. A. P., Samama, F., & Svartzman, R. (2020). *The green swan*. BIS Books
- Buallay, A. M., Wadi, R. M. A., Kukreja, G., & Hassan, A. A. (2020). Evaluating ESG disclosures of Islamic banks: Evidence from the organization of Islamic cooperation members. *International Journal of Innovation and Sustainable Development*, 14(3), 266-287. <https://doi.org/10.1504/IJISD.2020.108045>
- Bursa Malaysia. (2021). *Listing Requirement*. Bursa Malaysia. Retrieved from https://www.bursamalaysia.com/regulation/listing_requirements
- Caesaria, A. F., & Basuki, B. (2017). The Study of Sustainability Report Disclosure Aspects and Their Impact on the Companies' Performance. *SHS Web of Conferences*, 34(08001). <https://doi.org/10.1051/shsconf/20173408001>
- Carney, M. (2015). Breaking the tragedy of the horizon—climate change and financial stability. *Speech given at Lloyd's of London*, 29, 220-230. Retrieved from <https://www.bis.org/review/r151009a.pdf>
- Deegan, C., Rankin, M., & Tobin, J. (2002). An Examination of the Corporate Social and Environmental Disclosures of BHP from 1983-1997: A Test of Legitimacy Theory. *Accounting, Auditing and Accountability Journal*, 15, 312-343. <https://doi.org/10.1108/09513570210435861>
- Derry, W., & Vinola, H. (2021). Sustainable Finance Disclosure on Banking Sector in Indonesia: The Relationship ESG with Company Performance and Institutional Ownership. *Journal of Research in Business and Management*, 9(12), 6-12. Retrieved from <http://repository.unsada.ac.id/id/eprint/5999>
- Ding, W. L. (2021). Corporate immunity to the COVID-19 pandemic. *Journal of Financial Economics*, 141(2), 802-830. <https://doi.org/10.1016/j.jfineco.2021.03.005>
- Ersoy, E., Swiecka, B., Grima, S., Özen, E., & Romanova, I. (2022). The Impact of ESG Scores on Bank Market Value? Evidence from the U.S. Banking Industry. *Sustainability*, 14(9527). <https://doi.org/10.3390/su14159527>
- Freeman, E., Harrison, J. S., Wicks, A. C., Parmar, B., & de Colle, S. (2010). *Stakeholder Theory: The State of the Art*. Cambridge, U.K.: Cambridge University Press. Retrieved from <https://core.ac.uk/download/pdf/346447581.pdf>
- Hadjoh, R., & Sukartha, I. M. (2013). Pengaruh Ukuran Perusahaan, Kinerja Keuangan dan Eksposur Media Pada Pengungkapan Informasi Lingkungan [The Effect of Company Size, Financial Performance and Media Exposure on Environmental Information Disclosure]. *Jurnal Ekonomi Universitas Udayana*. Retrieved from <https://www.neliti.com/publications/44815/pengaruh-ukuran-perusahaan-kinerja-keuangan-dan-eksposur-media-pada-tingkat-peng#cite>
- Hayat, U., & Orsagh, M. (2015). *Environmental, social, and governance issues in investing*. A Guide for Investment Professionals. Retrieved from <https://rpc.cfainstitute.org/en/policy/positions/environmental-social-and-governance-issues-in-investing-a-guide-for-investment-professionals>

20. Herzig, C., & Schaltegger, S. (2006). Corporate sustainability reporting. An overview. In Schaltegger, S., Bennett, M., Burritt, R. (Eds.), *Sustainability Accounting and Reporting* (pp. 301-324). Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-4974-3_13
21. Huynh, Q. L. (2020). A triple of corporate governance, social responsibility and earnings management. *Journal of Asian Finance, Economics and Business*, 7(3). <https://doi.org/10.13106/jafeb.2020.vol7.no3.29>
22. Ioannou, I., & George, S. (2017). *The Consequences of Mandatory Corporate Sustainability Reporting* (Research Working Paper No. 11). Harvard Business School. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1799589
23. Juliana, A., & Alfiannur, A. (2023). Improving the quality of sustainability reports through the influence of company size, leverage, company age, media visibility, and profitability. *Akuntabel: Jurnal Ekonomi dan Keuangan*, 20(2), 195-202. <https://doi.org/10.30872/jakt.v20i2.13305>
24. Junius, D., Adisurjo, A., Rijanto, Y. A., & Adelina, Y. E. (2020). The Impact of ESG Performance to Firm Performance and Market Value. *Jurnal Aplikasi Akuntansi*, 5(1), 21-41. <https://doi.org/10.29303/jaa.v5i1.84>
25. KPMG. (2017). *The road ahead. The KPMG Survey of Corporate Sustainability Reporting 2017*. Retrieved from <https://assets.kpmg.com/content/dam/kpmg/ber/pdf/2017/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf>
26. Krasodomska, J., & Cho, C. H. (2017). Corporate social responsibility disclosure: Perspectives from sell-side and buy-side financial analysts. *Sustainability Accounting, Management and Policy Journal*, 8(1), 2-19. <https://doi.org/10.1108/SAMPJ-02-2016-0006>
27. Kuswanto, H., Sholihin, M., & Djajadikerta, H. G. (2022). Exploring the implementation of sustainable development goals: a comparison between private and state-owned enterprises in Indonesia. *Environment, Development and Sustainability*, 25, 10799-10819. <https://doi.org/10.1007/s10668-022-02505-1>
28. Lucia, C. D., Paziienza, P., & Bartlett, M. (2020). Does Good ESG Lead to Better Financial Performances by Firms? Machine Learning and Logistic Regression Models of Public Enterprises in Europe. *Sustainability*, 12(13). <https://doi.org/10.3390/su12135317>
29. Markovskaya, E., Nikolaishvili, N., & Kashperuk, P. (2021). The impact of oil companies' sustainability on. *IOP Conference Series: Earth and Environmental Science*, 937(022079). <https://doi.org/10.1088/1755-1315/937/2/022079>
30. Munir, A., Khan, F. U., Taunsvi, M. U., & Khuram, S. (2019). Relationship between Corporate Governance, Corporate Sustainability and Financial Performance. *Pakistan Journal of Commerce and Social Sciences*, 13(4), 915-933. Retrieved from <https://www.econstor.eu/bitstream/10419/214258/1/4368.pdf>
31. Nemoto, N., & Morgan, P. J. (2020). *Environmental, social, and governance investment: Opportunities and risks for Asia*. Asian Development Bank Institute. Retrieved from <https://www.adb.org/sites/default/files/publication/610771/adbi-environmental-social-governance-investment-opportunities-risks-asia.pdf>
32. Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & De Colle, S. (2010). Stakeholder theory: The state of the art. *Academy of Management Annals*, 4(1), 403-445. <https://doi.org/10.5465/19416520.2010.495581>
33. Peng, L. S., & Isa, M. (2020). Environmental, Social and Governance (ESG) Practices and Performance in Shariah Firms: Agency or Stakeholder Theory? *Asian Academy of Management Journal of Accounting and Finance*, 16(1), 1-34. <https://doi.org/10.21315/aamjaf2020.16.1.1>
34. Prananingrum, M. P., & Davianti, A. (2021). Environmental Responsibility Disclosures by Agricultural Companies in Indonesia. *Jurnal Penelitian dan Pengembangan Sains dan Humaniora*, 5(2), 330-339. <https://doi.org/10.23887/jppsh.v5i2.37177>
35. Prol, J. L., & Kim, K. (2022). Risk-return performance of optimized ESG equity portfolios in the NYSE. *Finance Research Letters*, 50, 103312. <https://doi.org/10.1016/j.frl.2022.103312>
36. Rahmaniati, N. P. G., & Ekawati, E. (2024). The role of Indonesian regulators on the effectiveness of ESG implementation in improving firms' non-financial performance. *Cogent Business & Management*, 11(1), 2293302. <https://doi.org/10.1080/23311975.2023.2293302>
37. Sacconi, L. (2004). *Corporate Social Responsibility (CSR) as a model of 'Extended' Corporate Governance: an explanation based on the economic theories of social contract, reputation and reciprocal conformism* (LIUC, Ethics, Law and Economics Paper No. 142). <http://dx.doi.org/10.2139/ssrn.514522>
38. Sanchez, P., Joaquin, Marival Segarra, O., & Angel Peiro, S. (2021). Building a Theoretical Framework for Corporate Sustainability. *Sustainability*, 13(1), 273. <https://doi.org/10.3390/su13010273>
39. Shleifer, A. (1998). State versus private ownership. *Journal of Economic Perspectives*, 12(4), 133-150. <https://doi.org/10.1257/jep.12.4.133>
40. Sustainability. (2021). *How Today's Banks are Adopting ESG-Based Strategies to Become More Sustainable*. Retrieved from <https://connect.sustainability.com/hubfs/SCS/SCS%20Infographics/Infographic-How-Banks-are-Adopting-ESG-Based-Strategies-to-Become-More-Sustainable.pdf>
41. Wardoyo, D. U., M. Luthfi, I., Arga, S. W., Rahmania, G. S. & Syifa, N. P. (2022). Pengaruh Sustainability Report terhadap Nilai

Perusahaan Studi Perusahaan Non Keuangan dari tahun 2018–2020) Proxy: PBV (Price to Book Value) [The Effect of Sustainability Report on Company Value Study of Non-Financial Companies from 2018–2020] Proxy: PBV (Price to Book Value). *Jurnal Publikasi dan Akuntansi*, 2(2), 161-166. <https://doi.org/10.51903/jupea.v2i2.333>

42. Yoo, S., & Managi, S. (2022). Disclosure or action: Evaluating ESG behavior towards financial performance. *Finance Research Letters*, 44, 102108. <https://doi.org/10.1016/j.frl.2021.102108>
43. Zaitul, Z., Melmusi, Z., & Ilona, D. (2019). Corporate governance and bank performance: Global financial crisis 2008. *Journal of*

Reviews on Global Economics, 8, 625-636. <http://www.lifescience-globalca.com/index.php/jrge/article/view/6129>

44. Zaman, S., & Ellili, N. O. D. (2022). *The effect of ESG disclosure on the financial performance of UAE banks*. <http://dx.doi.org/10.2139/ssrn.4043024>