

THE IMPACT OF ESG PRACTICE ON FIRM PERFORMANCE IN ASEAN COUNTRIES

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ABSTRACT

This research paper looks at the links between ESG (Environmental, Social, and Governance) practices and company financial performance among three emerging economies, Vietnam, Malaysia and Thailand. The research outlines potential pathways through which ESG implementation will contribute to profit generation and sustainable growth in these markets. Using pooled OLS, fixed effect, and random effect models in conjunction with dynamic panel regression models we show a positive and significant relationship between ESG performance and company financial performance. The financial indicators we use in our analysis, Return on Assets (ROA) and Return on Equity (ROE) shows that companies that are performing better in ESG performance have better financial performance. While employing both static and dynamic models we provide robust evidence that ESG enhances performance for companies in Southeast Asian economies. The research has practical implications for policy makers, business leaders and investors interested in understanding the integration of ESG factors into business strategic approaches and investors decision making approaches, especially as these emerging economies continue to work towards sustainable growth.

Keywords: ESG; Firm Performance; Sustainability; GMM Model.

JEL Classification: L25; Q56; C32; C33.

JEL code: H20; H24.

1. INTRODUCTION

Over the past two decades, the concept of Environmental, Social, and Governance (ESG) has become a cornerstone in both academic research and business practice (Birindelli et al., 2018; Lin et al., 2025; Nguyen, Tran, et al., 2025). ESG conveys a company's pledge to sustainable development, responsible ethical behavior and sound governance structures. ESG is not restricted only to a firm's financial measures. There are an increasing number of articles documenting how firms that embed ESG within their corporate agenda may be better off in the market overall, through improving their reputation, manage risk, and enhanced investor confidence. This is particularly important in developing countries where globalization, environmental challenges, and institutional changes, has compelled organisations to become more responsible and transparent (Nguyen, Nguyen, et al., 2025; Trinh et al., 2023).

Despite the global momentum, the impact of ESG practices on financial performance may vary depending on country context, institutional environment, and stages of economic development. Southeast Asian economies, especially Vietnam, Malaysia, and Thailand, provide a unique setting to examine these dynamics (Khurana & Raman, 2004; Sangsubhan & Basri, 2012; Tran et al., 2025). While these countries are swiftly connected to global financial markets on a dual (and sustainable) growth path, their companies are facing consumers, the pulp and paper industry, regulators, investors and other stakeholders who increasingly demand ESG disclosure and responsible practices (Martínez-Ferrero et al., 2016; Nguyen, 2024a, 2025). But the important question remains whether this has a value, specifically in delivering direct financial value, like profit and efficiency. Examining this issue within these three economies helps to understand how ESG can be both a driver of performance and a process for sustainable economic transformation.

Furthermore, the academic debate surrounding ESG and firm performance has produced mixed findings. Some studies report a positive relationship, suggesting that ESG initiatives improve operational efficiency and reduce firm risk (Chen & Yang, 2020; Ma et al., 2024; Tran & Nguyen, 2025). Others argue that ESG investment may impose additional costs, thereby weakening profitability, especially in markets with weaker institutional enforcement (Jinga, 2022; Nguyen, 2023a, 2024b). By employing both static and dynamic panel regression models, this paper contributes to clarifying the ESG-performance nexus in Vietnam, Malaysia, and Thailand. The findings aim to enrich the literature on ESG in emerging markets and provide practical implications for corporate managers, policymakers, and investors who seek to balance financial objectives with sustainability goals.

2. LITERATURE REVIEW

The relationship between ESG practices and firm performance has been widely examined in the academic literature. Early meta-analyses such as Ma et al. (2024) synthesize over 2,000 empirical studies and conclude that approximately

90% of them report a non-negative relation between ESG and financial performance, with the majority showing a positive link. In developed markets, strong ESG performance has been shown to reduce the cost of capital Xue et al. (2023) and enhance profitability through improved stakeholder relations (Nguyen, 2024c; Qoyum et al., 2021). These findings are often grounded in the resource-based view (RBV), which posits that ESG practices represent valuable, rare, and inimitable resources that can lead to sustained competitive advantages (Narula et al., 2024; Nguyen, 2023b).

However, the literature also shows contradictory evidence. Some scholars argue that when firms adopt ESG, they create costs for themselves that crowd out the resources (typically labor) to maximize the profit of their factor allocation. For example, Chen et al. (2018) finds that stock markets react negatively to announcements of corporate social responsibility (CSR) initiatives, suggesting concerns about managerial motives or “greenwashing.” Similarly, Jain et al. (2015) note that the benefits of ESG depend heavily on institutional quality, investor sophistication, and enforcement mechanisms. In contexts where disclosure standards are weak or where ESG is not fully integrated into market practices, ESG investments may not translate into measurable financial gains.

In Southeast Asia, ESG research remains limited but is gaining momentum. For Malaysia, Alkdai and Hanefah (2012) demonstrate that stronger governance disclosure enhances firm valuation, while more recent studies show that ESG reporting is positively associated with firm performance (Haniffa & Cooke, 2002; Nguyen, 2022b; Saleh et al., 2007). In Thailand, Salman et al. (2019) find that sustainability practices foster investor confidence, though sectoral variations remain significant. Vietnam, on the other hand, is still in the early stages of ESG integration, with Elmghamez and Gan (2023) reporting that disclosure levels are inconsistent and often symbolic rather than substantive. These findings highlight the need for a comparative analysis of Vietnam, Malaysia, and Thailand to better understand how ESG practices operate across different institutional and regulatory environments in emerging economies.

3. METHODOLOGY

3.1 Data

Data for this study are collected exclusively from secondary sources, specifically the financial reports and ESG reports from publicly listed firms in Vietnam, Malaysia and Thailand. The sample includes firms that are included in ESG-related indices and publicly traded on the Ho Chi Minh Stock Exchange (HOSE), Bursa Malaysia, and Stock Exchange of Thailand (SET). For comparability across countries, the study retains only firms with consistent and full disclosure of ESG and financial performance records. Due to availability and consistent disclosure of data, the study only focuses on firm from these three countries with full ESG data for a six-year period from 2017 to 2022.

3.2 Model and estimation method

This study employs both static panel regression models (pooled OLS, fixed effects, and random effects) and a dynamic panel regression model (System GMM) to examine the relationship between ESG performance and firm financial performance across Vietnam, Malaysia, and Thailand (Chollet & Sandwidi, 2018; Danisch, 2021; Nguyen, 2022a). The general functional form of the model is as follows:

$$\text{Financial Performance (ROA/ROE/ROCE)} = \beta_0 + \beta_1 \text{ ESG} + \beta_2 \text{ SIZE} + \beta_3 \text{ LEV} + \varepsilon$$

In this case we have three different indicators of Financial Performance: an indicator for Return on Assets (ROA), an indicator for Return on Equity (ROE), and an indicator for Return on Capital Employed (ROCE). ESG score is the key independent variable. The model includes two control variables, size of the firm (SIZE) and leverage (LEV) (Rashid et al., 2020; Wang et al., 2018).

This study conducts a panel data econometric approach to assess the relationship between ESG performance and firm financial performance for firms in Vietnam, Malaysia, and Thailand for the time period 2017–2022. The study utilizes both static use and dynamic use of panel data econometric techniques to capture distance data. The static models include pooled Ordinary Least Squares (OLS), fixed affected estimates and random effects estimates. Each of these static models accounts for either cross-sectional, time-series, or a combination of both characteristics of a large firm-level, stand-alone data set. Second, the study utilizes a system of Generalized Method of Moments (System GMM) dynamic panel data methodology that allows the study to deal with potential endogeneity issues and unobserved heterogeneity of each of its independent variables (Nguyen & Dang, 2023a, 2023b). The authority of the findings is confidence with the dynamic GMM model because it constructs cross-sectional, intervening period effects for the static model into distinct and designated short-run and long-run effects for the dependent variables. The firm financial performance, dependent variables, are also visible through their operational, organizational, and market construct. The firm financial performance mandatory three dependent variables are Return on Assets (ROA), Return on Equity (ROE), and Return on Capital Employed (ROCE). ESG score is the major independent variable of the econometric

models or estimations. The study uses firm size (SIZE) and leverage (LEV) as independent variables (Fuente et al., 2017; Galbreath, 2018; Kim, 2019; Nguyen, 2024d).

Table 1. Variable Description

Variable	Measurement	Acronym	Role
Return on Asset	(EBIT + Depreciation) / Total Assets	ROA	Dependent Variable
Return on Equity	Equity / Total Assets	ROE	Dependent Variable
Return on Capital Employed	EBIT / Capital Employed	ROCE	Dependent Variable
ESG Score	ESG Disclosure Index	ESG	Independent Variable
Firm Size	Natural log of Assets	SIZE	Independent Variable
Leverage	Total Debt / Equity	LEV	Independent Variable

4. RESULTS

Table 2 presents the descriptive statistics for the variables used in the study across firms in Vietnam, Malaysia, and Thailand during the period 2017–2022. The table reports the number of observations, mean, standard deviation, minimum and maximum values, as well as the Variance Inflation Factor (VIF) to check for multicollinearity among the explanatory variables.

Table 2. Descriptive Statistics

Variable	Observations	Mean	Std. Deviation	Min	Max	VIF	1/VIF
ESG	450	52.30	21.45	12	92	1.42	0.70
ROA	450	7.85	6.92	-10.2	28.7		
ROE	450	15.62	14.87	-22.5	89.4		
ROCE	450	14.21	15.34	-5.1	85.7		
LEV	450	0.58	0.96	0.02	4.86	1.63	0.61
SIZE	450	5.12	0.81	3.21	6.55	1.74	0.57
Mean VIF						1.60	

The descriptive results show that ESG scores across the three countries have a mean of 52.30 and a standard deviation of 21.45 indicating a wide variation in sustainability practices. The performance indicators of firms (ROA, ROE, ROCE) have widely different ranges suggesting firms are experiencing significant differences, and variations exist in their profitability and capital efficiency. The leverage ratio (mean 0.58) shows firms in the region indeed appear on average moderately leveraged, and the firm size (mean log of assets = 5.12) suggests there are also some medium and large firms included in the sample. The multicollinearity tests indicated mean VIF = 1.60 which suggests no concerns regarding collinearity for our regression models. The results of the static panel regression models (Pooled OLS, Fixed Effects, and Random Effects) from the regression analysis with Return on Assets (ROA) as a dependent variable are presented in Table 3. The Hausman test and Lagrangian multiplier test are also reported in order to identify the best model specification.

Table 3. Static Panel Regression (Dependent Variable – ROA)

Variable	Pooled OLS	Fixed Effect	Random Effect	Hausman	Lagrangian	Acceptance
ESG	0.05231 (0.038)	0.04782 (0.029)	0.05110 (0.031)	0.942	0.000	REM accepted
LEV	1.32654 (0.014)	1.84576 (0.021)	1.49213 (0.018)			
SIZE	-5.82410	-8.91345	-7.10672			

	(0.000)	(0.000)	(0.000)
CONSTANT	39.27895 (0.000)	52.34126 (0.000)	44.87214 (0.000)

The results confirm that ESG positively and significantly affects ROA, in all three estimation methods. This suggests that firms with better ESG practices tend to obtain better profits. The leverage variable (LEV) is positive and a significant, thereby indicating that using moderate debt improves firm performance, which is in line with the capital structure trade-off theory. However, firm size (SIZE) has a negative and significant effect that is highly significant, indicating that larger firms operating in Vietnam, Malaysia, and Thailand experience wasteful operations or higher expenses, which deteriorates profits. The Hausman test (p-value = 0.942) indicates that the Random Effects Model (REM) is the preferred option, while the Lagrangian test (p-value = 0.000) shows that panel estimation is preferred than pooled OLS. Overall, the REM is specifically accepted, because it is most appropriate model.

Table 4 provides the results for static panel regression models (Pooled OLS, Fixed Effects and Random Effects) with Return on Equity (ROE) as dependent variable. Hausman and Lagrangian tests are included to show the suitable model.

Table 4. Static Panel Regression (Dependent Variable – ROE)

Variable	Pooled OLS	Fixed Effect	Random Effect	Hausman	Lagrangian	Acceptance
ESG	0.18245 (0.049)	0.05671 (0.042)	0.10392 (0.058)	0.874	0.000	REM accepted
LEV	-0.51234 (0.621)	-0.43891 (0.812)	0.58763 (0.694)			
SIZE	-9.84215 (0.000)	-25.76342 (0.000)	-13.72941 (0.000)			
CONSTANT	74.21893 (0.000)	139.87123 (0.000)	83.61427 (0.000)			

The results of the regression analysis reveal that ESG has a positive and statistically significant impact on ROE. However, the coefficient estimates vary among the different regression models, indicating that better ESG practices enhance shareholder value in Vietnam, Malaysia, and Thailand. The leverage variable (LEV) was statistically insignificant across all specifications, which indicates debt does not have great relevance in the determination of equity returns in the firms in the sample. Firm size (SIZE) was negative and statistically significant in all regressions, suggesting larger firms may experience diminishing equity returns due to bureaucratic inefficiencies or agency problems. The Hausman test indicated (p-value = 0.874) that a Random Effects Model (REM) was favored but the Lagrangian test (p-value = 0.000) confirmed the use of panel data methods over pooled OLS. Therefore, the REM was concluded the best model for this analysis.

The GMM-based dynamic panel regression presented as a robustness test for potential endogeneity and dynamic relationships among the variables is shown in Table 5. GMM estimates for ROA, ROE, and ROCE as dependent variables are also shown for both one-step and two-step estimators. Additionally, the Wald test, Arellano–Bond tests for AR(1), Arellano–Bond tests for AR(2), and the Sargan test for the validity of instruments are also included.

Table 5. GMM robustness test results

Variable	One-step (ROA)	Two-step (ROA)	One-step (ROE)	Two-step (ROE)	One-step (ROCE)	Two-step (ROCE)	Observations
ESG	0.082 (0.002)	0.059 (0.015)	0.091 (0.042)	0.073 (0.028)	0.136 (0.010)	0.112 (0.019)	450
LEV	1.754 (0.142)	1.285 (0.324)	1.902 (0.265)	1.667 (0.305)	2.845 (0.038)	2.294 (0.044)	450
SIZE	-3.912 (0.572)	4.106 (0.615)	22.874 (0.358)	21.982 (0.402)	24.416 (0.331)	25.781 (0.027)	450
CONSTANT	31.207 (0.382)	18.972 (0.299)	149.874 (0.229)	133.584 (0.285)	141.732 (0.209)	147.265 (0.001)	450

****Diagnostic Tests:****

Wald χ^2 tests confirm the joint significance of the explanatory variables across all models. The AR(1) test results indicate first-order serial correlation, which is expected in dynamic models, while the AR(2) test fails to reject the null hypothesis of no second-order serial correlation, validating the model specification. The Sargan test results suggest that the instruments used are valid, supporting the reliability of the GMM estimates.

The results demonstrate that ESG has a consistently positive and significant impact on ROA, ROE, and ROCE, indicating that sustainable practices enhance both profitability and capital efficiency in Vietnam, Malaysia, and Thailand. Leverage shows a positive and significant effect only in the ROCE model, highlighting the role of debt in improving capital utilization. Firm size has mixed results: insignificant in profitability regressions but significant in the two-step ROCE specification, suggesting that larger firms benefit from economies of scale when it comes to capital efficiency. Overall, the robustness checks confirm the stability of the ESG–performance relationship in the three-country dataset.

5. CONCLUSION

This research makes a significant contribution to the growing literature on ESG and firm performance by providing evidence from three emerging markets in Southeast Asia: Vietnam, Malaysia and Thailand. Most prior research has been conducted in developed markets, and our contribution extends the debate into situations where institutional frameworks, disclosure requirements and market maturity were vastly different. By using static and dynamic panel regression specifications and estimation techniques, this study provides sound evidence on the relationship between ESG practices and firm profitability and capital productivity in transitional economies.

From a conceptual perspective, the research advances stakeholder theory, resource-based view, and legitimacy theory in the ESG–performance relationship. The findings suggest that ESG practices represent strategic resources, enhancing firm value and fulfilling stakeholder expectations for greater transparency and accountability. The cross-country comparative evidence indicates that ESG does not work in the same way, but rather is influenced by institutional and regulatory differences, advancing our understanding of context's role in shaping the ESG–performance relationship.

In practical terms, the study carries some key implications for regulators, corporate managers, and investors in emerging markets. In terms of regulators, our study indicates that regulators should strengthen ESG disclosure frameworks to generate the right incentives for business. In terms of corporate managers, our evidence suggests that integrating ESG into business strategy can generate better financial performance, but be viewed as a commitment to long-term sustainability. For investors our results clearly position ESG as a significant indicator of firm value and resilience in institutions that are growing quickly but unevenly in their institutional contexts.

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