

CORPORATE ESG IMPLEMENTATION AND FIRM SUCCESS: AN EMPIRICAL STUDY IN THE ASIAN MARKETS

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Abstract: *This study investigates the effect of ESG dimensions on the financial outcome of companies across six selected Asian markets. The sample from this study was downloaded from LSEG, which consists of 418 non-financial listed firms in six Asian countries over the period 2019 to 2024. A linear regression analysis was conducted to examine the correlation between the ESG score and financial variables concerning Return on Assets (ROA) and Return on Equity (ROE). The findings reveal that firm performance is positively affected by ESG performance using both financial indicators, ROA and ROE. This indicates that firms with good ESG performance will have better performance, which is in line with the purpose of the implementation of ESG itself: to create business value and fair governance while protecting the Earth. On the contrary, the control variables, such as firm size and leverage, show significant adverse effects, indicating that poor operational efficiency or high financial burden may weaken the firm's financial performance. These findings have offered a new regional perspective on the implications of ESG towards Asian firm performance. This is important as investors and regulators are looking to align financial goals with corporate sustainability requirements.*

Keywords: *ESG, firm performance, ROA, ROE, profitability, firm size, leverage, Asia*

Introduction

ESG is traditionally the domain of developed economies such as the UK, US and Europe, where it has already entrenched itself as a standard feature of corporate planning and regulatory requirements. ESG has emerged over the last decades as a benchmark for evaluating the company's achievements (Zhou, Wu & Li, 2025). According to Habib et al. (2024), the concept of ESG originates from stakeholder theory, which emphasises that companies are accountable for both their governance systems and the interests of their stakeholders. Investors, regulators, and customers are putting pressure on companies to be more open and responsible about their non-financial activities, like how they handle social responsibility, environmental impacts, and structures of governance (Qoyum et al., 2022). ESG is not yet synonymous with Asia on a worldwide level. Still, this field is already gaining popularity, especially in financial hubs like Singapore, which has become a leader in ASEAN ESG frameworks and green finance (Sorooshian et al., 2024). Additionally, Fadhillah & Agung (2024) supported in their study that Singapore is the only ASEAN country listed among the top 15 of the thirteenth edition of the Global Green Finance Index. Likewise, Japan specialises in governance and ESG investing, whereas Hong Kong is a financial centre that complies with global ESG disclosure guidelines. Marie et al. (2024) and Xue et al. (2025) further mentioned that China is well known in the world for being involved in mass production activities. Thus, ESG is viewed as a good practice to gain the competitive edge and has become a significant transformation for China's economy.

Despite Asian countries making progress in ESG growth and development, the continent is primarily in the initial or early developing stage, making it an essential focus of educational and policy analysis (Wu, Lam and Liu, 2024; Xue et al., 2025). The development of ESG in Asia is notably inconsistent and splintered, including substantial gaps among developed nations, including Japan and Singapore, and developing nations such as Indonesia, Vietnam, and the Philippines (Sorooshian et al., 2024). Additionally, the implementation of ESG-related standards and reporting guidelines in different Asian countries' legislatures frequently demonstrates a lack of uniformity, clarity, and reliability, which results in ineffective adherence and limited impact. This becomes even worse by the absence of comprehensive local standards and poor connections with global frameworks.

In developed countries, ESG reporting is compulsory due to firm regulation from governments. Nonadherence may cause harm to reputation, legal sanctions, or financial penalties. Technologically advanced countries in Europe and the United States established strong ESG structures, whereby environmental standards are systematically governed, established, and widely seen to be critical for lasting company survival and performance. On the other hand, most companies in emerging Asian countries encounter numerous obstacles to ESG adoption due to a shortage of resources, the absence of specialised skills, insufficient enforcement, and low shareholder or regulatory pressure (Yoshida et al., 2024). As a result, these companies generally perceive ESG initiatives not as a source of value or competitive edge, but rather as a cost or investment risk. This increasing gap between large companies and smaller companies could widen the ESG gap, as only some companies are genuinely pushing for sustainable business (Puteh Salin et al., 2023). Closing that gap is important not only for accelerating ESG integration in Asia but also for driving inclusive and resilient economic growth that is aligned with global sustainability aspirations.

Although Environmental, Social, and Governance (ESG) practices have gained global attention, most empirical evidence remains concentrated in Western markets, while cross-country studies in Asia remain limited. This gap is critical, as Asian economies display diverse regulatory frameworks, governance traditions, and sustainability challenges that may alter the ESG-performance nexus. Recent studies highlight inconsistent findings, underscoring the need for further regional validation (Lee & Koh, 2023; Sakiewicz et al., 2023; Gjergji et al., 2024; Liu & Song, 2025). This study addresses the gap by examining the ESG-performance relationship across six Asian countries during 2019–2024, a period shaped by post-SDG acceleration, heightened ESG reporting requirements, and the disruptive impact of the COVID-19 pandemic. Firm performance is measured using ROA (operational efficiency) and ROE (shareholder returns), which serve as more stable indicators than market-based measures such as Tobin's Q. Control variables such as firm size, profitability, and leverage are included to ensure robustness. By applying panel data techniques (fixed and random effects), this study advances understanding of ESG adoption in Asia and offers implications for scholars, policymakers, and corporate stakeholders.

The organisation of this paper is as follows: the following section discusses the literature review on ESG and firm performance. The following section contains a description of the methodology of data collection and analysis adopted. Next, the findings are reported and analysed in depth, and the last section presents the conclusions.

Literature Review

ESG has become increasingly relevant across companies worldwide. Nowadays, several companies report ESG activities and some researchers have started to investigate the interaction of these performances with sustainable ones. The relationship between ESG and company performance is gaining additional attention, particularly as companies are increasingly re-emphasising sustainability, socially responsible practices, and principles (Marie et al., 2024). The heightened emphasis on ESG is driven by escalating stakeholder concerns and a strategic necessity in response to global challenges such as global warming, scarce resources, and inequalities in society. With the world centring in on sustainable development, and a more green-based economy, the demands on government, regulators, businesses and investors will grow. Now, ever extending beyond the mere pursuit of economic development, business has the focus of being a corporate citizenry on the welfare of all parties concerned (Cao & Hanafiah, 2024). Firms are more and more being asked to put ESGs into their strategies, risk management systems and performance measures. A bow to the new reality that we have a new yardstick to measure corporate success. In addition, institutional investors and capital markets have started to regard ESG indicators as indispensable for investment decision-making, confirming that sustainability scores have a fundamental connection to the long-term financial stability of the company. The change mirrors a wider understanding that responsible business conduct can be an enabler of innovation, a means to mitigate risk and increase competitiveness in a fast-moving global economy.

Nian and Said (2025) conducted a systematic literature review comprising 120 publications drawn from Scopus and Web of Science. They concluded that the majority of these papers find evidence of either a positive, negative, mixed or no relationship between ESG and corporate risk and financial performance. This discrepancy illustrates the dynamic and multifaceted world of ESG research. Similarly, Halid et al. (2023) anticipated that firms with greater ESG scores would do better and yield greater returns; their empirical analyses, however, did not support

this perspective, indicating that the association between ESG and performance might be potentially contingent upon some contextual factors.

Wang and Zhu (2024) also stated that there is a widespread consensus in most of the academic literature that ESG has a positive relation with corporate performance, especially in improving long-term value creation and sustainable growth. However, they stressed that the relationship is complicated and is not consistently seen across the board. It is, however, pertinent to note that differences in the type of ESG measurement methodology, the specific components of the ESG being studied, firm size, industry grouping, location, or types of institutional factors can and often do result in different conclusions. These discrepancies suggest that we should take regional factors, regulatory context, and stakeholder norms into account when judging the impact of ESG on corporate results. Consequently, more advanced approaches and a contextual perspective are needed for properly evaluating the impact of ESG on a company's profitability and risk control.

Notwithstanding these contradictory results, certain research indicates more uniform outcomes. Lee and Koh (2024) discovered that excellent ESG performance correlates with reduced overall, firm-specific, and market risks, even when accounting for firm and year effects. Their findings indicate that firms with robust ESG ratings have lower exposure to leverage-related concerns, reinforcing the notion that ESG helps mitigate financial risk. Liu and Song (2025) discovered that ESG policies mitigate corporate risk by decreasing environmental penalties, enhancing financial access, bolstering reputation, and augmenting support from government initiatives. They also observed that the risk-reducing effect of ESG becomes stronger in times of environmental uncertainty. Saini et al. (2023) provided a theoretical explanation for how ESG is connected to firm outcomes. They highlighted that stakeholder, legitimacy, and signalling theories help explain why firms benefit from ESG. ESG builds stakeholder trust, shows that firms behave responsibly, and sends positive signals to investors. Their study also found that firms with strong social performance are often seen as less risky, which helps them reduce their cost of capital.

Consequently, in light of the aforementioned literature and theoretical frameworks, the subsequent hypotheses are proposed:

H1a: Firms that exhibit stronger ESG performance are expected to achieve better Return on Assets, implying that firms with more effective ESG practices demonstrate higher productivity in asset utilisation for earnings generation.

H1b: A positive link is proposed between ESG performance and Return on Equity, indicating that higher ESG engagement leads to improved returns for shareholders.

Research Methodology

Data and Sample

This study utilises secondary data sourced from the London Stock Exchange Group (LSEG) database, covering firms in six Asian countries for the period 2019–2024. The dataset was carefully screened to ensure consistency and comparability. Specifically, financial firms were excluded due to their unique regulatory frameworks and accounting practices, which could bias comparisons with non-financial sectors. In addition, firms with incomplete ESG or financial

information and extreme outliers were removed. After this filtering process, the final dataset comprised 2,507 firm-year observations.

Firm performance is measured using Return on Assets (ROA) and Return on Equity (ROE). These indicators were selected because they capture internal operational efficiency and shareholder value creation, respectively, and are less susceptible to external market fluctuations compared to market-based measures such as Tobin's Q or stock returns. The analysis applies panel data regression techniques, considering both fixed effects (FE) and random effects (RE) models to account for firm-level heterogeneity. The Hausman test is used to determine the more appropriate model specification. To ensure robust results, diagnostic tests for heteroskedasticity and autocorrelation are conducted, with robust standard errors applied where necessary.

Variable definitions

Firm Performance

Consistent with the prior studies, firm performance is measured by using return on assets (ROA) and return on Equity (ROE) (Marie et al., 2024; Xue et al., 2025). Both of these profitability measures are well established in the literature as a good proxy for enterprise performance. ROA is computed by dividing net income by total assets and measures the company's ability to derive profits from its total asset accounts, which also acts as an indicator of operational efficiency. Return on Equity (ROE), on the other hand, is computed by dividing net income by shareholders' equity. This ratio shows a company's capacity to translate equity into profit and the return to its shareholders on the company's earnings.

ESG

ESG is the independent variable of this study and is proxied by the composite ESG score obtained from the LSEG database. In line with previous studies using the ESG rating scores as a substitute for sustainability performance (Zhou et al., 2025; Xue et al., 2025; Marie et al., 2024), the composite ESG score is broadly recognised as a credible and standardised measure of a firm's non-financial performance and future value generation. This score is from 0 to 100, and it represents how the firm performs in terms of sustainability in the following three aspects: obligation to the environment, social impact, and corporate governance quality. A higher ESG score reflects greater alignment with globally recognised ESG criteria and a stronger commitment to ethical corporate behaviour.

Control Variables

Other firm-specific elements that could potentially have an effect on firm performance are taken into account and adjusted for in the research. Size is the natural logarithm of total assets, serving as a proxy for firm size and an indicator of the firm's capacity to endure operational shocks (Wu et al., 2024; Xue et al., 2025). Profitability (profit) is the ability of the enterprise to make use of its assets to produce net income and can be measured by net income divided by total assets (Wu et al., 2024; Xue et al., 2025). Finally, the financial risk of the firm is considered under leverage (lev), which is computed using total liabilities divided by total assets (Qoyum et al., 2022; Zhou et al., 2025; Xue et al., 2025). Both of these variables are commonly utilised in empirical research to account for heterogeneity of the firm when investigating the relationship between ESG and firm performance. The following table is the description and measurement information for all the variables used in this study.

Table 1: Variable Definitions and Measurements

Category	Variable	Abbreviation	Measurement
Firm Performance	Return on Assets	ROA	Net Income / Total Assets x 100%
	Return on Equity	ROE	Net Income / Shareholders' Equity x 100%
ESG Performance	ESG Score	ESG	Composite ESG score (0–100 scale)
Control variables	Firm Size	Size	Natural log of total assets
	Profitability	Profit	Net Income/Total Assets
	Leverage	Lev	Natural logarithm of Total liabilities/Total assets

Empirical Model and Model Construction

To investigate the relationship between ESG and firm performance, the quantitative research design is adopted using panel data. Multi-year panel linear regression is conducted to control for cross-sectional and time-series variation among all firms with SPSS statistical software. To conform with the hypothesis, which is to identify the relationship between the ESG score and firm performance, two regression models are developed. In the first model, the dependent variable is Return on Assets, and in the second model, the dependent variable is Return on Equity. The independent variable is ESG score, while there are three control variables: firm size, profitability and leverage. The analysis includes descriptive statistics, Pearson correlation, and multiple linear regression. Diagnostic tests were performed to ensure the validity of the regression model, including checks for multicollinearity (VIF), normality, and linearity assumptions.

Model 1 (ROA)

$$ROA_i = \beta_0 + \beta_1 ESG_i + \beta_2 Size_i + \beta_3 Profit_i + \beta_4 Lev_i + e_i$$

Model 2 (ROE)

$$ROE_i = \beta_0 + \beta_1 ESG_i + \beta_2 Size_i + \beta_3 Profit_i + \beta_4 Lev_i + e_i$$

Results and Discussions

Descriptive Statistics

Table 2 presents the descriptive statistics for the key variables examined in this study, based on 2,507 firm-year observations from multiple Asian countries over the period 2019 to 2024. The mean value for Return on Assets (ROA) is 6.49%, with a standard deviation of 6.82%, indicating moderate profitability and a considerable spread in asset utilisation efficiency among firms. Return on Equity (ROE) averages 10.37%, but with a higher standard deviation of 12.81%, highlighting more pronounced variation in shareholder returns, likely due to differing capital structures and market conditions. ESG scores range from 2.86 to 91.83, with an average of 58.04 and a standard deviation of 17.38, suggesting significant disparity in sustainability engagement across firms. The log-transformed firm size variable has a mean of 9.83 and a relatively low standard deviation of 0.55, implying that most firms in the sample are of comparable scale. Profitability exhibits a wide range, from –2.97 to 100.00, with a mean of 31.67 and a standard deviation of 21.14, reflecting operational variability across firms and industries. Leverage (LEV) presents a notable concern, with a mean of 69.85 and an unusually high maximum value of 412.08, coupled with a standard deviation of 71.76, indicating that

some firms are highly indebted and may pose elevated financial risk. Overall, the results reveal significant heterogeneity in financial performance, capital structure, and ESG integration across firms in the sample, warranting further examination in the inferential analysis.

Table 2: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	2507	-9.72	31.18	6.49	6.82
ROE	2507	-32.14	69.75	10.37	12.81
ESG	2507	2.86	91.83	58.04	17.38
SIZE	2507	8.09	11.56	9.83	0.55
PROFIT	2507	-2.97	100.0	31.67	21.14
LEV	2507	0.38	412.08	69.85	71.76

Correlation Analysis

Table 3 presents the Pearson correlation results among all variables. There is a strong and significant positive relationship between ROA and ROE ($r = 0.798$, $p < 0.01$), indicating that firms with strong asset performance also tend to generate higher returns for shareholders. The ESG score shows a weak but positive correlation with ROE ($r = 0.048$, $p < 0.10$), suggesting that ESG practices may have a small influence on shareholder value. However, the correlation between ESG and ROA is very weak and not significant ($r = -0.009$), which implies ESG efforts may not directly affect asset efficiency.

Firm size has significant negative relationships with both ROA ($r = -0.309$) and ROE ($r = -0.211$), meaning that larger firms tend to perform less effectively. Profitability is positively associated with both performance measures, showing that more profitable firms usually deliver higher returns. Leverage is negatively correlated with ROA ($r = -0.333$) and ROE ($r = -0.104$), indicating that firms with higher debt levels tend to perform worse. ESG score is positively related to firm size ($r = 0.310$), suggesting that larger firms are more likely to implement ESG initiatives. All correlations between independent variables are moderate and below 0.40, showing that there are no multicollinearity problems in this study.

Table 3: Pearson Correlation Matrix

	ROA	ROE	ESG	SIZE	PROFIT	LEV
ROA	1	.798**	-.009	-.309**	.235**	-.333**
ROE	.798**	1	.048*	-.211**	.183**	-.104**
ESG SCORE	-.009	.048*	1	.310**	-.097**	.028
FIRM SIZE	-.309**	-.211**	.310**	1	-.103**	.237**
PROFIT	.235**	.183**	-.097**	-.103**	1	-.087**
LEV	-.333**	-.104**	.028	.237**	-.087**	1

***, **, and * indicate the significance level of the variable is 1%, 5%, and 10%.

Regression Analysis

The effectiveness of the regression models in explaining firm financial performance is assessed using the adjusted R-squared values. For the model utilising Return on Assets (ROA) as the dependent variable, the adjusted R-squared stands at 0.209. This implies that approximately 21% of the variability in firms' asset efficiency can be explained by the independent variables: ESG score, firm size, profitability, and leverage. While not exceptionally high, this value is reasonable in the context of firm-level panel data, where unobserved heterogeneity and industry-specific variations are common. On the other hand, the model using Return on Equity

(ROE) yields a lower adjusted R-squared value of 0.088, suggesting that only 8.8% of the variation in shareholder returns is explained by the same set of predictors. This indicates that ROE may be more sensitive to external or firm-specific factors not captured within the current model, such as market sentiment, capital structure dynamics, or macroeconomic influences.

Notwithstanding differences in explanatory power, results from both models indicate a robustly positive and statistically significant relationship exists between ESG performance and firms' financial performance. In the ROA model, in particular, the ESG coefficient is 0.038 ($p < 0.001$), which is more moderate, although still very significant in positive correlation. This implies that firms with high ESG ratings are likely to be more efficient in using assets to generate income. Similarly, the ESG coefficient of 0.100 ($p < 0.001$) in the ROE model indicates the same positive and significant effect on shareholder return.

These results provide strong empirical support for Hypotheses H1a and H1b, as the results reinforce that good ESG performance leads to greater operating efficiency and shareholder value creation. By this, Xue et al. (2025) noticed that the ESG performance evolution increased when facing climate risks, highlighting the strategic value of cost reduction and reputation gains. Handoko et al. (2024) also found that companies scoring high in ESG performed better as reflected in ROA and ROE. In the Indian firms, Digar (2023) and Parwani et al. (2024) found a positive relationship between ESG engagement and financial performance. It also reinforced the evidence of the linear relationship between ESG values and economic and financial returns (Jung & Yoo, 2023). On the other hand, Intezar et al. (2024) found a significant negative relationship with ROE and a non-significant effect on ROA. Andersen et al. (2024) argued that these negative consequences could be related to transitional inefficiencies associated with the introduction of ESG, temporarily reducing a firm's productivity and profitability. Complementing this, Gutman et al. (2024) found mixed evidence in the oil and gas industry, illustrating how ESG effects can significantly vary between sectors.

Firm size exhibits a negative relationship with ROA and ROE, with coefficients of -3.188 ($p < 0.001$) and -5.248 ($p < 0.001$), respectively, indicating that larger firms tend to experience reduced asset efficiency and lower returns on equity. This may be due to increased administrative complexity, coordination challenges, or declining marginal returns as firms grow. Consistent with this result, Rahmah et al. (2024) reported an adverse impact of firm size on firm performance. However, in contrast, Abdioğlu & Aytakin (2024) and Digar (2023) found a positive association, suggesting that in some contexts, larger firms may still benefit from market power and accessibility to capital.

As for profitability, the results indicate a positive relationship on ROA and ROE, with coefficients of 0.063 ($p < 0.001$) for ROA and 0.102 ($p < 0.001$) for ROE. The findings are consistent with financial theory, which asserts that higher profits reflect efficient cost control and robust revenue generation, ultimately improving returns. Conversely, Rahmah et al. (2024) found that profitability had an adverse effect on firm performance, indicating that not all financial or non-financial indicators are guaranteed to enhance firm outcomes. Finally, the leverage, proxied by the debt ratio, demonstrates a negative and significant relationship with ROA (-0.024, $p < 0.001$) and ROE (-0.007, $p = 0.044$). These findings align with prior research, as higher leverage often leads to increased interest obligations and financial risk, which may hinder performance, especially under adverse conditions (Intezar et al., 2024; Abdioğlu & Aytakin, 2024; Digar, 2023).

Table 4: Regression Results

Variables	ROA	ROE
ESG	0.038*** (0.007)	0.100*** (0.015)
Firm Size	-3.188*** (0.238)	-5.248*** (0.480)
Profit	0.063*** (0.006)	0.102*** (0.012)
Leverage	-0.024*** (0.002)	-0.007** (0.004)
Constant	35.311*** (2.244)	53.376*** (4.531)
N	2507	2507
R ²	0.209	0.088

***, **, and * indicate the significance level of the variable is 1%, 5%, and 10%.

Conclusion

This research investigated the influence of ESG on corporate financial performance across various Asian nations. The results imply that ESG does have a positive and significant impact on both ROA and ROE. Companies exhibiting superior ESG performance typically demonstrate enhanced asset utilisation and yield greater returns for shareholders. This indicates that ESG serves not only as a mechanism for sustainability but also enhances business success. The favourable impact on ROA suggests that ESG practices may enhance operational efficiency, while the positive correlation with ROE indicates advantages for shareholder value. Nonetheless, specific adverse associations were also identified. Large corporations sometimes exhibit inferior financial performance, potentially attributable to increased complexity and diminished efficiency. Increased debt is associated with diminished performance, particularly regarding asset use, which may be attributable to financial strain or risk.

This study is particularly relevant for Asian countries, where the implementation of ESG practices is still in its early phases. The findings suggest that ESG may serve as a fundamental element of corporate strategy in this area. The results highlight the imperative for governments to advocate for improved ESG standards and transparency in reporting. Robust ESG policies can facilitate corporate expansion and advance national sustainability objectives. This work enhances ESG literature within the Asian setting and establishes a foundation for future research incorporating additional variables, industries, or nations. Nonetheless, particular limits exist. The research depends on secondary data, which may inadequately represent the quality or depth of genuine ESG practices. It also concentrates on a restricted array of financial variables. Future studies may investigate more extended periods, including various control variables, or analyse the impact of ESG within specific sectors. The findings raise the financial significance of ESG performance and its influence on operational results and shareholder value. The results offer valuable insights for businesses, investors, governments, and researchers aiming to align financial goals with sustainable practices.

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