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Evaluating the impact of ESG performance on firm value: the moderating role of ownership type in Thailand

Nantana Ngamtampong and Anupong Sukprasert
Mahasarakham Business School, Mahasarakham University, Mahasarakham, Thailand

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Abstract

Purpose – The purpose of this study is to concentrate on the moderating effect that ownership types, such as institutional ownership and minority shareholders, have on the link between environmental, social and governance (ESG) performance and the value of a firm.

Design/methodology/approach – This study utilizes a dataset consisting of 422 firm-year observations from publicly traded Thai firms for the period from 2019 to 2023. This study employs pooled ordinary least squares (OLS) regression. Additional tests and a robustness check are performed to validate the findings.

Findings – The results indicate a strong positive impact of ESG performance on a firm's value, thus indicating that sustainable practices contribute to long-term economic success. The type of ownership is significant for minority shareholders having a positive moderating impact on the connection between ESG performance and firm value, whereas institutional ownership does not. The findings indicate that minority shareholders might enhance ESG benefits by aligning with their own interests.

Practical implications – The findings have practical implications for investors, managers and policymakers. The findings demonstrate that firms with a substantial proportion of minority shareholders have to ensure that ESG activities are transparent, effective and in accordance with shareholder expectations. This alignment can mitigate the adverse impact of minority ownership on firm value. Policymakers in Thailand and comparable emerging countries might utilize this study to promote ESG transparency and standards, therefore mitigating information asymmetry. Regulations facilitating minority shareholders' access to information may enhance the beneficial moderating impact of their participation on ESG performance.

Originality/value – This study first demonstrated the moderating role of minority shareholders on the ESG-firm value relationship. This expands knowledge by focusing on ownership forms and their impact on ESG and firm value in emerging economies.

Keywords Institutional ownership, Minority shareholders, Environmental, social and governance (ESG), Firm value, Investors, Ownership

Paper type Research paper

1. Introduction

In recent years the notion of sustainability has gained acceptance in businesses. Environmental, Social, and Governance (ESG) performance is becoming a key indicator of a firm's long-term survival and ethics. Despite the increased focus on ESG, the link between

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ESG performance and company value is still debated. Some academics contend that robust ESG practices increase the value of a firm by enhancing risk management, encouraging innovation, and constructing a solid reputation among stakeholders. Others argue that ESG measures can be prohibitively expensive, potentially undermining financial success. They contend that excessive investment in ESG initiatives can lead to overinvestment, ultimately reducing firm value instead of enhancing it.

Numerous researchers have investigated the influence of ESG on a firm's financial performance and valuation, yet its effect on corporate valuation remains contentious (Cornell and Damodaran, 2020). However, there is no conclusive research on whether sustainability initiatives improve firm valuation (Miralles-Quirós *et al*., 2019; Abdi *et al*., 2022). Several studies have revealed that firms with better ESG performance have higher valuations and financial performance (Al-Dhamari *et al*., 2022; Chung *et al*., 2023), whereas several investigations revealed negative or inconclusive correlations (Kim and Lyon, 2015). Rastogi *et al*. (2024) discovered a positive nonlinear association between ESG and firm value. They showed that lesser ESG involvement may reduce firm value, but once a threshold is met, ESG have a substantial positive influence on valuation. Thus, the inconclusive findings show the complexity of this issue, and developing market firms need long-term impact studies since ESG performance data is unavailable.

To assess the impact of ESG performance on firm value, it is crucial to acknowledge that the type of ownership may be utilized to clarify variations in ESG practices or to restore a damaged reputation (Brown and Deegan, 1998; Cho and Patten, 2007). Ownership type can have a substantial impact on the correlation between ESG performance and the value of a firm due to their substantial proportional ownership stakes. Institutional ownership and minority shareholders exhibit differing influences on ESG performance and firm value.

Institutional ownership specializes in overseeing operations and plays a significant role in corporate governance (Gillan and Starks, 2003; Chen *et al*., 2007; Gillan *et al*., 2010; Starks, 2009). This can enhance the value of a firm by improving governance and assuring effective allocation of resources. However, institutional ownership can also mitigate the value-enhancement of ESG performance by stimulating conflicts between investing shareholders and non-investing stakeholders (Rastogi *et al*., 2024; Buchanan *et al*., 2018). Moreover, their short-term focus may sometimes conflict with long-term ESG goals.

Conversely, minority shareholders play a crucial role in corporate governance by enhancing the oversight of management and controlling shareholders, thereby mitigating agency problems and potentially improving firm performance (Berkman *et al*., 2010). Minority shareholders often demand enhanced transparency and accountability regarding ESG initiatives. This mitigates information asymmetry and facilitates the alignment of corporate strategy with stakeholder interests (Feng *et al*., 2021). Nonetheless, the impact of minority shareholders on ESG performance remains ambiguous. Their perceived restricted power and insufficient access to critical information may hinder their ability to effectively influence ESG choices (La Porta *et al*., 2002; Bharath *et al*., 2013). Although several research studies on ownership structure have examined diverse ownership forms (Solomon, 2016), including foreign ownership (Fuadah *et al*., 2022), state ownership (Boubakri *et al*., 2019), and family ownership (Noor *et al*., 2020), all of which influence ESG and firm value in distinct ways, few studies have examined how institutional and minority shareholders moderate the ESG performance-firm value link. Thus, institutional ownership and minority shareholders add to the analysis.

This study analyzes the influence of ESG performance on firm value and explores whether ownership types modify this relationship. This study posits that the correlation between a firm's ESG performance and its value is influenced by its ownership type, specifically distinguishing between institutional and minority shareholders. The impact of ownership type on this situation remains unclear. Ownership type is anticipated to have a positive impact on information asymmetries and corporate oversight. If the type of ownership affects company decisions and results in "overinvestment" that diminishes firm value, then ownership type

could reduce firm value. Previous evidence indicates that ESG influences corporate value variably according to ownership type.

This study adds to the growing body of literature on longitudinal studies, indicating that ESG performance has a significant impact on the market value of firms. With an emphasis on the moderating function of ownership type—categorized into institutional ownership and minority shareholders—this research adds to the ongoing discourse by offering a thorough examination of how ESG performance affects firm value. The results of this study suggest that a firm's ESG performance has a beneficial effect on its value. Furthermore, ownership type, specifically minority shareholders, influences the relationship between a firm's ESG performance and its value.

Our empirical research utilizes data from 422 firm-year observations of publicly listed Thai firms, covering the years 2019–2023. This research uses the ESG scores from Thomson Reuters Eikon Refinitiv as an indicator of a firm's ESG performance. We categorized the ownership type into two classifications: institutional ownership and minority shareholders.

This research employs regression models to investigate the impact of ESG performance on firm value and the moderating effect of ownership type on such impact. In addition, this study further decomposed the ESG performance into three aspects, investigated its impact on firm value, and evaluated the moderating effect of ownership type. Additionally, a robustness check was performed to validate the findings. This research provides more insights into the correlation between ESG and a firm's value, as well as the impact of various ownership forms on this relationship, by analyzing aggregated ESG components and examining distinct groups of companies: those responsive to ESG and those unresponsive.

The remainder of the paper is structured as follows. In the next section, we review the literature relevant to our work and develop our predictions. Section 3 explains the research design, the sample, and the data. Section 4 presents the empirical results. Section 5 provides a conclusion and a discussion of the findings.

2. Literature reviews

2.1 Environmental, social, and governance (ESG) and firm value

Environmental, Social, and Governance (ESG) aspects are crucial to a firm's operations and long-term success. These aspects are essential for firms to achieve sustainable growth, manage risks effectively, and build a positive reputation among stakeholders. Integrating ESG into business strategies not only benefits the environment and society but also enhances the firm's overall performance and resilience. Businesses are under pressure to present clear metrics of externalities affecting stakeholders and local/global ecosystems. This has led them to incorporate ESG considerations into their strategies and decision-making as a commitment to sustainable business practices. The question of how ESG initiatives affect a firm's financial performance and overall value has been a topic of contentious debate.

Previous research shows mixed results regarding the association between ESG performance and financial performance or firm value. Several studies (Aydoğmuş *et al*., 2022; Velte, 2017; Yoon *et al*., 2018; Minutolo *et al*., 2019; Rahman *et al*., 2023) have shown a strong and positive connection between ESG performance and financial performance or firm value. Based on stakeholder theory, delivering value for all stakeholders—not just shareholders—is a prerequisite for the firm's success (Campbell, 2007; Driver and Thompson, 2002). ESG can reduce conflicts between managers and non-investing stakeholders (Freeman *et al*., 2010). ESG engagement promotes insider-outsider communication, reduces management conflicts of interest among various non-investing stakeholders, and increases firm value (Jo and Harjoto, 2011, 2012). ESG initiatives have the potential to enhance the value of sustainable businesses for their shareholders (Gillan *et al*., 2021). Enhancing ESG performance also increases the value of the business (Naeem *et al*., 2022; Abdi and Càmara-Turull, 2022). This implies that stakeholders' trust and accountability enhance a business's value (Nekhili, 2021). In addition, Rastogi *et al*. (2024) found a positive, non-linear relationship between ESG and corporate

valuation. Lower ESG involvement initially decreases its value, but once it exceeds a certain level, it increases firm value. Furthermore, a few multi-country studies also support a positive relationship between ESG scores and firm financial performance. Firms with high performance on environmental, governance, and social pillars tend to create more value in the market (Xie *et al*., 2019; Bhaskaran *et al*., 2020; Naeem *et al*., 2022). Corporate sustainability disclosure serves as a crucial step for enhancing firm value in both developed and emerging Asian countries (Laskar and Gopal Maji, 2018).

Some studies anticipate a negative or insignificant impact of ESG on business value. It has been argued that the relationship between ESG performance and firm value is negative (Kim and Lyon, 2015; Fisher-Vanden and Thorburn, 2011; Brammer *et al*., 2006). Based on agency theory, a firm's social obligation is to maximize its owners' profits (Friedman, 1970). The fundamental premise is that ESG initiatives do not generate earnings that outweigh their costs. Conflicts between managers and shareholders result in costly diversions of the firm's valuable resources through ESG investments. Managers have an incentive to increase CSR expenditure beyond the optimal level, which can destroy firm value (Barnea and Rubin, 2010; Crisóstomo *et al*., 2011). Based on the "overinvestment hypothesis" (Cespa and Cestone, 2007; Barnea and Rubin, 2010), some research shows that companies that say they are doing things to be more environmentally friendly may have unusually low returns. This is because investors punish these companies for making what they view as expensive and unnecessary investments. There is also some evidence that the link between ESG performance and financial performance or firm value is weak (Velte, 2017; Horvathova, 2010; Nelling and Webb, 2009). Lopez-de-Silanes *et al*. (2024) found that ESG scores have no impact on firm financial performance.

As mentioned above, the majority of empirical evidence indicates that ESG performance positively influences corporate value and financial performance. There is an increasing number of multi-country research studies corroborating this positive association. Therefore, this study predicts that a firm's ESG performance positively impacts its value.

H1. ESG performance positively influences firm value.

2.2 Ownership type: institutional ownership and minority shareholders

This study focuses on ownership types characterized by institutional ownership following Rastogi *et al.* (2024), and minority shareholders following Feng *et al.* (2021).

2.2.1 Institutional ownership, ESG performance, and firm value. The results about the influence of institutional ownership on ESG and corporate value are unclear. Two scenarios demonstrate the impact of institutional ownership on the relationships between ESG performance and business value. Firstly, institutional ownership may positively impact the relationship between ESG and business value (Oh *et al*., 2011). Secondly, institutional ownership may improve ESG and corporate value by eliminating overinvestment and agency problems, which encourages effective resource allocation and monitoring management. Institutional ownership monitoring protects shareholders against ESG value-destroying behaviors (Gillan and Starks, 2003; Starks, 2009; Gillan *et al*., 2010). Institutional shareholders therefore actively monitor firms, boosting their worth.

On the other hand, institutional ownership may restrict the transparency of firm information, generating information asymmetry between firms and their non-investing stakeholders. Institutional ownership could threaten the increasing value of ESG by creating conflict amongst shareholders and non-investing stakeholders. Institutional ownership could limit corporate value due to its short-term focus. They may collaborate with management to serve their interests at the expense of minority shareholders; however, they may exhibit diminished motivation to enhance governance and profitability. If institutional ownership leverages its advantages without sharing the benefits with minority investors and other ESG stakeholders, it might diminish ESG performance and business value (Buchanan *et al*., 2018). Furthermore, higher participation among institutional investors diminishes management incentives and integrity (Burkart *et al*., 1997; Guiso *et al*., 2015). Inadequate management

integrity correlates with diminished productivity and reduced firm value (Tobin's Q). Borghesi *et al*. (2014) illustrate a negative link between institutional ownership and businesses' ESG scores, but Gillan *et al*. (2010) provide evidence that an improvement in firms' ESG ratings is associated with a decrease in institutional ownership. In particular, Rastogi *et al*. (2024) discovered that institutional investors reduce the impact of ESG on firm value. High institutional ownership diminishes this relationship, indicating that it may not enhance the advantageous effects of ESG on firm value.

As mentioned above, recent empirical research suggests that institutional ownership adversely affects the relationship between ESG and firm value. This study posits that institutional ownership negatively impacts the relationship between ESG and firm value.

H2a. Institutional ownership negatively influences firm value.

H2b. Institutional ownership negatively influences the relationship between ESG and firm value.

2.2.2 Minority Shareholders, ESG performance, and firm value. Minority shareholders can influence corporate decisions and generate improvements in society (Xu *et al.*, 2022). The effects of minority shareholder participation on corporate decisions are unclear. According to Berkman *et al*. (2010), minority shareholder participation lowers agency problems between controlling and minority shareholders, improving corporate governance and performance. Minority shareholders can vote against proposals which adversely affect the value of the firm (Chen *et al.*, 2013). Their participation in corporate governance reduces agency concerns by strengthening oversight of management and shareholder control. Engagement by minority shareholders lowers information asymmetry between controlling and minority shareholders (Feng *et al.*, 2021). Minority shareholders are able to help all investors obtain crucial details about the firm's operations and decision-making by demanding better disclosure. However, it is unclear if minority shareholders influence ESG decisions in order to protect their interests. Minority shareholders are generally perceived as weak and powerless (La Porta *et al*., 2002) because of their small interest in firms and constraints to obtaining corporate information (Bharath *et al*., 2013; Chen *et al*., 2013). Minority shareholders may make improper choices that lower firm value due to limited information availability (Bainbridge, 2005).

As mentioned above, this study investigates how minority shareholders affect ESG performance and corporate value. This study posits that minority shareholders positively impact the relationship between ESG and firm value.

H3a. Minority shareholders positively influence firm value.

H3b. Minority shareholders positively influence the relationship between ESG and firm value.

3. Data and methodology

3.1 Sample and data

In emerging economies, ESG practices may improve the image of firms. Firms that demonstrate transparency, ethical behavior, and environmental stewardship enhance consumer trust and loyalty, therefore gaining a competitive advantage. The Stock Exchange of Thailand (SET) said that the SET ESG Ratings 2024 has achieved a new record stage, with 228 listed firms gaining positions on the list. This reflects the increasing trend of sustainable investments both nationally and worldwide.

The research sample consisted of 114 firms listed on the SETTHSI index as of December 31, 2023, selected for their reputation as sustainable businesses that typically disclose ESG information publicly. Sixteen firms from the financial industry were excluded due to their unique characteristics, as recommended by previous research (Cabeza-García *et al*., 2017).

Data was collected from 2019 to 2023, and firms with missing data were omitted. The final sample consisted of 422 firm-year observations for 98 Thai listed firms. Details of the sample are presented in Table 1. In addition, the sample firms were from within seven industries based on the Stock Exchange of Thailand classification, consisting of agriculture and foods, consumption, industrial, technology, resource, services, and property and construction.

3.2 Variables and empirical models

3.2.1 Variable. The dependent variable is Tobin's Q, which serves as a measure of market value for the business, following Fatemi *et al.* (2018) and Feng *et al.* (2021). The ESG Scores, which serve as a measure of firms' ESG performance, are the independent variable. Thomson Reuters ESG Scores, utilizing a defined ESG rating scale ranging from 0 to 100%, measured the ESG score data. Although alternative ESG ratings are available in Thai, academic research widely uses the Thomson Reuters ESG Scores for its comprehensive and standardized evaluation of a firm's ESG practices (Velte, 2017). The moderator variable of interest comprises two variables: institutional ownership and minority shareholders. According to the research of Karazsia and Berlin (2018), time is a crucial factor in determining whether a variable functions as a mediator or moderator. The type of ownership could influence the relationship between ESG performance and firm value. Furthermore, prior research has shown that ownership types predate ESG performance (Wang *et al*., 2023; Doshi *et al*., 2024); as a result, it supports acting as a moderator rather than a mediator in the context of time. Changes in ESG performance impact ownership type since it acts as a mediator. Nonetheless, there is a lack of empirical evidence indicating that ESG performance precedes ownership type. Consequently, ownership type cannot serve as a mediating variable. This study aims to investigate the moderating effects of ownership type on the relation between ESG performance and firm value.

Institutional ownership quantifies the level of authority and dominance that significant expert investors have over a firm. Following Hong and Linh (2023), institutional ownership represents the ratio of the number of shares held by institutions to the number of outstanding shares held by the firm. Institutional investor is defined according to the announcement of the Securities and Exchange Commission. This study collects data on the proportion of shares owned by institutional investors among the top 10 largest shareholders reported for the period. Minority shareholders are individual investors who possess a comparatively lower stake in the firm's shares and generally possess less power in determining business decisions. This study evaluates minority shareholders according to the percentage of shares they held in firms that followed Solomon (2016). Minority shareholders data was collected from % Shares in Minor Shareholders (% free float) reported in the period from SET SMART, which is a database website providing real-time and historical data of publicly traded Thai firms.

To complete the regression models, this study incorporates several documented factors that impact firm value (Cho and Patten *et al*., 2007; Feng *et al*., 2021). Following Garcia-Sanchez *et al*. (2019) Feng *et al*. (2021), we control for factors that are documented to have an impact on

Table 1. Details of sample and data

Firm-year observations during 2019–2023		
Total listed companies listed in SETTHSI index at 31 December 2023	114	*firms*
Less financial firms	*(16)*	*firms*
Total sample	*98*	*firms*
Period 2019–2023 (years)	5	
Total observations	490	*firm-year*
Less missing data	*(66)*	*firm-year*
Total observations	*422*	*firm-year*

Source(s): Created by authors

firms' CSR performance, including total assets (ASS_{it}), the return on assets (ROA_{it}), the debt to equity ratio (DE_{it}), board size ($Board_{it}$), cash flow to operating revenue (CFR_{it}), capital expenditure ($CapEx_{it}$) and board diversity (Gen_{it}). We also included firm-specific characteristics, such as Thailand Sustainability Investment Index ($THSI_{it}$) and top 100 highest market value index in the Security Exchange of Thailand ($SET100_{it}$). All models include industry-specific and year-specific fixed effects for endogeneity concerns. Table 2 provides more details on the description of the variables.

3.2.2 Empirical models. Empirical models are defined or described in the following manner. This study used Model 1 to investigate Hypothesis 1, which pertains to the correlation between ESG performance and a firm's value. Model 2a investigates the impact of institutional ownership on company value, whereas Model 2b explores the interaction of ESG and institutional ownership influence on firm value. Model 3a investigates the impact of minority shareholders on firm value, whereas Model 3b explores the interaction between ESG and minority shareholder influence on firm value. The regression model for this research is represented as follows:

Model 1.

$$TBQ = \beta_0 + \beta_1 ESG_{it} + \beta_2 ASS_{it} + \beta_3 ROA_{it} + \beta_4 DE_{it} + \beta_5 CFR_{it} + \beta_6 CapEx_{it} + \beta_7 Board_{it} + \beta_8 Gender_{it} + \beta_9 THSI_{it} + \beta_{10} SET100_{it} + Indus_{it} + T_{it} + \varepsilon_{it}$$

Model 2a.

$$TBQ = \beta_0 + \beta_1 ESG_{it} + \beta_2 IOwn_{it} + \beta_3 ASS_{it} + \beta_4 ROA_{it} + \beta_5 DE_{it} + \beta_6 CFR_{it} + \beta_7 CapEx_{it} + \beta_8 Board_{it} + \beta_9 Gender_{it} + \beta_{10} THSI_{it} + \beta_{11} SET100_{it} + Indus_{it} + T_{it} + \varepsilon_{it}$$

Table 2. Variable definitions

Variables	Description
Dependent variable	
ESG_{it} (percentage)	ESG score, which ranges between 0–100 score
Independent variable	
TBQ_{it} (percentage)	Tobin's Q, which is the measurement of firm value (market capitalization/total assets)
Moderator variable	
$IOwn_{it}$ (percentage)	Institutional ownership (percentage of shares held by Institutional investor)
$Minor_{it}$ (percentage)	Minority shareholders (percentage of shares held by Minority shareholders)
Control variable	
ASS_{it} (million baht)	Total assets
ROA_{it} (percentage)	Return on assets
CFR_{it} (percentage)	Cash flow to operating revenue (net cash flow/operating revenue)
DE_{it} (percentage)	Debts to equity ratio (total liabilities/total shareholder equity)
$CapEx_{it}$ (time)	Capital expenditure (investment in fixed assets/total assets)
$Board_{it}$ (People)	Board size (total number of the board of directors)
Gen_{it} (percentage)	Board diversity (percentage of females on the board)
$THSI_{it}$	Thailand Sustainability Investment Index (dichotomous variable; THIS = 1 if firm listed in Thailand Sustainability Investment, THIS = 0 otherwise)
$SET100_{it}$	Top 100 highest market value index in the Security Exchange of Thailand (dichotomous variable; SET100 = 1 if firm listed in SET100 index, SET100 = 0 otherwise)

Source(s): Created by authors

Model 2b.

$$TBQ = \beta_0 + \beta_1 ESG_{it} + \beta_2 IOwn_{it} + \beta_3 ESG_{it} * IOwn_{it} + \beta_4 ASS_{it} + \beta_5 ROA_{it} + \beta_6 DE_{it} + \beta_7 CFR_{it} + \beta_8 CapEx_{it} + \beta_9 Board_{it} + \beta_{10} Gender_{it} + \beta_{11} THSI_{it} + \beta_{12} SET100_{it} + Indus_{it} + T_{it} + \varepsilon_{it}$$

Model 3a.

$$TBQ = \beta_0 + \beta_1 ESG_{it} + \beta_2 Minor_{it} + \beta_3 ASS_{it} + \beta_4 ROA_{it} + \beta_5 DE_{it} + \beta_6 CFR_{it} + \beta_7 CapEx_{it} + \beta_8 Board_{it} + \beta_9 Gender_{it} + \beta_{10} THSI_{it} + \beta_{11} SET100_{it} + Indus_{it} + T_{it} + \varepsilon_{it}$$

Model 3b.

$$TBQ = \beta_0 + \beta_1 ESG_{it} + \beta_2 Minor_{it} + \beta_3 ESG_{it} * Minor_{it} + \beta_4 ASS_{it} + \beta_5 ROA_{it} + \beta_6 DE_{it} + \beta_7 CFR_{it} + \beta_8 CapEx_{it} + \beta_9 Board_{it} + \beta_{10} Gender_{it} + \beta_{11} THSI_{it} + \beta_{12} SET100_{it} + Indus_{it} + T_{it} + \varepsilon_{it}$$

3.3 Summary of descriptive statistics

Table 3 provides a summary of the descriptive statistics for the data used in this research. For the main variables of this study, the average of ESG_{it} is 56.23% and its standard deviation is 16.45%. The average of TBQ_{it} is 153.00% and its standard deviation is 144.68%. The average of $IOwn_{it}$ is 19.14% and its standard deviation is 16.83%. $IOwn_{it}$ had a wide range, with a minimum of 3.12% and a maximum of 62.28%. The average of $Minor_{it}$ is 43.91% and its standard deviation is 15.16%. This variable also had a wide range, with a minimum of 23.72% and a maximum of 71.25%. For financial aspects, Table 3 showed that the Ass_{it}, ROA_{it}, DE_{it} and CFR_{it} was 152,627.92 million baht, 6.12%, 22.03% and 91.95% respectively. The wide distribution range of these variables across firms indicated that the sample firms had different sizes and total assets. However, $CapEx_{it}$ distribution has less variation across firms; it has an average value of 4.74%, and the distribution was 3.86%. In addition, the average number of board members ($Board_{it}$) was approximately 11 people, ranging from a minimum of 8 to a maximum of 16. The proportion of female members on the board (Gen_{it}) was 18.06%. The sample had 125 firms listed on THSI index (29.62%) and 169 listed on SET100 index (40.05%).

3.4 Data analysis and regression and diagnostics

To achieve the research objectives, this study utilized OLS regression analysis. Due to normality distribution, the data was transformed using natural logarithm and was applied to eliminate outliers at the top and bottom 5 percentiles of the distribution, which a method previously used by Buchanan *et al.* (2018).

3.4.1 Multicollinearity testing. This study assessed the Pearson correlation matrix and variance inflation factor (VIF) to examine multicollinearity, as presented in Table 4. Correlation coefficients indicate the absence of significant pairwise correlations. The highest correlation coefficient between board and total assets was 0.578, suggesting the absence of multicollinearity (Gujarati and Porter, 2009). The variance inflation factor (VIF) was below 10, indicating the absence of multicollinearity (Gujarati and Porter, 2009).

Table 3. Descriptive statistics of the variables

Panel A: Financial aspects	*N*	Mean	Std. dev	Max	Min
ESG_{it} (percentage)	422	56.28	16.45	82.81	25.63
TBQ_{it} (percentage)	422	153.00	144.68	533.20	24.41
$IOwn_{it}$ (percentage)	422	19.14	16.83	62.28	3.12
$Minor_{it}$ (percentage)	422	43.91	15.16	71.25	23.72
ASS_{it} (million baht)	422	152627.92	340899.76	3415632.29	2457.28
ROA_{it} (percentage)	422	6.12	4.59	15.68	−1.39
CFR_{it} (percentage)	422	91.95	69.71	239.92	1.55
DE_{it} (percentage)	422	22.03	17.34	63.50	2.15
$CapEx_{it}$ (time)	422	4.74	3.86	14.18	0.20
$Board_{it}$ (People)	422	11.75	2.53	16.00	8.00
Gen_{it} (percentage)	422	18.06	11.22	44.44	0.00

Panel B: others aspects	Yes	No	Total
$THSI_{it}$			
Firms listed on the THSI index	125	297	422
Percentage	29.62	70.38	100
$SET100_{it}$			
Firms listed on the SET100 index	169	253	422
Percentage	40.05	59.95	100
Sensitivity			
Firm within sensitivity industry	150	272	422
Percentage	35.55	64.45	100

Source(s): Created by authors

3.4.2 Homoscedasticity. This study examined homoscedasticity in all models using the Breusch-Pagan test. All models rejected the null hypothesis, suggesting that the variance of residuals was not constant. As shown in Table 5, a heteroscedasticity issue was present. Furthermore, it is crucial to take into account the autocorrelation issue. Thus, this study applied robust standard errors to all models in order to mitigate heteroscedasticity and autocorrelation issues (Wooldridge, 2013).

3.4.3 Model specification. Unobservable individual effects across entities, or effects that fluctuate over time while remaining constant across entities, can bias the regression results obtained from panel data. This study employed the Hausman test and the Breusch-Pagan Lagrange multiplier test to assess fixed effects, random effects, or pooled OLS methods shown in Table 6. Hausman test results indicated that the random effects model was more suitable than the fixed effects model across all models except model 2b. The Breusch-Pagan Lagrange multiplier, which tests between random effects and pooled OLS, indicated that the pooled OLS model was superior to random effects in all models analyzed. Thus, this study examined all models using pooled OLS, which offers significant advantages for identifying changes in the relationship over time. This study also incorporates industry- and year-fixed effects in all regression models to address potential endogeneity bias arising from the omission of certain variables in the OLS estimates.

4. Empirical results

4.1 The relationship between ESG performance, firm value, and ownership type

Table 7 presents the estimated results for pooled OLS models 1, 2a, 2b, 3a, and 3b where Tobin's Q (TBQ) is the dependent variable. The results of model 1 show that ESG is positively

Table 4. Pearson correlation matrix and iance inflation factors (VIFs)

Variables	(1)	(2)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	VIF
(1) TBQ	1.000												1.58
(2) ESG	−0.136*	1.000											1.58
(3) IOwn	0.032	−0.052											1.09
(4) Minor	−0.138*	0.238*	1.000										1.18
(5) LogASS	−0.380*	0.483*	0.094	1.000									2.60
(6) ROA	0.483*	−0.267*	−0.083	−0.353*	1.000								1.52
(7) DE	−0.309*	0.157*	0.105	0.390*	−0.490*	1.000							1.48
(8) CFR	0.072	−0.066	−0.099	−0.011	0.232*	−0.079	1.000						1.09
(9) CapEx	0.195*	0.009	−0.050	−0.101	0.104	−0.067	0.045	1.000					1.09
(10) Board	−0.116	0.197*	0.106	0.578*	−0.156*	0.248*	−0.017	−0.081	1.000				1.59
(11) Gen	0.209*	−0.231*	−0.255*	−0.326*	0.179*	−0.059	0.007	0.145*	−0.118	1.000			1.26
(12) THSI	−0.198*	0.376*	0.192*	0.311*	−0.152*	0.145*	0.004	−0.174*	0.098	−0.126*	1.000		1.29
(13) SET100	0.217*	0.096	−0.049	0.232*	−0.026	0.127*	−0.026	0.142*	0.099	0.045	−0.063	1.000	1.14

Note(s): ***$p < 0.01$, **$p < 0.05$, *$p < 0$

Source(s): Created by authors

Table 5. Breusch Pagan test for homosc ty test

Breusch Pagan test	el 1	Model 2a	Model 2b	Model 3a	Model 3b
Ho: variance of residual is constant	$> \chi^2 = 0.0000$	Prob $> \chi^2 = 0.0000$	Prob $> \chi^2 = 0.0000$	Prob $> \chi^2 = 0.0000$	Prob $> \chi^2 = 0.0000$

Source(s): Created by authors

Table 6. Model specification test for fix :ts, random effects and pooled OLS

	Mode		Model 2a	Model 2b	Model 3a	Model 3b
Haussmann test (Fixed effects versus rar		*ects)*				
Ho: difference in coefficient do not systematics random effects	Prob	0.8518	Prob > χ^2 = 0.9143	Prob > χ^2 = 0.0000	Prob > χ^2 = 0.7769	Prob > χ^2 = 0.0511
Breusch-Pagan LM test (Random effect v		*ooled OLS)*				
Ho: VAR (u) = 0	Prob	r2 = 0.0000	Prob > chibar2 = 0.0000	Prob > chibar2 = 0.0000	Prob > chibar2 = 0.0000	Prob > chibar2 = 0.0000

Source(s): Created by authors

Table 7. Empirical results of Model 1, 2a, 2b, 3a and 3b

Variables	Model 1 TBQ	Model 2a TBQ	Model 2b TBQ	Model 3a TBQ	Model 3b TBQ
Constant	801.307*** [4.31]	822.233*** [4.49]	833.619*** [4.44]	927.147*** [5.04]	996.634*** [5.15]
ESG	1.226** [2.50]	1.357*** [2.80]	1.262** [2.18]	1.502*** [3.14]	−0.570 [-0.49]
IOwn		0.609 [1.58]	0.357 [0.33]		
ESG*IOwn			0.005 [0.26]		
Minor				−1.637*** [-4.03]	−4.205*** [-3.21]
ESG*Minor					0.044* [1.93]
ASS	−37.693*** [−4.20]	−39.190*** [−4.42]	−39.429*** [−4.41]	−41.288*** [−4.53]	−39.227*** [−4.56]
ROA	11.516*** [6.97]	11.591*** [7.15]	11.578*** [7.13]	11.625*** [7.16]	11.411*** [7.04]
DE	−0.141 [−1.23]	−0.132 [−1.18]	−0.132 [−1.18]	−0.103 [−0.92]	−0.143 [−1.34]
CFR	0.119 [0.37]	0.153 [0.48]	0.152 [0.48]	0.113 [0.37]	0.154 [0.50]
CapEx	1.806 [1.24]	1.844 [1.28]	1.859 [1.29]	1.999 [1.38]	1.996 [1.38]
Board	8.355*** [2.84]	7.906*** [2.72]	7.882*** [2.73]	10.034*** [3.38]	9.874*** [3.37]
Gen	0.763 [1.16]	0.733 [1.13]	0.733 [1.13]	0.283 [0.46]	0.196 [0.32]
THSI	−1.153 [−0.08]	−4.735 [−0.32]	−4.308 [−0.29]	10.933 [0.74]	11.400 [0.76]
SET100	76.769*** [6.07]	75.912*** [6.05]	76.030*** [6.08]	77.032*** [6.11]	77.824*** [6.24]
Industry-fixed effect	Yes	Yes	Yes	Yes	Yes
Year-fixed effect	Yes	Yes	Yes	Yes	Yes
Observations	422	422	422	422	422
R-squared	0.49	0.50	0.50	0.51	0.52
Adj. *R*-squared	0.47	0.47	0.47	0.49	0.49
F	22.83***	21.29***	20.40***	21.58***	21.04***

Note(s): Robust *t*-statistics in brackets ***$p < 0.01$, **$p < 0.05$, *$p < 0.10$
Source(s): Created by authors

associated with TBQ at a 5% significance level, suggesting that ESG performance improves firm value. This result is consistent with prior research (Li *et al.*, 2018; Nekhili *et al.*, 2021; Abdi and Càmara-Turull, 2022). This indicates that when a firm actively participates in ESG initiatives, it is rewarded with a notable increase in financial efficiency. It implies that increasing ESG performance seems to affect firms' valuations, indicating that stakeholder trust and accountability have a positive impact on firm value. In addition, Rastogi *et al*. (2024) found a positive relationship between ESG practices and firm valuation. Lower levels of ESG engagement may initially negatively impact firm value, but once they reach a certain threshold, the positive effects of ESG on valuation become significant. This suggests that firms need to invest adequately in ESG practices to realize their benefits on firm value.

As for the effect of ownership type, the research in models 2a and 2b shows that institutional ownership does not have a big effect on firm value. Furthermore, when viewed together, the effect of institutional ownership and ESG on firm value is not that important. This

result aligns with the traditional perspective, that suggests the distribution of share ownership does not impact a firm's value (Meckling and Jensen, 1976).

When examining the impact of minority shareholders on model 3a, the findings indicate a statistically significant negative correlation between minority shareholders and firm value at a significance level of 1%. This implies that the presence of minority owners generally reduces the value of a firm. The results in Model 3b were interesting because they showed that the interaction between ESG and minority shareholders had a statistically significant negative effect on firm value. This suggests that the ownership type—minority shareholders—has a moderating effect on the firm's value. Nonetheless, the primary impact of ESG on firm value was not significant, as minority shareholders moderate the association between ESG performance and firm value. The result suggests that the direct relative significance of ESG on firm value is ambiguous, and its impact is contingent upon the proportion of minority shareholders. This is more interesting when we acknowledge that an increase in minority shareholders generally leads to a reduction in the value of a firm.

However, the positive significance of the interaction suggests that an increase in the number of minority shareholders, who are more concerned with ESG initiatives for sustainability, can lead to an increase in the firm's value. This implies that although the presence of minority owners generally reduces a company's value, when the firm's ESG performance reaches a level that satisfies the interests of minority shareholders, its value will increase. These results are consistent with those of Rastogi *et al.* (2024). While ESG has no meaningful linear influence on value, it does have a nonlinear beneficial influence on business valuations. This conclusion suggests that a casual or low degree of ESG diminishes value rather than boosting it. However, as the ESG reaches a certain threshold, it fully supports the valuation. In addition, the results are consistent with a non-linear relationship between institutional ownership and firm value found by Navissi and Naiker (2006). Firm value has a positive correlation with active institutional investors' shareholding. However, beyond this threshold, the relationship becomes negative, suggesting that excessive ownership can lead to suboptimal decisions by management due to the increased bargaining power of these investors. In other words, institutional investors can enhance firm value through effective monitoring, but their influence can diminish or become negative at higher ownership levels, particularly when they have board representation.

4.2 Robustness check: change indicators

Regarding the potential impact of minority shareholders in the baseline regression models 3a and 3b, this study modified the minority shareholders measurement method to validate the results, thereby enhancing the robustness of the findings. This study has redefined minority shareholders into two variables: high minority and low minority. This study included a dummy variable to quantify the high minority shareholders variable (HighMinor) at the 75th percentile (Heydari and Mountrakis, 2018). The dummy variable is assigned a value of 1 if the firm possesses the highest 75th percentile of minority owners;, otherwise it is assigned a value of 0. We assessed the low-minority shareholder variable (LowMinor) at the 25th percentile utilizing a dummy variable (Freedman *et al*., 2009). We assign a value of 1 if the firm possesses minority owners in the lowest 25th percentile and a value of 0 otherwise. Table 8 presents the regression results of high and low minority shareholder (HighMinor and LowMinor) variables substituted for minority shareholders variables.

The results showed that high minority shareholders have a significantly negative influence on the firm value at a 1% significant level. Again, high minority shareholders interact with ESG, which positively influences firm value at a 1% significant level. In contrast, low minority shareholders have no significant influence on firm value, and their interaction with ESG has no significant influence on firm value. Figure 1 provides more information on the marginal effect to describe the interaction between ESG and high minority shareholders on firm value. This result confirms that a high level of minority shareholder ownership influences firm value, and it also moderates the effect of ESG performance on firm value.

Table 8. Empirical results of robustness check: high and low minority shareholder variables

Variables	(HighMinor) TBQ	(LowMinor) TBQ
Constant	824.892***	808.009***
	[4.64]	[4.30]
ESG	0.785	1.181**
	[1.51]	[2.37]
HighMinor	−133.991***	
	[−3.50]	
ESG* HighMinor	1.765***	
	[2.72]	
LowMinor		6.077
		[0.13]
ESG* LowMinor		0.515
		[0.60]
ASS	−37.155***	−38.617***
	[−4.38]	[−4.28]
ROA	11.178***	11.783***
	[6.81]	[7.09]
DE	−0.186*	−0.106
	[−1.67]	[−0.91]
CFR	0.088	0.136
	[0.28]	[0.43]
CapEx	1.799	2.292
	[1.24]	[1.57]
Board	8.739***	9.075***
	[2.99]	[3.12]
Gen	0.334	0.560
	[0.51]	[0.85]
THSI	−0.148	7.385
	[−0.01]	[0.49]
SET100	74.901***	74.871***
	[5.98]	[5.91]
Industry-fixed effect	Yes	Yes
Year-fixed effect	Yes	Yes
Observations	422	422
R-squared	0.50	0.50
Adj. *R*-squared	0.48	0.47
F	21.40***	21.38***

Note(s): Robust *t*-statistics in brackets ***$p < 0.01$, **$p < 0.05$, *$p < 0.10$
Source(s): Created by authors

4.3 Additional test

4.3.1 Substitution of ESG performance by E, S and G aspects separately. This study conducted additional tests to investigate the differential influence of ESG aspects on firm value separately, and also investigated the moderating effect of minority shareholders on these associations. We reexamined models 3a and 3b by substituting the E, S, and G variables for the ESG variable individually. Table 9 presents the regression results of the additional test based on individual ESG aspects. The results showed that only the environmental (E) aspect had a significant positive influence on firm value at the 5% significance level, and minority shareholders moderate the effect of environmental (E) on firm value. Social and Governance aspects have no statistically significant impact on firm value. This result is consistent with the previous study indicating a significant positive impact of the overall ESG score; however, the individual ESG aspects show mixed results (Ahmad *et al*., 2021). Therefore, the results indicate the variation on the influence of individual ESG aspects on firm value.

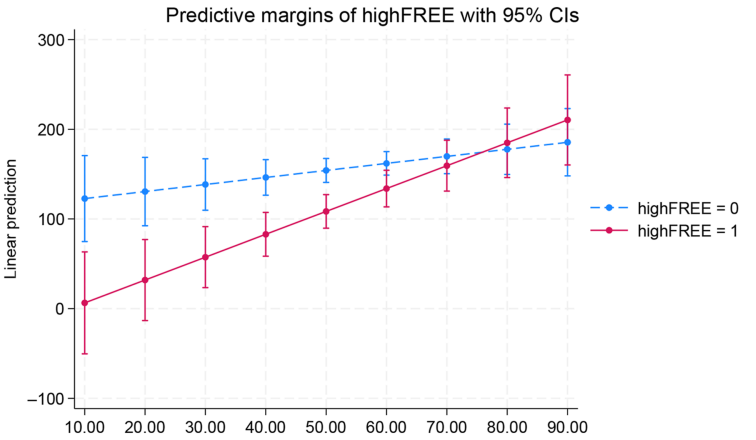

Figure 1. Demonstrates the marginal effect of ESG and high minority shareholders on firm value. Source: Created by authors

5. Conclusion and discussion

The findings indicate that ESG performance is positively and significantly associated with firm value, consistent with previous studies (Abdi and Càmara-Turull, 2022; Nekhili *et al*., 2021; Li *et al*., 2018; Fatemi *et al*., 2018; Aydoğmuş *et al*., 2022; Velte, 2017; Yoon *et al*., 2018; Minutolo *et al*., 2019; Rahman *et al*., 2023). Only environmental aspects substantially enhance corporate value. Although minority shareholders moderate this association, other factors exert no significant impact on them. Stakeholder theory provides an explanation of the financial benefits of engaging in ESG practices (Driver and Thompson, 2002). ESG initiatives can create value in two primary ways: first, by boosting the firm's cash flow and enhancing shareholder value; and second, by improving corporate governance and maximizing the shareholder utility derived from owning shares in a sustainable firm (Gillan *et al*., 2021).

This research provides further evidence of the individual effect of ownership type on firm value, those being institutional ownership and minority shareholders. The empirical investigation reveals that institutional ownership has no significant individual impact on firm value. It also does not influence the relationship between ESG performance and firm valuation. This result contradicts the findings of Rastogi *et al*. (2024), which indicated that significant stakes held by institutional investors adversely reduce the influence of ESG on firm value. This suggests that institutional investors may not endorse ESG measures as substantially as promoters, thus adversely impacting the firm's valuation when their ownership concentration is elevated. This conclusion is consistent with prior evidence indicating that institutional investors do not substantially affect ESG scores or performance (Martínez-Ferrero and Lozano, 2021; Gillan *et al*., 2010). This indicates that institutional investors do not have a significant role in the investment or ownership of shares in firms that are active in the ESG domain. It implies that institutional investors are indifferent to ESG scores or performance, indicating a lack of significant engagement with ESG factors in their investment decisions (Lavin and Montecinos-Pearce, 2021).

Moreover, the empirical findings indicate an inverse correlation between minority shareholders and corporate value. Minority shareholders attenuate the impact of a firm's ESG value. This indicates that minority owners might adversely affect business value mainly through agency problems and conflicts of interest that emerge within firms with controlling shareholders (Solomon, 2016). Minority shareholders frequently choose to convey dissatisfaction by selling their shares (exit) instead of exercising their voting rights (voice).

Table 9. Empirical results of the additional test based on individual ESG aspects

Variables	Model 3a TBQ	Model 3b TBQ
Constant	973.690*** [5.04]	997.429*** [5.21]
E	3.097** [2.29]	−0.710 [−0.23]
S	0.900 [0.93]	
G	0.300 [0.26]	
Minor	−1.613*** [−3.92]	−3.154*** [−3.04]
E*Minor		0.092* [1.65]
ASS	−42.784*** [−4.60]	−39.820*** [−4.49]
ROA	11.358*** [7.00]	11.181*** [6.93]
DE	−0.103 [−0.92]	−0.144 [−1.31]
CFR	0.305 [0.95]	0.319 [1.02]
CapEx	1.953 [1.32]	1.961 [1.35]
Board	9.485*** [3.15]	9.047*** [3.18]
Gen	0.409 [0.69]	0.305 [0.52]
THSI	11.108 [0.74]	13.956 [0.93]
SET100	76.724*** [6.05]	76.487*** [6.23]
Industry-fixed effect	Yes	Yes
Year-fixed effect	Yes	Yes
Observations	422	422
R-squared	0.52	0.52
Adj. *R*-squared	0.49	0.50
F	19.97***	21.15***

Note(s): Robust *t*-statistics in brackets ***$p < 0.01$, **$p < 0.05$, *$p < 0.10$
Source(s): Created by authors

This behavior may result in less responsibility for management and controlling shareholders, since they may not perceive a necessity to regard the interests of minority shareholders. As a result, inadequate management decisions may remain unaddressed, adversely affecting the firm's value. Controlling shareholders can intensify agency costs when their interests conflict with those of minority shareholders. This mismatch may result in choices that favor the controlling shareholder's interests at the expense of the business's long-term viability, thereby diminishing firm value (Enriques and Volpin, 2007). The findings imply that the type of shareholding control influences the nature and magnitude of agency conflicts and the relationship between ownership concentration and firm value. Consequently, within an institutional framework, agency conflicts may vary among enterprises based on the kind of shareholder control.

This study also found a moderating effect of minority shareholders on the relationship between ESG performance and firm value after reevaluation with both high- and low-minority

shareholders. This study provides more evidence linking ESG performance to firm value. The supplemental exam provides further evidence: Initial analysis shows that only the environmental ESG factor positively impacts the firm's valuation. This implies the significance of the environmental aspect. Consistently, when reexamining this analysis with high- and low-minority shareholders, the result indicated a strong moderating influence of minority shareholders on ESG performance and firm value. This study adds empirical evidence on ESG performance and corporate value. Additional tests give more evidence that when examining each ESG feature individually, only the environmental factor positively affects the firm's worth, highlighting its relevance.

This study contributes to the literature in numerous ways. First, this study adds evidence on the positive impact of ESG performance on firm value, which ensures novelty and significantly contributes to the existing body of knowledge on the topic. Second, this study's results support recent evidence of the negative impact of minority investors on a firm's ESG and valuation. Third, this study also presents minority shareholders as a moderating factor for the ESG's impact on firm valuation, which was not considered in earlier studies. In addition, this study reveals the moderating influence of minority shareholders on the relationship between a firm's ESG performance and its value, which is a noteworthy contribution to the existing literature. Fifth, this study presents additional findings from the sample, categorizing industries into sensitivity and non-sensitivity groups.

The findings in this study have the following significant consequences. (1) Investors should be aware of the link between ESG and the firm valuation when considering the firm's ESG initiatives. ESG initiatives may initially lower the firm's value, but it might increase its value after certain circumstances. (2) Minority shareholders who favor long-term investments will benefit from participating in ESG-friendly firms. ESG initiatives would increase value for businesses with substantial minority shareholder ownership However, minority shareholders may be viewed with skepticism because they can significantly impact the firm's ESG valuation. (3) Institutional investors and minority shareholders may utilize ESG data to evaluate the long-term viability and ethical integrity of firms, facilitating informed investment decisions. (4) Firms with a substantial proportion of minority shareholders have to ensure that ESG activities are transparent, effective, and in accordance with shareholder expectations. This alignment can mitigate the adverse impact of minority ownership on firm value. (5) Management needs to be aware that they may not obtain advantages and a high value unless they make a long-term commitment to sustainability. (6) Policymakers in Thailand and comparable emerging countries might utilize this study to promote ESG transparency and standards, therefore mitigating information asymmetry. (7) Regulations facilitating minority shareholders' access to information may enhance the beneficial moderating impact of their participation on ESG performance.

This research conveys useful insights into whether ESG performance affects business value, but it has limitations: The research starts with Thomson Reuters ESG Scores. This source is reliable, however ESG information in emerging economies might vary dramatically, and inconsistent reporting standards and ESG score biases may alter results. Second, the study does not distinguish between local and international, passive and active institutional investors, or minority owners with varying involvement levels. These subcategories may enable deeper insights. Thus, future study might compare local and overseas institutional investors, or examine activist investors' effects on ESG strategies and corporate value.

References

Abdi, Y., Li, X. and Càmara-Turull, X. (2022), "Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: the moderating role of size and age", *Environment, Development and Sustainability*, Vol. 24 No. 4, pp. 5052-5079, doi: 10.1007/s10668-021-01649-w.

Ahmad, N., Mobarek, A. and Roni, N.N. (2021), "Revisiting the impact of ESG on financial performance of FTSE350 UK firms: static and dynamic panel data analysis", *Cogent Business and Management*, Vol. 8 No. 1, 1900500, doi: 10.1080/23311975.2021.1900500.

Al-Dhamari, R., Al-Gamrh, B., Al Farooque, O. and Moses, E. (2022), "Corporate social responsibility and firm market performance: the role of product market competition and firm life cycle", *Asian Review of Accounting*, Vol. 30 No. 5, pp. 713-745, doi: 10.1108/ara-07-2022-0179.

Aydoğmuş, M., Gülay, G. and Ergun, K. (2022), "Impact of ESG performance on firm value and profitability", *Borsa Istanbul Review*, Vol. 22, pp. S119-S127, doi: 10.1016/j.bir.2022.11.006.

Bainbridge, S.M. (2005), "The case for limited shareholder voting rights", *UClA l. reV.*, Vol. 53, p. 601.

Barnea, A. and Rubin, A. (2010), "Corporate social responsibility as a conflict between shareholders", *Journal of Business Ethics*, Vol. 97 No. 1, pp. 71-86, doi: 10.1007/s10551-010-0496-z.

Berkman, H., Cole, R.A. and Fu, L.J. (2010), "Political connections and minority-shareholder protection: evidence from securities-market regulation in China", *Journal of Financial and Quantitative Analysis*, Vol. 45 No. 6, pp. 1391-1417, doi: 10.1017/s0022109010000608.

Bharath, S.T., Jayaraman, S. and Nagar, V. (2013), "Exit as governance: an empirical analysis", *The Journal of Finance*, Vol. 68 No. 6, pp. 2515-2547, doi: 10.1111/jofi.12073.

Bhaskaran, R.K., Ting, I.W.K., Sukumaran, S.K. and Sumod, S.D. (2020), "Environmental, social and governance initiatives and wealth creation for firms: an empirical examination", *Managerial and Decision Economics*, Vol. 41 No. 5, pp. 710-729, doi: 10.1002/mde.3131.

Borghesi, R., Houston, J.F. and Naranjo, A. (2014), "Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests", *Journal of Corporate Finance*, Vol. 26, pp. 164-181, doi: 10.1016/j.jcorpfin.2014.03.008.

Boubakri, N. and Saffar, W. (2019), "State ownership and debt choice: evidence from privatization", *Journal of Financial and Quantitative Analysis*, Vol. 54 No. 3, pp. 1313-1346, doi: 10.1017/s0022109018000881.

Brammer, S., Brooks, C. and Pavelin, S. (2006), "Corporate social performance and stock returns: UK evidence from disaggregate measures", *Financial Management*, Vol. 35 No. 3, pp. 97-116, doi: 10.1111/j.1755-053x.2006.tb00149.x.

Brown, N. and Deegan, C. (1998), "The public disclosure of environmental performance information—a dual test of media agenda setting theory and legitimacy theory", *Accounting and Business Research*, Vol. 29 No. 1, pp. 21-41, doi: 10.1080/00014788.1998.9729564.

Buchanan, B., Cao, C.X. and Chen, C. (2018), "Corporate social responsibility, firm value, and influential institutional ownership", *Journal of Corporate Finance*, Vol. 52, pp. 73-95, doi: 10.1016/j.jcorpfin.2018.07.004.

Burkart, M., Gromb, D. and Panunzi, F. (1997), "Large shareholders, monitoring, and the value of the firm", *Quarterly Journal of Economics*, Vol. 112 No. 3, pp. 693-728, doi: 10.1162/003355397555325.

Cabeza-García, L., Sacristán-Navarro, M. and Gómez-Ansón, S. (2017), "Family involvement and corporate social responsibility disclosure", *Journal of Family Business Strategy*, Vol. 8 No. 2, pp. 109-122, doi: 10.1016/j.jfbs.2017.04.002.

Campbell, J.L. (2007), "Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility", *Academy of Management Review*, Vol. 32 No. 3, pp. 946-967, doi: 10.5465/amr.2007.25275684.

Cespa, G. and Cestone, G. (2007), "Corporate social responsibility and managerial entrenchment", *Journal of Economics and Management Strategy*, Vol. 16 No. 3, pp. 741-771, doi: 10.1111/j.1530-9134.2007.00156.x.

Chen, X., Harford, J. and Li, K. (2007), "Monitoring: which institutions matter?", *Journal of Financial Economics*, Vol. 86 No. 2, pp. 279-305, doi: 10.1016/j.jfineco.2006.09.005.

Chen, Z., Ke, B. and Yang, Z. (2013), "Minority shareholders' control rights and the quality of corporate decisions in weak investor protection countries: a natural experiment from China", *The Accounting Review*, Vol. 88 No. 4, pp. 1211-1238, doi: 10.2308/accr-50424.

Cho, C.H. and Patten, D.M. (2007), "The role of environmental disclosures as tools of legitimacy: a research note", *Accounting, Organizations and Society*, Vol. 32 Nos 7-8, pp. 639-647, doi: 10.1016/j.aos.2006.09.009.

Chung, R., Bayne, L. and Birt, J. (2023), "The impact of environmental, social and governance (ESG) disclosure on firm financial performance: evidence from Hong Kong", *Asian Review of Accounting*, Vol. 32 No. 1, pp. 136-165, doi: 10.1108/ara-07-2022-0165.

Cornell, B. and Damodaran, A. (2020), "Valuing ESG: doing good or sounding good?", *The Journal of Impact and ESG Investing*, Vol. 1 No. 1, pp. 76-93.

Crisóstomo, V.L., de Souza Freire, F. and De Vasconcellos, F.C. (2011), "Corporate social responsibility, firm value and financial performance in Brazil", *Social Responsibility Journal*, Vol. 7 No. 2, pp. 295-309, doi: 10.1108/17471111111141549.

Doshi, M., Jain, R., Sharma, D., Mukherjee, D. and Kumar, S. (2024), "Does ownership influence ESG disclosure scores?", *Research in International Business and Finance*, Vol. 67, 102122, doi: 10.1016/j.ribaf.2023.102122.

Driver, C. and Thompson, G. (2002), "Corporate governance and democracy: the stakeholder debate revisited", *Journal of Management and Governance*, Vol. 6 No. 2, pp. 111-130, doi: 10.1023/a:1015721819591.

Enriques, L. and Volpin, P. (2007), "Corporate governance reforms in continental Europe", *The Journal of Economic Perspectives*, Vol. 21 No. 1, pp. 117-140, doi: 10.1257/jep.21.1.117.

Fatemi, A., Glaum, M. and Kaiser, S. (2018), "ESG performance and firm value: the moderating role of disclosure", *Global Finance Journal*, Vol. 38, pp. 45-64, doi: 10.1016/j.gfj.2017.03.001.

Feng, Y., Pan, Y., Wang, L. and Sensoy, A. (2021), "The voice of minority shareholders: online voting and corporate social responsibility", *Research in International Business and Finance*, Vol. 57, 101408, doi: 10.1016/j.ribaf.2021.101408.

Fisher-Vanden, K. and Thorburn, K.S. (2011), "Voluntary corporate environmental initiatives and shareholder wealth", *Journal of Environmental Economics and Management*, Vol. 62 No. 3, pp. 430-445, doi: 10.1016/j.jeem.2011.04.003.

Freedman, D.S., Wang, J., Thornton, J.C., Mei, Z., Sopher, A.B., Pierson, R.N., Dietz, W.H. and Horlick, M. (2009), "Classification of body fatness by body mass index–for-age categories among children", *Archives of Pediatrics and Adolescent Medicine*, Vol. 163 No. 9, pp. 805-811, doi: 10.1001/archpediatrics.2009.104.

Freeman, R.E., Harrison, J.S., Wicks, A.C., Parmar, B.L. and De Colle, S. (2010), "Stakeholder theory: the state of the art", *The Academy of Management Annals*, Vol. 4 No. 1, pp. 403-445, doi: 10.5465/19416520.2010.495581.

Friedman, M. (1970), "A theoretical framework for monetary analysis", *Journal of Political Economy*, Vol. 78 No. 2, pp. 193-238, doi: 10.1086/259623.

Fuadah, L.L., Mukhtaruddin, M., Andriana, I. and Arisman, A. (2022), "The ownership structure, and the environmental, social, and governance (ESG) disclosure, firm value and firm performance: the audit committee as moderating variable", *Economies*, Vol. 10 No. 12, p. 314, doi: 10.3390/economies10120314.

García-Sánchez, I.M., Hussain, N., Martínez-Ferrero, J. and Ruiz-Barbadillo, E. (2019), "Impact of disclosure and assurance quality of corporate sustainability reports on access to finance", *Corporate Social Responsibility and Environmental Management*, Vol. 26 No. 4, pp. 832-848, doi: 10.1002/csr.1724.

Gillan, S. and Starks, L.T. (2003), "Corporate governance, corporate ownership, and the role of institutional investors: a global perspective", Weinberg Center for Corporate Governance Working Paper, (2003-01).

Gillan, S., Hartzell, J.C., Koch, A. and Starks, L.T. (2010), "Firms' environmental, social and governance (ESG) choices, performance and managerial motivation", Vol. 10, Unpublished working paper.

Gillan, S.L., Koch, A. and Starks, L.T. (2021), "Firms and social responsibility: a review of ESG and CSR research in corporate finance", *Journal of Corporate Finance*, Vol. 66, 101889, doi: 10.1016/j.jcorpfin.2021.101889.

Guiso, L., Sapienza, P. and Zingales, L. (2015), "The value of corporate culture", *Journal of Financial Economics*, Vol. 117 No. 1, pp. 60-76, doi: 10.1016/j.jfineco.2014.05.010.

Gujarati, D.N. and Porter, D.C. (2009), *Basic Econometrics*, 5th ed., McGraw-Hill.

Heydari, S.S. and Mountrakis, G. (2018), "Effect of classifier selection, reference sample size, reference class distribution and scene heterogeneity in per-pixel classification accuracy using 26 Landsat sites", *Remote Sensing of Environment*, Vol. 204, pp. 648-658, doi: 10.1016/j.rse.2017.09.035.

Hong, N.T.H. and Linh, T.K. (2023), "Institutional investors, corporate governance and firm performance in an emerging market: evidence from Vietnam", *Cogent Economics and Finance*, Vol. 11 No. 1, 2159735, doi: 10.1080/23322039.2022.2159735.

Horváthová, E. (2010), "Does environmental performance affect financial performance? A meta-analysis", *Ecological Economics*, Vol. 70 No. 1, pp. 52-59, doi: 10.1016/j.ecolecon.2010.04.004.

Jo, H. and Harjoto, M.A. (2011), "Corporate governance and firm value: the impact of corporate social responsibility", *Journal of Business Ethics*, Vol. 103 No. 3, pp. 351-383, doi: 10.1007/s10551-011-0869-y.

Jo, H. and Harjoto, M.A. (2012), "The causal effect of corporate governance on corporate social responsibility", *Journal of Business Ethics*, Vol. 106 No. 1, pp. 53-72, doi: 10.1007/s10551-011-1052-1.

Karazsia, B.T. and Berlin, K.S. (2018), "Can a mediator moderate? Considering the role of time and change in the mediator-moderator distinction", *Behavior Therapy*, Vol. 49 No. 1, pp. 12-20, doi: 10.1016/j.beth.2017.10.001.

Kim, E.H. and Lyon, T.P. (2015), "Greenwash vs. brownwash: exaggeration and undue modesty in corporate sustainability disclosure", *Organization Science*, Vol. 26 No. 3, pp. 705-723, doi: 10.1287/orsc.2014.0949.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (2002), "Investor protection and corporate valuation", *The Journal of Finance*, Vol. 57 No. 3, pp. 1147-1170, doi: 10.1111/1540-6261.00457.

Laskar, N. and Gopal Maji, S. (2018), "Disclosure of corporate sustainability performance and firm performance in Asia", *Asian Review of Accounting*, Vol. 26 No. 4, pp. 414-443, doi: 10.1108/ara-02-2017-0029.

Lavin, J.F. and Montecinos-Pearce, A.A. (2021), "ESG disclosure in an emerging market: an empirical analysis of the influence of board characteristics and ownership structure", *Sustainability*, Vol. 13 No. 19, 10498, doi: 10.3390/su131910498.

Li, Y., Gong, M., Zhang, X.Y. and Koh, L. (2018), "The impact of environmental, social, and governance disclosure on firm value: the role of CEO power", *The British Accounting Review*, Vol. 50 No. 1, pp. 60-75, doi: 10.1016/j.bar.2017.09.007.

Lopez-de-Silanes, F., McCahery, J.A. and Pudschedl, P.C. (2024), "Institutional investors and ESG preferences", *Corporate Governance: An International Review*, Vol. 32 No. 6, pp. 1060-1086, doi: 10.1111/corg.12583.

Martínez-Ferrero, J. and Lozano, M.B. (2021), "The nonlinear relation between institutional ownership and environmental, social and governance performance in emerging countries", *Sustainability*, Vol. 13 No. 3, p. 1586, doi: 10.3390/su13031586.

Meckling, W.H. and Jensen, M.C. (1976), "Theory of the firm", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.

Minutolo, M.C., Kristjanpoller, W.D. and Stakeley, J. (2019), "Exploring environmental, social, and governance disclosure effects on the S&P 500 financial performance", *Business Strategy and the Environment*, Vol. 28 No. 6, pp. 1083-1095.

Miralles-Quirós, M.M., Miralles-Quirós, J.L. and Redondo-Hernández, J. (2019), "The impact of environmental, social, and governance performance on stock prices: evidence from the banking industry", *Corporate Social Responsibility and Environmental Management*, Vol. 26 No. 6, pp. 1446-1456, doi: 10.1002/csr.1759.

Naeem, N., Cankaya, S. and Bildik, R. (2022), "Does ESG performance affect the financial performance of environmentally sensitive industries? A comparison between emerging and developed markets", *Borsa Istanbul Review*, Vol. 22, pp. S128-S140, doi: 10.1016/j.bir.2022.11.014.

Navissi, F. and Naiker, V. (2006), "Institutional ownership and corporate value", *Managerial Finance*, Vol. 32 No. 3, pp. 247-256, doi: 10.1108/03074350610646753.

Nekhili, M., Boukadhaba, A., Nagati, H. and Chtioui, T. (2021), "ESG performance and market value: the moderating role of employee board representation", *International Journal of Human Resource Management*, Vol. 32 No. 14, pp. 3061-3087, doi: 10.1080/09585192.2019.1629989.

Nelling, E. and Webb, E. (2009), "Corporate social responsibility and financial performance: the "virtuous circle" revisited", *Review of Quantitative Finance and Accounting*, Vol. 32 No. 2, pp. 197-209, doi: 10.1007/s11156-008-0090-y.

Noor, S., Saeed, A., Baloch, M.S. and Awais, M. (2020), "CSR permanency, family ownership, and firm value: evidence from emerging economies", *Corporate Social Responsibility and Environmental Management*, Vol. 27 No. 5, pp. 2135-2149, doi: 10.1002/csr.1953.

Oh, W.Y., Chang, Y.K. and Martynov, A. (2011), "The effect of ownership structure on corporate social responsibility: empirical evidence from Korea", *Journal of Business Ethics*, Vol. 104 No. 2, pp. 283-297, doi: 10.1007/s10551-011-0912-z.

Rahman, H.U., Zahid, M. and Al-Faryan, M.A.S. (2023), "ESG and firm performance: the rarely explored moderation of sustainability strategy and top management commitment", *Journal of Cleaner Production*, Vol. 404, 136859, doi: 10.1016/j.jclepro.2023.136859.

Rastogi, S., Singh, K. and Kanoujiya, J. (2024), "Firm's value and ESG: the moderating role of ownership concentration and corporate disclosures", *Asian Review of Accounting*, Vol. 32 No. 1, pp. 70-90, doi: 10.1108/ara-10-2022-0266.

Solomon, D. (2016), "The voice: the minority shareholder's perspective", *Nev. LJ*, Vol. 17, p. 739.

Starks, L.T. (2009), "EFA keynote speech: 'Corporate governance and corporate social responsibility: what do investors care about? What should investors care about?'", *Financial Review*, Vol. 44 No. 4, pp. 461-468, doi: 10.1111/j.1540-6288.2009.00225.x.

Velte, P. (2017), "Does ESG performance have an impact on financial performance? Evidence from Germany", *Journal of global responsibility*, Vol. 8 No. 2, pp. 169-178, doi: 10.1108/jgr-11-2016-0029.

Wang, Y., Lin, Y., Fu, X. and Chen, S. (2023), "Institutional ownership heterogeneity and ESG performance: evidence from China", *Finance Research Letters*, Vol. 51, 103448, doi: 10.1016/j.frl.2022.103448.

Wooldridge, J.M. (2013), "Correlated random effects panel data models", *IZA Summer School in Labor Economics*. available at: http://www.iza.org/conference_files/SUMS_2013/viewProgram

Xie, J., Nozawa, W., Yagi, M., Fujii, H. and Managi, S. (2019), "Do environmental, social, and governance activities improve corporate financial performance?", *Business Strategy and the Environment*, Vol. 28 No. 2, pp. 286-300, doi: 10.1002/bse.2224.

Xu, S., Yin, B. and Lou, C. (2022), "Minority shareholder activism and corporate social responsibility", *Economic Modelling*, Vol. 116, 106045, doi: 10.1016/j.econmod.2022.106045.

Yoon, B., Lee, J.H. and Byun, R. (2018), "Does ESG performance enhance firm value? Evidence from Korea", *Sustainability*, Vol. 10 No. 10, p. 3635, doi: 10.3390/su10103635.

About the authors

Nantana Ngamtampong is a full-time lecturer at Mahasarakham University in Thailand. She earned a bachelor's degree in accountancy from the University of the Thai Chamber of Commerce, a master's degree, and a doctoral degree in business administration from Kasetsart University and Khonkaen

University, respectively, all in Thailand. She is interested in the following areas of financial and managerial accounting research: CSR and ESG disclosure, ESG performance, corporate sustainability, corporate transparency, risk management, and earnings management. Nantana Ngamtampong is the corresponding author and can be contacted at: nantana.n@acc.msu.ac.th

Anupong Sukprasert is a full-time lecturer at Mahasarakham University, Thailand. He received a bachelor's degree in statistics from Naresuan University, Thailand; a master's degree in information technology in business from Chulalongkorn University, Thailand; and a doctoral degree in computer science from Universiti Teknologi Malaysia, Malaysia, respectively. He is interested in data analytics, text analytics, data mining, and knowledge discovery.