Journal of Infrastructure, Policy and Development 2024, 8(14), 9195.
https://doi.org/10.24294/jipd9195

Article

ESG, country governance indicators and company value: Evidence from Asia

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CITATION

Devi LV, Ariefianto MD, Juliana R. (2024). ESG, country governance indicators and company value: Evidence from Asia. Journal of Infrastructure, Policy and Development. 8(14): 9195. https://doi.org/10.24294/jipd9195

ARTICLE INFO

Received: 18 September 2024
Accepted: 15 November 2024
Available online: 4 December 2024

Abstract: This study aimed to examine the impact of Environmental, Social, and Corporate Governance (ESG) scores and Country Governance Indicators (CGI) on companies' value. The study procedures were carried out by creating a linear empirical model where the dependent variable was companies' value. In addition, the variables of interest in the model were ESG scores and CGI. Analysis was carried out on annual data from 278 non-financial Asian companies spanning 11 years from 2011–2021. The feasible generalized least squares (FGLS) method was used for estimation due to the presence of serial correlation and heteroscedasticity in the data obtained. The results showed the presence of a positive relationship and correlation between ESG scores and companies' value. Meanwhile, CGI had a negative impact, revealing the potential difficulties caused by country governance framework. This study also found a positive correlation between CGI and ESG on company value. These findings have important practical contributions emphasizing the significance of ESG factors in improving companies' value and the complex relationship between country governance and corporate valuation.

Keywords: company value; ESG; country governance indicators; Asian companies; feasible generalized; least square

1. Introduction

Understanding the factors that influence company value has investors increasingly focusing on environmental, social, and governance (ESG) factors as important determinants of company value. The ESG framework as described by Wan et al. (2023), comprises social equality, environmental preservation, and economic development. In recent times, businesses typically face greater scrutiny regarding their social and environmental impacts, which go beyond financial profits. The growing societal recognition that companies have a moral duty beyond financial performance has raised the significance of ESG factors. Several studies have shown that stakeholders must understand ESG practices comprehensively (Bai et al., 2022). Based on stakeholders theory (Mahajan et al., 2023), there is a pressing need to prioritize the welfare of all their members, including owners, shareholders, creditors, consumers, suppliers, government, society, and analysts, rather than only concentrating on generating profits. Companies investing in ESG practices can potentially improve their financial performance and gain a competitive advantage.

In line with these findings, several reports have investigated the relationship between ESG factors and their impact. Eccles et al. (2014) reported that companies adopting sustainability practices experienced improvements in both stock market and accounting performance. In addition, Yu et al. (2023) showed that ESG practices increased brand reputation and consumer purchase intention. A previous study also

showed that high ESG scores often improved access to capital and lowered cost of capital (Chen et al., 2023). These factors influence market perceptions of the performance and profitability of companies, thereby affecting their value. Shareholders expect managers to maximize value due to the expectation of future returns (Indupurnahayu et al., 2023; Kostyuk et al., 2004; Otman, 2021). Companies with high ESG scores are more resilient and efficient in capital allocation, often achieving higher stock returns during crises. These results show the significance of ESG practices in corporate strategy for enhancing market competitiveness (Wang et al., 2023).

However, the need for ESG disclosure in a company is also driven by external factors such as the country dimension as a place where the company develops, where there are factors from the situation of the country such as political stability, regulatory quality, and control of corruption. So that country governance plays an important role in the correlation between corporate ESG performance and financial performance (Mooneeapen et al., 2022). Despite the widespread acknowledgment of the positive effect of ESG factors on companies' value, there are limited investigations on their interaction with external variables, such as Country Governance Indicators (CGI). A previous report revealed that CGI referred to the infrastructure and systems necessary for countries' functioning, including government official selection, strategy development, and legal compliance. These variables influence countries' management of its social and economic resources (Kaufmann et al., 2011). Several studies (Aslam and Haron, 2021; Aslan and Kumar, 2014; Schiehll et al., 2014; Yoshikawa et al., 2014) have demonstrated that governance has a substantial role in determining the conduct of companies. Efficient government administration can boost financial stability, economic growth, and the quality of information (Eriqat and Al-Khazaleh, 2023; Nguyen et al., 2021; Szarowska, 2018). Frotagheh and Kardan (2019) also reported a positive relationship between six CGI indicators and companies' success. The leadership of countries can either increase the likelihood of financial crises (Mahmoudinia and Amroabadi, 2023) or encourage the improvement of sustainability performance (Massuga et al., 2023). Therefore, this study aimed to analyze the impact of ESG scores and CGI on companies' value in Asian countries.

The integration of Environmental, Social, and Governance (ESG) issues into corporate investment decisions is steadily growing across Asia. Investors, regulators, and consumers are increasingly focused on the positive impacts of ESG practices, which are seen as key to reducing risks and promoting sustainable products and services (Mohamad et al., 2021). Leading institutional investors are advocating for greater transparency and better management of these practices (Bai et al., 2022). In addition, legislation is driving this movement towards greater ESG transparency and environmental risk management. The Asia-Pacific region has been reported to play a vital role in global sustainability efforts due to its distinctive geographical location as a hub of economic development, urbanization, and rich biodiversity (OECD, 2023). Various governments are revising their climate objectives, with many Asian countries committing to complete carbon reduction (Tiwari et al., 2024). Consequently, companies face challenges and opportunities in achieving net-zero emissions and integrating sustainable development goals, necessitating the application of good ESG practices.

While previous studies have shown a positive relationship between ESG and firm value, few have examined the simultaneous impact of both ESG and CGI on firm value. This study aims to fill that gap by using different models, indicators, and research samples. Specifically, the study has three objectives: 1) to empirically test the impact of ESG factors; 2) to assess the influence of CGI on firm value, and 3) to evaluate the combined effect of ESG and CGI on firm value. Also with increasing investor pressure and government mandates related to sustainability disclosure in companies especially in the Asian countries, this study focuses on countries in Asia. The results are expected to enhance understanding of how internal strategies and external governance conditions exert their influence. The structure of this paper is as follows. Section 2 presents a literature review on ESG and CGI. Section 3 outlines the data and methodology, while 4 presents the estimation results, deriving important insights and establishing their association with existing literature. Section 5 presents the study discussion and the conclucion in section 6.

2. Literature review

2.1. Stakeholder theory

Investors' interest in ESG (environmental, social, and governance) issues has consistently increased and gained more significance over the years. Previous studies on ESG Scores (Bai et al., 2022) suggest that companies must openly communicate with their stakeholders regarding their environmental effects, social responsibility, and good governance practices. Businesses around the world are obligated to prioritize sustainability reporting alongside financial reporting. According to the stakeholders theory (Freeman, 2010), there must be a focus on the well-being of all stakeholders, including owners, shareholders, lenders, customers, vendors, the authorities, the broader community, and analysts rather than solely maximizing profits. Investing in ESG activities can help companies to maintain their competitive advantage and enhance financial performance.

2.2. Signaling theory

Signaling theory shows the role of information in economic transactions and suggests that managers can reduce information asymmetry problems by voluntarily disclosing information. In addition, the Arkelof's theory posits that the management has more data regarding companies compared to the external investors. With limited information, investors are unable to distinguish between high-quality and low-quality organizations. Consequently, reputable companies often set lower prices for their new products to signal their true value. Spence (1978) revealed that corporate reporting's primary purpose was to provide information to analysts and investors regarding value. The necessity to give financial data to external parties arises from the information asymmetry problem that exists with the management. Revealing ESG data can enhance companies' long-term value and reputation. (Bergh et al., 2014) showed that ESG disclosure improved internal management practices and strengthened stakeholders relationship, leading to enhanced value. The stakeholder theory and

signaling theory both support responsible investing, emphasizing that companies' performance must include their ESG practices rather than just financial performance.

2.3. Legitimacy theory

The theory of social and environmental responsibility disclosure in accounting (Naser et al., 2006) highlights legitimacy theory as a key framework. According to legitimacy theory, a company's management system should align with the interests of society, government, individuals, and community groups (Gray et al., 1996). This theory posits that companies must ensure their operations remain within the societal norms and expectations of the environment in which they operate, aiming to have their activities recognized as legitimate by external stakeholders (Deegan, 2004). Legitimacy is crucial for a company's long-term success and sustainability. Furthermore, legitimacy theory supports the concept of ESG (Environmental, Social, and Governance) by advocating for management practices based on socially constructed norms and values, which, in turn, help build trust and ensure acceptance within the community.

2.4. Agency theory

Agency theory explains the relationship between principals (owners or shareholders) and agents (management), where the principals delegate authority to the agents to manage the organization with the aim of maximizing firm value and other benefits. Conflicts of interest can arise when the goals of principals and agents diverge, potentially increasing agency costs and reducing corporate value (Jensen and Meckling, 1976). The theory is relevant in the context of ESG (Environmental, Social, and Governance) as it helps explain how board composition, particularly ESG committees, can mitigate agency problems and information asymmetry between owners and management (Li et al., 2008). By adopting ESG disclosures and performance, companies can provide more comprehensive information, improving management accountability and transparency, thus reducing agency costs (Cerbioni and Parbonetti, 2007). Agency theory is also used to explain the positive relationship between independent ESG committees and ESG performance, highlighting the role of board composition in enhancing both financial and non-financial reporting processes (Suttipun and Dechthanabodin, 2022).

2.5. ESG disclosure and companies' value

The concept of ESG (Environmental, Social and Governance) originated as an extension of traditional Corporate Social Responsibility (CSR) and socially responsible investing (SRI) practices. It builds on these foundations by providing a more structured framework for evaluating and reporting on corporate practices in these areas (Starks, 2023). ESG development in Europe has been heavily influenced by regulatory frameworks and market demand, supported by regulatory initiatives such as the EU Taxonomy (Rapp and Roser, 2024). ESG development in Asia has progressed, but generally lags behind regions such as Europe. In emerging Asia, there is an increasing focus on integrating ESG factors into business operations, driven by

the recognition of the positive correlation between economic growth and ESG performance (Wang, 2023).

Several reports (Grisales and Caracuel, 2021) show that ESG measures can increase expenses and negatively impact financial performance. The costs associated with implementing ESG practices, which may outweigh the benefits in the short term. Establishing ESG policies involves the costs of establishing an ESG framework (Bătae et al, 2020). ESG scores can negatively impact firm value, although ESG practices may involve additional costs or complexity, they do not always generate direct financial benefits for the firm (Setiani, 2023). However, the overall consensus posits that transparency in operations generally provides more benefits than drawbacks. Various studies consistently support the hypothesis that ESG positively affects companies' value through different mechanisms. For example, ESG practices have been linked to profitability enhancement, lower cost of capital (Chen et al., 2023), and increased investment efficiency (Bilyay-Erdogan et al., 2023). These practices also contribute to greater stakeholders satisfaction (Jin and Kim, 2022; Yu et al., 2023) and improvements in ecological strategy (Zhang et al., 2020). Previous studies (Naeem et al., 2022) demonstrated a positive impact on companies' value. Based on these findings, the following hypothesis was proposed:

H1: ESG Scores have a positive impact on firm value.

2.6. Country governance indicators and companies' value

Country Governance Indicators (CGI) assess government supervision levels, incorporating perspectives from enterprises, individuals, specialists, NGOs, and international organizations in both developed and developing countries (Kelley et al., 2011). The theoretical basis for CGI is provided by stakeholders theory (Gray et al., 1995), which suggests that companies' flexibility and growth are influenced by their stakeholders. Therefore, understanding the sustainability of companies requires observing the impact of country governance systems on the environmental strategy and overall performance. Examining the governmental systems of each country has been reported to have a significant role.

Effective governance can be reflected by economic growth and income per capita (Huynh and Jacho-Chávez, 2009). Previous studies have demonstrated a positive relationship between CGI and companies' value. Frotagheh and Kardan (2019) also found a positive relationship between six CGI elements (Voice and Accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption) and companies' growth. El-Sehwagy and Bekheit (2023) reported similar findings due to the influence of better CGI in decreasing the cost of capital. Alsaleh et al. (2021) demonstrated that CGI helps to improve the growth of the bioenergy industry. Based on these findings, the following hypothesis was proposed:

H2: Country Governance Indicators (CGI) have a positive impact on firm value.

2.7. ESG disclosure, country governance indicators and companies' value

The implementation of sustainable practices is influenced by a country's governance structure. In countries with a strong legal and institutional environment,

companies face greater pressure for transparency and social responsibility (Jacoby et al., 2019). Strong public governance can drive higher levels of ESG (Environmental, Social, and Governance) engagement (Uyar et al., 2021). When institutional mechanisms are strong, agency conflicts are reduced; however, when they are weak, corporate governance plays a more significant role in meeting stakeholder expectations (Kuzey et al., 2023). Effective country governance structures, such as strong regulatory quality and political stability, encourage companies to adopt better ESG practices. These governance elements can lead to increased compliance with ESG standards and motivate companies to engage in proactive ESG initiatives, thereby improving their overall ESG performance. A company's reputation, risk, and operational efficiency, all of which contribute to a company's value, can be enhanced by regulatory quality and political stability (Mooneeapen et al., 2022).

H3: Country Governance Indicators (CGI) and ESG Scores have a positive impact on firm value.

3. Methodology

3.1. Data and sample descriptions

This study involves companies from 15 Asian countries, utilizing a purposive sampling technique. Asia was chosen as the object of research because this region has experienced significant economic growth and development in the implementation of ESG disclosure. This approach specifically targets companies in the non-financial sector that have comprehensive environmental, social, and governance (ESG) scores covering the period 2011 to 2021, with a total of 3058 observations. We selected 15 countries with 5 developed countries located in Asia based on data released by the IMF and other developing countries by representing parts of the region in Asia. These sample companies represent companies with the highest market capitalization in each country headquartered in Asia as classified by the Osiris and Bloomberg databases. Non-financial and financial companies have different characteristics of management and reporting, financial reports from companies in the financial sector differ from those in other industries due to stricter regulations and increased government oversight. Then non-financial information, such as sustainability reports or integrated reports, are more common and relevant in the context of non-financial companies. Non-financial companies, especially in sectors such as energy, agriculture, and manufacturing, have more direct environmental impacts from their operations (Alfalih, 2022). In the data collection process, we first gathered financial information, including company value, from the Osiris database, and non-financial information, specifically ESG scores, from the Bloomberg database. Both databases were chosen for their comprehensive, international coverage of financial and non-financial data. Additionally, the Country Governance Indicator (CGI) data was sourced from the Worldwide Governance Indicators databank. Address the presence of outliers in the dataset, winsorization was performed at the 5% level specifically for the company-level variables.

3.2. Empirical model

This model was constructed by slightly modifying the work of Saygili et al. (Saygili et al., 2022) as follows:

$$VAL_{it} = \beta_0 + \beta_1 ESG_{it-1} + \beta_2 CGI_{it} + \beta_3 ROE_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \varepsilon_{it} \quad (1)$$

where:

PB_{it} = Valuation measure of the company i at time t

ESG_{it-1} = ESG performance score of corporation i at the time $t-1$

CGI_{it} = Country Governance Indicator score of country i at the time t

LEV_{it} = Financial Leverage of corporation i at time t

$SIZE_{it}$ = Log of total assets of the corporation I at the time t

The study adhered to the methodologies outlined by Atan et al. (2018), Manrique and Martí-Ballester (2017), and Velte (2017) by using a valuation model that accounted for the time delay between companies' ESG performance and their financial worth. This proposed that the environmental, social, and governance (ESG) performance of a corporation in the previous time ($t - 1$) had an impact on its evaluation metrics in the current time (t). Investors typically required a significant amount of time, often up to a year, to fully comprehend and assess the effect of an organization's ESG policies on its overall value, resulting in the observed delay in time.

Other control factors were incorporated in this model, to simultaneously examine the correlations between the dependent and additional explanatory variables. The control variables consisted of the size of the business, financial leverage, and return on equity (ROE). The size of companies was determined by using a natural logarithm of their total assets, measuring financial leverage by dividing debt by total assets, and evaluating ROE as a financial metric that assessed companies' profitability through their efficient use of capital. All the reseach variables mentioned is presented in **Table 1**.

Table 1. Research variables

Variables	Proxy	Description
Valuation Measures (VAL)	Price to Book Ratio (PB)	The ratio of market value to book value
	Tobin's Q (TOB)	The ratio of market value of the corporation/Total Assets
ESG	ESG Score (ESG); E/S/G	ESG Score calculated and published by Bloomberg
	Country Governance Indicator (CGI); VA, PS, GE, RQ, LAW, COC	Country Governance Indicators taken from the World Bank database (Kaufmann et al., 2011)
Control Variables	Firm Size (SIZE)	Log of total asset
	Profitability (ROE)	ROE = Net Income/Shareholders' Equity
	Financial Leverage (LEV)	Total debt/equity

This analysis enhanced the current body of literature by not only evaluating the influence of ESG factors on the companies' value but also investigated the effects of country governance index (CGI). Therefore, the variable CGI in Equation (1) was included to incorporate the country governance index, which reflected the broader institutional framework therein enterprises function. Prior studies by Frotagheh and

Kardan (2019), Massuga et al. (2023) had emphasized the capacity of CGI to motivate organizations to enhance their performance, suggesting that more robust governance structures could lead to better firm outcomes.

Equation (1) was analyzed using panel data regression analysis. Ordinary least squares (OLS), fixed effects (FE), and random effects (RE) methods were applied. To select the most suitable model, the Chow Test, Breusch-Pagan LM Test, and Hausman Test were conducted. After detecting serial correlation and heteroscedasticity, a feasible generalized least squares (FGLS) approach was utilized to obtain efficient parameters estimated under these conditions.

To ensure the robustness of the estimations, several additional tests were conducted. First, alternative indicators were used for the outcome and variables of interest namely ESG and CGI. For measuring companies' value, this study alternated between using the Price to Book Value (PBV) and Tobin's Q (TOB). When calculating the ESG score, its components were separately analyzed, this includes, Environment (E), Social (S), and Governance (G). Similarly, rigorous tests were conducted to ensure the credibility of the CGI, comprising of these six components, voice and accountability (VA), political stability and nonviolence (PS), government effectiveness (GE), regulatory quality (RQ), rule of law (LAW), and corruption control (COC). These robustness checks aimed to determine when the significance of the relationship was driven by the aggregate variable or its components. In addition, further robustness checks were performed using subsampling. The regression analysis was conducted using sub-samples defined by 2 criteria, namely, (a) countries classification, distinguishing between developed and developing countries based on the World Bank classification in 2021; and (b) industry classification, based on the Global Industry Classification Standard (GICS) used in OSIRIS. These checks were designed to assess the extent to which the baseline regression could be applied to different contexts or datasets.

4. Result

4.1. Descriptive statistics

Table 2 shows the result of descriptive statistics. This study found that the average score of Environment, Social, Governance (ESG) disclosure is 40.8 and the environmental disclosure value has an average value of 26.03, where the disclosure value is greater than the social value with an average value of 21.78 for ESG disclosure. However, the governance value in ESG disclosure has the largest average value, namely 74.32, this shows that the level of corporate governance disclosure in Asia is better than Environmental and Social ESG disclosure. This could be because there is an obligation to carry out good corporate governance practices and disclosures. The Country Governance Indicators (CGI) variable consists of 6 indicators, namely, Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption. The GCI value has an average value of 58.86 with a minimum value of 28.71 which is the CGI value of Russia in 2020. The CGI with a maximum value of 88.73 is Japan in 2021.

Table 2. Descriptive statistic.

Stats	Mean	Standard Deviation	Min	Max	N
PB	2.22	2.19	0.21	8.69	3058
TOB_Q	1.12	1.17	0.077	4.47	3058
ESG	40.82	12.82	20.11	64.36	3058
ENV	26.03	20.68	0	63.39	3058
SOC	21.79	12.76	0	46.8	3058
GOV	74.32	12.09	48.83	90.01	3058
ROE	12.26	11.89	−5.62	44.45	3058
FIN_LEV	67.91	67.51	0.3	247.65	3058
SIZE	3.80	0.56	2.8	4.83	3058
CGI	58.86	19.71	28.71	88.73	3058
COC	59.26	21.94	21.63	96.63	3058
GE	73.30	16.25	44.71	99.53	3058
PS	46.57	25.56	13.74	93.33	3058
RQ	64.66	19.90	35.1	99.52	3058
LAW	63.41	21.12	25	93.27	3058
VA	45.51	25.05	4.93	80.3	3058

The mean values of the primary variables were presented in **Table 3**, which was broken down by countries. Notably, Thailand, South Korea, and Turkey had the highest ESG ratings, while Japan, South Korea, and Singapore had high CGI values. In terms of firm-year observations, China, Japan, and Korea had the largest numbers compared to other countries. These descriptive data, shown in **Tables 2** and **3**, provided evidence that supported the conclusions of previous studies conducted in Asia (Khan et al., 2024). Furthermore, the correlations between the variables were presented in **Table 4**. Notably, both CGI and ESG had negative relationships with Tobin's Q and the Price-to-book ratio (PB). The correlation coefficients for ESG and CGI were significantly low, which alleviated concerns regarding multicollinearity issues in the model.

Table 3. Descriptive statistic per country.

Country	N	Percentage	TOB_Q	PB	ESG	CGI
China	536	17.53%	0.37	1.063	37.247	39.570
Indonesia	265	8.67%	1.684	2.985	35.596	43.547
India	318	10.40%	2.048	4.078	42.196	44.876
Israel	24	0.78%	0.62	1.923	31.697	69.685
Japan	520	17.00%	0.59	1.564	39.885	87.668
South Korea	453	14.81%	0.57	1.635	45.284	75.072
Kuwait	11	0.36%	0.33	1.102	32.342	49.268
Malaysia	436	14.26%	1.477	2.571	40.489	61.523
Philippines	13	0.43%	0.66	2.123	37.699	41.458
Qatar	18	0.59%	0.54	2.041	27.053	66.948

Table 3. (*Continued*).

Country	N	Percentage	TOB_Q	PB	ESG	CGI
Rusia	122	3.99%	0.59	2.179	42.708	28.869
Singapore	152	4.97%	1.132	2.159	41.572	88.460
Thailand	168	5.49%	1.467	3.576	49.021	42.625
Turkey	8	0.26%	0.43	1.121	47.935	42.964
United Arab Emirates	14	0.46%	0.65	2.084	31.330	68.665
Total	3058	100.00%	1.122	2.217	40.816	58.856

In the correlation matrix results in **Tables 4** and **5**, it is found that company size has a negative effect on company value. The size of a company can negatively impact its value. Research by Niesh and Velnampy (2014) indicates that companies with large assets and inventories may struggle to pay dividends due to assets being tied up in receivables and inventory. Additionally, large companies that fail to effectively utilize their assets may experience a decline in value, leading to a negative outlook from investors (Pambudi and Meini, 2023). Furthermore, highly concentrated ownership can result in major shareholders using the company for personal gain, to the detriment of minority shareholders, increasing costs associated with excessive control, and ultimately affecting the company's value (Shleifer and Vishny, 1997).

Table 4. Correlation matrix.

	TOB_Q	PB	ESG	ENV	SOC	GOV	ROE	FIN_LEV
TOB_Q	1							
PB	0.7176*	1						
ESG	−0.0583*		1					
ENV	−0.1132*	−0.0916*	0.8992*	1				
SOC			0.8767*	0.7101*	1			
GOV		0.0452*	0.7094*	0.4034*	0.5338*	1		
ROE	0.4125*	0.4536*	−0.0960*	−0.1213*	−0.0496*	−0.0472*	1	
FIN_LEV	−0.2140*				0.0602*			1
SIZE	−0.4672*	−0.3869*	0.2540*	0.2903*	0.1730*	0.1279*	−0.2281*	0.2250*
CGI	−0.0865*	−0.1322*	0.0967*	0.1821*			−0.2367*	−0.0981*
COC	−0.1226*	−0.1677*	0.0480*	0.1346*	−0.0695*		−0.2386*	−0.0848*
GE	−0.1461*	−0.1893*	0.1376*	0.1857*		0.1052*	−0.2492*	−0.0667*
PS	−0.1440*	−0.1930*	0.0464*	0.1445*	−0.0749*	−0.0354*	−0.2275*	−0.1182*
RQ	−0.0858*	−0.1290*	0.1023*	0.1472*		0.0566*	−0.2211*	−0.0675*
LAW	−0.0729*	−0.1094*	0.1271*	0.1896*		0.0604*	−0.2369*	−0.0718*
VA	0.0784*	0.0462*	0.0824*	0.1904*		−0.0843*	−0.1346*	−0.1075*

Note: * Level of significance 5%.

Table 5. Correlation matrix (cont.).

	SIZE	CGI	COC	GE	PS	RQ	LAW	VA
SIZE	1							
CGI		1						
COC	0.0480*	0.9628*	1					
GE	0.0708*	0.9304*	0.9525*	1				
PS	0.0520*	0.9285*	0.9262*	0.8939*	1			
RQ		0.9583*	0.9069*	0.9069*	0.8889*	1		
LAW		0.9748*	0.9454*	0.9214*	0.8723*	0.9293*	1	
VA	−0.0853*	0.7134*	0.5564*	0.4706*	0.4942*	0.6250*	0.6800*	1

Note: * Level of significance 5%.

4.2. Regression results

The results of the regression analysis were presented in **Table 6**. The Chow test rejects the null hypothesis of no fixed effect and favored the OLS, leading to the selection of the Fixed Effect model.

Table 6. Baseline regression result.

VARIABLES	OLS	FE	RE	FGLS
ESG.L1	0.018***	−0.002	0.000	0.004**
	(0.003)	(0.003)	(0.002)	(0.002)
CGI	−0.006***	−0.021**	−0.011**	−0.003**
	(0.002)	(0.010)	(0.004)	(0.001)
ROE	0.072***	0.040***	0.042***	0.023***
	(0.003)	(0.003)	(0.003)	(0.002)
SIZE	−1.251***	−0.937***	−1.213***	−0.905***
	(0.074)	(0.180)	(0.129)	(0.049)
FIN_LEV	0.003***	0.005***	0.005***	0.003***
	(0.001)	(0.001)	(0.001)	(0.000)
Chow test		3.92		
BP LM Test			552.15	
Hausman		49.08		
AR(1)		70.028		
Hetero		3.7×10^8		
Observations	2.473	2.473	2.473	2.473
R-squared	0.299	0.141	0.268	
F Stat	210.3	71.91		
wald chi2			476.1	531.7

Note: Standard errors in parentheses. *** $p < 0.01$. ** $p < 0.05$. * $p < 0.1$.

The Chow test is a test to determine the most appropriate fixed effect or common effect model used in estimating panel data. If the Cross-section Chi-Square Probability > 0.05 then H0 is accepted and H1 is rejected, if the Cross-section Chi-Square Probability < 0.05 then the Null Hypothesis is rejected and H1 is accepted. In

the table above, the f value in the Chow test is 3.92 with a probability value of 0.0000, so H1 is accepted and H0 is rejected, so the FE model is selected.

The BP LM test invalidated the null hypothesis, supporting the use Random Effect model. Breusch Pagan test to determine the OLS or RE model to be used to perform panel data regression. In the test results, the chi value shows the number 552.15 with a probability value of 0.0000, so H1 is accepted and H0 is rejected, so the RE model is selected.

However, the Hausman test provided substantial evidence in favor of the Fixed Effect model over the Random Effects model, due to the presence of bias in the latter. The tests for serial correlation and heteroscedasticity rejected their respective null hypothesis, indicating that the Feasible Generalized Least Squares (FGLS) method was appropriate. The Hausman Test is carried out to compare or also choose which model is the best between FE and RE which will be used to perform panel data regression. If the Hausman probability > 0.05 then H0 is accepted and H1 is rejected, if the Hausman probability < 0.05 then H0 is rejected and H1 is accepted. The table shows the results of the Hausman test with a number of 49.08 and a probability value of 0.0000, so H0 is rejected and H1 is accepted. So the FE model is selected. Therefore, FGLS was selected as the primary regression model for this analysis.

Table 7. The effect of ESG × CGI interaction variable to firm value.

VARIABLES	**PB**
ESG	0.00866**
	(0.00346)
CGI	−0.00665***
	(0.00215)
esgxcgi	0.000103**
	(5.22×10^{-5})
ROE	0.0687***
	(0.00192)
SIZE	−1.003***
	(0.0291)
FIN_LEV	0.00192***
	(0.000250)
Observations	2473
wald chi2	533.46

Note: Standard errors in parentheses. *** $p < 0.01$. ** $p < 0.05$. * $p < 0.1$.

In **Table 7**, regression analysis was conducted using a combined model of GCI and ESG. The results show a positive impact of CGI × ESG on company value. These findings are consistent with previous research by Uyar et al. (2021), which indicates that governance quality has a positive effect on ESG involvement and company value.

4.3. Robustness check

The robustness test aims to provide stronger evidence of structural validity by changing informal checks into more formal structural specification tests and to

evaluate whether the regression coefficient estimates remain consistent and valid when the regression specification is modified by adding or removing variables. In this subsection, a series of rigorous tests was conducted to verify the reliability of the initial findings presented in **Table 8**. Initially, the empirical model was evaluated by conducting regression analyses utilizing 2 indicators of companies' value, namely TOB_Q and PB. This test is conducted to see how the PB value is when replaced with the TOB_Q value. Tobin's Q can be used as an alternative or substitute for Price to Book Value (PBV) in several contexts, especially when measuring the value of a company related to corporate governance (Willim, 2015). The outcomes were presented in **Table 8** indicating a significant and positive influence on firm valuation. Algebraic sign and statistical significance remain largely unchanged when substituting PB with TOB_Q, which indicated that this substitution did not substantially affect the result.

Regression analyses were performed on empirical models and using the components of ESG interchangeably. The results were displayed in **Table 9**, where each proxy E, S, and G score positively impacted companies' value. Specifically, the G (Governance) score demonstrated a statistically significant impact. These findings aligned with previous studies, such as Aydoğmuş et al. (2022), which identified governance as having the most impact on the companies' value. The E (Environment) aspect could required more time and higher costs to provide results that could affect the companies' value.

Table 8. Robustness check: Changing proxy for dependent variables.

VARIABLES	PB	TOB_Q
ESG.L1	0.004**	0.002**
	(0.002)	(0.001)
CGI	−0.003**	0.000
	(0.001)	(0.001)
ROE	0.023***	0.010***
	(0.002)	(0.001)
SIZE	−0.905***	−0.481***
	(0.049)	(0.025)
FIN_LEV	0.003***	−0.001***
	(0.000)	(0.000)
Observations	2.473	2.473
wald chi2	531.7	771.2

Note: Standard errors in parentheses; *** $p < 0.01$. ** $p < 0.05$. * $p < 0.1$.

Table 9. Robustness: Changing proxy for ESG.

VARIABLES	ENV	SOC	GOV
ENV.L1	0.001		
	(0.001)		
SOC.L1		0.000	
		(0.002)	

Table 9. (*Continued*).

VARIABLES	ENV	SOC	GOV
GOV.L1			0.007***
			(0.002)
CGI	−0.002**	−0.002**	−0.003***
	(0.001)	(0.001)	(0.001)
ROE	0.024***	0.024***	0.025***
	(0.002)	(0.002)	(0.002)
SIZE	−0.911***	−0.895***	−0.924***
	(0.045)	(0.045)	(0.046)
FIN_LEV	0.003***	0.003***	0.003***
	(0.000)	(0.000)	(0.000)
Observations	2.473	2.473	2.473
wald chi2	658.2	670.5	610.9

Note: Standard errors in parentheses; *** $p < 0.01$. ** $p < 0.05$. * $p < 0.1$.

Additional robustness tests were conducted by substituting CGI with its six components interchangeably. Previous studies by Feyisa et al. (2022) had shown that each CGI component had unique effects on economic growth. The results, documented in **Table 10**, suggested that PS, RG, GE, and COC significantly decreased value. In contrast, voice and accountability (VA) had a notably positive influence on value. Almustafa (2022) noted that VA had a distinct impact on stock return compared to other CGI components. VA or value added, included the principles of press freedom and citizen engagement, which were significant factors in shaping an investor's evaluation of future success Nguyen (2021) discovered that investors in countries with press freedom encounter fewer issues related to information asymmetry, and corporations were less likely to engage in earning management. In summary, these findings suggested that the corporate governance index (CGI), was a complex notion that generally had a negative effect on value, primarily due to factors such as political stability, adherence to regulations, governance practices, and corruption control.

The results of the robustness test were presented by comparing emerging and developed countries in **Table 11**. The findings indicated that ESG significantly enhanced companies' value in developing countries. Engelhardt et al. (2021) suggested that implementing ESG principles in developing countries could enhance firm value due to the higher demand for societal support in these regions. However, this analysis indicated that the CGI variable had an insignificant effect on firm value in both developed and developing countries. This highlighted a persistent lack of distinction in CGI's impact on companies' value across various settings

The outcomes of the robustness test were presented for specific industrial subgroups in **Table 12**. This analysis revealed that the ESG score positively impacted the value of companies in the communication service, consumer staples, information technology, and materials sectors. However, CGI showed a positive effect only in the information technology and utilities sectors. These results provided clear evidence that supported the varied relationship between companies' ESG score, CGI, and its value across different industry sectors. The findings aligned with prior studies (Şerban et al.,

2023), which highlighted the diverse impacts of ESG and CGI across sectors, and also indicated that these measures could not consistently describe companies' value within specific sectors.

Table 10. Robustness: Changing proxy for CGI.

VARIABLES	COC	GE	PS	RE	LAW	VA
ESG.L1	0.004**	0.005***	0.004**	0.004**	0.004**	0.004**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
COC	−0.003***					
	(0.001)					
GE		−0.004***				
		(0.001)				
PS			−0.002**			
			(0.001)			
RE				−0.003**		
				(0.001)		
LAW					−0.001	
					(0.001)	
VA						0.004***
						(0.001)
ROE	0.023***	0.023***	0.023***	0.023***	0.023***	0.023***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
SIZE	−0.895***	−0.922***	−0.908***	−0.903***	−0.916***	−0.888***
	(0.049)	(0.042)	(0.046)	(0.051)	(0.047)	(0.048)
FIN_LEV	0.003***	0.003***	0.003***	0.003***	0.003***	0.002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	2.473	2.473	2.473	2.473	2.473	2.473
wald chi2	518.8	856.5	631.9	489.9	588.5	660.9

Note: Standard errors in parentheses; *** $p < 0.01$. ** $p < 0.05$. * $p < 0.1$.

Table 11. Robustness: Developed versus developing.

VARIABLES	DEVELOPED	DEVELOPING
ESG.L1	0.001	0.004*
	(0.003)	(0.002)
CGI	−0.017	0.001
	(0.012)	(0.003)
ROE	0.006*	0.027***
	(0.003)	(0.002)
SIZE	−0.381***	−1.089***
	(0.077)	(0.065)

Table 11. (*Continued*).

VARIABLES	DEVELOPED	DEVELOPING
FIN_LEV	−0.001	0.003***
	(0.001)	(0.001)
Observations	656	1.817
wald chi2	49.86	520.9

Note: Standard errors in parentheses; *** $p < 0.01$. ** $p < 0.05$. * $p < 0.1$.

Table 12. Robustness: Industry sample.

VARIABLES	COMMUNICATION SERVICE	CONSUMER DISCRETIONARY	CONSUMER STAPLES	ENERGY	HEALTH CARE	INDUSTRIALS	INFORMATION TECHNOLOGY	MATERIALS	REAL ESTATE	UTILITIES
ESG.L1	0.012**	−0.006	0.013**	−0.001	−0.014	−0.002	0.035***	0.012***	0.000	−0.007
	(0.005)	(0.007)	(0.007)	(0.005)	(0.014)	(0.003)	(0.009)	(0.004)	(0.006)	(0.005)
CGI	−0.002	−0.004	−0.019***	−0.001	−0.029**	−0.000	0.005	−0.008**	−0.008	0.002
	(0.005)	(0.005)	(0.007)	(0.006)	(0.012)	(0.002)	(0.008)	(0.003)	(0.005)	(0.003)
ROE	0.061***	0.016**	0.052***	0.009**	0.021**	0.010***	0.016	0.018***	0.016***	0.026***
	(0.008)	(0.007)	(0.007)	(0.004)	(0.009)	(0.004)	(0.014)	(0.004)	(0.005)	(0.006)
SIZE	−1.516***	−0.289	−1.471***	−0.184	−1.125***	−0.332***	−0.513**	−1.225***	−1.104***	−0.985***
	(0.173)	(0.178)	(0.218)	(0.163)	(0.360)	(0.087)	(0.212)	(0.170)	(0.266)	(0.217)
FIN_LEV	0.007***	0.001	0.004***	−0.000	0.000	0.001	−0.006	0.006***	0.006***	0.001
	(0.001)	(0.002)	(0.002)	(0.001)	(0.003)	(0.001)	(0.004)	(0.001)	(0.001)	(0.001)
Observations	253	270	341	217	153	474	114	347	107	197
wald chi2	283.2	13.79	239.8	5.747	34.75	21.96	27.33	85.77	84.72	44.70

Note: Standard errors in parentheses; *** $p < 0.01$. ** $p < 0.05$. * $p < 0.1$.

5. Discussion

5.1. ESG Scores have a positive impact on firm value

Understanding the factors that influence a company's value is essential to assessing the financial well-being of a company, which directly impacts the wealth of its stakeholders, including ownership structure, profitability, company size, cash flow, audit quality, leverage, and growth (Bakri, 2021). These factors influence market perceptions of a company's performance and profitability, thus affecting its value. This study found that the ESG coefficient is significantly positive, indicating a beneficial effect on firm value. This finding is consistent with previous studies (Aydoğmuş et al., 2022) which also identified a positive relationship between ESG and business value. ESG has recently been in the spotlight in the business world, ESG has become an important component of business strategy to reflect a company's responsibility towards the environment, society, and governance. In this case, ESG is an important part of the disclosures that must be reported by companies and is a consideration for investors. A Bloomberg survey stated that 85% of investors and

company leaders see ESG as the key to a stronger corporate strategy and believe that ESG investments result in better financial returns and a more resilient investment portfolio. ESG disclosure is also important in manufacturing companies to build consumer and investor confidence. Investors are increasingly convinced that companies that perform well on ESG have lower risk, are better positioned for the long term, and are better prepared to face uncertainty. This is supported by the fact that in running its business operations, companies need to pay attention to social responsibility and concern for the environment in order to gain support and trust from the community. Support and trust from the community can have a positive impact on the company's survival in the future (Gray et al., 1995).The main problem of business globally is no longer how to achieve economic growth and high living standards, but how to do it without damaging the earth's ecosystem (Boeva et al., 2017). Companies continue to pay attention to the environment that is affected by their business processes. One of the business problems related to the environment is excess production of CO_2 emissions, waste management problems, water scarcity, and limited supplies of fossil fuels. Companies that are oriented in the non-financial sector contribute more to the negative impact on the environment.

The results of this study found that ESG involvement is positively in line with stakeholder theory. According to stakeholder theory, the success of a company is not only its ability to satisfy shareholders, but also to satisfy other stakeholders. By disclosing ESG information, companies demonstrate their commitment to social and environmental responsibility, which can improve relationships with stakeholders such as customers, employees, communities, and governments. This can build trust and strengthen the company's reputation so that conflicts between managers and stakeholders can be resolved (Pulino et al., 2022). The results of this study are also in line with signaling theory, this theory helps explain how companies use signals to communicate their ESG performance to stakeholders. By voluntarily sharing information about ESG practices and disclosing commitments to sustainable business, companies can reduce information asymmetry between companies and external stakeholders. This can improve the company's reputation and can influence the perceptions and decisions of investors who care about environmental, social, and governance issues which in turn can affect the company's value and access to capital (Friede et al., 2015).

5.2. Country Governance Indicators (CGI) have a negative impact on firm value

Country governance Indicators (CGI) has an important role for a country. Good governance can affect various aspects of development and welfare, including political stability, government effectiveness, regulatory quality, law enforcement, and control of corruption. Good governance in a country can create a conducive environment for economic growth, increase public trust, which in turn can create a stable and predictable business environment, which is very important for operating and attracting foreign investment. For example, indicators such as government effectiveness, regulatory quality, and control of corruption can influence corporate decisions regarding investment and business operations in the country. Thus, it can be said that

CGI has an important role for companies because CGI provides data on perceptions of governance that can influence business and investment decisions. Companies often use this information to assess risks and opportunities in various countries. Perceptions about government effectiveness, regulatory quality, and control of corruption, for example, can influence corporate decisions regarding investment and business operations in a country. These perceptions are important because corporate actions are often based on their views of the investment climate and government performance. (Kaufmann et al., 2011).

This study shows a significant negative coefficient on the CGI variable, which is contrary to this hypothesis, and suggests several reasons for this result. A high CGI score reflects an effective and business-friendly bureaucracy (Guerrero and Castañeda, 2021). Fulfilling bureaucratic procedures can cause business disruption, financial disruption, and negatively impact overall company value. Additionally, investors may view a high CGI score with skepticism as to the accuracy or accuracy of governance indicators. Doubts about the governance system can have a negative impact on the perception of the investment environment. This finding is in line with previous research (Adedeji and Ogunfalu, 2023) which states that CGI cannot increase company value significantly.

High CGI values are also generally considered positive and reflect good governance. However, CGI values can have a negative impact on corporate value in several contexts. The first is that strict regulations in a government can increase operational costs for companies to meet and comply with environmental and social standards. Then high expectations and increased competition, which can have a negative impact on market value and can affect profit margins and growth of existing companies. Finally, rapid policy changes to address social and environmental issues in a country can result in companies having difficulty adapting and affecting company performance and value (Mooneeapen et al., 2022).

5.3. ESG and CGI have a positive impact on firm value

An effective government plays a crucial role in strengthening the relationship between ESG (Environmental, Social, and Governance) practices and corporate performance (Handoyo and Anas, 2024). Governments can create an environment that supports ESG initiatives through policies that encourage or mandate sustainability (Kaufmann et al., 2011). In countries with high government effectiveness, companies implementing ESG practices receive better institutional support, greater access to capital, and more positive public perception, which in turn boosts their financial performance (Cahan et al., 2016). Conversely, in countries with low government effectiveness, the impact of ESG on corporate performance is diminished due to weak policy enforcement and greater uncertainty. Regulatory quality also acts as a moderating factor in this relationship (Handoyo and Anas, 2024). In countries with strong regulations, companies adopting ESG practices tend to have better financial performance because they align with standards and stakeholder expectations. In countries with weaker regulations, ESG practices can become a differentiation strategy to gain a competitive edge, even if they do not fully meet stakeholder expectations (De Villiers and Marques, 2016).

Additionally, strong public governance can encourage companies to engage more in ESG practices through six dimensions of governance: voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption (Kuzey et al., 2023). In countries with strong public governance, companies are more motivated to transparently disclose ESG practices, driven by pressure from a legal and institutional environment that supports transparency and social responsibility (Jacoby et al., 2019). The strength of public governance is positively correlated with greater ESG involvement, which can enhance the company's reputation, attract investors, reduce risks, and ultimately increase its value.

This study shows that the interaction of CGI × ESG has a positive coefficient indicating that good country governance increases the benefits of ESG practices. The results found in this study are in accordance with the hypothesis proposed earlier, which states that Country Governance Indicators (CGI) and ESG Scores have a positive impact on firm value. In other words, ESG practices become more valuable to companies operating in an environment with good governance. This may be because strong institutions and policies help strengthen the positive aspects of ESG initiatives, making them more effective and valuable in terms of company performance. The results of this study align with previous research which found that better governance quality and effective regulations strengthen the positive link between ESG performance and financial outcomes. Companies in such environments are more likely to benefit from improved ESG disclosure and stronger financial performance (Handoyo and Anas, 2024; Luo et al., 2024; Rahmaniati and Ekawati, 2024; Uyar et al., 2021).

6. Conclusion

This study investigated the relationship between the Environment, Social, and Governance (ESG) score and the Country Governance Indicator (CGI) on companies' value in Asia. The research sample consisted of 278 companies located in 15 countries in Asia in the period 2011–2021.The findings indicated that adopting ESG standards positively affects firm value, aligning with previous studies on sustainable and socially responsible strategies. It can be concluded that the first hypothesis of this study is accepted. This study uses the price to book value as the company value, then we conduct a robustness test by replacing the PB value with the Tobins'Q value and the results show a significant and positive effect on company valuation. In addition, individually the Environment, Social, Governance values each have a positive effect on company value and in particular, the G (Governance) score shows a statistically significant impact. It can be said that ESG Disclosure is important in non-financial companies to build consumer and investor trust, ESG investment can generate better financial returns and a more resilient investment portfolio.

However, contrary to the initial hypothesis, CGI had a negative impact on companies' value. This suggested that while good country governance was crucial for economic stability, high CGI scores did not always create a favorable business environment. Bureaucratic inefficiencies and investor mistrust in country governance could hinder a firm's performance and overall value. CGI value is replaced with the individual value of the six components showing that each CGI component has a unique

impact on economic growth. The PS, RG, GE, and COC components significantly decrease the value and conversely, voice and accountability (VA) have a positive impact on the value, while LAW shows no effect. This study also found a positive correlation between CGI and ESG on company value. These results suggest that the disclosure of ESG values within a company is influenced by the quality of country governance, which in turn impacts the company's value.

Suggestions for regulators and policy makers can set policies that are in accordance with the economic and cultural conditions of their countries so that they can increase ESG disclosure but are in line with positive increases in company value and can reduce negative aspects of governance in each country. It is recommended that future studies can focus on the specific mechanisms used by ESG practices to increase company value and the mediating factors that facilitate this relationship. There are several factors that may moderate or influence the relationship between ESG and firm value indirectly, either by strengthening or reducing the impact of ESG practices on firm value. Furthermore, detailed evaluations of the various components of ESG and CGI were necessary to understand how changes in specific characteristics affect firm value across industries and regions. Such a study could identify key drivers of corporate sustainability and governance effectiveness, thereby guiding governments and businesses in implementing targeted measures and strategies. Also in the future research can conduct research on the joint effect of ESG and CGI. This study has limitations with limited samples and research period. This study only examined 15 countries in Asia, so future researchers can examine all countries in Asia. This study is also limited to the observation period of 2011–2021, so it cannot describe conditions outside that period. This study is limited to non-financial companies, so that further researchers can also examine the financial sector.

These findings emphasized the importance of integrating ESG elements into corporate decision-making processes. Transparent ESG practices and accountability could improve financial performance and increase stakeholder confidence and loyalty. Furthermore, this study highlighted the necessity for corporations to navigate the regulatory and institutional environment effectively, recognizing the potential impact of country-level governance indicators on corporate value. Managers must engage with policymakers to support reforms that enhanced transparency, accountability, and economic stability, fostering an environment conducive to long-term growth and value generation.

Author contributions: Conceptualization, LVD, MDA and RJ; methodology, LVD, MDA and RJ; writing, LVD; investigation, LVD, MDA and RJ; resources, LVD; supervision, MDA and RJ. All authors have read and agreed to the published version of the manuscript.

Conflict of interest: The authors declare no conflict of interest.

References

Adedeji, A. A., & Ogunfalu, K. M. (2023). Investments, governance quality, and industrial development in Africa. Economic Alternatives, 29(2), 344–373. https://doi.org/10.37075/EA.2023.2.07

Alfalih, A. A. (2022). ESG disclosure practices and financial performance: A general and sector analysis of SP-500 non-financial companies and the moderating effect of economic conditions. Journal of Sustainable Finance & Investment, 13(4), 1506–1533. https://doi.org/10.1080/20430795.2022.2150511

Almustafa, H. (2022). National governance quality, COVID-19, and stock index returns: OECD evidence. Economies, 10(9), 1–16. https://doi.org/10.3390/economies10090214

Alsaleh, M., Abdul-Rahim, A. S., & Abdulwakil, M. M. (2021). The importance of worldwide governance indicators for transitions toward sustainable bioenergy industry. Journal of Environmental Management, 294, 1–13. https://doi.org/10.1016/j.jenvman.2021.112960

Aslam, E., & Haron, R. (2021). Corporate governance and risk-taking of Islamic banks: Evidence from OIC countries. Corporate Governance, 21(7), 1460–1474. https://doi.org/10.1108/CG-08-2020-0311

Atan, R., Alam, M. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. Management of Environmental Quality: An International Journal, 29(2), 182–194. https://doi.org/10.1108/MEQ-03-2017-0033

Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. Borsa Istanbul Review, 22(S2), S119–S127. https://doi.org/10.1016/j.bir.2022.11.006

Bai, X., Han, J., Ma, Y., & Zhang, W. (2022). ESG performance, institutional investors' preference and financing constraints: Empirical evidence from China. Borsa Istanbul Review, 22(S2), S157–S168. https://doi.org/10.1016/j.bir.2022.11.013

Bakri, M. A. (2021). Moderating effect of audit quality: The case of dividend and firm value in Malaysian firms. Cogent Business and Management, 8(1), 1–15. https://doi.org/10.1080/23311975.2021.2004807

Bătae, O. M., Dragomir, V. D., & Feleagă, L. (2021). The relationship between environmental, social, and financial performance in the banking sector: A European study. Journal of Cleaner Production, 290, 125791. https://doi.org/10.1016/j.jclepro.2021.125791

Bergh, D. D., Connelly, B. L., Ketchen, D. J., & Shannon, L. M. (2014). Signalling theory and equilibrium in strategic management research: An assessment and a research agenda. Journal of Management Studies, 51(8), 1334–1360. https://doi.org/10.1111/joms.12097

Bilyay-Erdogan, S., Danisman, G. O., & Demir, E. (2024). ESG performance and investment efficiency: The impact of information asymmetry. Journal of International Financial Markets, Institutions and Money, 91. https://doi.org/10.1016/j.intfin.2023.101919

Boeva, B. N., Zhivkova, S. G., & Stoychev, I. S. (2017). Global supply chains and sustainable development. In CBU International Conference Proceedings (Vol. 5, pp. 508-511). ISE Research Institute. https://doi.org/10.12955/cbup.v5.975

Cahan, S., De Villiers, C., Jeter, D., Naiker, V., & Van Staden, C. (2016). Are CSR disclosures value relevant? Cross-country evidence. European Accounting Review, 25(3), 579-611. https://doi.org/10.1080/09638180.2015.1064009

Chen, Y., Li, T., Zeng, Q., & Zhu, B. (2023). Effect of ESG performance on the cost of equity capital: Evidence from China. International Review of Economics & Finance, 83, 348–364. https://doi.org/10.1016/j.iref.2022.09.001

De Villiers, C., & Marques, A. (2016). Corporate social responsibility: Country-level predispositions and the consequences of choosing a level of disclosure. Accounting and Business Research, 46(2), 167-195. https://doi.org/10.1080/00014788.2015.1039476

Deegan, C. (2004). Financial accounting theory. McGraw-Hill Australia.

Duque-Grisales, E., & Aguilera-Caracuel, J. (2021). Environmental, social and governance (ESG) scores and financial performance of Multilatinas: Moderating effects of geographic international diversification and financial slack. Journal of Business Ethics, 168(2), 315–334. https://doi.org/10.1007/s10551-019-04177-w

Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. Management Science, 60(11), 2835–2857. https://doi.org/10.1287/mnsc.2014.1984

El-Sehwagy, A. M., & Bekheit, M. B. E. D. (2023). World governance indicators and corporate borrowing decisions in the G8 countries. Alexandria Journal of Accounting Research, 6(3), 125–147. https://aljalexu.journals.ekb.eg/article_268025.html?lang=en

Engelhardt, N., Ekkenga, J., & Posch, P. (2021). ESG ratings and stock performance during the COVID-19 crisis. Sustainability, 13(13), 7133. https://doi.org/10.3390/su13137133

Eriqat, I. O. A., & Al-Khazaleh, S. (2023). The impact of corporate-and country-level governance mechanisms on the firm's disclosure quality: Evidence from MENA countries. Global Business and Finance Review, 28(7), 122–137. https://doi.org/10.17549/gbfr.2023.28.7.122

Feyisa, H. L., Ayen, D. D., Abdulahi, S. M., & Tefera, F. T. (2022). The three-dimensional impacts of governance on economic growth: Panel data evidence from the emerging market. Corporate Governance and Organizational Behavior Review, 6(1), 42–55. https://doi.org/10.22495/cgobrv6i1p3

Freeman, R. E. (2010). Strategic management: A stakeholder approach. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139192675

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance & Investment, 5(4), 210–233. https://doi.org/10.1080/20430795.2015.1114910

Frotagheh, M., & Kardan, B. (2019). The relationship between governance indicators and firm performance. Iranian Journal of Accounting, Auditing & Finance, 3(3), 39–56. https://doi.org/10.22067/ijaaf.v3i3.89075

Gray, R., Kouhy, R., & Lavers, S. (1995). Constructing a research database of social and environmental reporting by UK companies. Accounting, Auditing & Accountability Journal, 8(2), 78–101. https://doi.org/10.1108/09513579510086812

Gray, R., Owen, D., & Adams, C. (Eds.). (1996). Accounting and accountability: Changes and challenges in corporate social and environmental reporting. Prentice-Hall.

Guerrero, O. A., & Castañeda, G. (2021). Does expenditure in public governance guarantee less corruption? Non-linearities and complementarities of the rule of law. Economics of Governance, 22(2), 139–164. https://doi.org/10.1007/s10101-021-00252-z

Handoyo, S., & Anas, S. (2024). The effect of environmental, social, and governance (ESG) on firm performance: The moderating role of country regulatory quality and government effectiveness in ASEAN. Cogent Business & Management, 11(1). https://doi.org/10.1080/23311975.2024.2371071

Huynh, K. P., & Jacho-Chávez, D. T. (2009). Growth and governance: A nonparametric analysis. Journal of Comparative Economics, 37(1), 121–143. https://doi.org/10.1016/j.jce.2008.08.003

Indupurnahayu, Walujadi, D., Lysandra, S., Hurriyaturrohman, & Endri, E. (2023). Determinant of firm value: Evidence of oil palm plantation companies. Corporate & Business Strategy Review, 4(2), 124–131. https://doi.org/10.22495/cbsrv4i2art11

Jacoby, G., Liu, M., Wang, Y., Wu, Z., & Zhang, Y. (2019). Corporate governance, external control, and environmental information transparency: Evidence from emerging markets. Journal of International Financial Markets, Institutions and Money, 58, 269–283. https://doi.org/10.1016/j.intfin.2018.11.015

Jin, M., & Kim, B. (2022). The effects of ESG activity recognition of corporate employees on job performance: The case of South Korea. Journal of Risk and Financial Management, 15(7), 1–18. https://doi.org/10.3390/jrfm15070316

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: Methodology and analytical issues. Hague Journal on the Rule of Law, 3(2), 220–246. https://doi.org/10.1017/S1876404511200046

Kelley, D. J., Bosma, N., Amorós, J. E., & Global Entrepreneurship Research Association (GERA). (2011). Global Entrepreneurship Monitor 2010 global report. Babson: Babson College.

Khan, M. A., Khan, A., Hassan, M. K., & Maraghini, M. P. (2024). Market response to environmental social and governance performance: A global analysis. Research in International Business and Finance, 67. https://doi.org/10.1016/j.ribaf.2023.102131

Kostyuk, A. N., Tchernyshov, K., & Kostyuk, H. (2004). Financial-industrial groups at the markets for corporate control and investments: The case of Ukraine. Corporate Ownership & Control, 2(2), 77-90. https://doi.org/10.22495/cocv2i2p7

Kuzey, C., Uyar, A., & Karaman, A. S. (2023). Over-investment and ESG inequality. Review of Accounting and Finance. https://doi.org/10.1108/RAF-10-2022-0279

Luo, Z., Li, Y., Nguyen, L. T., Jo, I., & Zhao, J. (2024). The moderating role of country governance in the link between ESG and financial performance: A study of listed companies in 58 countries. Sustainability, 16, 5410. https://doi.org/10.3390/su16135410

Mahajan, R., Lim, W. M., Sareen, M., Kumar, S., & Panwar, R. (2023). Stakeholder theory. Journal of Business Research, 166, 1–16. https://doi.org/10.1016/j.jbusres.2023.114104

Manrique, S., & Martí-Ballester, C. P. (2017). Analyzing the effect of corporate environmental performance on corporate financial performance in developed and developing countries. Sustainability, 9(11), 1–30. https://doi.org/10.3390/su9111957

Massuga, F., Larson, M. A., Kuhl, M. R., & Doliveira, S. L. D. (2023). The influence of global governance on the sustainable performance of countries. Environment, Development and Sustainability. https://doi.org/10.1007/s10668-023-03827-4

Mohamad, N. E. A., Saad, N. M., & Abdullah, F. N. (2021). Comparative analysis of environmental, social and governance (ESG) implementations across Asia. Global Business and Management Research, 13(4s), 554-563. http://gbmrjournal.com/pdf/v13n4s/V13N4s-49.pdf

Mooneeapen, O., Abhayawansa, S., & Mamode Khan, N. (2022). The influence of the country governance environment on corporate environmental, social and governance (ESG) performance. Sustainability Accounting, Management and Policy Journal, 13(4), 953-985. https://doi.org/10.1108/SAMPJ-07-2021-0298

Naeem, N., Cankaya, S., & Bildik, R. (2022). Does ESG performance affect the financial performance of environmentally sensitive industries? A comparison between emerging and developed markets. Borsa Istanbul Review, 22(S2), S128–S140. https://doi.org/10.1016/j.bir.2022.11.014

Naser, K., Al-Hussaini, A., Al-Kwari, D., & Nuseibeh, R. (2006). Determinants of corporate social disclosure in developing countries: The case of Qatar. Advances in International Accounting, 19, 1-23. https://doi.org/10.1016/S0897-3660(06)19001-7

Nguyen, T. (2021). Freedom of the press and corporate misconduct. Journal of Business Finance and Accounting, 48(9–10), 1668–1710. https://doi.org/10.1111/jbfa.12532

OECD. (2023). Sustainable finance in Asia: ESG and climate-aligned investing and policy considerations. https://www.oecd.org/finance/Sustainable-finance-Asia-ESG-climate-aligned-investing-policy-considerations.pdf

Otman, K. (2021). Corporate governance: A review of the fundamental practices worldwide. Corporate Law & Governance Review, 3(2), 53–66. https://doi.org/10.22495/clgrv3i2p5

Pulino, S. C., Ciaburri, M., Magnanelli, B. S., & Nasta, L. (2022). Does ESG disclosure influence firm performance? Sustainability, 14(14), 7595. https://doi.org/10.3390/su14137595

Rahmaniati, N. P. G., & Ekawati, E. (2024). The role of Indonesian regulators on the effectiveness of ESG implementation in improving firms' non-financial performance. Cogent Business & Management, 11(1), 2293302. https://doi.org/10.1080/23311975.2023.2293302

Rapp, M. S., & Roser, M. (2024). The importance of ESG, environmental sustainability, and the EU taxonomy for institutional investors: Survey evidence. SSRN. http://dx.doi.org/10.2139/ssrn.4851251

Saygili, E., Arslan, S., & Birkan, A. O. (2022). ESG practices and corporate financial performance: Evidence from Borsa Istanbul. Borsa Istanbul Review, 22(3), 525–533. https://doi.org/10.1016/j.bir.2021.07.001

Setiani, E. P. (2023). The impact of ESG scores on corporate financial performance: Moderating role of gender diversity. Nominal Riset Akuntansi dan Manajemen, 12(1), 128–139. https://doi.org/10.21831/nominal.v12i1.59778

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. The Journal of Finance, 52(2), 737–783. https://doi.org/10.2307/2329497

Singhania, M., & Saini, N. (2023). Institutional framework of ESG disclosures: Comparative analysis of developed and developing countries. Journal of Sustainable Finance & Investment, 13(1), 516–559. https://doi.org/10.1080/20430795.2021.1964810

Spence, M. (1978). Job market signaling. Quarterly Journal of Economics, 87, 281–306. https://doi.org/10.1016/B978-0-12-214850-7.50025-5

Starks, L. T. (2023). Presidential address: Sustainable finance and ESG issues—Value versus values. The Journal of Finance, 78(4), 1837-1872. https://doi.org/10.1111/jofi.13255

Suttipun, M. (2023). ESG performance and corporate financial risk of the alternative capital market in Thailand. Cogent Business & Management, 10(1), 2168290. https://doi.org/10.1080/23311975.2023.2168290

Tiwari, S., Bashir, S., Sarker, T., & Shahzad, U. (2024). Sustainable pathways for attaining net zero emissions in selected South Asian countries: Role of green energy market and pricing. Humanities and Social Sciences Communications, 11(93), 1–13. https://doi.org/10.1057/s41599-023-02552-7

Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. Journal of Global Responsibility, 8(2), 169–178. https://doi.org/10.1108/JGR-11-2016-0029

Wan, G., Dawod, A. Y., Chanaim, S., & Ramasamy, S. S. (2023). Hotspots and trends of environmental, social and governance (ESG) research: A bibliometric analysis. Data Science and Management, 6(2), 65–75. https://doi.org/10.1016/j.dsm.2023.03.001

Wang, K., Yu, S., Mei, M., Yang, X., Peng, G., & Lv, B. (2023). ESG performance and corporate resilience: An empirical analysis based on the capital allocation efficiency perspective. Sustainability, 15(23), 1–31. https://doi.org/10.3390/su152316145

Willim, A. P. (2015). Price book value & Tobin's Q: Which one is better for measuring corporate governance? European Journal of Business and Management, 7(27), 1-10.

Yu, H., Ahn, M., & Han, E. (2023). Key driver of textile and apparel industry management: Fashion brand ESG and brand reputation. Frontiers in Environmental Science, 11, 1–14. https://doi.org/10.3389/fenvs.2023.1140004

Zhang, F., Qin, X., & Liu, L. (2020). The interaction effect between ESG and green innovation and its impact on firm value from the perspective of information disclosure. Sustainability, 12(5), 1–18. https://doi.org/10.3390/su12051866