

STRATEGIC ALIGNMENT OF ESG PRACTICES AND FIRM PERFORMANCE: THE MEDIATING ROLE OF STAKEHOLDER ENGAGEMENT AND THE MODERATING EFFECT OF STRATEGIC FLEXIBILITY

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Abstract: This study aims to explore the impact of the strategic alignment of Environmental, Social, and Governance (ESG) practices on firm performance, examining the mediating role of stakeholder engagement and the moderating effect of strategic flexibility. Using a quantitative approach, data were collected via a structured questionnaire from 488 senior executives, ESG officers, and managers across various industries in China. The study employs Structural Equation Modeling (SEM) to test the proposed hypotheses. The findings reveal that ESG strategic alignment has a significant positive effect on firm performance. Moreover, stakeholder engagement mediates this relationship, suggesting that firms that actively engage stakeholders in ESG practices experience enhanced performance outcomes. Additionally, strategic flexibility moderates the relationship between ESG alignment and firm performance, with firms demonstrating greater flexibility showing a stronger link between ESG practices and performance. These results provide actionable insights for firms seeking to enhance their long-term competitiveness and sustainability by aligning ESG practices with corporate strategy and fostering stakeholder engagement, particularly in dynamic market environments.

Keywords: ESG Strategic Alignment, Stakeholder Engagement, Strategic Flexibility, Firm Performance

Introduction

In the context of the advancing global sustainability agenda, the challenges faced by enterprises have long extended beyond traditional performance pressures, placing greater emphasis on their responsibilities in environmental, social, and governance (ESG) dimensions. From the introduction of the concept of sustainable development in the 1987 Brundtland Report, to the establishment of a global climate action framework in the 2015 Paris Agreement, and the 2020 announcement by BlackRock integrating ESG into its investment decisions, these global initiatives collectively mark the evolution of

ESG as a key indicator of a firm's long-term value creation and social responsibility (Manapreechadeelert, 2023). As stakeholders—including investors, consumers, and policymakers—pay increasing attention to sustainable business practices, ESG has transitioned from a matter of regulatory compliance to a core element of corporate strategy (Adio et al., 2025). In this trend, firms are widely expected to embed ESG principles into their organizational mission, strategic planning, key performance indicators (KPIs), executive compensation schemes, and day-to-day operations, thereby achieving what is referred to as the “strategic alignment of ESG practices” (Mio et al., 2022).

Although ESG has become an integral part of corporate strategy, empirical research on how the strategic alignment of ESG practices influences firm performance (FP) remains limited. Existing literature has primarily focused on isolated ESG initiatives or disclosure practices, with few studies offering a systematic analysis of how ESG, as an integrated strategic element, is embedded within core management systems and how it affects performance outcomes (Gidage & Bhide, 2025). This gap is particularly evident under rapidly changing market and societal conditions, where mechanisms for translating ESG strategy into measurable results remain underexplored.

Against this backdrop, this study develops a research framework to systematically examine the impact of ESG strategic alignment on firm performance, while further exploring the mediating role of stakeholder engagement and the moderating effect of strategic flexibility. The findings of this study aim to offer actionable strategic management insights for enterprises responding to increasingly stringent ESG regulations and diverse stakeholder demands. These insights are particularly relevant to ESG-sensitive industries such as manufacturing, finance, and technology, and support the coordinated advancement of environmental responsibility, social impact, and financial performance.

Research Objective (s)

1. To examine the effect of strategic alignment of ESG practices on firm performance.
2. To investigate the mediating role of stakeholder engagement in the relationship between ESG strategic alignment and firm performance.
3. To assess the impact of stakeholder engagement on firm performance.
4. To evaluate the moderating effect of strategic flexibility on the relationship between ESG strategic alignment and firm performance.

Literature Review

ESG–Performance Linkages:

1. ESG Strategic Alignment and Firm Performance

In the current governance environment dominated by the sustainability paradigm, the logic of performance evaluation faced by companies has undergone a profound transformation. ESG strategic

alignment (Strategic Alignment of ESG Practices) represents an advanced form of strategic management, which is not only reflected in the formal integration of ESG issues but also in a resource allocation model that deeply integrates environmental responsibility, social governance, and the organization's core value system (Mio et al., 2022). This alignment is manifested not only in goal congruence within task systems but also in institutional arrangements such as executive compensation, performance indicators, and process design, forming the underlying logic for companies to transition from “doing ESG” to “thinking through ESG.” From the perspective of the Resource-Based View (RBV), a high degree of ESG strategic alignment means that the firm can integrate scarce social-environmental resources to form unique capabilities, thereby establishing a sustainable competitive advantage. Embedding ESG not only enhances the organization’s legitimacy, brand trust, and reputation capital (Kulova & Nikolova-Alexieva, 2023) but also significantly improves firm performance in areas such as customer preference, capital acquisition, and government relations. While existing studies have confirmed the unidimensional effects of ESG, the mechanisms through which ESG strategic alignment, as a strategic configuration, influences firm performance still require systematic construction. Based on this, the following hypothesis is proposed:

H1: Firms with higher strategic alignment of ESG practices exhibit better firm performance.

2. Stakeholder Engagement

Although ESG strategy provides firms with direction for sustainable development, its translation into actual performance does not occur automatically. In this process, stakeholder engagement (SE) plays a critical role, serving as both an institutional embeddedness and an essential component of the firm’s proactive behavior. Based on stakeholder theory (Freeman, 1984), firms that actively engage external groups (such as customers, investors, and communities) and internal members (such as employees) in the co-creation of ESG strategies can significantly enhance the strategic feasibility and internal organizational alignment (Sen & Bhattacharya, 2001). This engagement not only helps firms strengthen their sense of social and environmental responsibility but also fosters long-term collaborative relationships with various stakeholders. For instance, Du et al. (2020) highlight that SE, through mechanisms such as green training, ethical sourcing, and community project participation, enhances organizational transparency and communication capabilities, further improving the firm’s commitment to ESG. Moreover, broad stakeholder participation not only increases the firm’s social capital but also enhances its ability to respond to external uncertainties and acquire resources. This makes SE not only the organizational behavior foundation for ESG strategic alignment but also the key "connecting link" that drives the successful implementation of ESG strategies and the transformation of strategic goals into actual performance (Bonetti et al., 2023). Based on this, the following hypotheses are proposed:

H2: The effect of ESG strategic alignment on performance is mediated by stakeholder engagement.

H3: Firms that actively engage stakeholders in ESG strategy gain greater performance benefits.

3. Strategic Flexibility

Strategic flexibility (SF) plays a key role in responding to rapidly changing market environments and uncertain policy contexts. It refers to the firm's ability to quickly identify external changes and adjust its strategic path and resource allocation accordingly. In the ESG context, strategic flexibility is especially important as firms often face dynamic external regulations, market demands, and societal expectations when implementing ESG strategies. Existing literature suggests that strategic flexibility not only helps firms cope with external challenges but also enhances their innovation capabilities and competitiveness, particularly in the adoption of green technologies and sustainable practices (Otahe, 2024). Strategic flexibility is manifested in several subdimensions, including environmental scanning, strategic reconfiguration, scenario planning, and innovation responsiveness. Specifically, environmental scanning enables firms to identify and anticipate sustainability trends and related compliance changes; strategic reconfiguration helps firms quickly shift resources from traditional objectives to emerging sustainable development goals; scenario planning provides effective contingency plans to respond to policy changes such as carbon taxes; and innovation responsiveness drives firms to rapidly adopt and apply green technologies in their operations. These capabilities collectively enhance the firm's flexibility and adaptability in ESG strategic alignment and contribute to improved overall performance. Based on this, the following hypothesis is proposed:

H4: The positive relationship between ESG strategic alignment and performance is stronger in firms with high strategic flexibility.

Theoretical Perspectives:

1. Stakeholder Theory

Stakeholder Theory (ST), introduced by Freeman in 1984, emphasizes that organizations should consider the interests of all stakeholders—such as employees, customers, suppliers, and communities—when making decisions, not just shareholders. ST underscores the importance of balancing stakeholder demands to achieve long-term success, offering guidance for strategic decision-making. As it relates to ESG strategies, Stakeholder Engagement (SE) is critical in improving strategic feasibility, transparency, and collaboration. By engaging stakeholders in ESG strategy design and execution, firms can enhance trust and fulfill their social and environmental responsibilities, thus driving sustainability. This study applies ST to explore how integrating stakeholder interests with ESG objectives can boost firm performance, foster innovation, and create long-term value, particularly in rapidly evolving market environments (Jayaraman et al., 2023; Mahajan et al., 2023; Valentinov & Hajdu, 2021).

2. Resource-Based View and Stakeholder

The Resource-Based View (RBV) is a key framework in understanding how firms gain competitive advantages by effectively managing internal resources. Introduced by Barney in 1991, RBV

posits that only resources that are rare, valuable, inimitable, and non-substitutable can provide sustainable competitive advantage. In the context of ESG, RBV highlights how environmental, social, and governance factors can be treated as strategic resources. Integrating stakeholders into a firm's resource framework enhances competitiveness and allows firms to better adapt to market and societal shifts. This study illustrates how stakeholders, as strategic resources, contribute to the successful implementation of ESG strategies, helping firms achieve both social responsibility and financial goals, while strengthening long-term market position (Chipimo et al., 2025; Góes et al., 2023; Ozdemir et al., 2023).

Methodology

This study uses a quantitative approach with a structured questionnaire to examine the relationships between ESG Strategic Alignment (ESG-SA), Stakeholder Engagement (SE), Strategic Flexibility (SF), and Firm Performance (FP). Data were collected through a questionnaire, and Structural Equation Modeling (SEM) was used to test the hypotheses. The study focuses on ESG-sensitive industries such as manufacturing, consumer goods, finance, and technology (Haavisto, 2024). The sample includes strategy executives, ESG officers, and senior managers from firms across various industries. Stratified random sampling ensured representation from different firm sizes, industry types, and ESG rating levels. Data were gathered from firms in regions of China, including the Yangtze River Delta, Pearl River Delta, and Beijing-Tianjin-Hebei, with varying levels of digital maturity. Of 500 distributed questionnaires, 488 valid responses were retained after data cleaning.

A 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) was used to measure four key variables. ESG Strategic Alignment (ESG-SA) was measured by assessing the degree to which ESG principles are integrated into the firm's mission, key performance indicators (KPIs), and executive compensation strategies (Lin et al., 2025). Stakeholder Engagement (SE) was measured by the extent and depth of collaboration with both internal and external stakeholders, such as employees, customers, and investors, with an emphasis on integrating their interests into the firm's ESG objectives (Dong et al., 2025). Strategic Flexibility (SF) was assessed based on how frequently the firm reviews its strategy, adapts to market and policy changes, and responds to ESG-related challenges and opportunities (Wei et al., 2025). Firm Performance (FP) was measured using financial indicators (e.g., return on assets), reputation metrics (e.g., ESG ratings), and operational outcomes (e.g., cost savings, risk reduction, and employee retention).

For data analysis, the reliability and validity of the scales were assessed using Cronbach's Alpha and Confirmatory Factor Analysis (CFA). Structural Equation Modeling (SEM) was employed to test the hypothesized relationships, including both direct and indirect effects. Additionally, multi-group analysis was conducted to explore the moderating effect of strategic flexibility, comparing the

performance of firms with high versus low strategic flexibility in their ESG strategic alignment.

Results

1. Confirmatory Analysis

Table 1: Model Fit Indicators

Common Indicators	χ^2	df	p	χ^2/df	GFI	RMSEA	RMR	CFI	NFI	NNFI
Criterion	-	-	>0.05	<3	>0.9	<0.10	<0.05	>0.9	>0.9	>0.9
Value	145.658	71	0	2.052	0.96	0.046	0.058	0.981	0.965	0.976
Other Indicators	TLI	AGFI	IFI	PGFI	PNFI	PCFI	SRMR	RMSEA	90% CI	
Criterion	>0.9	>0.9	>0.9	>0.5	>0.5	>0.5	<0.1	-		
Value	0.976	0.941	0.982	0.649	0.753	0.766	0.026	0.036	~ 0.057	

2 Structural Equation Modeling

The baseline structural model shows a strong fit, with $\chi^2/df = 1.059$, IFI = 0.997, TLI = 0.997, CFI = 0.997, and RMSEA = 0.011, all exceeding recommended thresholds, indicating the model is suitable for interpretation. The path analysis reveals that ESG performance significantly boosts firm performance ($\beta = 0.259$, $t = 4.954$, $p < 0.01$) and strongly influences stakeholder engagement ($\beta = 0.448$, $t = 8.680$, $p < 0.01$). Furthermore, stakeholder engagement positively impacts firm performance ($\beta = 0.115$, $t = 2.384$, $p < 0.05$), suggesting ESG enhances performance both directly and indirectly through stakeholder engagement. These results emphasize the critical role of ESG in driving firm success and the importance of stakeholder relationships as a key mediator.

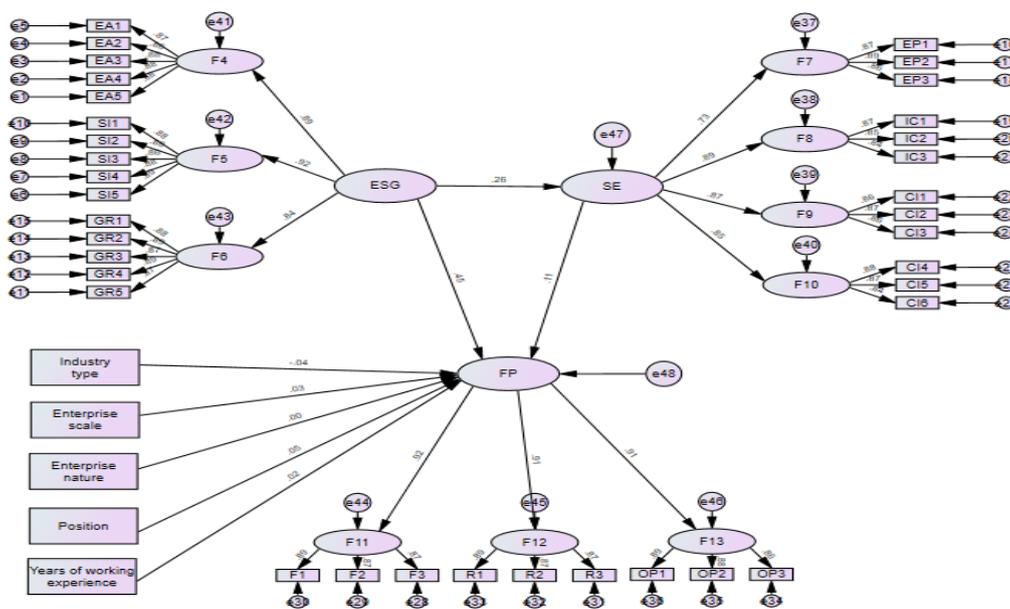


Figure 1: Structural Equation Modeling Diagram

Table 2: Estimation of the baseline structural model

Item	Main Effect
Model fit	Model 1
x ² /df	1.059
IFI	0.997
TLI	0.997
CFI	0.997
RMSEA	0.011
ESG→FP	0.259**(4.954)
ESG→SE	0.448**(8.680)
SE→FP	0.115**(2.384)

2. Mediation Test

This study employed the Bootstrap method in AMOS software to test the mediating effect, setting the sample size at 5,000 (typically required to exceed 1,000), and the confidence interval at 95% (commonly set at 90%, 95%, or 99%), using the bias-corrected confidence interval. The upper and lower limits of this interval were observed. If the bias-corrected confidence interval of the indirect effect does not include 0, it indicates the existence of a mediating effect. Further, if the bias-corrected confidence interval of the direct effect does not include 0, it suggests that the direct effect is also significant, indicating partial mediation. If it does include 0, it suggests complete mediation.

Table 3: Summary of Mediation Effect Test

Path	Estimate	Lower	Upper	P	
Indirect Effect	0.030	0.003	0.068	0.031	
ESG Strategic Alignment -> Stakeholder Engagement -> Firm Performance	Direct Effect	0.450	0.336	0.566	0.000
	Total Effect	0.480	0.3372	0.596	0.000

The results of the mediation effect test indicate that in the model with strategic fit as the independent variable, firm performance as the dependent variable, and stakeholder engagement as the mediating variable, the indirect effect value is 0.030, and the Bootstrap confidence interval ranges from [0.003, 0.068]. Since the confidence interval does not include 0, this suggests that stakeholder engagement has a significant mediating effect on the relationship between strategic fit and firm

performance, thereby supporting the mediation hypothesis.

3. Moderation Test

Table 4: Moderating Effect Analysis Results

	Model 1	Model 2	Model 3
Constant	4.476** (14.109)	4.770** (17.579)	4.761** (20.531)
Industry Type	-0.038 (-0.699)	-0.022 (-0.472)	0.011 (0.278)
Firm Size	0.085 (0.921)	0.096 (1.216)	0.035 (0.512)
Firm Nature	-0.004 (-0.063)	-0.070 (-1.387)	-0.059 (-1.382)
Position	0.086 (1.295)	-0.003 (-0.061)	-0.026 (-0.537)
Years of Work Experience	0.054 (0.640)	0.038 (0.527)	0.023 (0.373)
ESG Strategic Alignment	0.432** (10.223)	0.357** (9.797)	0.419** (13.290)
Strategic Flexibility		0.609** (13.479)	0.757** (18.838)
ESG Strategic Alignment * Strategic Flexibility			0.309** (13.348)
Sample Size	488	488	488
R ²	0.190	0.412	0.572
ΔR ²	0.190	0.222	0.159
F-value	18.792**	48.112**	79.908**

Note: Dependent Variable = Firm Performance

p < 0.05 ** p < 0.01 (t values are in parentheses)

Model 1 included control variables such as industry type and firm size, along with strategic fit. The results showed that strategic fit had a significant effect on firm performance ($\beta = 0.432$, $p < 0.01$), while other control variables were not significant, with an explanatory power of $R^2 = 0.190$. Model 2 added strategic flexibility to Model 1, and this variable also had a significant impact on firm performance ($\beta = 0.609$, $p < 0.01$), increasing the model's explanatory power to $R^2 = 0.412$, with $\Delta R^2 = 0.222$, indicating that strategic flexibility makes an important contribution to firm performance. Model 3 further incorporated the interaction term between strategic fit and strategic flexibility, which was significant ($\beta = 0.309$, $p < 0.01$). The explanatory power of the model reached $R^2 = 0.572$, with $\Delta R^2 = 0.159$, and the F-value also increased significantly. These results suggest that strategic flexibility plays a significant moderating role in the relationship between strategic fit and firm performance, meaning that the level of strategic flexibility alters the strength of the relationship between strategic fit and firm performance.

Table 5: Simple Slope Analysis

Moderating Variable Levels	Regression Coefficient	Standard Error	t	p	95% CI	
Mean	0.419	0.032	13.290	0.000	0.357	0.481
High Level (+1SD)	0.782	0.045	17.556	0.000	0.694	0.869
Low Level (-1SD)	0.056	0.038	1.463	0.144	-0.019	0.132

When strategic flexibility is at its mean level, each unit increase in strategic fit leads to a 0.419-unit increase in firm performance. When strategic flexibility is at a high level (+1SD), this effect is strengthened to 0.782 units, and the significance is extremely high ($t = 17.556$, $p < 0.001$). However, when strategic flexibility is at a low level (-1SD), strategic fit has a positive but nonsignificant effect on firm performance (regression coefficient = 0.056, $t = 1.463$, $p = 0.144$).

Discussion

This study confirms the positive impact of strategic alignment of ESG practices on firm performance, consistent with the findings of Mio et al. (2022) and Gidage and Bhide (2025). However, it extends these findings by introducing stakeholder engagement as a mediating variable, filling a gap in the existing literature. Additionally, while previous studies mainly focused on the direct effect of ESG on firm performance (Manapreechadeelert, 2023), this study introduces strategic flexibility as a moderating variable, showing that firms with higher strategic flexibility experience a stronger relationship between ESG and firm performance. This provides a new perspective on how firms can optimize their ESG strategies through adaptability in dynamic markets. Overall, this study reinforces the strategic importance of ESG beyond compliance and highlights the critical roles of stakeholder engagement and strategic flexibility in driving long-term success.

Conclusion

The results of this study confirm that the strategic alignment of ESG practices positively influences firm performance, as hypothesized in the research objectives. Specifically, the study shows that higher alignment of ESG strategies with corporate goals leads to improved performance. Moreover, stakeholder engagement was identified as a significant mediator in this relationship, demonstrating that the positive impact of ESG strategic alignment on firm performance is partly driven by the active involvement of stakeholders. The study also examined the moderating effect of strategic flexibility, finding that firms with higher strategic flexibility experience a stronger effect of ESG alignment on performance. These findings align with the study's objectives by demonstrating the complex relationships between ESG strategic alignment, stakeholder engagement, and firm performance, while

also highlighting the crucial role of strategic flexibility in enhancing these effects.

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