Name of Publisher: BRIGHT EDUCATION RESEARCH SOLUTIONS

Area of Publication: Business, Management and Accounting (miscellaneous)

Let's Start!

Journal of Management & Social Science

ISSN Online: 3006-4848
ISSN Print: 3006-483X

https://rjmss.com/index.php/7/about

RECOGNIZED IN "Y" CATEGORY BY HEC

EXTERNAL GOVERNANCE AND THE ESG–PERFORMANCE NEXUS: EVIDENCE FROM BRICS COUNTRIES

1 Bashir Ahmad
(Ph.D Scholar)Institute of Business Studies and Leadership, Abdul Wali Khan University Mardan, Mardan, Pakistan.bashpro617@gmail.com
2. Dr.Muhammad Yusuf Amin
Assistant Professor Institute of Business Studies and Leadership, Abdul Wali Khan University Mardan, Mardan, Pakistan.yusuf@awkum.edu.pk
3. Dr. Saeed Akbar
Institute of Business Studies and Leadership, Abdul Wali Khan University Mardan, Mardan, Pakistan.
saeed.akbar@awkum.edu.pk

Review Type: Double Blind Peer Review

Journal of Management & Social Science
VOL-2, ISSUE-2, 2025

ABSTRACT

This study employs advanced econometric methods to investigate the impact of external governance mechanisms on the relationship between corporate sustainability initiatives and firm performance across the BRICS countries (Brazil, Russia, India, China, and South Africa). Using a comprehensive dataset of 2,987 non-financial firms from major stock exchanges from 2016 to 2023, we address key methodological limitations through two-stage least squares (2SLS), system GMM, and threshold regression models to control for endogeneity, simultaneity bias, and non-linear effects. Our robust empirical methodology incorporates multiple instrumental variables, dynamic panel specifications, and extensive robustness checks, including propensity score matching and quantile regression analysis. The findings indicate that external governance quality has a significant influence on the ESG-performance relationship, with a threshold effect observed at an External Governance Index of 0.52. Below this threshold, ESG investments tend to have lower returns, while above it, they deliver significant performance benefits. Market-based governance mechanisms have a stronger moderating impact than regulatory mechanisms, with the interaction effect being 1.8 times larger for institutional investor presence compared to government effectiveness measures. This study provides valuable insights for policymakers and managers seeking to optimize sustainable investments in emerging markets.

Keywords: External Governance, Corporate Sustainability, ESG, Firm Performance, BRICS, Threshold Effects, Dynamic Panel Models

1. Introduction

The link between environmental, social, and governance (ESG) practices and firm performance has become more important for corporate strategy and policy, especially in emerging economies where institutions are still developing. Since the BRICS nations—Brazil, Russia, India, China, and South Africa—account for more than 41% of the world's population and 24% of its GDP, their sustainability initiatives are essential to achieving global environmental and social objectives. However, there are significant methodological issues with the way that ESG and performance are currently being studied in these markets, including inadequate endogeneity handling, a lack of attention to institutional diversity, and a lack of investigation into non-linear relationships.

Markets may reward transparent sustainability communication, but actual sustainability performance may eventually lower firm value, according to recent evidence showing a complex, context-dependent relationship between sustainability disclosure and performance in emerging economies (Grishunin et al., 2023; Järvinen, 2022). This seeming contradiction highlights how important external governance mechanisms are to making sure sustainability initiatives add value rather than just act as expensive signalling tools.

The institutional environment in which businesses function, including regulatory frameworks, market-based supervision instruments, and general institutional quality, is referred to as external governance. These mechanisms vary widely and evolve rapidly in BRICS nations, providing special opportunities to examine how the institutional

environment affects the effectiveness of corporate sustainability initiatives.

1.2. Why Focus on BRICS?

The BRICS economies are particularly suitable for investigating the moderating role of governance in ESG–firm performance dynamics. Collectively, they account for 24% of the world's GDP and more than 41% of the world's population. Rapid economic growth, unstable regulations, and "institutional voids"—times and industries where well-established institutions that support the market are either nonexistent or weak—are characteristics of these times (Khanna & Palepu, 2010). The perfect empirical setting for examining the impact of external governance thresholds on the relationship between ESG and performance is created by this volatility.

1.3. Theoretical Framing

Institutional Theory and Agency Theory form the grounding for this study. The resource dependence theory (Pfeffer & Salancik, 2003) and the institutional voids theory (Khanna & Palepu, 2010) explicate how companies counter the environment where regulatory, informational, or enforcement mechanisms are not efficient. External governance, conceived as a dimension of the broader institutional environment, includes regulatory quality, market monitoring, and investor presence (Scott, 2014). These frameworks underpin our hypotheses and empirical approach.

1.4. The ESG–Performance Paradox

A growing body of research highlights a paradox in sustainability reporting: while disclosure transparency is often rewarded by markets, actual ESG improvements sometimes do not translate into higher firm value, especially where institutional quality is limited (Grishunin et al., 2023; Järvinen, 2022). Understanding the conditions under which ESG investments drive performance is therefore a critical and unresolved issue in both theory and practice.

2. Literature Review and Theoretical Framework

2.1 External Governance Theory in Emerging Markets

External governance theory indicates that the institutional environment greatly influences firm-level governance practices and their effectiveness (Hall & Jones, 1999). In emerging markets, external governance mechanisms are characterized by institutional fragmentation, evolving regulatory frameworks, and varying levels of market development. This creates a unique setting where the relationship between sustainability practices and performance largely depends on the quality of external institutional support.

2.1.1 Institutional Theory Perspective: From an institutional theory standpoint, firms operating in environments with stronger external governance face greater pressure to engage in substantive rather than symbolic sustainability practices. Higher institutional quality reduces information asymmetries, improves monitoring capabilities, and offers clearer regulatory guidelines, thereby increasing the likelihood that ESG investments lead to performance benefits.

2.1.2 Market-Based vs. Regulatory Mechanisms: Recent research differentiates between market-based external governance (such as institutional investor presence and stock exchange requirements) and regulatory mechanisms (like government effectiveness and

the rule of law). Market-based mechanisms might be more effective in emerging economies because they can provide immediate feedback and disciplinary action. Conversely, regulatory mechanisms may be more vulnerable to enforcement gaps and corruption (Mathias, 2022).

2.2 The ESG-Performance Paradox in Emerging Markets

A growing body of evidence reveals a paradoxical relationship in emerging economies, where ESG disclosure has a positive impact on firm performance, but actual ESG performance may have negative effects (Mujumdar & Shadrin, 2021). To explain it further lets break it into following:

2.2.1 Signaling vs. Substance: In the weakly governed markets, companies are likely to practice so-called greenwashing involving hollowed-out ESG practices that result in favorable market responses without real operational content. Good external governance tools assist in the differentiation between real and symbolic sustainability activities (Nirino et al., 2021).

2.2.2 Cost-Benefit Heterogeneity: The investments in ESG also have varying costs and benefits depending on the context of the institutions. With low external regulation, ESG investments will end up as a source of cost with no associated benefit because there is no stakeholder implementation or market acknowledgement (Velte, 2017).

2.2.3 Threshold Effects: The quality of ESG practices can be characterized by threshold behavior where such practices only start to be useful once the quality of governance provided by external governance agents surpasses some critical level. Anything less than this will be considered an unwarranted expense of ESG investments or possibly a greenwashing initiative (Kremer et al., 2013).

2.3 Hypotheses Development

We formulate the following hypotheses in light of the theoretical framework and the available empirical data:

H1: External governance quality positively moderates the relationship between ESG practices and firm performance in BRICS countries.

H1a: The moderating effect of external governance is stronger for actual ESG performance than for ESG disclosure.

H1b: The moderating effect exhibits threshold behavior, with ESG benefits materializing only above a critical level of external governance quality.

H2: Market-based external governance mechanisms have stronger moderating effects than regulatory mechanisms.

H3: The external governance moderation effect varies significantly across BRICS countries due to institutional heterogeneity.

H4: The moderating effect is strongest for governance-related ESG practices, followed by social and environmental practices.

3. Research Methodology

3.1 Sample Selection and Data

Our sample includes 2,987 non-financial firms listed on major stock exchanges across all five BRICS countries from 2016 to 2023. The selection process addresses several methodological concerns identified in previous research.

Survivorship Bias Control: We include all firms that were publicly listed during any part of

the sample period, including those that were subsequently delisted, to avoid survivorship bias.

Balanced Representation: The sample ensures adequate representation from each BRICS country: Brazil (598 firms), Russia (547 firms), India (634 firms), China (712 firms), and South Africa (496 firms).

Industry Coverage: We include firms from six major industries (Financials, Technology, Energy, Healthcare, Materials, Utilities) with industry fixed effects to control for sector-specific factors.

Data Sources: ESG scores are obtained from multiple providers (Refinitiv, MSCI, Sustainalytics) with cross-validation to ensure robustness. Financial data is sourced from Thomson Reuters Eikon and Bloomberg, while governance indicators are obtained from the World Bank's Worldwide Governance Indicators database.

3.2 Variable Construction

Dependent Variables:

- **ROA**: Return on Assets (primary measure)
- **ROE**: Return on Equity (robustness check)
- **Tobin's Q**: Market-based performance measure
- **Market Return**: Stock return performance

Independent Variables:

- **ESG Score**: Composite ESG score (0-100 scale)
- **Environmental Score**: Environmental pillar score
- **Social Score**: Social pillar score
- **Governance Score**: Governance pillar score

External Governance Measures:

- **External Governance Index**: Composite index combining regulatory quality, rule of law, control of corruption, and government effectiveness
- **Regulatory Quality**: The Government's ability to formulate sound policies
- **Rule of Law**: Extent of contract enforcement and property rights
- **Control of Corruption**: Absence of corruption in public and private sectors
- **Market-Based Governance**: A Composite of institutional investor presence and stock exchange requirements

Control Variables:

- **Firm-level**: Size, leverage, age, market concentration, R&D intensity
- **Country-level**: GDP growth, inflation, exchange rate volatility, political stability
- **Industry-level**: Industry fixed effects and time-varying industry characteristics

3.3 Advanced Econometric Specifications

3.3.1 Baseline Fixed Effects Model

$$\begin{aligned}\text{Performance}_{i,c,t} &= \alpha + \beta_1 \text{ESG}_{i,c,t-1} + \beta_2 \text{ExtGov}_{c,t} + \beta_3 (\text{ESG} \times \text{ExtGov})_{i,c,t-1} \\ &+ \sum \gamma_k \text{Controls}_{i,c,t} + \theta_i + \lambda_t + \delta_c + \varepsilon_{i,c,t}\end{aligned}$$

where θ_i, λ_t, and δ_c represent firm, time, and country fixed effects, respectively.

3.3.2 Two-Stage Least Squares (2SLS) Model

To address the endogenous nature of ESG decisions, we employ 2SLS estimation with

multiple instrumental variables:

First Stage:

$$\text{ESG}_{i,c,t} = \pi_0 + \pi_1 \text{Industry\_Mean\_ESG}_{j,c,t-1} + \pi_2 \text{Lagged\_ESG}_{i,c,t-2} + \pi_3 \text{Peer\_ESG}_{i,c,t-1} + \pi_4 \text{ExtGov}_{c,t} + \sum \pi_k \text{Controls}_{i,c,t} + u_{i,c,t}$$

Second Stage:

$$\text{Performance}_{i,c,t} = \alpha + \beta_1 \widehat{\text{ESG}}_{i,c,t-1} + \beta_2 \text{ExtGov}_{c,t} + \beta_3 (\widehat{\text{ESG}} \times \text{ExtGov})_{i,c,t-1} + \sum \gamma_k \text{Controls}_{i,c,t} + \text{Fixed Effects} + \varepsilon_{i,c,t}$$

Instrumental Variable Validity: Our instruments satisfy the relevance and exclusion restrictions:

- **Industry Mean ESG** captures peer effects while being exogenous to individual firm performance
- **Lagged ESG** provides temporal variation while avoiding reverse causality
- **Peer ESG** reflects competitive pressures in sustainability adoption

3.3.3 Dynamic Panel System GMM

To account for performance persistence and dynamic adjustment processes, we employ the Arellano-Bond system GMM estimator:

$$\text{Performance}_{i,c,t} = \alpha + \rho \text{Performance}_{i,c,t-1} + \beta_1 \text{ESG}_{i,c,t-1} + \beta_2 \text{ExtGov}_{c,t} + \beta_3 (\text{ESG} \times \text{ExtGov})_{i,c,t-1} + \sum \gamma_k \text{Controls}_{i,c,t} + \eta_{i,c,t}$$

This specification addresses the "Nickell bias" inherent in dynamic panel models with fixed effects while controlling for unobserved heterogeneity and endogeneity.

3.3.4 Panel Threshold Regression Model

To identify threshold effects in the external governance-ESG relationship, we employ the Hansen (2000) panel threshold methodology:

$$\text{Performance}_{i,c,t} = \alpha + \beta_1 \text{ESG}_{i,c,t-1} \cdot I(\text{ExtGov}_{c,t} \leq \gamma) + \beta_2 \text{ESG}_{i,c,t-1} \cdot I(\text{ExtGov}_{c,t} > \gamma) + \beta_3 \text{ExtGov}_{c,t} + \sum \gamma_k \text{Controls}_{i,c,t} + \varepsilon_{i,c,t}$$

where γ is the threshold value determined endogenously, and $I(\cdot)$ is an indicator function.

3.3.5 Heterogeneous Country Effects Model

To capture institutional heterogeneity across BRICS countries:

$$\text{Performance}_{i,c,t} = \alpha + \sum_{c=1}^{5} \beta_c \text{ESG}_{i,c,t-1} \times \text{Country}_c + \sum_{c=1}^{5} \delta_c \text{ExtGov}_{c,t} \times \text{Country}_c + \sum \gamma_k \text{Controls}_{i,c,t} + \varepsilon_{i,c,t}$$

3.4 Robustness Checks and Alternative Specifications

3.4.1 Propensity Score Matching (PSM)

We employ PSM to create matched samples of high and low external governance firms, addressing selection bias concerns:

$$\text{Propensity Score} = P(\text{High ExtGov} = 1|\text{X}) = \frac{e^{\text{X}\beta}}{1 + e^{\text{X}\beta}}$$

3.4.2 Quantile Regression Analysis

To examine heterogeneous effects across the performance distribution:

$$Q_\tau(\text{Performance}_{i,c,t}|\text{X}) = \alpha_\tau + \beta_{1\tau}\text{ESG}_{i,c,t-1} + \beta_{2\tau}\text{ExtGov}_{c,t} + \beta_{3\tau}(\text{ESG} \times \text{ExtGov})_{i,c,t-1}$$

where $\tau \in \{0.10, 0.25, 0.50, 0.75, 0.90\}$ represents different quantiles.

3.4.3 Alternative Performance Measures

We test robustness using multiple performance indicators:

- **Operating Performance**: EBITDA margins, asset turnover
- **Market Performance**: Stock returns, market-to-book ratios
- **Risk-Adjusted Performance**: Sharpe ratios, volatility measures

3.5 Diagnostic Tests and Model Validation

Endogeneity Tests:

- Hausman tests for endogeneity of ESG variables
- Sargan-Hansen tests for instrumental variable validity
- Durbin-Wu-Hausman tests for robustness

Panel Data Diagnostics:

- Pesaran CD test for cross-sectional dependence
- Im-Pesaran-Shin unit root tests
- Breusch-Pagan tests for heteroskedasticity

Dynamic Model Validation:

- Arellano-Bond tests for serial correlation
- Hansen J-tests for over-identification: We fit Hansen's panel threshold model to capture non-linear ESG–performance relationships conditioned on external governance. The threshold (0.52) is determined via a grid search that minimizes the sum of squared residuals, with statistical significance established by bootstrap resampling (1,000 replications). This threshold applies to the pooled panel. Country-specific analyses reveal variability but support the validity of a common threshold.
- Difference-in-Sargan tests for subset orthogonality

4. Results and Analysis

4.1 Descriptive Statistics and Correlation Analysis

Table 1 presents comprehensive descriptive statistics for our enhanced sample. The mean ROA of 8.09% is consistent with emerging market benchmarks, while the ESG score mean of 52.78 reflects the developing nature of sustainability practices in BRICS countries. The External Governance Index exhibits substantial variation (standard deviation = 0.17), indicating significant institutional heterogeneity across our sample.

Table 1: Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max	N
ROA (%)	8.09	12.62	-31.27	51.96	2,987
ROE (%)	12.80	18.50	-45.20	67.80	2,987
Tobin's Q	1.45	0.80	0.42	4.83	2,987

ESG Score	52.78	22.18	8.10	94.20	2,987
Environmental Score	48.86	27.92	0.00	96.50	2,987
Social Score	54.67	26.32	2.30	98.10	2,987
Governance Score	56.22	21.89	12.40	92.70	2,987
External Governance Index	0.42	0.17	0.12	0.78	2,987
Regulatory Quality	0.44	0.23	-0.53	1.27	2,987
Rule of Law	0.38	0.20	-0.27	1.04	2,987
Control of Corruption	0.41	0.25	-0.45	1.23	2,987
Institutional Investor Presence	0.35	0.15	-0.29	0.86	2,987

4.2 Main Regression Results

4.2.1 Baseline and 2SLS Results

Table 2 presents our main regression results comparing OLS, fixed effects, and 2SLS estimations. The 2SLS results address endogeneity concerns, while the fixed effects control for unobserved heterogeneity.

Table 2: Main Regression Results - Advanced Econometric Models

Variable	(1) OLS	(2) Fixed Effects	(3) 2SLS	(4) System GMM
ESG Score	0.025***	0.034***	0.058***	0.041***
	(0.003)	(0.008)	(0.015)	(0.012)
External Governance	0.156***	0.142***	0.189***	0.167***
	(0.045)	(0.041)	(0.058)	(0.049)
ESG × External Governance	0.021**	0.025**	0.042***	0.035***
	(0.009)	(0.010)	(0.013)	(0.011)
Lagged Performance				0.234***
				(0.028)
Firm Size	-0.013***	-0.018***	-0.021***	-0.019***
Leverage	-0.089***	-0.095***	-0.102***	-0.098***
WACC	-0.015**	-0.018**	-0.022**	-0.020**
GDP Growth	0.082***	0.089***	0.095***	0.091***

Diagnostic Tests:				
Hausman Test (p-value)		0.000		
Hansen J-test (p-value)			0.324	0.412
Weak Instruments F-stat			48.7	
AR(2) test (p-value)				0.186
R-squared	0.089	0.289	0.267	0.312
N	2,987	2,987	2,987	2,687

*Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Key Findings: Table 2 showss the results from a various models, including OLS, Fixed Effects, Two-Stage Least Squares (2SLS), and System Generalized Method of Moments (System GMM), to rigorously examine the relationship between ESG performance, external governance, and firm financial outcomes. ESG scores exhibits a consistent positive and significant association with firm performance, with coefficients ranging from 0.025 to 0.058. The strength of the ESG-performance link is further enhanced by external governance, which also casts a significant impact as shown in all models, indicating firms operating under stringent governance environments tend to perform better financially.

Importantly, external governance amplifies the beneficial effect of ESG initiatives on firm performance, which supports the moderating role hypothesis and is highlighting the complementary relationship between internal sustainability and external Governance.

The confirmation of the validity of the instrumental variables used in the 2SLS model by a strong first-stage F-statistic of 48.7 (well above the conventional threshold of 10) and a Hansen J-test p-value of 0.324, indicates no evidence of over-identification problems. Similarly, the System GMM results reinforce the dynamic nature of firm performance, with a significant lagged performance coefficient of 0.234*****, which suggests performance persistence over time. Diagnostic tests including the AR(2) p-value of 0.186 further support the validity of the GMM specification. The R-squared values increases across models, the highest at 0.312 under System GMM, indicating an increased explanatory power as endogeneity and dynamics are addressed.

4.2.2 Threshold Regression Results

Table 3 presents the results from the panel threshold regression, revealing significant non-linearities in the relationship between external governance and ESG.

Table 3: Panel Threshold Regression Results

Regime	**Threshold Value**	**ESG Coefficient**	**Std. Error**	**95% Confidence Interval**
Low External Governance	$\gamma \leq 0.52$	0.008	(0.012)	[-0.015, 0.031]
High External Governance	$\gamma > 0.52$	0.067***	(0.018)	[0.032, 0.102]

Threshold Tests:		
Threshold Estimate (γ)	0.524***	[0.485, 0.563]
F-statistic	47.82***	
Bootstrap P-value	0.003	

The threshold effect at the External Governance Index of 0.52 demonstrates that ESG investments generate significant performance benefits only in institutional environments above this critical level. Below the threshold, ESG effects are statistically insignificant, supporting the "institutional prerequisite" hypothesis.

4.3 Country-Specific and Mechanism-Specific Analysis

4.3.1 Heterogeneous Country Effects

Table 4 presents country-specific regression results, revealing substantial institutional heterogeneity across BRICS nations.

Table 4: Country-Specific External Governance Moderation Effects

Country	ESG Coefficient	ExtGov Coefficient	ESG × ExtGov	External Gov. Index (Mean)	R-squared	N
Brazil	0.042***	0.134**	0.028**	0.58	0.312	598
Russia	0.031**	0.201***	0.035***	0.31	0.289	547
India	0.039***	0.145**	0.024**	0.48	0.298	634
China	0.018*	0.089*	0.012	0.42	0.234	712
South Africa	0.035***	0.178***	0.031**	0.52	0.287	496

*Standard errors omitted for brevity. *** p<0.01, ** p<0.05, * p<0.1*

Russia shows the strongest external governance effects (0.201) despite having the lowest governance quality (0.31), suggesting high marginal returns to institutional improvements. China exhibits the weakest ESG-performance relationship (0.089), possibly due to state-dominated governance structures. South Africa demonstrates strong effects across all dimensions, reflecting its advanced institutional framework.

4.3.2 Market-Based vs. Regulatory Mechanisms

Table 5 decomposes external governance into market-based and regulatory components to test H2.

Table 5: Market-Based vs. Regulatory External Governance Mechanisms

Mechanism Type	ESG Coefficient	Governance Mechanism	ESG × Governance	Mechanism Effect	R-squared	N
Market-Based	0.029***	0.189***	0.035***	1.85	0.294	2,987
Regulatory	0.031***	0.143***	0.019**	1.00	0.271	2,987
Interaction Ratio			**1.84***			

Market-based external governance mechanisms exhibit interaction effects 1.84 times larger than regulatory mechanisms, supporting H2. This suggests that institutional investor presence and stock exchange requirements are more effective than government regulatory quality in moderating the ESG-performance relationship.

4.4 Robustness Checks and Alternative Specifications

4.4.1 Propensity Score Matching Results

Using PSM, we created matched samples of firms in high vs. low external governance environments. The results confirm our main findings while addressing selection bias concerns.

PSM Treatment Effects:

Businesses in high external governance environments typically exhibit a 4.8 percentage point higher outcome than businesses in low governance environments, according to the Average Treatment Effect (ATE) of 0.048 (standard error = 0.014, $p < 0.01$).

Similarly, the firms that are actually exposed to high governance show, on average, a 5.2 percentage point improvement compared to their matched counterparts, according to the Average Treatment effect on the Treated (ATT) of 0.052 (standard error = 0.016, $p < 0.01$).

These findings show signs of endogeneity and sample selection bias while reaffirming the beneficial role of external governance.

4.4.2 Quantile Regression Results

Table 6 presents quantile regression results showing heterogeneous effects across the performance distribution.

Table 6: Quantile Regression Results - ESG × External Governance Interaction

Quantile	0.10	0.25	0.50	0.75	0.90
Interaction Coefficient	0.015	0.024**	0.035***	0.042***	0.058***
Standard Error	(0.018)	(0.012)	(0.010)	(0.013)	(0.021)

The external governance moderation effect is strongest for high-performing firms (90th percentile), suggesting that institutional quality particularly benefits firms with strong operational capabilities.

4.4.3 Alternative Performance Measures

Our results remain robust across alternative performance indicators:

4.4.3.1 ROE: The interaction coefficient is **0.047** (standard error = 0.015, ***p < 0.01***), indicates that those firms that are operating under stronger external governance exhibit a significant increase in profitability due to ESG interaction.

4.4.3.2 Tobin's Q: A coefficient of **0.032** (standard error = 0.013, **p < 0.05**), suggests improvement in market valuations for ESG-performing firms in stronger governance environments

4.4.3.3 Market Returns: A coefficient of **0.028** (standard error = 0.012, **p < 0.05**) shows that external governance strengthens the interaction between ESG and shareholder wealth.

4.4.3.4 Operating Margin: The coefficient of **0.041** (standard error = 0.014, ***p < 0.01***) confirms that ESG initiatives are more effective at improving operational efficiency in firms subject to greater external governance scrutiny.

5. Conclusion

This study provides comprehensive evidence that external governance quality significantly moderates the relationship between ESG practices and firm performance in BRICS countries. Through advanced econometric methodologies including 2SLS, System GMM, and threshold regression, we demonstrate that strong non-linearities and institutional dependencies characterize this relationship.

This study demonstrates that the performance impact of ESG investments in BRICS markets is highly contingent upon external governance mechanisms. Evidence of a governance threshold—specifically, an External Governance Index of 0.52—explains much of the previous inconsistency in this literature. Market-based mechanisms are shown to be the most effective in enabling ESG-driven value creation.

The superior effectiveness of market-based governance mechanisms over regulatory ones suggests that the development of institutional investors and strengthening of stock exchanges should be prioritized alongside traditional regulatory reforms. This finding is particularly relevant for emerging economies seeking to enhance the effectiveness of their sustainability policies.

Our country-specific analysis reveals substantial heterogeneity within the BRICS, with Russia showing the highest marginal returns to institutional improvements and China exhibiting the weakest ESG performance relationships. These findings underscore the importance of context-specific approaches to ESG policy and practice.

The robustness of our results across multiple methodologies, alternative performance measures, and various specifications provides confidence in our core findings. The use of propensity score matching, quantile regression, and comprehensive diagnostic tests ensures that methodological artifacts or sample selection issues do not drive our conclusions.

As BRICS countries continue to develop their institutional frameworks and capital markets, understanding the complex interplay between external governance and ESG

effectiveness becomes increasingly critical. Our findings provide a roadmap for enhancing sustainability outcomes through targeted institutional improvements, ultimately contributing to both firm performance and broader societal benefits.

6. Discussion and implications

The identification of a specific threshold value (External Governance Index = 0.52) provides empirical support for institutional threshold theory, suggesting that ESG investments require a minimum level of institutional support to be effective. This finding reconciles conflicting evidence in the ESG-performance literature by showing that the relationship depends critically on institutional context. The superior effectiveness of market-based governance mechanisms over regulatory ones challenges conventional wisdom about the primacy of formal institutions in emerging markets. This suggests that market discipline through institutional investors and exchange requirements may be more reliable than government regulation in ensuring ESG effectiveness.

The System GMM results reveal that institutional improvements have both immediate and persistent effects on ESG effectiveness, with lagged performance strongly predicting current performance (coefficient = 0.234). This suggests that institutional Development creates virtuous cycles that compound over time. Countries with an External Governance Index below 0.52 should prioritize reaching this threshold before expecting significant returns from ESG policies. Instead of concentrating only on regulatory changes, attention should be paid to strengthening stock exchange requirements and building institutional investor capabilities. Piecemeal reforms might not be as effective as comprehensive institutional packages because of the threshold nature of institutional effects.: ESG disclosure when mandatory becomes more effective as institutional quality improves. In ESG analysis, developing institutional investor capabilities should be prioritized**.** Countries below the threshold can learn from those counties that are better than them in this study's context, particularly Brazil and South Africa

Large ESG investments should be avoided by companies in low external governance environments until institutional changes take place. In high external governance environments, ESG investments can be pursued more aggressively with confidence in positive returns. Market-driven sustainability projects could be more profitable than merely adhering to regulations.

For country specific strategies, Chine should focus on governance-related ESG improvements given weak overall ESG effects. For Russia, Leverage high marginal returns to institutional improvements through stakeholder engagement. And with robust institutional backing, Brazil and South Africa pursue comprehensive ESG strategies.

Raising governance quality above crucial thresholds should be a top priority for policymakers in order to optimize the financial returns on sustainability investments. For managers, these findings highlight the importance of aligning ESG strategies with local governance realities and suggest a focus on building robust internal and external monitoring mechanisms. Emerging markets, in particular, can benefit from strengthening market institutions, investor engagement, and transparency in parallel with regulatory reforms.

7. Limitations and Future Research

The study addresses the time period 2016-2023, while comprehensive, may not capture

longer-term institutional evolution. Despite using multiple providers, ESG scoring remains subject to measurement error and provider bias. Furthermore, while our instrumental variable approach addresses endogeneity, establishing definitive causality remains challenging.

Future work should consider time-series dynamics of governance and ESG, conduct deeper sub-national and industry analyses, and bring qualitative insights on how firm-level and stakeholder relationships drive sustainability implementation. Investigating digital transformation's role in governance and expanding outcome measures to include climate risk and supply chain sustainability are recommended. Replication in other emerging markets or at the sectoral level will further validate these findings.

8. References

Alsayegh, M. F., Rahman, R. A., & Homayoun, S. (2020). Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure. *Sustainability, 12*(9), 3910. https://doi.org/10.3390/su12093910

Atif, M., & Ali, S. (2021). Environmental, social, and governance disclosure and default risk. *Business Strategy and the Environment, 30*(8), 3937–3959.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120. https://doi.org/10.1177/014920639101700108

Bodhanwala, S., & Bodhanwala, R. (2018). Does corporate sustainability impact firm profitability? Evidence from India. *Management Decision, 56*(8), 1734–1747.

Bui, H., et al. (2024). The impacts of corporate governance on firms' performance: Evidence from publicly listed companies. *Journal of Financial Risk Management, 32*(1), 18–45. https://doi.org/10.4236/jfrm.2024.32002

Cupertino, S., Consolandi, C., & Vercelli, A. (2019). Corporate social responsibility and economic performance in the fashion industry. *Journal of Cleaner Production, 236*, 117652.

Dalal, K. K., & Thaker, N. (2019). ESG and corporate financial performance: A panel study of Indian companies. *IUP Journal of Corporate Governance, 18*(1), 44–59.

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/10.1080/20430795.2015.1118917

Grishunin, S., Burova, E., & Suloeva, S. (2023). Assessment of impact of economic sustainability on shareholder return and economic profit of BRICS industrial companies following digital transformation strategy. *International Journal of Technology, 14*(8), 1672–1684.

Hall, R. E., & Jones, C. I. (1999). Why do some countries produce so much more output per worker than others? *Quarterly Journal of Economics, 114*(1), 83–116.

Hansen, B. E. (2000). Sample splitting and threshold estimation. *Econometrica, 68*(3), 575–603. https://doi.org/10.1111/1468-0262.00124

Järvinen, T. (2022). Corporate sustainability and financial performance in the emerging markets context. *Journal of Sustainable Finance, 15*(3), 234–251.

Khanna, T., & Palepu, K. G. (2010). *Winning in emerging markets: A roadmap for strategy and execution*. Harvard Business School Press.

Kim, S., & Li, Z. (2021). Understanding ESG from a practical standpoint. *Journal of Investment Management, 19*(4), 1–15.

Kremer, S., Bick, A., & Nautz, D. (2013). Inflation and growth: New evidence from a dynamic panel threshold analysis. *Empirical Economics, 44*(2), 861–878.

Lehenchuk, S., et al. (2024). The role of institutional quality in ESG implementation effectiveness. *Corporate Governance Review, 28*(2), 145–168.

Mathias, R. (2022). Market-based governance mechanisms in emerging economies. *Journal of Corporate Finance, 67*, Article 101892.

Moussa, T., et al. (2024). Stock exchange requirements and sustainability performance: Evidence from BRICS. *International Review of Financial Analysis, 89*, Article 102756.

Mujumdar, S., & Shadrin, A. (2021). BRICS sustainability paradox: Growth versus environmental protection. *Emerging Markets Review, 48*, Article 100789.

Ndiweni, E., & Sibanda, K. (2020). South Africa's governance approach to sustainability transformation. *African Journal of Business Management, 14*(8), 234–248.

Nirino, N., Santoro, G., Miglietta, N., & Quaglia, R. (2021). Corporate controversies and company's financial performance: Exploring the moderating role of ESG practices. *Technological Forecasting and Social Change, 162*, Article 120341. https://doi.org/10.1016/j.techfore.2020.120341

North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge University Press.

Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford University Press.

Scott, W. R. (2014). *Institutions and organizations: Ideas, interests, and identities* (4th ed.). Sage Publications.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance, 52*(2), 737–783. https://doi.org/10.1111/j.1540-6261.1997.tb04820.x

Suwandaru, A., et al. (2024). Institutional fragility and ESG performance in BRICS countries. *Journal of International Financial Markets, 42*(3), 567–589.

Tomislav, K. (2018). The concept of sustainable development: From its beginning to the contemporary issues. *Zagreb International Review of Economics & Business, 21*(1), 67–94. https://doi.org/10.2478/zireb-2018-0005

Tripathi, V., & Kaur, A. (2020). Socially responsible investing: Performance evaluation of BRICS nations. *Journal of Advances in Management Research, 17*(4), 525–547.

Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from meta-analysis studies. *Business Research, 10*(2), 360–405. https://doi.org/10.1007/s40685-017-0056-6

Williamson, O. E. (1985). *The economic institutions of capitalism*.

Xu, S., et al. (2021). ESG practices and green innovation: Evidence from emerging markets. *Business Strategy and the Environment, 30*(7), 3412–3428

⁂