

# STRATEGIC COMMUNICATION OR UNETHICAL PRACTICE? BOARD COMPOSITION AND ITS IMPACT ON GREENWASHING IN LATIN AMERICA

## 1 INTRODUCTION

When companies do not disclose sustainability information ethically, they often engage in greenwashing practices. Gatti et al. (2019) argue that a universal definition of greenwashing does not exist in the literature, as the concept is approached from varying perspectives across different academic fields.

Although the literature on governance and greenwashing has expanded, it still lacks insight into underexplored contexts like Latin America. Latin America is considered one of the most unequal regions in the world, facing multiple challenges such as poverty and the concentration of power and wealth (Linares-Rodríguez et al., 2023). An additional challenge is that corporate governance mechanisms are generally more effective in developed countries than in emerging market economies, such as those in Latin America (Gallego-Álvarez & Pucheta-Martínez, 2020; Pinheiro & Ramalho, 2024).

Therefore, the research question is: How do corporate governance mechanisms influence greenwashing practices among companies in Latin America? Framed under the agency theory, the purpose of this paper is to investigate whether corporate governance mechanisms impact greenwashing practices within the Latin American context. To achieve this objective, we analyzed 376 companies across six Latin American countries, totaling 1,870 observations from 2016 to 2023.

## 2 HYPOTHESIS DEVELOPMENT

Ghitti et al. (2023) found a negative relationship between board size and greenwashing in U.S. firms, a result similar to Zahid et al. (2023) in Chinese firms. However, Yu et al. (2020), Erol and Çankaya (2023), and Hu et al. (2024) found that board size does not have a significant influence on greenwashing behaviors. Duarte et al. (2024) showed that board size intensifies greenwashing behavior in the Brazilian context. Likewise, Sensharma et al. (2022) and Gidage et al. (2024) found that, in Indian firms, larger boards were associated with a higher tendency to engage in greenwashing. Therefore:

*H1: Board size has a positive effect on greenwashing practices.*

Several studies have shown that a higher proportion of independent board members is linked to lower levels of greenwashing across various contexts, including European firms (Erol & Çankaya, 2023), Chinese companies (Hu et al., 2024; Ma & Ahmad, 2024) and Indian organizations (Gidage et al., 2024; Sensharma et al., 2022). However, Duarte et al. (2024) found that, in Brazilian companies, independent board members did not significantly reduce overall greenwashing in the aggregate ESG, but had a negative and significant impact on the social pillar. Also, Ghitti et al. (2023) found that a higher proportion of independent board members is positively linked to greenwashing in U.S. companies. Therefore:

*H2: Board independence has a negative effect on greenwashing practices.*

A higher representation of women on the board improves CSR disclosure transparency and diminishes information asymmetry (Gull et al., 2023), thereby limiting the occurrence of greenwashing practices. Zalata et al. (2019) found that female directors are able to reduce managerial opportunism when serving in monitoring roles. Also, due to their lower tendency for unethical behavior, women are expected to help reduce greenwashing (Zahid et al., 2023).

A few studies conducted in the context of Chinese companies have shown a negative and significant relationship between the presence of female directors on the board and the adoption of greenwashing practices (Ma & Ahmad, 2024; Zahid et al., 2023). Cotugno et al.

(2025) found that the presence of women on a board is correlated with a decrease in greenwashing activities in European firms. However, Ghitti et al. (2023) and Erol and Çankaya (2023) found no statistically significant relationship between board gender diversity and greenwashing behaviors. Therefore:

*H3: Board gender diversity has a negative effect on greenwashing practices.*

From an agency theory viewpoint, members of the sustainability committee are expected to oversee management actions and protect shareholders' interests regarding the firm's sustainable performance (Fama & Jensen, 1983).

The presence of a CSR committee contributes to improved sustainability performance in firms operating in both emerging and developed countries (Lozano & Martínez-Ferrero, 2022). Studies indicate that the presence of such committees is associated with a decrease in greenwashing practices among European (Erol & Çankaya, 2023) and Chinese firms (Ma & Ahmad, 2024). However, Pratama et al. (2025) showed that sustainability committees fail to prevent greenwashing in Southeast Asian companies. Therefore:

*H4: The presence of a CSR committee has a negative effect on greenwashing practices.*

According to Almici (2023), remuneration policies aligned with sustainability goals and strong corporate governance can foster long-term alignment between shareholders and management. Although these practices are explicitly intended to improve ESG performance and align with societal expectations, concerns remain about their misuse as a tool for image management, facilitating greenwashing.

Erol and Çankaya (2023) identified that the inclusion of sustainability factors in executive remuneration schemes reduces greenwashing behaviors in European companies. However, Li et al. (2024) found that the higher a CEO's short-term compensation, the greater their focus on immediate benefits and their tendency to maximize personal gains through greenwashing. Therefore:

*H5: Executive Compensation Based on ESG Performance has a negative effect on greenwashing practices.*

### 3 METHOD

The sample comprises 1,870 observations from 376 companies across six Latin American countries from the Refinitiv Eikon database. We analyzed the period from 2016 to 2023. The sample is segmented into six countries (Argentina, Brazil, Chile, Colombia, Mexico and Peru). Table 1 presents the distribution of the sample observations by country and sector.

Table 1 – Description of variables

Variable	Variable symbol	Measurement	Expected Effect	Literature
<b>Dependent Variable</b>				
Greenwashing Practice of a Company	GREENW	100 – ESG Controversies Score. The higher the score, the greater the company's greenwashing practice.	N/A	Research suggestion based on ESMA (2023)
<b>Independent Variables</b>				
Board size	SIZE	Total number of board members	Positive	Duarte et al. (2024); Gidage et al. (2024)
Board independence	INDEP	Proportion of independent board members	Negative	Yu et al. (2020)

Board gender diversity	GENDER	Proportion of women board members	Negative	Liu (2024); Ma and Ahmad (2024)
Presence of a CSR committee	COMMI	Dummy: 1 if there is a CSR committee; 0 otherwise	Negative	Erol and Çankaya (2023)
Executive compensation based on ESG performance	ESGPERF	Dummy: 1 if there is a policy of executive compensation based on ESG performance; 0 otherwise.	Negative	Erol and Çankaya (2023)
<b>Control Variables</b>				
Firm size	FIRM	Logarithm of the Firm's Total Assets	Positive	Ma and Ahmad (2024)
Return on Equity	ROE	Net Income/Equity	Negative	Ma and Ahmad (2024)
Leverage	LEV	Net Debt/Firm's Total Assets	Positive	Ghitti et al. (2023)
Industry	INDUS	Dummy: 1 if the company operates in the energy, utilities, basic materials and industrial sectors; 0 otherwise.	Negative	Ruiz-Blanco et al. (2022); Duarte et al. (2024)

Source: authors.

This study employed a multi-method approach that combines multiple linear regression on unbalanced panel data with Necessary Condition Analysis (NCA). The econometric model used is represented by Equation 1.

$$GREENW_{i,t} = \beta_0 + \beta_1.SIZE_{i,t} + \beta_2.INDEP_{i,t} + \beta_3.GENDER_{i,t} + \beta_4.COMMI_{i,t} + \beta_5.ESGPERF_{i,t} + \beta_6.FIRM_{i,t} + \beta_7.ROE_{i,t} + \beta_8.LEV_{i,t} + \varepsilon \text{ (Equation 1)}$$

#### 4 RESULTS AND DISCUSSION

Considering corporate governance mechanisms as influencing greenwashing practices from the perspective of Agency Theory, Table 2 presents the regression results. In Model 1.1, the variable SIZE is positively significant at the 1% level, indicating that a larger board size positively influences greenwashing practices among Latin American companies. In Model 1.2, the variable INDEP also shows positive significance at the 1% level, suggesting that a higher proportion of independent board members is associated with increased greenwashing practices.

Table 2 – Multivariate analysis

Variable	Model 1.1	Model 1.2	Model 1.3	Model 1.4	Model 1.5	Hypothesis
SIZE	0.45***					H1 (+)
INDEP		0.06***				H2 (-)
GENDER			0.05			H3 (-)
COMMI				4.36***		H4 (-)
ESGPERF					6.58***	H5 (-)
FIRM	0.70	0.83*	0.76*	0.65	0.76*	
ROE	-0.01	-0.01	-0.01	-0.01	-0.01	
LEV	12.47***	12.23***	12.78***	11.41***	12.06***	
INDUS	3.14***	3.13***	3.04***	2.92***	2.68**	

F	9.73	9.42	8.16	10.98	12.53
p value	0.0000	0.0000	0.0000	0.0000	0.0000
R <sup>2</sup>	0.0370	0.0359	0.0312	0.0415	0.0471
VIF	1.01	1.01	1.01	1.02	1.01
Endog.	No	No	No	No	No

Source: authors. Note: \*\*\*p<0.01. \*\*p<0.05. \*p<0.10.

Regarding the variable GENDER, Model 1.3 shows that board gender diversity does not have a significant effect on greenwashing practices. In Model 1.4, COMMI is positively significant at the 1% level, implying that the presence of a CSR committee positively affects greenwashing behavior among Latin American companies. In Model 1.5, the variable ESGPERF shows positive significance at the 1% level, indicating that executive compensation policies based on ESG performance have a relevant and positive impact on the dependent variable (GREENW).

To enhance the robustness of the results and to identify the necessary conditions for the practice of greenwashing, a Necessary Condition Analysis (NCA) was conducted, as presented in Table 3.

Table 3 – Necessary Conditions for the Practice of Greenwashing

Variable	Method	Ceiling zone	Effect size (d)	C-accuracy (%)	Fit (%)	P-value
Full sample (n=376)						
SIZE	CR	403.60	0.170	98.7	96.4	0.016
	CE	418.60	0.176	100	100	0.030
INDEP	CR	43.17	0.004	100	50	0.445
	CE	86.35	0.009	100	100	0.299
GENDER	CR	10.76	0.001	99.9	73.3	0.097
	CE	14.69	0.002	100	100	0.104
COMMI	CR	0.57	0.006	100	50	0.089
	CE	1.15	0.012	100	100	0.089
ESGPERF	CR	0.08	0.000	100	50	0.136
	CE	0.17	0.002	100	100	0.136
FIRM	CR	176.23	0.236	99.6	70.6	0.024
	CE	249.52	0.335	100	100	0.000
ROE	CR	1982.56	0.033	99.8	57.8	0.986
	CE	3431.71	0.058	100	100	0.985
LEV	CR	55.61	0.227	99.7	74	0.046
	CE	75.11	0.306	100	100	0.002
INDUS	CR	0.23	0.002	100	50	0.175
	CE	0.47	0.005	100	100	0.175
Excluding financial companies (n=306)						
SIZE	CR	331.49	0.145	98.5	85.3	0.024
	CE	388.41	0.170	100	100	0.001
INDEP	CR	43.17	0.004	100	50	0.408
	CE	86.35	0.009	100	100	0.257
GENDER	CR	10.76	0.001	99.9	73.3	0.099
	CE	14.69	0.002	100	100	0.109
COMMI	CR	0.57	0.006	100	50	0.092
	CE	1.15	0.012	100	100	0.092
ESGPERF	CR	0.08	0.000	100	50	0.155
	CE	0.17	0.002	100	100	0.155

FIRM	CR	124.04	0.192	99.4	74.2	0.011
	CE	167.22	0.259	100	100	0.000
ROE	CR	1982.56	0.033	99.7	57.8	0.985
	CE	3431.71	0.058	100	100	0.985
LEV	CR	31.96	0.160	99.5	79	0.006
	CE	40.48	0.202	100	100	0.000
INDUS	CR	0.23	0.002	100	50	0.275
	CE	0.47	0.005	100	100	0.275

Source: authors.

SIZE is a necessary condition with a medium effect in both the full sample ( $d > 0.1$ ) and the sample excluding financial firms ( $d > 0.1$ ), with a significance level of 5%. GENDER and COMMI exhibit a small effect ( $d < 0.1$ ), with significance at the 10% level. The variables INDEP and ESGPER do not exhibit statistical significance.

## 5 CONCLUSION

The purpose of this paper is to investigate whether corporate governance mechanisms influence greenwashing practices in the Latin American context. Our results show that board size and the presence of a CSR committee positively influence greenwashing practices among Latin American companies.

Our paper has some limitations, as is the case with any research. We focused on the Latin American context, which involves emerging countries. Another limitation is that we analyzed only internal governance mechanisms. Future research could consider other techniques for measuring greenwashing and compare the results with those found in this study. Additionally, future studies could assess the skills of independent board members and members of the CSR committee to understand how these characteristics may influence greenwashing practices.

## REFERENCES

- Almici, A. (2023). Does sustainability in executive remuneration matter? The moderating effect of Italian firms' corporate governance characteristics. *Meditari Accountancy Research*, 31(7), 49–87. [10.1108/medar-05-2022-1694](https://doi.org/10.1108/medar-05-2022-1694)
- Cotugno, M., Ferilli, G. B., & Palmieri, E. (2025). Does board gender diversity make firms less greenwashed? *Business Ethics, the Environment & Responsibility*. <https://doi.org/10.1111/beer.12799>
- Duarte, J. P., Bastos, S. A. P., D'Angelo, M. J., Oliveira, E. S. de, & Fortunato, G. X. (2024). Oversight mechanisms and the reduction of greenwashing. *Revista de Gestão Social e Ambiental*, 18(8), e06098. <https://doi.org/10.24857/rgsa.v18n8-065>
- Erol, D., & Çankaya, S. (2023). The impacts of firm-level and country-level variables on Environmental, social and corporate governance greenwashing. *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi*, 22(46), 683–704. <https://doi.org/10.46928/iticusbe.1200111>
- ESMA. (2023). *Progress Report on Greenwashing: Response to the European Commission's request for input on "greenwashing risks and the supervision of sustainable finance policies*.
- Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *The Journal of Law and Economics*, 26(2), 301–325. <https://doi.org/10.1086/467037>
- Gallego-Álvarez, I., & Pucheta-Martínez, M. C. (2020). Corporate social responsibility reporting and corporate governance mechanisms: An international outlook from emerging countries. *Business Strategy and Development*, 3(1), 77–97. <https://doi.org/10.1002/bsd2.80>

- Gatti, L., Seele, P., & Rademacher, L. (2019). Grey Zone In—Greenwash Out: A review of greenwashing research and implications for the voluntary-mandatory transition of CSR. *International Journal of Corporate Social Responsibility*, 4(6), 1-25. <https://doi.org/10.1186/s40991-019-0044-9>
- Ghitti, M., Gianfrate, G., & Palma, L. (2023). The agency of greenwashing. *Journal of Management and Governance*. <https://doi.org/10.1007/s10997-023-09683-8>
- Gidage, M., Bhide, S., & Bilan, Y. (2024). Greenwashing in the Indian corporate landscape: an empirical assessment of ESG disclosures of NIFTY 50 companies. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-024-05191-3>
- Gull, A. A., Hussain, N., Khan, S. A., Nadeem, M., & Zalata, A. M. (2023). Walking the talk? A corporate governance perspective on corporate social responsibility decoupling. *British Journal of Management*, 34, 2186–2211. <https://doi.org/10.1111/1467-8551.12695>
- Hu, P., Li, X., Li, N., Wang, Y., & Wang, D. D. (2024). Peeking into Corporate Greenwashing through the Readability of ESG Disclosures. *Sustainability*, 16(6), 2571. <https://doi.org/10.3390/su16062571>
- Li, K., Lin, T.-Y., & Zhu, G. (2024). The effect of CEO's compensation in driving corporate ESG greenwashing: Evidence from China. *PLOS ONE*, 19(10), e0312247. <https://doi.org/10.1371/journal.pone.0312247>
- Linares-Rodríguez, M. C., Gambetta, N., & García-Benau, M. A. (2023). Climate action information disclosure in Colombian companies: A regional and sectorial analysis. *Urban Climate*, 51, 101626. <https://doi.org/10.1016/j.uclim.2023.101626>
- Lozano, M. B., & Martínez-Ferrero, J. (2022). Do emerging and developed countries differ in terms of sustainable performance? Analysis of board, ownership and country-level factors. *Research in International Business and Finance*, 62, 101688. <https://doi.org/10.1016/j.ribaf.2022.101688>
- Ma, Y., & Ahmad, M. I. (2024). Do board characteristics impact greenwashing? Moderating role of CSR committee. *Heliyon*, 10(20), e38743. <https://doi.org/10.1016/j.heliyon.2024.e38743>
- Pinheiro, A. B., & Ramalho, A. L. de O. S. (2024). GRI guidelines in developing countries: Uncovering the antecedents and consequences. *Management Research: The Journal of the Iberoamerican Academy of Management*. <https://doi.org/10.1108/MRJIAM-05-2024-1547>
- Pratama, A., Yusoff, H., Yadiati, W., & Jaenudin, E. (2025). Sustainability-related corporate governance and greenwashing practices: Preliminary evidence from Southeast Asian companies. *Meditari Accountancy Research*. <https://doi.org/10.1108/MEDAR-07-2024-2579>
- Sensharma, S., Sinha, M., & Sharma, D. (2022). Do Indian Firms Engage in Greenwashing? Evidence from Indian Firms. *Australasian Business, Accounting and Finance Journal*, 16(5), 67–88. <https://doi.org/10.14453/aabfj.v16i5.06>
- Yu, E. P., Luu, B. Van, & Chen, C. H. (2020). Greenwashing in environmental, social and governance disclosures. *Research in International Business and Finance*, 52, 101192. <https://doi.org/10.1016/j.ribaf.2020.101192>
- Zahid, R. M. A., Maqsood, U. S., Irshad, S., & Khan, M. K. (2023). The role of women on board in combatting greenwashing: A new perspective on environmental performance. *Business Ethics, the Environment & Responsibility*, 34(10), 81–102. <https://doi.org/10.1111/beer.12607>
- Zalata, A. M., Ntim, C. G., Choudhry, T., Hassanein, A., & Elzahar, H. (2019). Female directors and managerial opportunism: Monitoring versus advisory female directors. *The Leadership Quarterly*, 30(5), 101309. <https://doi.org/10.1016/j.leaqua.2019.101309>