

***ETHICAL LEADERSHIP AND SUSTAINABILITY TRANSPARENCY: THE
MODERATING ROLE OF AUDIT COMMITTEE DILIGENCE IN ASEAN-5***

**KEPEMIMPINAN ETIS DAN TRANSPARANSI KEBERLANJUTAN: PERAN
MODERATOR KETELITIAN KOMITE AUDIT DI ASEAN-5**

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ABSTRACT

Purpose This study aims to examine the effect of board gender diversity on ESG disclosure quality moderated by audit committee diligence. *Method:* This study employs a quantitative approach using fixed-effect panel regression on 4,249 firm-year observations from ASEAN-5 companies (2016-2024). *Results:* The results show that female directors positively influence ESG transparency only when supported by frequent audit committee meetings, particularly in social and governance pillars. *Novelty:* This research offers novelty by empirically proving that governance synergy is required to overcome gender tokenism in the post-pandemic era. *Contribution:* It contributes to solving the nation's greenwashing problem by integrating inclusive leadership with rigorous oversight

Keywords: ASEAN-5, Audit Committee, ESG Disclosure, Women on Board

ABSTRAK

Tujuan: Tujuan penelitian ini adalah menguji pengaruh diversitas gender dewan terhadap kualitas pengungkapan ESG dengan ketekunan komite audit sebagai pemoderasi. Metode: Penelitian ini menggunakan pendekatan kuantitatif dengan regresi data panel pada perusahaan ASEAN-5 periode 2016-2024. Hasil: Hasil penelitian menunjukkan bahwa kepemimpinan wanita berpengaruh positif signifikan terhadap transparansi ESG hanya jika didukung oleh frekuensi rapat komite audit yang tinggi. Kebaruan: Kebaruan studi ini terletak pada pembuktian peran sinergis tata kelola dalam mengatasi isu tokenisme gender. Kontribusi: Penelitian ini berkontribusi memberikan solusi atas masalah greenwashing bangsa melalui integrasi kepemimpinan inklusif dan pengawasan ketat.

Kata Kunci: ASEAN-5, Komite Audit, Pengungkapan ESG, Wanita di Dewan

INTRODUCTION

The urgency of enhancing Environmental, Social, and Governance transparency within the Association of Southeast Asian Nations region is underscored by the escalating global demand for corporate accountability and sustainable practices [1], [2], [3], [4]. This imperative is further amplified by the pervasive issue of "greenwashing," where companies disingenuously portray their commitment to sustainability, creating significant information asymmetry for stakeholders [5], [6], [7], [8], [9]. Such deceptive practices not only erode investor confidence but also undermine genuine efforts toward achieving sustainable development goals across the ASEAN-5 economies [3], [10],

[11]. This pervasive lack of transparent ethical commitment from top leadership within organizations further exacerbates the problem, hindering the authentic integration of sustainability principles into core business strategies [12].

Against this backdrop, the theoretical underpinnings of Upper Echelons Theory become particularly relevant, positing that an organization's strategic choices and performance outcomes are a reflection of its top management's values and cognitive biases. Complementing this, Care Ethics emphasizes the relational and interdependent nature of decision-making, suggesting that ethical leadership prioritizes collective well-being and responsible stewardship over

purely self-interested gains. However, despite the growing recognition of these theoretical frameworks, empirical research regarding the actual impact of ethical leadership, particularly through board gender diversity, on ESG transparency has yielded inconsistent results, with some studies indicating positive correlations and others suggesting mere "tokenism" [13], [14], [15], [16].

This divergence highlights a critical gap in understanding how female directors can effectively translate their values into tangible improvements in ESG transparency [14]. Specifically, the literature often grapples with whether the mere presence of women on boards genuinely fosters ethical conduct or if their inclusion is often symbolic [10], [17]. Most previous studies have neglected the interacting role of internal control mechanisms in this equation. The effectiveness of diverse boards does not operate in a vacuum; it requires a robust governance infrastructure. The role of the Audit Committee—particularly its diligence as measured by meeting frequency—remains underexplored as a catalyst that empowers female directors to enforce rigorous ESG reporting [9].

This study addresses the gap by offering novelty in examining the moderating role of audit committee diligence on the relationship between ethical leadership and ESG disclosure in ASEAN-5 countries in the post-pandemic era (2016-2024). Unlike prior research that treats these variables in isolation, this article demonstrates how governance synergy can solve the "tokenism" problem. At a contextual level, this research contributes to solving the nation's problem of low corporate governance credibility by identifying specific governance

configurations that drive genuine transparency, thus helping regulators improve the regional investment climate.

Therefore, the purpose of this article is to empirically analyze the effect of board gender diversity on ESG disclosure quality and to examine the moderating role of audit committee diligence in this relationship. This study employs a quantitative approach using panel data regression to test the hypotheses.

METHOD

This study employs a quantitative approach using secondary data derived from the Bloomberg database to examine the interplay between ethical leadership, governance diligence, and sustainability transparency. The population comprises all listed companies in the ASEAN-5 region (Indonesia, Malaysia, Philippines, Singapore, and Thailand) spanning the period from 2016 to 2024. Through a purposive sampling method based on the completeness of ESG and governance data, a final sample of 4,249 firm-year observations was obtained. To mitigate the influence of outliers, continuous variables were winsorized at the 1st and 99th percentiles.

The dependent variable is the ESG Disclosure Score, representing the extent of ethical transparency. The independent variable is the Women on Board Ratio (WOB_RATIO), calculated as the proportion of female directors to the total board size, serving as a proxy for inclusive and ethical leadership. The moderating variable is Audit Committee Meeting (ACOM_MEET), measured by the frequency of meetings per year, representing the diligence of the internal oversight mechanism. Control

variables include Firm Size (natural logarithm of total assets) and Profitability (Return on Assets) to account for resource availability and

financial performance. A detailed summary of operational definitions is presented in **Table 1**.

Table 1. Operational Variabels Definitions

Variabel	Measurement
ESG	A proprietary score measuring the extent of a company's transparency in reporting Environmental, Social, and Governance data. The score ranges from 0.1 to 100, where a higher score indicates more comprehensive public disclosure.
WOB_RATIO	The proportion of female representation in the boardroom, calculated as the number of women serving on the board divided by the total number of board members.
ACOM_MEET	The frequency of monitoring activities performed by the audit committee, measured by the number of meetings held by the committee during the reporting period.
FSIZE	The scale of the company's resources, measured by the natural logarithm of total assets at the end of the fiscal year.
ROA	The company's ability to generate profit from its assets, calculated as net income divided by total assets.

The research framework, which visualizes the proposed moderation model, is depicted in **Illustration 1**.

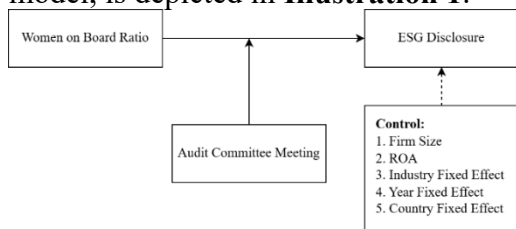


Illustration 1. Research

Framework

Data analysis was conducted using STATA MP 19.5 software employing panel data regression analysis. Based on the Chow and Hausman tests, the Fixed Effect Model (FEM) was selected as the most appropriate estimator to control for unobserved heterogeneity across firms and years. The regression model includes robust standard errors to correct for potential heteroscedasticity. The statistical model aims to falsify the assumption that board gender diversity has no conditional effect on ESG disclosure when interacting with

governance mechanisms. The empirical model is specified as follows:

$$ESG_{it} = \alpha + \beta_1 WOB_RATIO_{it} + \beta_2 ACOM_MEET_{it} + \beta_3 WOB * ACOM_{it} + \beta_4 FSIZE_{it} + \beta_5 ROA_{it} + \varepsilon_{it}$$

Where ESG represents the disclosure score, WOB * ACOM is the interaction term testing the moderating role of audit diligence, and ε is the error term. Additional analyses were also performed by disaggregating ESG into its three pillars and conducting subsample regressions for each country to ensure the robustness of the findings.

RESULTS AND DISCUSSION

The statistical profile of the 4,249 firm-year observations is presented in **Table 2**. The average ESG Disclosure Score is 46.173, indicating that sustainability reporting in the ASEAN-5 region is currently at a moderate level of maturity. Regarding the independent variable, the Women on Board Ratio (WOB_RATIO) shows a mean of

0.177, implying that, on average, female representation on boards is approximately 17.7%. This figure is notably below the "critical mass" threshold of 30% often cited in literature as necessary to influence boardroom dynamics significantly. The

moderating variable, Audit Committee Meeting (ACOM_MEET), shows a high average of 7.116 meetings per year, demonstrating active internal oversight exceeding the regulatory minimums in most ASEAN countries.

Table 2. Statistic Descriptive

	Obs	Mean	STD	Median	Min	Max
ESG	4249	46.173	12.524	45.690	6.860	85.233
WOB_RATIO	4249	0.177	0.143	0.167	0.000	1.000
ACOM_MEET	4249	7.116	5.937	5.000	0.000	80.000
FSIZE	4249	21.454	1.719	21.422	13.259	27.052
ROA	4249	0.052	0.454	0.036	-11.581	22.653

Prior to regression analysis, the Pearson correlation matrix in **Table 3** indicates a positive significant correlation between WOB_RATIO and ESG ($r = 0.086$, $p < 0.01$) and between ACOM_MEET and ESG ($r = 0.177$, p

< 0.01). Furthermore, collinearity diagnostics confirm that no variables exhibit strong correlations (all coefficients < 0.70), ensuring the regression model is free from severe multicollinearity issues.

Table 3. Pearson Correlation

	[1]	[2]	[3]	[4]	[5]
[1] ESG	1.000				
[2] WOB_RATIO	0.086*** (0.000)	1.000			
[3] ACOM_MEET	0.177*** (0.000)	-0.124*** (0.000)	1.000		
[4] FSIZE	0.304*** (0.000)	-0.022 (0.156)	0.318*** (0.000)	1.000	
[5] ROA	0.001 (0.963)	0.009 (0.578)	-0.017 (0.259)	-0.092*** (0.000)	1.000

p-values in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

The results of the fixed-effect panel regression are presented in **Table 4**. Model 1 examines the direct effect of gender diversity on ESG disclosure. The finding reveals that WOB_RATIO has a positive coefficient (1.111) but is statistically insignificant ($p = 0.33$). This result fails to support the direct

application of Upper Echelons Theory in isolation, suggesting that merely appointing female directors does not automatically translate into better transparency. This aligns with the "Tokenism" theory, where female directors in minority positions may lack the political power to influence strategic reporting decisions.

Table 4. Main Regression Analysis

	(1)	(2)	(3)
	ESG	ESG	ESG
WOB_RATIO	1.111	1.953*	-1.815

	(0.33)	(0.08)	(0.34)
ACOM MEET		0.242***	0.196***
		(0.00)	(0.00)
WOB_ACOM			0.601***
			(0.01)
FSIZE	3.291***	3.061***	3.023***
	(0.00)	(0.00)	(0.00)
ROA	0.769*	0.725*	0.714*
	(0.07)	(0.09)	(0.10)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Constanta	-31.075***	-28.721***	-27.567***
	(0.00)	(0.00)	(0.00)
r^2	0.418	0.428	0.429
r^2 adjusted	0.415	0.424	0.425
N	4249	4249	4249

p-values in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

However, a significant shift occurs in Model 3 when the interaction term is introduced. The interaction variable (**WOB_ACOM**) exhibits a positive coefficient of **0.601** and is statistically significant at the 1% level. This confirms the main hypothesis of this study: the positive impact of female leadership on ESG transparency is conditional upon the diligence of the audit committee. This finding

contributes to the debate on ethical leadership by providing evidence that *Ethical Leadership* (female directors) requires a robust *Governance Structure* (audit diligence) to be effective. The audit committee acts as a catalyst, providing the necessary oversight rigor that empowers female directors to push for genuine, rather than symbolic, ESG disclosures.

Table 5. Additional Analysis Results Based on ESG Pillars

	(1)	(2)	(3)
	ENV	SOC	GOV
WOB_RATIO	2.881	-4.036**	-4.282**
	(0.33)	(0.05)	(0.03)
ACOM_MEET	0.161**	0.219***	0.208***
	(0.02)	(0.00)	(0.00)
WOB_ACOM	0.270	0.939***	0.595***
	(0.44)	(0.00)	(0.01)
FSIZE	4.791***	2.545***	1.737***
	(0.00)	(0.00)	(0.00)
ROA	1.054***	0.479	0.609
	(0.00)	(0.34)	(0.24)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Constanta	-84.017***	-34.750***	35.850***

	(0.00)	(0.00)	(0.00)
r^2	0.426	0.378	0.216
r^2 adjusted	0.423	0.374	0.211
N	4249	4249	4249

p -values in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

To provide deeper insights, this study disaggregated the analysis based on ESG pillars (**Table 5**) and country levels (**Table 6**). The analysis of pillars reveals that the synergy between female directors and audit committees is highly effective in driving **Social** ($\beta=0.939^{***}$) and **Governance** ($\beta=0.595^{***}$) disclosures. This supports the *Gender Socialization Theory*,

which posits that women hold stronger communal values and concern for stakeholder welfare. Conversely, the interaction is insignificant for the **Environmental** pillar ($\beta=0.270$), suggesting that environmental reporting may require specific technical expertise beyond the scope of general board diversity and audit oversight.

Table 6. Additional Analysis Results Based on Country-Level Analysis

	(1)	(2)	(3)	(4)	(5)
	Indonesia (IJ)	Malaysia (MK)	Philippines (PM)	Singapore (SP)	Thailand (TB)
WOB RATIO	-2.417 (0.41)	11.574** (0.02)	-3.662 (0.49)	29.184** (0.01)	-12.744* (0.07)
ACOM MEET	0.165*** (0.00)	-0.000 (1.00)	0.075 (0.72)	3.095*** (0.00)	0.154 (0.25)
WOB ACOM	0.637** (0.03)	0.806 (0.21)	0.304 (0.72)	-6.903*** (0.01)	1.060 (0.11)
FSIZE	2.864*** (0.00)	2.127*** (0.00)	2.944*** (0.00)	2.596*** (0.00)	4.246*** (0.00)
ROA	5.282* (0.09)	0.456 (0.66)	22.494*** (0.00)	0.446*** (0.00)	1.099 (0.84)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Constanta	-22.247*** (0.00)	-8.376* (0.07)	-25.778*** (0.00)	-26.823*** (0.00)	-42.854*** (0.00)
r^2	0.415	0.366	0.612	0.480	0.514
r^2 adjusted	0.402	0.351	0.593	0.465	0.502
N	999	1051	458	796	945

p -values in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Furthermore, the country-level analysis highlights critical contextual differences. In **Indonesia**, the interaction term is positive and significant ($\beta=0.637^{**}$), indicating that in developing markets with evolving governance frameworks, female directors strongly rely on audit committee support to overcome structural barriers. In contrast, in **Singapore**, the interaction is negative ($\beta=-6.903^{***}$), while the direct effect of women is highly positive. This

suggests a "substitution effect" in mature markets: when board diversity is high within a strong legal environment, additional audit monitoring becomes redundant.

These findings directly address the nation's problem regarding the credibility of corporate sustainability commitments and the need to attract green investment. The study offers a solution to the "greenwashing" phenomenon by demonstrating that regulatory efforts should not function

in silos. Promoting gender quotas alone is insufficient if the internal audit function is passive.

Unlike previous studies that solely advocated for more women on boards to improve ethics, this research explains why mixed results occurred in the past. The inconsistency in prior literature stems from ignoring the governance environment. This study clarifies that female directors are not "magic bullets"; they are ethical agents who need the structural support of a diligent audit committee to effectively enforce transparency. Thus, to improve national investment competitiveness, regulators must simultaneously strengthen audit committee mandates while encouraging inclusive leadership.

CONCLUSION

This study aims to examine the effect of board gender diversity on ESG disclosure quality and the moderating role of audit committee diligence in ASEAN-5 countries. The empirical findings demonstrate that the presence of female directors alone does not significantly enhance ESG transparency, lending support to the tokenism hypothesis where minority representation lacks sufficient power to influence strategic reporting. However, the interaction between female leadership and audit committee meeting frequency yields a significant positive effect on ESG disclosure. This answers the research objective by proving that ethical leadership becomes effective only when supported by a diligent oversight mechanism. Furthermore, additional analysis reveals that this synergy is most pronounced in the Social and Governance pillars, and is specifically crucial in the Indonesian context, where female directors heavily rely on

structural support to overcome barriers to transparency.

This research contributes significantly to the scientific field by reconciling previous inconclusive findings regarding board diversity and ethics. It offers a novel perspective that the relationship between diverse leadership and ethical disclosure is not direct but conditional upon the strength of governance infrastructure. Practically, this study contributes to solving the nation's problem of low investor confidence and the prevalence of greenwashing practices. The findings imply that policymakers and regulators in ASEAN, particularly in developing markets, should not only advocate for gender quotas but must simultaneously mandate rigorous activity standards for audit committees. This dual approach ensures that diverse boards are empowered with the necessary data and oversight authority to enforce genuine sustainability accountability, rather than merely serving a symbolic function.

Despite its contributions, this study has several limitations. First, the sample distribution is uneven, with countries like the Philippines having fewer observations compared to Malaysia or Singapore, which may affect the generalizability of country-specific findings. Second, this study relies solely on quantitative data, which cannot capture the psychodynamics of boardroom interactions or the specific content discussed during audit committee meetings. Future research is encouraged to employ qualitative methods, such as interviews with female directors, to deeply understand the behavioral barriers they face in promoting ethics. Additionally, given the insignificant results in the environmental pillar, future studies could expand the research agenda by

examining the role of specialized Sustainability Committees as a more relevant moderator for technical environmental disclosures.

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