

Media Coverage Influence on ESG-Firm Value Nexus in 3 ASEAN Public Palm Oil Industry

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Abstract

Purposes: This study investigates the impact of ESG performance on firm value in the palm oil sector, with a particular focus on the moderating role of media coverage.

Methods: This study employs OLS regression analysis using data from 27 palm oil companies listed on SPOTT in Indonesia, Malaysia, and Singapore over the period 2020–2023. The analysis combines ESG and media coverage data from SPOTT with financial metrics obtained from Thomson Reuters.

Findings: The findings reveal a significant negative relationship between ESG performance (both composite scores and individual components) and firm value, reflecting market skepticism toward sustainability investments in this resource-intensive industry. Importantly, media coverage is identified as a positive moderator that mitigates the valuation discounts associated with ESG initiatives.

Novelty: This study extends prior research by applying the role of media coverage as a moderating variable in the ESG–firm value nexus within the palm oil industry context. The results provide practical implications for companies to enhance ESG transparency and strategically manage media narratives to shape stakeholder perceptions, while regulators are encouraged to consider media dynamics in ESG reporting frameworks to improve market responses.

Keywords: ESG, Firm Value, Palm Oil, Media Coverage, Southeast Asia

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INTRODUCTION

The palm oil industry in Southeast Asia, particularly Indonesia, Malaysia, and Thailand, supplied 87% of the world's palm oil in 2024, producing 69,500,000 metric tons (USDA, 2025). As a major provider of cooking oil, biodiesel, and other food ingredients, it significantly contributes to exports, job creation, and local economic development (Nurfatriani et al., 2022). In 2024, palm oil accounted for approximately 35% of global vegetable oil consumption and remained the most traded edible oil worldwide, with Indonesia and Malaysia alone contributing over 80% of global exports (USDA, 2025). The sector provides livelihoods for more than 16 million workers across Southeast Asia, including 4.5 million smallholders in Indonesia, making it a critical driver of rural development (Nurfatriani et al., 2022). At the same time, palm oil is linked to 23% of deforestation in Indonesia between 2001–2019, with mounting concerns over biodiversity loss and

carbon emissions (Lai, 2022). This dual role, being both a cornerstone of economic development and a focal point of environmental controversies, highlights the pressing need for sector-specific research.

However, the sector faces scrutiny over environmental and social issues like deforestation and human rights violations (Adhariani & Afrizal, 2021; Norwana et al., 2011), challenging companies to maintain their reputation. Implementing strong ESG principles helps mitigate these impacts while promoting transparency and accountability (Debnath & Debnath, 2024). ESG implementation enhances financial performance and investor appeal by addressing environmental/social impacts while serving as a long-term business strategy (Fu & Li, 2023; Jovita, 2023), with sustainability-focused investments gaining traction as investors prioritize ESG factors (Yu et al., 2024). Companies with robust ESG performance demonstrate better risk management and market competitiveness (Xu et al., 2024), yet research gaps persist in palm oil sector-specific analyses, particularly in Southeast Asia. This industry faces unique challenges like deforestation and biodiversity risks that differ from other sectors, complicating ESG-value assessments (Alaika & Firmansyah, 2024). Targeted studies are needed to address these sector-specific dynamics, particularly regarding land-use controversies and natural resource governance impacts on corporate valuations.

Prior research reveals conflicting findings on ESG's financial impacts in palm oil, with environmental initiatives showing negative valuation effects (Fardillah & Honggowati, 2024; Khin et al., 2022), due to perceived short-term cost burdens (Abdullah et al., 2019; Chong & Loh 2023; Jagannathan et al., 2017). A study by the Centre for Governance and Sustainability at the National University of Singapore (2024), demonstrates ESG transparency reduces market value, contrasting Hutaaruk's (2024) Indonesian findings of positive sustainability expenditure impacts, while Friede et al. (2015) report 90% positive ESG-performance correlations across 2,200 studies. These contradictions underscore sector-specific complexities in palm oil, where environmental commitments interact uniquely with investor perceptions. The divergent outcomes highlight critical knowledge gaps regarding ESG valuation mechanisms in this industry, necessitating context-driven analyses accounting for its ecological and governance particularities.

While the broader literature confirms media coverage as a moderating factor that amplifies stakeholder reactions to ESG disclosure (Rong & Kim, 2024; Zheng et al., 2024; Zhong & Wang, 2023; Zou et al., 2025). Empirical evidence specific to the palm oil sector remains scarce. Most prior research focuses on other industries, despite recurring controversies tied to palm oil regarding deforestation and human rights. The “megaphone effect” of media is well-established elsewhere, but its influence on ESG transparency and valuation in palm oil is not sufficiently understood (Chong & Loh, 2023; Zheng et al., 2024; Zou et al., 2025).

This study extends prior research by applying the role of media coverage as a moderating variable in the ESG–firm value nexus within the palm oil industry context. The palm oil sector provides a particularly meaningful setting for this analysis, as it embodies a dual role in Southeast Asia's economic and environmental landscape. On one hand, palm oil is a vital driver of export earnings, employment, and rural livelihoods—supporting millions of smallholders across Indonesia, Malaysia, and Singapore. On the other hand, its rapid expansion has been linked to deforestation, biodiversity loss, and greenhouse gas emissions, leading to global scrutiny over its sustainability practices and corporate legitimacy. These intertwined economic and ecological dimensions make the sector distinct from general ESG–value studies in other industries.

By analyzing SPOTT-assessed ESG data and financial metrics from 27 publicly listed palm oil companies in three ASEAN countries (2020–2023), this research offers context-specific insights into how sustainability performance influences market valuation. The findings reveal that ESG performance, including its environmental, social, and governance components, is negatively associated with firm value, reflecting market skepticism toward sustainability investments in this resource-intensive sector. However, media coverage serves as a positive moderator, mitigating these valuation discounts by improving transparency and shaping investor perceptions.

This study therefore contributes to the existing body of ESG literature by contextualizing the moderating effect of media within an industry characterized by intense ecological and governance challenges, offering insights relevant to policymakers, investors, and sustainability advocates navigating similar emerging-market contexts.

This paper is organized as follows. Section 2 explains the main theories and the hypotheses based on previous studies. Section 3 describes how the study was done, including how the data was chosen, what each variable means, and the analysis methods used. Section 4 shows the statistical results and discusses whether the hypotheses were supported. Section 5 interprets these findings and connects them back to the earlier theories and framework. The last section wraps up with the main conclusions, practical implications, study limitations, and suggestions for future research.

LITERATURE REVIEW AND CONCEPTUAL DEVELOPMENT

Legitimacy Theory

Legitimacy Theory explains that palm oil companies adopt ESG practices to align with societal norms and secure operational legitimacy from stakeholders like governments, communities, and investors (Nor-Ahmad et al., 2022), with transparent ESG disclosures enhancing firm value through improved reputation (Agapova et al., 2025), risk mitigation (Arif et al., 2024), and capital access (Huang et al., 2025; Tawfiq et al., 2024). Media coverage moderates this relationship by amplifying or undermining legitimacy signals, positive reporting reinforces ESG-driven trust and valuation (Aprilina et al., 2025; Wong & Zhang, 2022), while negative exposure on issues like deforestation erodes stakeholder confidence despite sustainability efforts (Chen & Wu, 2024). In the palm oil sector, where environmental/social controversies are acute, media acts as a critical legitimacy “gatekeeper,” shaping how ESG initiatives translate to market perceptions (Zheng et al., 2024; Zou et al., 2025). This dual dynamic aligns with Legitimacy Theory’s emphasis on societal acceptance, where media serves as both a validator and disruptor of corporate sustainability narratives. Consequently, palm oil firms must strategically manage ESG transparency and media engagement to navigate legitimacy pressures and optimize valuation outcomes.

Signaling Theory

Signaling Theory posits that ESG disclosures function as quality indicators to investors, reducing information asymmetries by signaling superior risk management and long-term viability in palm oil firms (Zumente & Bistrova, 2021). Media coverage amplifies or distorts these signals, where positive reporting enhances investor confidence and valuation (Tan et al., 2025; Zou et al., 2025), while negative exposure undermines trust, escalating perceived risks (Wong & Zhang, 2022). As a moderator, media shapes stakeholder interpretation of ESG signals, particularly in environmentally sensitive sectors like palm oil, where coverage intensity and tone directly influence market responses (Liu et al., 2020; Naidu et al., 2024). This dynamic necessitates strategic media engagement by firms to ensure ESG initiatives are framed as credible value drivers rather than costly obligations.

Conceptual Development

Several studies highlight the positive influence of ESG performance on company value, demonstrating its importance as a strategic business focus. Buallay (2019), Friede et al. (2015) and Tahmid et al. (2022) found that strong ESG practices enhance company performance and value, supported by Melinda and Wardhani (2020) who showed significant positive effects of ESG indices on Tobin’s Q. Companies with good ESG performance benefit from effective risk management, improved stakeholder relationships, enhanced reputation, and increased investor trust, which collectively strengthen financial resilience and operational stability (Quintiliani, 2022; Shan et al., 2024; K. Zhang et al., 2024). Additionally, ESG practices drive operational efficiency, foster innovation, reduce costs, and improve access to capital markets with lower financing costs (Li et al., 2024; C. Zhang & Shi, 2024). These benefits affirm the importance of integrating ESG factors into corporate strategies to ensure long-term sustainability and competitiveness.

Conversely, some studies reveal that ESG performance can negatively affect company value, particularly in the palm oil sector. Grishunin et al. (2022) and Singh et al. (2023) documented negative relationships between ESG activities and company performance, with transparency in ESG reporting sometimes leading to investor resistance and reduced firm value (National University of Singapore, 2024). In the palm oil industry, environmental performance and accounting practices were found to negatively impact firm value due to perceptions of higher risks or reduced profitability (Kahate, 2024; Khin et al., 2022). Investors in Southeast Asian stock markets often prioritize short-term profitability over sustainability initiatives, creating challenges for companies implementing ESG activities in attracting investment amidst resource competition (Bahari et al., 2024). These findings underscore the complexity of ESG impacts on firm value in industries facing significant environmental and social scrutiny.

H1: ESG performance has a significant relationship with firm value in palm oil companies.

Media coverage acts like an external watchdog that can either boost or weaken the effect of ESG performance on a company's value by shaping how stakeholders see and understand a firm's sustainability efforts (Chong & Loh, 2023; Rong & Kim, 2024; Zhong & Wang, 2023). When the media highlights positive ESG actions, it can strengthen a company's reputation and increase its value, especially for those with strong sustainability practices, as shown by research on the "megaphone effect" that links good press to better brand equity (Ge, 2024; Zou et al., 2025). On the flip side, negative media attention can magnify risks by exposing ESG weaknesses, which can shake investor confidence and lower firm value—this is particularly true in sensitive sectors like palm oil (An et al., 2020; Wong & Zhang, 2022). In the palm oil industry, media scrutiny is intense, with close attention paid to sustainability certifications and deforestation pledges (Jong, 2022; Tey & Brindal, 2021). Publicly committing to ESG standards can help companies manage reputational risks and build long-term value by meeting investor demands for transparency, but the industry's environmental challenges mean that negative news—such as reports on land-use conflicts—can quickly erode market trust. All of this underscores how crucial it is for companies in high-risk sectors to engage strategically with the media to manage the complex relationship between ESG efforts and firm value.

H2: Media coverage moderates the relationship between ESG performance and firm value in palm oil companies.

METHODS

This research utilizes purposive sampling and employs ESG scores from the SPOTT (Sustainable Palm Oil Transparency Toolkit) platform as the principal measurement instrument. SPOTT provides reliable, standardized, and internationally recognized sustainability assessments for major commodity sectors such as palm oil, ensuring both data quality and global relevance for academic analysis.

The sample comprises all publicly listed palm oil companies in Southeast Asia, specifically Indonesia, Malaysia, and Singapore. These three countries were selected because they are the only ASEAN members with publicly traded palm oil firms for which SPOTT data are available. Other ASEAN countries (such as Thailand, the Philippines, and Vietnam) have palm oil industries that remain dominated by private or non-listed entities, resulting in the unavailability of comparable ESG disclosure data. Thus, the inclusion of these three countries accurately represents the publicly listed segment of the Southeast Asian palm oil industry.

A total of 30 companies form the complete population of interest for this study, providing comprehensive coverage of the region's listed palm oil firms. To enhance the robustness of the analysis, three companies were excluded due to incomplete ESG score data across the observation period. The selected timeframe of 2020–2023 was determined by the availability of media coverage information, which SPOTT began systematically documenting from 2020 onwards.

Consequently, the final sample includes 27 companies with complete ESG and media coverage records throughout the period studied (see Table 1). This approach ensures both the validity and accessibility of data for regression analysis, aligning the research with global standards and the practical realities of data availability in the region.

Table 1 shows that this research uses a sample of 27 palm oil companies with a total of 108 data observations over a 4-year research period. The sample size in this study is larger compared to several previous studies (Abdullah et al., 2019; Fardillah & Honggowati, 2024; Tey & Brindal, 2020) and provides broader coverage. Additionally, this research offers a more inclusive representation of the palm oil industry in three Southeast Asian countries, namely Indonesia, Malaysia, and Singapore. This sample involves major companies in the Southeast Asian region, such as Astra Agro Lestari, Sampoerna Agro, and Golden Agri-Resources Ltd (Indonesia); FGV Holdings BHD, IOI Corporation BHD, and Kuala Lumpur Kepong BHD (Malaysia); Wilmar International Ltd, Golden Agri-Resources Ltd, and First Resources Ltd (Singapore).

Table 1. Purposive Sampling

	Indonesia	Malaysia	Singapore	Total
Total public companies in the palm oil sector with ESG scores from SPOTT	10	13	7	30
Less:				
Companies that do not have consecutive ESG scores for 2020-2023	1	2	0	3
Final Sample Size	9	11	7	27
Total Data Observations over 4-years of Research	36	44	28	108

Source : Primary Data Processed (2025)

Table 2. Variable Measurement

Dependent Variables	Measurement
Tobin's Q	(Total Market Value + Total Book Value of Liabilities)/ Total Book Value of Asset
Independent Variable	Measurement
ESG Score	ESG scores are taken from SPOTT assessments for palm oil companies during the 2020-2023 period
Moderating Variable	Measurement
Media coverage	SPOTT-tracked media articles and campaigns
Control Variables	Measurement
ROA	(Net Income / Total Assets)
SIZE	The natural logarithm of the company market capitalization
AGE	Company age from the year of IPO to the year of observation
DAR	(Total Debt / Total Assets)
GDP Growth	Annual growth rate of a country's gross domestic product based on World Bank data
Inflation	Annual percentage change in consumer price index (CPI) based on World Bank data

Source : Table by authors

ESG disclosure scores are derived from SPOTT assessments, which evaluate palm oil companies' transparency across 196 indicators in 10 categories based on the SPOTT index framework for tracking public disclosure, and are aligned with the UN Sustainable Development Goals.

The framework focuses on upstream supply chain actors, prioritizing entities with direct influence over plantation-level ESG impacts, and employs a granular scoring system (0–1 per indicator) converted to percentages for comparability. SPOTT’s credibility stems from its iterative development since 2014, incorporating stakeholder feedback and providing contextual company data like land holdings and market capitalization for trend analysis. This approach addresses limitations of certification-centric ESG frameworks, offering a sector-specific tool to assess both large and small firms comprehensively.

Financial metrics, sourced from Thomson Reuters (Refinitiv), include firm value proxies like market capitalization and profitability ratios, standardized to USD using fiscal-year-end exchange rates to mitigate currency fluctuations. Data is updated through December 2023 to account for potential lagged effects of ESG disclosures on financial performance, with fiscal-year details cross-verified via annual reports and corporate websites. The dataset encompasses companies listed across Southeast Asian stock exchanges, ensuring regional representation while addressing reporting heterogeneity. This standardization enables robust cross-border analysis of ESG-performance linkages in the palm oil sector.

This research employs Tobin’s Q as the dependent variable to measure firm value, calculated as the ratio of market value to book value of assets, reflecting investor perceptions of sustainability performance. The independent variable, ESG performance, is quantified using SPOTT-assessed scores (2020–2023), which evaluate transparency across 196 sector-specific indicators. Media coverage, acting as a moderating variable, is operationalized through SPOTT-tracked media articles and campaigns, with the interaction term $ESG \times Media$ testing its amplifying or mitigating role. Control variables include firm-specific factors: ROA (profitability), SIZE (total assets), AGE (years since establishment), and DAR (debt-to-asset ratio), alongside country-level macroeconomic controls (GDP growth and inflation rate) to account for regional economic dynamics. A complete description of each variable used can be seen in Table 2.

This research conducts ordinary least squares (OLS) regression with robust standard errors by running two testing models. To evaluate the influence of ESG performance on company value in palm oil companies (Hypothesis 1), the equation for the direct relationship is formulated as follows :

$$\text{Tobin's } Q_{i,t} = \beta_0 + \beta_1 \text{ESG}_{i,t} + \beta_2 \text{ROA}_{i,t} + \beta_3 \text{SIZE}_{i,t} + \beta_4 \text{AGE}_{i,t} + \beta_5 \text{DAR}_{i,t} + \beta_6 \text{GDP}_{i,t} + \beta_7 \text{INF}_{i,t} + e_{i,t} \dots \dots \dots (1)$$

Description :

Tobin’s $Q_{i,t}$: Company value i at time t

$\text{ESG}_{i,t}$: Total ESG score of company i at time t

Control [ROA, SIZE, AGE, DAR, GDP Growth, Inflation]: Control variables of company i at time t in the form of: return on asset ratio, company size calculated with natural logarithm of market capitalization, company age, debt to asset ratio, GDP growth rate and inflation of the country where the company operates

e: Error term.

To evaluate the moderating role of media coverage on the relationship between ESG performance and company value (Hypothesis 2), the equation with interaction effect is formulated as follows:

$$\begin{aligned} \text{Tobin's } Q_{i,t} = & \beta_0 + \beta_1 \text{ESG}_{i,t} + \beta_2 \text{MED}_{i,t} + \beta_3 \text{ESG} * \text{MED}_{i,t} + \beta_4 \text{ROA}_{i,t} + \beta_5 \text{SIZE}_{i,t} + \beta_6 \text{AGE}_{i,t} + \beta_7 \text{DAR}_{i,t} + \beta_8 \text{GDP}_{i,t} \\ & + \beta_9 \text{INF}_{i,t} + e_{i,t} \dots \dots \dots (2) \end{aligned}$$

Additional notes :

$\text{MED}_{i,t}$: Moderating variable, which is Media Coverage of company i at time t.

$\text{ESG} * \text{MED}_{i,t}$: Interaction variable between ESG score and Media Coverage of company i at time t.

RESULTS AND DISCUSSION

Descriptive Statistics

Based on descriptive statistics presented in Table 3, this study analyzes 108 observations from publicly listed palm oil companies. The average Tobin's Q of 0.874 indicates variation in market value relative to company asset value, ranging from 0.349 to 3.252. The mean ESG score of 0.605 reflects a fairly good level of ESG performance, with values ranging from 0.067 to 0.947. Media coverage shows an average of 39.15 articles per company, with considerable variation from a minimum of 2 to a maximum of 212 articles. The average ROA of 0.053 indicates relatively low asset performance, with some companies experiencing losses (minimum -0.126). Company size measured by the natural logarithm of market capitalization averages 20.215, ranging from 16.60781 to 23.82649. The average company age is 20.87 years, ranging from 7 to 54 years, indicating that the majority of companies have been operating for quite some time. The average debt-to-asset ratio (DAR) of 0.555 shows variation in capital structure, with some companies having high leverage (maximum 2.207). Macroeconomic factors show an average GDP growth of 2.724% with considerable variation (-5.5% to 9.7%), while average inflation reaches 2.536% with a range from -1.1% to 6.1%, reflecting fluctuating economic conditions during the study period.

Table 3. Descriptive Statistics

Variable	Obs	Mean	Std. dev.	Min	Max
ESG	108	0.6055	0.2441	0.0670	0.9470
Tobin's Q	108	0.8747	0.5316	0.3491	3.2520
Media Coverage	108	39.1574	44.2814	2.0000	212.0000
ROA	108	0.0534	0.0560	-0.1259	0.2179
SIZE	108	20.2155	1.6428	16.6078	23.8265
AGE	108	20.8704	12.2559	7.0000	54.0000
DAR	108	0.5556	0.3373	0.1193	2.2067
GDP	108	2.7241	4.4822	-5.5000	9.7000
Inflation	108	2.5361	1.8842	-1.1000	6.1000

Source : Primary Data Processed (2025)

Correlation Analysis

Prior to regression analysis, multicollinearity was assessed using the correlation matrix in Table 4, which examines relationships among variables (Tobin's Q, ESG, Media Coverage, ROA, Size, Age, DAR, GDP Growth, and inflation).

Table 4. Pearson Correlation Matrix (Dependent Variable : Tobin's Q)

	Tobin's Q	ESG	Media Coverage	ROA	Size	AGE	DAR	GDPs	Inflation
Tobin's Q	1								
ESG	-0.1396	1							
Media Coverage	-0.1554	0.4823***	1						
ROA	0.3009***	0.1632*	-0.0825	1					
Size	0.3493***	0.152	-0.0595	0.3013***	1				
AGE	0.3686***	0.0545	-0.0679	0.2886***	0.3016***	1			
DAR	-0.0307	-0.1517	0.0832	-0.2894***	-0.4473***	-0.0839	1		
GDP	-0.0812	0.0613	0.0046	0.2248**	-0.0379	0.0372	-0.0094	1	
Inflation	-0.1752*	0.0493	0.0574	0.1446	-0.1114	-0.1092	0.0579	0.6455***	1

Notes: * p<0.1, ** p<0.05, *** p<0.01

Source : Primary Data Processed (2025)

All pairwise correlations between independent variables remain below the 0.7 threshold, with the highest correlation observed between GDP and inflation (0.6455), confirming no severe multicollinearity issues. This validates the suitability of OLS regression, further supported by robustness checks. The analysis reveals key significant correlations: Tobin's Q positively correlates with ROA (0.3009; $p < 0.01$), Size (0.3493; $p < 0.01$), and Age (0.3686; $p < 0.01$), while ESG shows a strong positive association with Media Coverage (0.4823; $p < 0.01$). Size demonstrates a notable negative correlation with DAR (-0.4473 ; $p < 0.01$), and ROA aligns positively with GDP (0.2248; $p < 0.05$). These findings, consolidated in Table 4, underscore the interplay between financial metrics and sustainability factors in the palm oil sector.

Regression Results

Table 5 presents the results of the Ordinary Least Squares (OLS) regression estimated with robust standard errors. This estimation approach was employed to correct for potential heteroskedasticity and non-constant error variances, ensuring that the standard errors remain reliable even if classical assumptions are violated.

Table 5. Regression Results for Model 1 and Model 2

Tobin's Q	Model 1	Model 2
ESG	-0.4443 (-4.57)**	-0.7313 (-8.65)***
Media Coverage		-0.0176 (-11.36)***
ESG*Media Coverage		0.0209 (10.18)***
ROA	2.4591 (2.36)*	2.7465 (2.64)*
SIZE	0.0963 (5.29)**	0.1179 (5.53)**
AGE	0.0093 (5.59)**	0.0085 (5.62)**
DAR	0.2710 (5.52)**	0.2175 (3.48)**
GDP	-0.0043 (-0.44)	-0.0059 (-0.72)
Inflation	-0.0372 (-1.7)	-0.0351 (-1.62)
Cons	-1.1754 (-3.65)**	-1.3212 (-3.68)**
F (Sig)	7.34 (0.000)***	6.71 (0.000)***
R2	0.3111	0.3579

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

Source : Primary Data Processed (2025)

Model 1 shows that ESG performance has a significant negative effect on firm value (Tobin's Q) ($\beta = -0.4443$; $t = -4.57$; $p < 0.05$), confirming H1. Among the control variables, ROA, firm size (SIZE), firm age (AGE) and DAR exhibit significant positive effects. In Model 2, the negative influence of ESG performance intensifies ($\beta = -0.7313$; $t = -8.65$; $p < 0.01$), while media coverage demonstrates a positive moderating effect on the ESG–firm value relationship ($\beta = +0.0209$; $t = 10.18$; $p < 0.01$), supporting H2.

Macroeconomic control variables (GDP growth and inflation) are not statistically significant, while the models overall show moderate explanatory power ($R^2 = 0.311\text{--}0.357$) and high joint significance (F-statistic = 6.71–7.34; $p < 0.01$). These findings collectively indicate that while ESG performance is negatively associated with firm value, media coverage serves as a counterbalancing factor that mitigates the negative market perception of ESG activities.

Robustness Test

Table 6 presents the results of the robustness test using lagged independent variables. The findings remain consistent with the main analysis, indicating that the negative effect of ESG performance on firm value (Tobin's Q) persists, while the positive moderating effect of media coverage also holds. Control variables such as ROA, company size, and age continue to show significant positive impacts, whereas macroeconomic factors remain insignificant. The explanatory power and statistical strength of the models are very similar between the main and robustness analyses, confirming that the study's results are stable and reliable.

Table 6. Robustness Test for Model 1 and Model 2

	Model 1	Model 2
	Tobin's Q	Tobin's Q
ESG	-0.4541779 (-2.41)***	-0.7297607 (-3.03)***
Media Coverage		-0.0176122 (-2.63)**
ESG*Media Coverage		0.020872 (2.63)**
ROA	2.450973 (2.72)***	2.739593 (3.06)***
SIZE	0.0984004 (3.04)***	0.1184132 (3.60)***
AGE	0.0094241 (2.38)***	0.0085935 (2.21)**
DAR	0.2688047 (1.78)*	0.2175488 (1.45)
GDP	-0.0041081 (-0.31)	-0.0058773 (-0.45)
Inflation	-0.0361787 (-1.14)	-0.0348405 (-1.12)
Cons	-1.214771 (-1.76)*	-1.321289 (-3.68)**
F (Sig)	6.35 (0.000)***	5.97 (0.000)***
R2	0.3100	0.3563

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

Source : Primary Data Processed (2025)

Additional Analysis

The study decomposes ESG into Environmental (ENV), Social (SOC), and Governance (GOV) components, revealing consistent negative impacts on palm oil firm value across all dimensions: ENV (−0.4818), SOC (−0.4349), and GOV (−0.3716), each significant at 5% (See Table 7 in Models 3–5). These findings align with the composite ESG results, underscoring market skepticism toward sustainability investments regardless of component focus.

Robust standard errors address heteroscedasticity, ensuring reliable estimates while controlling for firm-specific (ROA, SIZE, AGE, DAR) and macroeconomic (GDP, inflation) factors. Media coverage positively moderates all ESG components' effects on firm value: ENV (+0.0198), SOC (+0.0214), and GOV (+0.0178), significant at 1% (See Table 7 in Models 6–8), offsetting baseline negative valuation impacts. Control variables maintain consistency, with ROA, SIZE, and AGE showing stable positive influences. This granular analysis confirms media's universal role in re-shaping ESG-value dynamics, highlighting its critical function as a reputational buffer and transparency amplifier in high-risk industries.

Table 7. Regression Results for Additional Analysis

	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	Tobin's Q	Tobin's Q	Tobin's Q	Tobin's Q	Tobin's Q	Tobin's Q
ENV	-0.481837 (-5.46)**			-0.7732603 (-10.78)***		
SOC		-0.434981 (-4.64)**			-0.7325794 (-7.91)***	
GOV			-0.3716214 (-3.48)**			-0.6746507 (-5.23)**
Media Coverage				-0.0153999 (-12.06)***	-0.0183407 (-13.67)***	-0.014199 (-8.52)***
ENV*Media Coverage				0.019185 (10.7)***		
SOC*Media Coverage					0.0214594 (11.76)***	
GOV*Media Coverage						0.0178631 (7.54)***
ROA	2.448731 (2.32)	2.4402 (2.35)*	2.347154 (2.27)	2.753583 (2.65)*	2.75699 (2.65)*	2.681445 (2.54)*
SIZE	0.0953902 (5.12)**	0.0966429 (5.39)**	0.0960902 (4.46)**	0.1175203 (5.53)**	0.1183179 (5.69)**	0.1178497 (5.78)*
AGE	0.0095852 (5.61)**	0.0092849 (5.95)***	0.0097905 (5.89)**	0.0087667 (5.55)**	0.0085577 (5.55)**	0.0086237 (5.49)**
DAR	0.265919 (5.29)**	0.2679364 (5.43)**	0.2727666 (5.43)**	0.2129671 (3.32)**	0.2123419 (3.29)**	0.2259473 (3.42)**
GDP	-0.0043651 (-0.45)	-0.0043626 (-0.44)	-0.0039585 (-0.39)	-0.0059876 (-0.74)	-0.0056955 (-0.66)	-0.0051237 (-0.6)
Inflation	-0.0363285 (-1.75)	-0.0381206 (-1.77)	-0.0374007 (-1.71)	-0.0350172 (-1.64)	-0.0365841 (-1.62)	-0.0372066 (-1.76)
Cons	-1.156318 (-3.55)**	-1.172882 (-3.74)**	-1.242725 (-4.15)**	-1.331248 (-3.76)**	-1.312189 (-3.82)**	-1.39642 (-4.24)**
F (Sig)	6.73 (0.000)***	6.45 (0.000)***	6.03 (0.000)***	6.31 (0.000)***	6.01 (0.000)***	5.52 (0.000)***
R2	0.3203	0.3109	0.2968	0.367	0.3556	0.3364

Notes : * p<0.1, ** p<0.05, *** p<0.01

Source : Primary Data Processed (2025)

Discussion : Direct Relationship

The research findings show that ESG performance has a significant negative effect on the value of palm oil companies. This result aligns with prior studies by Fardillah and Honggowati (2024), Khin et al. (2022), Grishunin et al. (2022), and Singh et al. (2023) all of which documented negative impacts of ESG on firm value within similar contexts. Furthermore, the negative influence extends to each ESG component, when analyzed separately, providing robust empirical evidence on the persistent challenges palm oil companies face in implementing sustainable practices. These consistent results emphasize the sector-specific difficulties in reconciling ESG commitments with financial performance, highlighting the complexity of sustainability integration in resource-intensive industries.

Interestingly, these findings reveal a negative direct relationship between ESG performance and firm value, which contradicts the expectations of Legitimacy Theory and Signaling Theory. According to Legitimacy Theory, firms engaging in ESG activities are expected to strengthen their social legitimacy and, consequently, enhance market valuation (Agapova et al., 2025; Ahmad et al., 2018). Similarly, Signaling Theory suggests that ESG disclosures serve as positive signals to investors, fostering higher firm valuation (Lee et al., 2022; Zumente & Bistrova, 2021). However, the negative coefficient of ESG performance challenges these theoretical predictions within the palm oil sector, where sustainability initiatives may be perceived as costly or driven by external pressures rather than genuine strategic value.

In contrast, the interaction between ESG and media coverage ($ESG \times Media$) shows a significant positive moderating effect, which restores alignment with both theories. Consistent with Zhong and Wang (2023), Zheng et al. (2024), and Zou et al. (2025), media coverage acts as an amplifying mechanism that improves information transparency and investor understanding. This enhanced visibility mitigates market skepticism toward ESG investments, allowing firms to regain legitimacy and strengthen investor confidence in line with theoretical expectations.

From a cost-benefit perspective, the negative effect of ESG on firm value can be attributed to the considerable investments required to meet ESG standards, which may suppress short-term profits. This perception is particularly relevant among Southeast Asian investors, who often prioritize immediate financial returns (Rahman & Bahari, 2023; Kahate, 2024). Supporting this view, the Centre for Governance and Sustainability at the National University of Singapore (2024) highlights investor resistance to companies with greater ESG transparency, implying wariness about short-term costs outweighing perceived benefits. The positive moderation effect of media coverage found in this study, with a highly significant interaction coefficient (0.0209 at 1% level), signals that strategic communication can improve investor perceptions of ESG initiatives. Closing this perception gap will require coordinated efforts from regulators, companies, and other stakeholders. Regulators might consider fiscal incentives to encourage ESG adoption, while companies should integrate ESG deeply into their business models and actively communicate these efforts to stakeholders, leveraging media to highlight long-term sustainability benefits and enhance firm value.

Discussion : Moderating Role of Media Coverage

The research demonstrates that media coverage significantly moderates the relationship between ESG performance and firm value, with a positive interaction coefficient of 0.0209 at the 1% significance level. This positive moderating effect is consistent across all ESG components, indicating that media exposure amplifies the value-enhancing potential of sustainability practices. These findings resonate with the concept of media as a “megaphone,” as described by Zou et al. (2025), where media coverage magnifies the influence of ESG investments, transforming them from perceived cost burdens into sources of value creation. This effect underscores the instrumental role of the media in shaping public and investor perceptions, particularly in industries with high sustainability sensitivities.

The positive moderation effect aligns well with Legitimacy Theory and Signaling Theory, providing empirical support for the theoretical predictions regarding media's role in enhancing firm legitimacy and communicating strategic signals to the market. Legitimacy Theory posits that organizations gain social acceptance by aligning their actions with societal norms and expectations, and media serves to broadcast these signals of conformity (Tan et al., 2025; Zou et al., 2025). The consistent positive moderation observed for the ESG components reinforces the notion that media disseminates and legitimizes companies' sustainability commitments in the palm oil sector. Furthermore, Signaling Theory, emphasizes that media functions as an amplifier that sharpens positive investor signals pertaining to ESG efforts (Liu et al., 2020; Naidu et al., 2024). The empirical increase in explanatory power, demonstrated by the rise in R-squared from 0.3111 to 0.3579 upon including media as a moderator, substantiates media's critical role in strengthening the communication of ESG initiatives. These outcomes align with recent studies by Zheng et al. (2024) and Zou et al. (2025) which detail how strategic media management can enhance stakeholder perceptions and firm value, particularly in sectors burdened by sustainability controversies such as palm oil.

Media coverage contributes to minimizing information asymmetry by making sustainability efforts transparent and accessible to investors and other stakeholders. By highlighting positive ESG actions, media enhances corporate credibility and amplifies the perceived authenticity of companies' commitments, which helps reshape public narratives around contentious industries Chong and Loh (2023) and Zhong and Wang (2023). In the case of palm oil companies, which are often subject to criticism related to deforestation and social impacts, media's role becomes crucial in balancing negative perceptions. Supporting this, Tey and Brindal (2021), emphasize that effective communication via media channels can pivot investor perceptions, allowing firms to convert reputational risks into value creation opportunities. This research reinforces such claims by showing that while ESG practices alone may negatively affect firm valuation due to short-term cost concerns, strong media engagement can reverse this trend and foster value enhancement.

The practical implications for palm oil company management are significant, underscoring the imperative of integrating comprehensive media strategies into ESG efforts. Such communication approaches are essential to realizing the full potential of sustainability investments, as reflected in the improved model fit when media coverage is accounted for. This suggests that companies should proactively manage media relations and strategically disseminate ESG information to influence stakeholder attitudes positively. Jong (2022) supports this perspective, arguing that effective ESG communication can materially increase firm value. Consequently, regulators and policymakers should consider how media dynamics impact ESG reporting frameworks and investor reactions, potentially encouraging transparent and media-friendly disclosure practices to foster sustainable value creation in the palm oil industry.

CONCLUSIONS

The study demonstrates that ESG performance in the palm oil sector tends to negatively affect firm value, reflecting market perceptions of sustainability investments as costly rather than beneficial. Crucially, media coverage serves as a powerful moderating force that alleviates this negative impact by reshaping stakeholder perceptions and repositioning ESG initiatives as strategic value drivers. This highlights the importance for palm oil companies to integrate proactive media engagement with their ESG efforts to better align with investor expectations and close the valuation gap.

Theoretically, the research makes a significant contribution to ESG literature by revealing the pivotal role of media dynamics as a moderating mechanism, especially within resource-intensive industries. Practically, it offers valuable guidance for firms and policymakers in emerging markets on leveraging media to enhance both sustainability performance and firm value, thereby advancing the integration of ESG into corporate strategy.

While the study provides critical insights, its focus on SPOTT-listed palm oil firms from three Southeast Asian countries, namely Indonesia, Malaysia, and Singapore, limits the generalizability of the findings. Future research should expand to include a broader set of countries and diverse ESG measurement frameworks to enhance external validity. Additionally, the reliance on SPOTT assessments, though comprehensive, may overlook sector-specific nuances, suggesting the need for hybrid metrics integrating certification standards and local governance practices. Future studies could expand temporal and geographical scopes, examine moderators like institutional ownership or regulatory environments, and conduct cross-industry comparisons to isolate palm oil-specific ESG dynamics. Addressing these gaps would deepen understanding of how sustainability initiatives translate to financial performance in high-risk agricultural sectors.

DECLARATION OF AI USE

During the preparation of this work, the author(s) used Grammarly's AI-assisted writing feature in order to increase the impact of the text and enhance clarity; as such, some parts of the paragraphs in this paper were reconstructed using AI-generated suggestions. The author(s) carefully reviewed each area of reconstructed content to ensure accuracy and coherence. The author(s) did not use AI tools to identify, generate, or cite any of the references included in this work. This framework was developed through the author's own experience in evaluating submitted manuscripts, and the author(s) take full responsibility for the content of the published article.

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