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ANALYSIS OF THE DETERMINANTS OF ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) WITH SENSITIVE INDUSTRY AS A MODERATING VARIABLE IN COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstract

This study aims to determine the determinants of Environmental, Social & Governance (ESG), with sensitive industry as a moderating variable, in companies listed on the Indonesia Stock Exchange (IDX) from 2022–2024. This research is quantitative which uses secondary data with testing tools in the form of Eviews 12. Sample used was 32 companies which selected with purposive sampling technique. The results indicate that profitability has a positive and significant effect on Environmental, Social & Governance (ESG). Intellectual capital has a negative and significant effect on Environmental, Social & Governance (ESG). Media coverage has a positive and significant effect on Environmental, Social & Governance (ESG). Sensitive industry significantly moderates the effect of profitability on Environmental, Social & Governance (ESG); sensitive industry insignificantly moderates the effect of intellectual capital on Environmental, Social & Governance (ESG) and sensitive industry insignificantly moderates the effect of media coverage on Environmental, Social & Governance (ESG)
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Keywords: Environmental, Social & Governance, profitability, intellectual capital, media coverage, ESG Quality45 IDX KEHATI

INTRODUCTION

The high volatility in real and financial markets has increased pressure on companies to maintain business continuity, achieve superior performance, and create value for all stakeholders. In this context, the integration of Environmental, Social & Governance (ESG) factors into investment decision-making is becoming increasingly important in creating medium- to long-term value. Companies with strong ESG practices and ratings are proven to be more resilient and serve as a safe haven when facing challenges. The UN Global Compact (2004) recommends that building social, economic, and environmental foundations forms the pillars of sustainability in the investment world. Investing in Environmental, Social & Governance (ESG) has become a key indicator of management competence, risk management, and non-financial performance. The ESG paradigm is now a sharp focus of the media and the wider public. Media coverage plays a crucial role as external oversight that encourages long-term performance improvement through a positive and mutually reinforcing relationship. When a crisis occurs, such as an environmental violation incident or corruption fraud, media coverage serves as a mirror for companies and encourages them to adjust strategic actions. However, the effect of media coverage is two-sided, where an inverted U-shaped relationship is found between negative news coverage and financial performance. Negative reporting can damage a company's reputation, while companies need to further explore the role of digital media in predicting performance amid the potential redundancy of information from extensive media coverage. In Indonesia, sustainability disclosure is regulated by the Financial Services Authority (OJK) through OJK Regulation No. 51/POJK.03/2017, which aims to harmonize business activities with the principle of sustainable development, encompassing environmental, social, and governance (ESG) aspects. The Indonesia Stock Exchange (IDX/BEI) is also committed to encouraging sustainable investment and the improvement of ESG practices. However, an assessment of 85 companies in 2025 revealed that the majority have medium ESG risk, and some companies even have severe high risk. This indicates that despite existing regulations, many companies still need to improve their

ESG practices. ESG practice is shaped by a combination of internal and external factors. Internal factors include financial characteristics, such as profitability, which provides resources for ESG initiatives, and non-financial characteristics, such as intellectual capital, which provides strategic direction. Profitability, measured by Return on Assets (ROA), is an indicator of operational success that strengthens investor confidence and contributes to firm value. High profitability suggests a positive relationship with strong ESG performance; however, several studies have shown mixed results, even finding a negative relationship, suggesting that ESG performance is driven by a complex interaction between financial capability (profitability) and strategic intent (will). The presence of non-financial internal factors, intellectual capital (IC), encompasses human, structural, and relational capital, which are crucial intangible assets for competitive advantage and increasing firm value. IC is highly important in addressing ESG performance challenges, especially in governance and green decision-making. Prior research has also shown mixed results regarding the influence of intellectual capital on ESG performance, with some studies finding a positive relationship and others finding none. This variation in findings highlights the need for further in-depth analysis of ESG determinants. Furthermore, sensitive industry also shapes ESG performance, as sensitive industries such as energy and mining are demanded to pay more attention to sustainability practices and disclosure due to the high level of public scrutiny and stakeholder demands. Based on these phenomena and the inconsistent findings of previous research, this study aims to re-verify the influence of internal determinants (profitability and intellectual capital) and external determinants (media coverage) on ESG performance. The distinction of this research lies in the use of an observation period from 2022–2024 with a focus on companies included in the ESG Quality45 IDX KEHATI index, and the inclusion of the sensitive industry moderating variable to enrich the analysis.

LITERATURE REVIEW

Stakeholder Theory

Stakeholder Theory, proposed by Freeman (1984), asserts that corporate success and long-term viability depend on managing and balancing the interests of all stakeholders, both internal (e.g., managers and employees) and external (e.g., customers, suppliers, media, and government) (Freeman et al., 2020). This framework obligates organizations to operate sustainably—not only financially but also socially and environmentally (Elkington, 1997)—by prioritizing moral obligations and providing mutual benefits to these groups. Effective stakeholder management, underpinned by principles of transparency and accountability (GRI, 2020), offers numerous advantages, including enhanced organizational performance, improved reputation and valuation, increased innovation and efficiency, and better risk mitigation, ultimately enabling firms to formulate effective strategies for sustainable, long-term value creation.

Legitimacy Theory

Legitimacy Theory is a foundational framework explaining the motivations for corporate social and environmental disclosure (Archel et al., 2009). The theory posits that a firm's license to operate, or its legitimacy, depends on its adherence to a social contract with the surrounding environment, which is vital for survival irrespective of financial performance (Lanis & Richardson, 2012). When a discrepancy emerges between corporate actions and societal expectations, management strategically utilizes information disclosure mechanisms, such as annual or sustainability reports, to mitigate public concern and maintain legitimacy (Gray et al., 1995). By engaging in socially responsible operations and transparently disclosing both financial and non-financial information—including Environmental, Social, and Governance (ESG) data—companies seek to prove compliance with this social contract, as any perceived breach thereof threatens the organization's legitimacy and long-term viability.

Resource Based View Theory

The Resource-Based View Theory (RBVT) posits that achieving a sustained competitive advantage requires the optimal utilization of both tangible and, more critically, intangible resources that possess the VRIO (Valuable, Rare, Inimitable, and Non-substitutable) attributes (J. B. Barney, 1991). In this long-term economic context, the application of RBVT highlights that intangible asset are key drivers of competence growth. Intellectual Capital (IC), comprising the interactively linked components of human, relational, and structural capital, is considered such an advantageous resource, as it represents a unique combination of values, skills, knowledge, and processes that is difficult to replicate (Barney et al., 2001). Beyond sustaining the firm's condition, IC functions as a strategic asset that significantly enhances sustainability performance across environmental, social, and economic dimensions, suggesting that corporate investment in building and managing intangible assets like IC is instrumental in achieving superior sustainability outcomes.

Signaling Theory

Signal Theory, introduced by Spence (1973), provides a conceptual framework for understanding how individuals or firms—the senders—strategically communicate observable information, or signals, to receivers (stakeholders) to mitigate information asymmetry (Spence, 2002). This theory primarily focuses on the conveyance of positive information to establish credibility and trustworthiness, with negative signals often being unintentionally revealed (Connelly et al., 2011). In the corporate context, a key signal relates to Environmental, Social, and Governance (ESG) practices and sustainability policies, which companies use to bridge information gaps and influence stakeholders effectively. However, the efficacy of this signaling is challenged by the risk of greenwashing, where sustainability claims are unfounded or exaggerated, underscoring the theory's importance as a robust framework for analyzing strategic communication in information-asymmetric settings.

Environmental, Social & Governance (ESG)

Environmental, Social, and Governance (ESG) is a critical international standard for measuring corporate green and sustainable development, encompassing three dimensions: Environmental performance, Social performance and Governance performance. Superior ESG performance enhances corporate value, financing capacity, operational efficiency, and innovation by integrating both external expectations (stakeholder demands, legitimacy, reputation risk) and internal capabilities (valuable, rare resources) (Barney, 1991). The ESG Risk Rating, such as the one provided by Sustainalytics, quantifies a company's financial risk exposure from unmanaged environmental, social, and governance issues by evaluating the company's Exposure to Material ESG Issues (MEI)—a set of focused, material issues—and the effectiveness of its Management (commitments, actions, and outcomes) in mitigating these risks, thereby playing a vital role in sustainable investment decision-making.

Profitability

Profitability is a fundamental metric for evaluating corporate performance, serving as a key indicator of financial health and success and is critical for shaping major corporate policies and decisions. High profitability, often measured by the Return on Assets (ROA), signals operational efficiency, effective cost management, and a strong market position, providing companies with the financial capacity to invest in Environmental, Social & Governance (ESG) initiatives that meet stakeholder expectations (Handoyo et al., 2023). Stakeholders actively encourage companies to balance profitability and sustainability, viewing the latter as essential for maintaining a positive public image and long-term performance, even though sustainability initiatives are often perceived as costly without immediate financial returns (Mahajan et al., 2023). Therefore, profitability plays a crucial role in strategic decision-making, influencing a firm's capacity to grow, compete, and adopt responsible practices to avoid long-term reputational damage from unethical, short-term profit-seeking behaviors.

$$ROA = \frac{Net\ Income\ After\ Tax}{Total\ Assets}$$

Intellectual Capital

Intellectual Capital (IC) is widely recognized as a vital contributor to corporate financial and sustainability performance, enhancing firm value through its role as an intangible asset base encompassing skills, knowledge, and processes that create a non-imitable competitive advantage (Barney et al., 2001). IC is universally segmented into three core components: Human Capital, Structural Capital and Relational Capital. Optimizing IC is crucial for businesses addressing environmental concerns and transitioning to a green economy, as employee skills, efficient processes, and strong stakeholder relations directly enhance innovation, facilitate sustainability initiatives, and improve overall corporate and sustainable performance (Lestari & Adhariani, 2022). The measurement consists of three stages: it begins with measuring the Value Added (VA) generated by the company. The subsequent measurement involves calculating Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Relational Capital Efficiency (RCE), and Capital Employed Efficiency (CEE). The final stage is the measurement of the Modified Value-Added Intellectual Coefficient (MVAIC).

$$VA = OUT - IN$$
$$HCE = VA/HC$$
$$SCE = SC/VA$$
$$RCE = RC/VA$$
$$CEE = VA/CE$$

Media Coverage

Media coverage is a crucial external factor that provides stakeholders with access to corporate information and is broadly categorized into traditional media (reliable, controlled channels like newspapers and TV) and new media (instant, digital platforms like social media and websites), both of which shape information dissemination and audience engagement. The primary role of media coverage is to reduce information asymmetry and influence stakeholder evaluation and behavior, characterized by attributes such as volume (the amount of coverage) and tone (positive or negative) (Carroll, C. E., & Deephouse, 2014). As an independent third-party monitor, media coverage acts as a powerful non-financial information channel, strategically using positive or negative sentiment to influence investor emotions and drive stakeholders to assign greater significance to these sentiments when assessing overall firm performance. Based on the SCImago Media Rankings (2025), a total of 10 Indonesian media outlets that have been verified and ranked in the Summer Edition 2025 are used as the data source for reputable digital media.

$$Media\ Coverage\ = ln\ (Number\ of\ articles/news\ that\ reported\ in\ year\ t\ )$$

Sensitive industry

Sensitive industry is an external factor in industry analysis, fundamentally representing the heightened exposure of an organization to public scrutiny and stakeholder pressure due to the nature of its operations. Sensitive industries—often defined as those with significant social and environmental impacts, high visibility in the social contract, or large environmental footprints (Qureshi et al., 2020)—face greater regulatory and political costs, compelling them to invest heavily in Environmental, Social & Governance (ESG) issues and adopt better operational practices. Empirical evidence suggests that this increased pressure leads companies in sensitive industries (e.g., energy, mining, chemicals, construction, as per the Global Industry Classification Standard/GICS) to exhibit better environmental performance compared to non-sensitive industries (Garcia et al., 2017). Sensitive industries such as energy, mining, metals, construction, chemicals, pulp, and paper are known to have a significant social-environmental impact (Garcia et al., 2017). The measurement tool for sensitive industries uses a dummy variable, where a score of 1 is assigned to companies classified as environmentally sensitive industries and a score of 0 is assigned if they are not included in this category.

MATERIALS & METHODS

This research method is designed to find solutions to the problems faced through a scientific approach, namely by using quantitative research methods. The quantitative approach method aims to test the determinants that influence Environmental, Social & Governance (ESG) performance. This study was conducted on companies engaged in ESG Quality45 IDX KEHATI and listed on the Indonesia Stock Exchange (IDX) in the period 2022 to 2024. The data source used came from the company's financial reports and sustainability reports published by the Indonesia Stock Exchange (IDX). The sampling technique used was purposive sampling, which is a sample selection method based on certain criteria. Data collection was carried out using secondary data methods, which involve analysis of information that is already available and published by relevant sources

Statistical Analysis

Panel Data Regression Analysis

This analysis utilizes panel data, which combines the characteristics of time-series data (observations over a period) and cross-section data (observations of various objects at a single point in time). Panel data allows for the collection of information from the same objects over time. The complexity of panel data lies in controlling for unobserved heterogeneity to ensure valid inferences on structural parameters. The three primary estimation methods for this regression model are the Common-Effect Model, the Random-Effect Model, and the Fixed-Effect Model.

Moderated Regression Analysis

This research employs a Panel Data Regression Analysis using the Moderated-Regression Analysis (MRA) approach to identify and understand the relationships between profitability, intellectual capital, and media coverage on Environmental, Social & Governance (ESG), with industry sensitivity as a moderating variable. MRA, also known as an interaction test, is an extension of multiple linear regression that includes an interaction term (the product of two or more independent variables) in the regression equation, which controls for the influence of the moderator while maintaining sample integrity (Ghozali, 2018). The MRA using panel data is conducted only after determining the most suitable model among the Common-Effect Model (CEM), Fixed-Effect Model (FEM), and Random-Effect Model (REM) via the Chow, Hausman, and Lagrange Multiplier tests.

Additional Analysis

There are two additional analyses used, such as regression analysis based on industry type and Autoregressive Distributed Lag (ARDL). Regression analysis based on industry type was employed to analyze the influence of profitability, intellectual capital, and media coverage on Environmental, Social & Governance (ESG) separately for two industry groups: environmentally sensitive industries and environmentally non-sensitive industries. The Autoregressive Distributed Lag (ARDL) analysis is utilized to test the short-run and long-run relationship among the variables in the research model. Through ARDL analysis, the extent to which independent variables influence the dependent variable in both the short and long run can be determined. The use of this model helps in comprehending the dynamics of the inter-variable relationships more comprehensively.

RESULT

A. Descriptive Analysis Results

Table 1. Descriptive Test Results

	n	Mean	Maximum	Minimum	SD
PROFIT	96	7,989	29,724	0,472	5,981
IC	96	4,323	14,090	1,090	2,149
MC	96	6,939	7,895	6,397	0,338
ESG	96	29,045	44,800	10,050	8,735
SI	96	0,531	1	0	0,502

The analysis utilizes a total of 96 data observations and five research instruments: Profitability (X1), Intellectual Capital (X2), Media Coverage (X3), Sensitive industry (Z), and Environmental, Social & Governance (ESG) (Y).

1. Profitability (X1) has a mean of 7.989 with a low standard deviation of 5.981, indicating low data variability. The maximum value was 29.724 and the minimum was 0.472
2. Intellectual Capital (X2) has a mean of 4.323 and a relatively low standard deviation of 2.149, showing a narrow data spread. The highest value was 14.090 and the lowest was 1.090
3. Media Coverage (X3) has a mean of 6.939 (ln) and a low standard deviation of 0.338, suggesting low variability. The maximum was 7.895 (ln) and the minimum was 6.397 (ln)
4. Industry Sensitivity (Z) is a dummy variable (1 for sensitive, 0 for non-sensitive), with a mean of 0.531 and a standard deviation of 0.502. Out of 96 samples, 51 samples (53.13%) were classified as environmentally sensitive industries.
5. Environmental, Social & Governance (ESG) (Y) has a mean of 29.045 and a standard deviation of 8.735, indicating low variability. The maximum score was 44.8 and the minimum was 10.050.

The consistently low standard deviations relative to the means across all variables suggest a relatively low level of variability in the data distribution.

B. Regression Results

Table 2. Equation Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-22.23232	24.34818	-0.913100	0.3648
PROFIT	0.144101	0.070435	2.045884	0.0451
IC	-0.916979	0.437835	-2.094347	0.0404
MC	7.795676	3.502028	2.226046	0.0297

R-squared	0.955412	Mean dependent var	29.04531
Adjusted R-squared	0.930560	S.D. dependent var	8.735360
S.E. of regression	2.301896	Akaike info criterion	4.781036
Sum squared resid	323.2222	Schwarz criterion	5.715954
Log likelihood	-194.4897	Hannan-Quinn criter.	5.158945
F-statistic	38.44374	Durbin-Watson stat	2.388646
Prob(F-statistic)	0.000000		

Based on the table above, the results are interpreted as follows:

1. The regression coefficient for variable X1 (Profitability) is 0.144101, indicating that a 1% increase in X1 leads to a 0.144101 unit increase in Y (Environmental, Social & Governance (ESG)) score, and vice versa.
2. The regression coefficient for variable X2 (Intellectual Capital) is -0.916979, indicating that a 1% increase in X2 leads to a 0.916979 unit decrease in Y (ESG) score, and vice versa.
3. The regression coefficient for variable X3 (Media Coverage) is 7.795676, indicating that a 1-unit increase in the log of X3 (or a proportional increase in media coverage) leads to a 7.795676 unit increase in Y (ESG) score, and vice versa.

Partially, the following results are observed as follows:

1. The t-statistic for X1 (Profitability) is 2.045884, with a prob. value of 0.0451 < 0.05. This indicates that profitability (X1) has a positive and significant effect on Environmental, Social & Governance (Y), leading to the acceptance of Hypothesis 1.
2. The t-statistic for X2 (Intellectual Capital) is -2.094347, with a prob. value of 0.0404 < 0.05. This indicates that intellectual capital (X2) has a negative and significant effect on Environmental, Social & Governance (Y), leading to the rejection of Hypothesis 2.
3. The t-statistic for X3 (Media Coverage) is +2.226046, with a prob. value of 0.0297 < 0.05. This indicates that media coverage (X3) has a positive and significant effect on Environmental, Social & Governance (Y), leading to the acceptance of Hypothesis 3.
4.

C. Moderated Regression Analysis Results

Table 3. Moderated Regression Analysis (MRA) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-21.31440	24.31986	-0.876419	0.3845
PROFIT	0.304358	0.106103	2.868526	0.0058
IC	-1.321776	0.515447	-2.564328	0.0130
MC	7.864352	3.449878	2.279603	0.0264
SI	-2.098524	2.417370	-0.868102	0.3890
X1*Z	1.392851	0.615718	2.262157	0.0275
X2*Z	1.803806	0.944257	1.910291	0.0611
X3*Z	1.102268	1.143886	0.963617	0.3393

Based on the table above, the coefficients for the interaction are interpreted as follows:

1. The coefficient for the X1Z interaction term is 1.392. Since Z is a dummy variable (1 for sensitive industry), this means that being in a sensitive industry (Z=1) strengthens the influence of Profitability (X1) on ESG (Y) by 1.392.
2. The coefficient for the X2Z interaction term is 1.803. Being in a sensitive industry (Z=1) strengthens the influence of Intellectual Capital (X2) on ESG (Y) by 1.803.
3. The coefficient for the X3Z interaction term is 1.102. Being in a sensitive industry (Z=1) strengthens the influence of Media Coverage (X3) on ESG (Y) by 1.102.

Furthermore, the hypothesis test results are:

1. The t-statistic for X1Z is 2.262$, with a prob. value of 0.0275 < 0.05. This indicates that Industry Sensitivity (Z) significantly moderates (strengthens) the effect of Profitability (X1) on ESG.
2. The t-statistic for X2Z is 1.910$, with a prob. value of 0.0611 > 0.05. This indicates that Industry Sensitivity (Z) does not significantly moderate the effect of Intellectual Capital (X2) on ESG.
3. The t-statistic for X3Z is 0.963, with a prob. value of 0.3393 > 0.05. This indicates that Industry Sensitivity (Z) does not significantly moderate the effect of Media Coverage (X3) on ESG.

D. Additional Analysis Results

Table 4. Industry Sensitivity-Based Regression Result

	Environmentally Sensitive Industries		Non-Environmentally Sensitive Industries	
Equation	ESG = -26,358 + 0,592 PROFIT - 0,578 IC + 7,657 MC		ESG = 19,783 + 0,050 PROFIT - 3,761 IC + 3,520 MC	
	Prob.	Decision	Prob.	Decision
PROFIT	0,004	Accepted	0,436	Rejected
IC	0,186	Rejected	0,004	Accepted
MC	0,042	Accepted	0,384	Rejected

Based on the regression test results for the environmentally sensitive industries subgroup, Profitability and Media Coverage exhibit coefficients of 0.592 and 7.657 with prob. value of 0.004 and 0.042 < 0.05, respectively. This finding indicates that, within the sensitive industry sample, two variables have a positive and significant partial effect on ESG performance. Conversely, the results for the environmentally non-sensitive industries subgroup show that Intellectual Capital has a coefficient of -3.761 with a prob. value of 0.004 < 0.05. This indicates that, within the non-sensitive industry sample, one variable has a negative and significant partial effect on ESG performance.

Table 5. Autoregressive Distributed Lag (ARDL) Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
COINTEQ*	-0.382691	0.085315	-4.485619	0.0000
D(PROFIT(-1))	0.182777	0.093821	1.948146	0.0545
COINTEQ*	-0.341073	0.081281	-4.196218	0.0001
D(IC(-1))	0.152572	0.369154	0.413300	0.6804
COINTEQ*	-0.363277	0.083824	-4.333818	0.0000
D(MC(-1))	-0.699414	3.016839	-0.231837	0.8172

The Autoregressive Distributed Lag (ARDL) estimation results show that the coefficient for D(PROFIT(-1)) is 0.1828 with a probability of $0.054, indicating a lagged effect. Specifically, this represents the delayed influence of profitability from the previous period on the current period's ESG performance. Although the value is slightly above the 5% significance threshold, its positive direction suggests that past profitability continues to have an impact on the company's subsequent sustainability performance. Conversely, intellectual capital and media coverage from previous period does not have a direct significant impact on the company's Environmental, Social, and Governance (ESG) performance.

DISCUSSION

The effect of profitability on Environmental, Social, and Governance (ESG)

The regression analysis showed that Profitability has a positive and significant effect on Environmental, Social & Governance (ESG), with a t-statistic of 0.144101 and a prob. value of 0.0451 < 0.05, thus accepting Hypothesis 1 (H1). This result is driven by two key theories: Stakeholder Theory, which suggests that strong profitability provides the necessary financial resources for companies—like those in the ESG Quality45 IDX KEHATI index—to invest in ESG initiatives and meet diverse stakeholder demands, thereby securing support and trust; and Legitimacy Theory, which mandates that highly profitable firms must invest in and disclose ESG activities to fulfill their 'social contract' and maintain their legitimacy by aligning corporate practices with public expectations. This creates a virtuous cycle where strong profitability facilitates better ESG investment, which, in turn, enhances reputation and long-term financial performance. Furthermore, while all ESG components are important, strong corporate Governance is often the foundational investment, ensuring that high profits are ethically and efficiently allocated to environmental and social initiatives. This finding aligns with previous studies (Hamdi et al., 2022; Khaled

et al., 2021) but contradicts others (Garcia & Orsato, 2020), potentially due to differences in corporate performance between developed and developing economies.

The effect of intellectual capital on Environmental, Social, and Governance (ESG)

The hypothesis test for Intellectual Capital (X2) revealed a negative and significant effect on Environmental, Social & Governance (ESG), with a regression coefficient of 0.916979 and a p-value of 0.0404 < 0.05, leading to the rejection of Hypothesis 2 (H2). This finding suggests that, despite the Resource-Based View Theory (RBVT) positioning IC as a strategic, VRIN-compliant asset capable of generating competitive advantage and better firm performance when aligned with ESG, the sampled companies in the ESG Quality45 IDX KEHATI index face a trade-off dilemma. The negative relationship implies that a higher focus on using limited resources (financial, human, and time) to create financial value and competitive advantage through IC may lead to the neglect or delay of non-financial ESG investments. This supports the trade-off theory, where prioritizing IC can inadvertently result in negative consequences, such as operational efficiencies that exacerbate environmental damage, social conflicts from automation, or weak governance due to focusing on IC-driven greenwashing over genuine impact. Therefore, the strategic management of intellectual capital must address the necessity of actively contributing to environmental protection, social responsibility, and sound governance. This result aligns with some prior studies (Lestari & Adhariani, 2022) but contradicts others that found a positive relationship (Bananuka et al., 2022), highlighting the complex allocation challenge within corporate sustainability practices.

The effect of media coverage on Environmental, Social, and Governance (ESG)

The hypothesis test for Media Coverage (X3) demonstrated a positive and significant effect on Environmental, Social & Governance (ESG), with a t-statistic of 7.795676 and a p-value of 0.0297 < 0.05, leading to the acceptance of Hypothesis 3 (H3). This result highlights that increased media intensity fosters more effective oversight and actively promotes ESG practices by exerting public opinion and external pressure, compelling firms to address stakeholder responsibilities. Consistent with Signaling Theory, media coverage acts as a credible external signal, reducing information asymmetry: positive coverage boosts investor confidence and lowers the cost of capital, while negative coverage forces swift, transparent remedial actions to restore reputation and legitimacy. Furthermore, Legitimacy Theory and Stakeholder Theory collectively explain that media coverage is a vital link that shapes public perception and drives accountability, particularly in the Environmental and Governance components, as these issues—like pollution or corruption scandals—tend to attract aggressive media attention and directly impact investor trust. This finding aligns with prior studies (He et al., 2024; S. Li & Long, 2024) that link higher media coverage to increased ESG engagement, though it contrasts with others (G. Li et al., 2024) that found a negative effect where excessive negative reporting erodes corporate legitimacy, overriding any benefits from ESG/CSR efforts.

The effect of sensitive industry moderates profitability on Environmental, Social, and Governance (ESG)

The Moderated Regression Analysis (MRA) on ESG Quality45 IDX KEHATI companies (2022–2024) revealed that Sensitive Industry (Z) significantly moderates (strengthens) the positive effect of Profitability (X1) on ESG performance (Y), confirmed by a t-statistic of 2.262 and a p-value of 0.0275 < 0.05. This finding suggests that the influence of profitability on ESG is amplified in environmentally sensitive industries because they face far greater stakeholder pressure and higher exposure to environmental and social risks, compelling them to allocate profits to ESG initiatives as a means of accountability. Framed by Stakeholder Theory and Legitimacy Theory, this strong moderation implies that sensitive firms use their financial strength not merely for compliance but to maintain their social license to operate, build legitimacy, and mitigate severe reputational and operational risks. Profitability thus becomes a critical enabler for ESG investments (e.g., environmental technology), which, in turn, can enhance operational efficiency and attract sustainable investors, creating a virtuous cycle where profitability and ESG performance are mutually reinforcing for long-term sustainability. This result aligns with studies emphasizing the role of sensitive industries (Kludacz-alessandri & Cygańska, 2021) but contradicts others from emerging markets where lower public pressure failed to establish a moderating effect (Garcia & Orsato, 2020).

The effect of sensitive industry moderates intellectual capital on Environmental, Social, and Governance (ESG)

The Moderated Regression Analysis (MRA) for the ESG Quality45 IDX KEHATI sample (2022–2024) found that Sensitive Industry (Z) does not significantly moderate the influence of Intellectual Capital (X2) on ESG performance (Y), evidenced by a t-statistic of 1.910 and a p-value of 0.0611 > 0.05. This non-significant finding

contradicts the expectation that pressure on environmentally sensitive industries would amplify the positive role of X2. This outcome can be explained by the Trade-Off Theory and Agency Theory: despite the strategic value of IC as an RBVT resource, managerial priorities—often focused on short-term profitability and core business activities—may lead to the misallocation or delay of IC investment for ESG initiatives. While Legitimacy Theory predicts that firms should use IC components (like human, structural, and relational capital) to bridge the gap between operations and public expectations, the observed lack of significant moderation suggests that some sensitive firms may engage in symbolic ESG adoption or that the short observation period is insufficient to capture the full impact of substantial IC investments. This result aligns with some prior work (Xu et al., 2021) but contrasts with others that found a positive moderating effect in sensitive industries (Hatane et al., 2022).

The effect of sensitive industry moderates media coverage on Environmental, Social, and Governance (ESG)

The Moderated Regression Analysis (MRA) for the ESG Quality45 IDX KEHATI sample (2022–2024) found that Sensitive Industry (Z) does not significantly moderate the influence of Media Coverage (X3) on ESG performance (Y), evidenced by a t-statistic of 0.963 and a p-value of 0.3393 > 0.05. This finding suggests that despite Signaling Theory emphasizing media as a crucial, long-term communication channel for building stakeholder trust and reducing information asymmetry—especially in inherently risky sensitive industries—this relationship is not amplified by the sensitive industry designation for the companies in this index. This non-significance is likely due to the high quality and maturity of the sampled firms, which are already selected for their strong ESG and financial credentials. These companies have well-internalized crisis communication protocols and public relations expertise to manage media scrutiny, proactively control the narrative, and rapidly respond to both positive and negative coverage. Consequently, the ability of these firms to manage media crisis and maintain legitimacy outweighs the inherent nature of the industry itself, rendering industry sensitivity insignificant as a moderator. This contrasts with research suggesting sensitive industries should significantly influence the media-ESG relationship (S. Li & Long, 2024).

CONCLUSION

Based on the analysis and discussion, the following conclusions were obtained:

1. Profitability has a positive and significant effect on Environmental, Social & Governance (ESG) in ESG Quality45 IDX KEHATI companies listed on the IDX during 2022–2024.
2. Intellectual capital has a negative and significant effect on Environmental, Social & Governance (ESG) in ESG Quality45 IDX KEHATI companies listed on the IDX during 2022–2024.
3. Media coverage has a positive and significant effect on Environmental, Social & Governance (ESG) in ESG Quality45 IDX KEHATI companies listed on the IDX during 2022–2024.
4. Sensitive industry strengthens the effect of profitability on Environmental, Social & Governance (ESG) in ESG Quality45 IDX KEHATI companies listed on the IDX during 2022–2024.
5. Sensitive industry does not strengthen the effect of intellectual capital on Environmental, Social & Governance (ESG) in ESG Quality45 IDX KEHATI companies listed on the IDX during 2022–2024.
6. Sensitive industry does not strengthen the effect of media coverage on Environmental, Social & Governance (ESG) in ESG Quality45 IDX KEHATI companies listed on the IDX during 2022–2024.

LIMITATION & RECOMMENDATION

This study has limitations, particularly in determining whether the influence of Environmental, Social & Governance (ESG) determinants, as moderated by sensitive industries, is short-term or permanent. This is due to the limited observation period, which only covers the years 2022–2024, and a small sample size of only 32 companies. Additional limitations relate to the use of detailed secondary data, the availability of explicit information regarding intellectual capital performance, and the fact that the articles/news used to measure media coverage were not classified as positive or negative. Several suggestions to extend the findings of this research encompass several parties. For future researchers, it is recommended to expand the timeframe and scope of the research object, as well as to apply an in-depth analysis involving other determinants that influence Environmental, Social & Governance (ESG) performance. Company stakeholders are advised to demand transparency in performance and sustainability reports and to evaluate media coverage to prevent greenwashing practices. Companies, especially those in sensitive industries, are expected to remain consistent in implementing and integrating ESG performance into their business strategy, proactively managing risks, and increasing public trust by attracting sustainable investment. Finally, regulators are encouraged to develop more consistent standards for ESG implementation and disclosure tailored to

industry characteristics, and to consider providing rewards or incentives for companies that consistently implement good ESG practices.

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