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LEGITIMACY IN MINING COMPANIES: THE EFFECT OF ASSET NEWNESS AND CAPITAL EXPENDITURE ON ESG DISCLOSURE

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Abstract

Amid global sustainability pressures, mining companies are facing intense public scrutiny. Using an integrated framework of Legitimacy, Signaling, and Stakeholder theories, this study examines the influence of physical asset characteristics, specifically asset newness and capital expenditure (CAPEX), on Environmental, Social, and Governance (ESG) disclosure. Using a quantitative design, this study analyzes a purposive sample of 57 observations from mining companies for the period 2020-2024. Data are processed using fixed-effect panel data regression with robust standard errors. ESG disclosure is measured through content analysis based on the OJK index no. 51/POJK/03./2017. The results show that asset newness has a significant negative effect on ESG disclosure, confirming the phenomenon of "reverse legitimacy". This indicates that companies with obsolete assets use extensive disclosure as a defense mechanism to bridge the legitimacy gap and appease stakeholders. In contrast, CAPEX does not show a significant effect, implying that capital allocation in emerging markets is still focused on operational capacity and not yet oriented towards green technologies. This study concludes that ESG reporting often serves as a symbolic legitimacy tool rather than a proactive commitment. These findings encourage policymakers and investors to critically evaluate the true nature of corporate asset expansion. This study contributes to the literature by integrating physical asset metrics with the still very limited ESG disclosure and demonstrating the existence of the “reverse legitimacy” phenomenon and CAPEX divergence in the context of emerging economies.

Keywords: Asset Newness, CAPEX, ESG Disclosure, Legitimacy Theory, Mining Sector

INTRODUCTION

In the era of global sustainability, companies in the extractive mining industry are facing escalating external pressures related to environmental degradation and climate change (Joseph, 2025; Qarahasanlou et al., 2022). Globally, this sector is estimated to produce 7.7 billion tons of CO2e, equivalent to 15% of global anthropogenic emissions (Zheng et al., 2023). In the domestic context in Indonesia, there are negative externalities from heavy equipment activities and the production of minerals such as gold, nickel, and copper, which have triggered air and noise pollution that threatens public health with the risk of respiratory diseases reaching 7.79×10^{1} person-years/ton (Prasetyo et al., 2025; Wahyono et al., 2024). This escalating environmental risk data is not merely ecological statistics, but rather a threat to legitimacy that creates a trust deficit for companies. This phenomenon triggers demands for transparency from stakeholders.

In response to stakeholder pressure, ESG disclosure is considered a strategic communication tool. However, the underlying motivations for ESG disclosure remain a matter of academic debate. Based on signaling theory and legitimacy theory, disclosure practices are often suspected of not reflecting substantive sustainability commitments, but rather serving as a managerial tool to quell public criticism and maintain corporate image (Khamisu et al., 2024; Tsang et al., 2022) . Particularly in sensitive industries like mining, the primary impetus for reporting tends to be rooted in defensive motives to mitigate reputational damage from high operational risks (Lokuwaduge & Heenetigala, 2017) .

To further understand the motivations behind such transparency, understanding the internal determinants of corporate governance is crucial. However, the current literature is still dominated by exploration of governance and financial metrics, while physical asset characteristics, such as asset newness, remain marginally explored. This is despite the fact that asset age directly dictates operational inefficiency and emissions, which are key drivers of legitimacy threats (Iazzi et al., 2025; Karwowski & Raulinajtys-Grzybek, 2021) . Furthermore, there is a gap in the literature regarding the role of capital expenditure in the context of developing economies. Unlike studies in developed countries that associate capital expenditure (CAPEX) with green technology investment, increased capital expenditure (CAPEX) in Indonesia is suspected to be focused on expanding operational capacity to meet stakeholder economic expectations rather than on the green technology transition (Chen et al., 2025; Deka, 2025; Moussa & Elmarzouky, 2023) .

Based on this literature gap, this study offers novelty and substantial theoretical contributions by proposing an alternative perspective to legitimacy theory in the extractive sector of emerging markets. The urgency of this study lies in examining the relationship between asset newness and capital expenditure (CAPEX) and ESG disclosure, a practice still limited in the sustainability accounting literature. While the dominant literature currently assumes that ESG disclosure is a proxy for the advantages of ecological investment, this study examines the possibility of a theoretical anomaly in the form of a "reverse legitimacy" phenomenon, where the expansion of sustainability reporting is suspected to be due to the high vulnerability of obsolete assets as a form of defensive action. By integrating the physical characteristics of an asset (asset newness) and investment allocation (CAPEX) into legitimacy theory, using the lens of "reverse legitimacy," along with signaling and stakeholder theory, empirically demonstrates that the expansion of ESG disclosure in Indonesia is a form of substantive accountability or simply a strategic management

instrument. Practically, this study is expected to provide crucial signals for regulators and investors to be more critical in evaluating the quality of a company's sustainability commitments.

REVIEW OF LITERATURE

Academic discourse on ESG disclosure continues to evolve, but fundamental debate remains regarding the primary motivations behind corporate transparency. ESG disclosure can be positioned as a tool for building reputation, investor trust, and competitive advantage, rather than simply formal compliance (Zhao et al., 2025) . However, according to Khamisu et al., (2024), The most fundamental motive is the pressure from regulators and stakeholders, but through the lens of signaling theory, such disclosure can be an instrument to reduce information asymmetry between management and investors, while several other literatures emphasize the risk of illusion of legitimacy and window dressing practices so that the disclosure of ESG practices carried out does not always reflect the company's seriousness in carrying out environmental and social responsibilities (Arvidsson & Dumay, 2021; Yadav et al., 2024) .

Based on legitimacy theory, organizations operate under a social contract with society; their survival and resources depend on the alignment of their operational activities with prevailing social value systems and norms (Dowling & Pfeffer, 1975) . When a company's operational impacts align with public expectations, this creates a legitimacy gap, leading to existential threats and pressures. To mitigate these threats and pressures, companies utilize information disclosure, such as ESG reports, as a strategic communication tool to maintain and gain legitimacy in the public eye (Destri et al., 2022; Velte, 2021) .

In addition to the legitimacy perspective, ESG disclosure can be explained through the integration of signaling theory and stakeholder theory. Based on stakeholder theory, companies have an obligation to meet the information expectations of various interest groups, making expanding ESG disclosure a strategic way to strengthen relationships with stakeholders (Saeed & Wiredu, 2025) . Meanwhile, through the lens of signaling theory, such disclosure serves as a medium for companies to send positive signals regarding operational quality and mitigate operational risks. Based on these three theories: legitimacy, stakeholder theory, and signaling theory, ESG disclosure can be said to be more than just a formal obligation, but rather a strategic mechanism to satisfy stakeholder demands while simultaneously sending positive signals and protecting the company's reputation in the public eye.

According to research by Herbohn et al. (2014), asset age influences the level of sustainability disclosure. This can be explained by the fact that companies with older assets are potentially more polluting and therefore have a greater incentive to manage stakeholder expectations through disclosure, while companies with younger assets tend to have a lower need to manage expectations through disclosure reports. Similarly, Wang (2017) explains that asset obsolescence influences the probability of sustainability report disclosure. Companies with obsolete assets will have higher environmental risks and therefore tend to use reports as a disclosure tool to gain legitimacy.

Furthermore, high CAPEX values are assumed to be a strategic measure by companies in modernizing fixed assets to provide positive value in terms of environmental friendliness and efficiency (Moussa & Elmarzouky, 2023) . Fixed asset modernization is

strongly influenced by environmental demands, emission standards, and green technology (Klius et al., 2025) . Therefore, if companies allocate CAPEX for sustainability activities and meet stakeholder and regulatory demands, they will purchase low-emission fixed assets or build advanced waste treatment infrastructure to make the green technology transition. Companies have a strong incentive to publish this through ESG disclosure to gain and maintain social legitimacy.

Assets Newness and ESG Disclosure

The link between the novelty of physical assets, or asset newness, and a company's ESG disclosure practices is explained through legitimacy theory (Dowling & Pfeffer, 1975) . In theory, companies will continually strive to ensure that their operations remain within reasonable limits to maintain their social legitimacy. According to Dutta (2019) , older fixed assets tend to have higher levels of inefficiency and produce greater pollution emissions, placing the company under closer stakeholder scrutiny. From a stakeholder theory perspective, pressure from environmental and regulatory groups forces companies with high-risk assets to be more transparent to secure public support. Companies with older assets respond by expanding ESG disclosure as a defensive strategy to cover legitimacy gaps. Conversely, companies with high levels of asset newness are perceived as possessing more efficient and environmentally friendly technology, thus responding with the perception that public pressure is relatively minimal. Through the lens of signaling theory, asset newness serves as a strong signal of operational quality, so companies feel no urgency to provide additional signals through extensive narrative disclosure. The company's focus then shifts to financial recovery through the allocation of new asset purchases. Based on the argument that companies with newer assets tend not to prioritize ESG disclosure due to minimal pressure and being focused on financial recovery, the first hypothesis is formulated as follows:

H_1 : Asset newness has an effect on ESG disclosure.

CAPEX and ESG disclosure

CAPEX reflects the extent of a company's resource allocation for investment in assets and long-term operational sustainability. Research shows that CAPEX supports long-term value by increasing efficiency, reliability, and the integration of sustainable technologies such as renewable systems or environmentally friendly innovations (Juma et al., 2025) . From a legitimacy theory perspective, large-scale investment activities in CAPEX will increase the company's visibility in the public eye. However, from a stakeholder theory perspective, massive capital investments trigger stakeholder reactions regarding the company's tangible contribution to the green technology transition. To ensure that such expansion is accepted and not considered contrary to environmental or social norms, the company must be able to demonstrate that its capital allocation is managed responsibly.

According to Asiri (2025), CAPEX can essentially influence ESG performance through strategic investments in capital assets designed to enhance a company's sustainability profile. Within the framework of signaling theory, comprehensive ESG disclosure serves as a signal to the market that the capital allocation is not merely capacity expansion, but rather a strategic investment that provides long-term added value. In the context of legitimacy, increased ESG disclosure serves as a strategic communication tool to manage stakeholder perceptions to support the investment strategy while also demonstrating that the decision aligns with the company's long-term sustainability principles. Based on the formulation above, the higher the CAPEX, the more a company is encouraged to disclose ESG practices

due to the need for legitimacy from stakeholders. Therefore, the second hypothesis is formulated as follows:

H_2 : CAPEX has an effect towards ESG disclosure.

RESEARCH METHOD

The study used a quantitative approach with panel data analysis. This approach was chosen because the research focuses on testing the causality hypothesis between the independent variables, namely asset newness and CAPEX, and the dependent variable, ESG. Disclosure analysis with firm size, profitability, and leverage as control variables. The sampling technique used purposive sampling, excluding companies with no data at all. The research sample was obtained based on the list of mining companies available on Osiris, resulting in 57 companies for the 2020-2024 research period. Overall, the research data was obtained from Osiris and the Indonesia Stock Exchange (IDX) from annual reports and/or sustainability reports (ESG reports).

Dependent variable of ESG research Disclosure is defined as non-financial reporting that includes information related to a company's practices in three main areas: environmental, social, and governance (Moussa & Elmarzouky, 2023; Saini et al., 2025) . Disclosure aims to assess and measure a company's performance and the potential value of ESG practices. Referring to research by Adam (2024) and Itan et al., (2025), ESG Disclosure is measured by dividing the total score of disclosed items by the item score based on applicable standards. This study uses a standard reporting matrix. ESG that is aligned with OJK regulation no.51/POJK/03./2017 and SEOJK No.16/SEOJK.04/2021 which adopts the ASEAN ESG common metrics and GHG/ISO 14064 protocol for reporting emissions (BEI Team, 2025) .

The independent variables consist of asset newness and CAPEX. Asset newness is a measure of age that indicates the level of newness of fixed assets owned by a company. This variable refers to the asset age of the research of Dutta & Dutta (2020) and Dutta (2019) , but the study uses the terminology of asset newness to adjust to the measurement proxy used, namely the ratio of net plant, property, and equity divided by gross net plant, property, and equity. This ratio specifically measures the percentage of the remaining economic useful life of an asset, meaning that a higher ratio value indicates a newer and more modern asset condition, so the term asset newness is considered more operationally representative than asset age.

The next independent variable is CAPEX, which refers to funds used by a company to acquire, improve, or maintain long-term assets that play a vital role in the company's operational capacity and growth. CAPEX typically consists of capital assets including property, plant, and equipment such as buildings, machinery, and vehicles with a useful life of more than one year (Asiri, 2025; Moussa & Elmarzouky, 2023; Normalita et al., 2017) . The study included control variables of firm size, profitability, and leverage to mitigate potential omitted variable bias (Asiri, 2025; Moussa & Elmarzouky, 2023; Syahputri et al., 2025) . Collectively, these three variables represent fundamental company characteristics that theoretically can influence corporate policies and ESG practices. disclosure.

Table 1
Measurement

Variable	Definition	Measurement	Data source

ESG disclosure	Non- financial reporting related practice company in environmental, social, and governance. Referring to on OJK standard no.51/POJK/03./2017 and SEOJK No.16/SEOJK.04/2021. Referring to on study Adam (2024) And Itan et al., (2025)	$\frac{\text{Total firm disclosure score}}{\text{IDX ESG Standart Score}}$	IDX
Assets Newness	Size age that shows level novelty asset still company with percentage remaining useful life economical. The more tall its value the more new and modern conditions assets. Referring to on study Dutta & Dutta (2020) And Dutta (2019)	$\frac{\text{Net plant, property, equipment}}{\text{Gross plant, propoerty, equipment}}$	Osiris
CAPEX	Funds used by company For acquire, improve, or look after long-term capital assets long Referring on study Asiri (2025) And Moussa & Elmarzouky (2023)	$\frac{\text{Capital expenditure}}{\text{Total assets}}$	Osiris
Firm size	Fundamental characteristics that represent scale And size operational company. Referring to on study Moussa & Elmarzouky (2023)	$\text{Natural log of total assets}$	Osiris
Profitability (ROA)	Ability company in produce profit. Referring on study Moussa & Elmarzouky (2023)	$\frac{\text{Net income}}{\text{Total assets}}$	Osiris
Leverage	Ability level company in use funds from debt For finance operational And its assets. Referring to on study Asiri (2025)	$\frac{\text{Total debt}}{\text{Total equity}}$	Osiris

RESULTS AND DISCUSSION

In the initial stages, the data were screened and cleaned. Descriptive statistics revealed extreme values in the leverage and ROA variables, resulting in excessively high standard deviations. Researchers refined the data using winsorizing to obtain more stable data.

Table 2
Descriptive statistics

	Mean	Std.dev.	Maximum	Minimum
ESG disclosure	0.7099	0.2264	1,0000	0.1786
Assets Newness	0.5432	0.3199	4.2020	0.0011
CAPEX	0.0412	0.0644	0.4875	0.0000
Firm Size	22.0411	1.9628	25.8568	14,6957
ROA_W	7.4394	15.5139	59.2600	-41.0600
Leverage_W	1.7890	4.7320	34.3332	-13.2682

Based on Table 2, the descriptive statistics for ESG disclosure have a mean of 0.7099 with a standard deviation of 0.2264. This indicates that the sample companies have a fairly high level of ESG disclosure, at 71%. Meanwhile, the mean for asset newness is 0.5432, indicating that the companies have an asset newness level of approximately 54% of their useful life. CAPEX has a relatively small mean value, namely 4% and the control variables are firm size, ROA_W, and Leverage_W.

Table 3
Multicollinearity Test

Variable	VIF	1/VIF
ROA_W	1.18	0.844093
Firm Size	1.17	0.857212
Leverage_W	1.06	0.947627
Assets newness	1.05	0.952345
CAPEX	1.03	0.971675
Mean VIF	1.10	

Table 4
Hausman test

Variables	Fixed Effect (b)	Random Effect (B)	Difference (bB)	Std. Error
Assets news	-0.942774	-0.092988	-0.849786	0.135406
CAPEX	0.234456	0.620906	-0.386450	0.139232
Firm size	0.185273	0.086397	0.098875	0.018682
Roa_w	0.002002	0.002141	-0.000139	0.000348
Leverage_w	0.000053	-0.000777	0.000830	.
Chi^2 value (5)	42.85			
Prob > chi^2	0.0000			

The next step is to conduct a multicollinearity test to detect the presence of a high linear correlation between independent variables that could potentially interfere with the accuracy of the estimate (Table 3). The test results in Table 3 show the mean value. The variance inflation factor (VIF) was 1.10. This value is <10, thus it can be concluded that this study is free from multicollinearity issues. Next, the best estimation model for panel data was selected using the Hausman test. This procedure is used to compare models to determine the most consistent model in capturing firm-specific effects. The results of the Hausman test in Table 4 show a probability value of <0.05, which is 0.0000, proving that there is a correlation

between the error term and the independent variable. Based on these results, the fixed effect model (FEM) is the most consistent and appropriate model compared to the other models. Furthermore, the FEM was inferentially selected as the superior model because it is most representative in explaining the ESG disclosure phenomenon in the mining sector. The selection of the FEM is strengthened by robust standard errors to ensure that the estimated coefficients remain consistent and unbiased. This is crucial because mining sector data is often surrounded by variance and serial correlation issues that can compromise the validity of hypothesis tests if not robustly corrected.

Table 5
Heteroscedasticity and autocorrelation test (Modified Wald Test)

Statistics Test Heteros.	Mark	Statistics Test Autocor.	Mark
Chi^2 (56)	530179.21	F(1.49)	115,179
Prob > Chi^2	0.0000	Prob > F	0.0000

The study established FEM as the best estimation model through the Hausman test, then ensured that the model meets the classical assumptions. In testing the classical assumptions, heteroscedasticity and autocorrelation tests were carried out using the modified Wald test. Based on the test results, Table 5 shows the statistical value of the chi-square heteroscedasticity test of 530179.21 with a significance value of prob>chi ^{2} 0.0000. The condition for fulfilling the homoscedasticity assumption is if the prob value is>0.05, because the results show a value less than the provisions, empirically there is a heteroscedasticity problem in the model. In addition to heteroscedasticity, panel data in the extractive sector often has serial correlation between times (autocorrelation). The results of the autocorrelation test show a statistical value of F (1.49) of 115.179 and Prob > F 0.0000, confirming that there is an autocorrelation problem in the research data.

Test results indicating the presence of heteroscedasticity and autocorrelation simultaneously can bias the hypothesis test results, thus invalidating the hypothesis test. To address this issue, researchers implemented the fixed-effects robust standard errors procedure with the vce(robust) option in STATA. This technique corrects standard errors so that estimation results remain consistent and robust to variance and correlation disturbances. Therefore, the regression results presented in Table 6 are the final results that have undergone the robustness check procedure and are used as the basis for making hypothesis decisions.

Table 6
Robust Fixed Effect Regression Results

ESG score	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
assetsnewness	-.0943	0.0354	-2.67	0.010	-.16513	-0.0234
CAPEX	0.2345	0.2818	0.83	0.409	-0.3303	0.7992
firmsize	0.1823	0.0330	5.60	0.000	0.1190	0.2516
roa_w	0.0002	0.0010	2.07	0.043	0.0001	0.0039
leverage_w	0.00005	0.0012	0.04	0.965	-0.0020	0.0024
_cons	-3.3917	0.7286	-4.66	0.000	-4.8519	-1.9316
R-sq	0.3497					
sigma_u	0.2604					
sigma_e	0.10612					

rho	0.85722	(fraction of variance due to u_i)

Based on The robust fixed effect regression results presented in Table 6 of this study provide empirical evidence in answering the formulated hypothesis with the provision that if the p-value <0.05 then the hypothesis is accepted, and vice versa.

H_1 : The effect of asset newness on ESG disclosure

The first hypothesis test (H_1) shows that the asset newness variable has a coefficient of -0.0943 with a significance p-value of 0.010. Empirically, these results indicate that the first hypothesis is accepted, there is a negative relationship between asset newness and ESG disclosure. The finding that asset newness has a negative effect on ESG disclosure is in line with the findings of Dutta & Dutta (2020) . Based on research by Dutta & Dutta (2020), asset age is considered a proxy indicator for a company's environmental performance. Older assets tend to be less efficient and produce higher emissions or waste, so the company is considered to have poor environmental performance. This finding indicates that there are impression management practices in sustainability reporting.

Based on Dowling & Pfeffer's (1975) legitimacy theory, companies with low asset newness (dominated by obsolete operational assets) inherently produce relatively massive ecological footprints and pollution levels. This inefficiency triggers an escalation of existential threats in the form of a legitimacy gap between the company's actual performance and social expectations. In response to this gap, company management focuses on implementing symbolic actions rather than substantive actions such as operational technology updates that require massive capital allocation. This defensive action manifests itself through extensive expansion of ESG disclosures, which serve to obscure actual environmental performance and dampen critical stakeholder scrutiny. Conversely, entities with new and modern assets feel they already possess sufficient legitimacy from the superiority of efficient and environmentally friendly technologies, thus feeling no urgency to expand ESG disclosures as a means of protecting their reputation (Al-Tarawneh et al., 2024; Liao et al., 2025) . These findings provide empirical confirmation that there is a practice of "reverse legitimacy" where the quantity of reporting disclosures is correlated with high ecological vulnerability rather than representing a true commitment to sustainability.

This reverse legitimacy phenomenon is further strengthened when viewed from the perspective of stakeholder and signaling theory. From stakeholder theory, companies with obsolete assets face significantly more aggressive pressure. This forces management to use extensive ESG disclosures as a defensive measure to ward off criticism. Conversely, based on signaling theory, companies with high asset novelty feel no need for excessive narrative disclosures because the modern and efficient physical condition of the assets is already a sufficient signal of quality to stakeholders.

In addition, if viewed from a financial perspective, assets with higher newness have a higher ESG level. Lower disclosure may be due to the company's current focus on financial performance. Companies prioritize financial performance, which is crucial for growth, over sustainability reporting practices, which can lead to a lower emphasis on ESG disclosure initiatives. (Al-Tarawneh et al., 2024; Liao et al., 2025) . Companies with new assets tend to be in an intensive operational phase, so management focuses entirely on optimizing production and accelerating return on investment (cost recovery). This results in non-financial reporting, such as ESG, still being considered secondary and not yet a strategic priority in the early stages of the asset lifecycle.

H_2 : The influence of CAPEX on ESG disclosure

In testing the second hypothesis (H_2), it shows that the CAPEX variable has a coefficient of 0.2345 with a p-value of 0.409 because the value exceeds >0.05, so the second hypothesis is rejected. This finding indicates that the amount of CAPEX allocated by the company for fixed assets does not have a significant effect on ESG disclosure. In line with the results of research by Hakim et al., (2025) that high CAPEX is not always in line with increased ESG performance and its disclosure, because these expenses have the potential to be used in projects that are a top priority besides improving ESG practices. The results of this study indicate an empirical divergence between the use of CAPEX in developing countries, especially the extractive sector, which has a different pattern compared to the research context in developed countries.

According to legitimacy theory, companies operate based on a social contract with their surrounding communities. In developed countries, the social contract has shifted strongly toward ecological sustainability, so massive capital expansion automatically triggers public demands for environmental accountability. Conversely, in developing countries, the formulation of the social contract is still dominated by the urgency of macroeconomic development, increasing production capacity, and creating jobs. One of the primary objectives of ESG disclosure is to close the legitimacy gap and mitigate public pressure (Rahman & Alsayegh, 2021) . If an action does not trigger counter-response and external pressure, management lacks strategic incentives to take defensive or proactive disclosure actions. Stakeholders in developing countries still have a high tolerance for the trade-off between environmental damage and economic growth, and massive physical asset expansion has not yet triggered strict ecological oversight. According to Karima et al., (2025) Stakeholders in emerging markets, particularly Indonesia, have yet to fully incorporate sustainability information into their profitability assessments. Consequently, there hasn't been significant market pressure for companies to prioritize ESG practices and disclosures as a response to their capital investments.

CAPEX allocation in the Indonesian mining sector is generally still dominated by conventional operational investments, such as mine expansion, procurement of heavy dredging equipment, and infrastructure supporting primary production. These investments tend to be capacity-centric, thus lacking green technology aspects that prioritize ESG disclosure. A similar finding can be explained by the complexity of green technology adoption in the study by Nathan et al. (2024) stated that the implementation of advanced green technology is highly dependent on various factors such as the availability of both financial and human resources. Although it has now become a priority, evolving regulations and the specific operational characteristics of mining operations likely mean that companies are not directing capital expenditures toward investments in technology that supports ESG practices. Furthermore, according to Moon et al., (2026) The large initial financial investment required for the energy transition presents a significant financial burden. This is a management consideration, leading to high CAPEX (Capex) being used to maintain operations to maintain stability and improve the company's finances, rather than for green technology transformation. This allocation does not provide positive material for disclosure in the sustainability report, resulting in no improvement in the ESG disclosure score.

Firm size, profitability, and leverage

firm size and profitability (ROA) control variables had a positive influence on ESG disclosure with p-values of 0.0000 and 0.043, respectively, in line with research (Asiri, 2025; Dutta, 2019; Moussa & Elmarzouky, 2023) . From a legitimacy theory perspective, these two factors can be conceptually interpreted using a social visibility lens. Social visibility is related to the substance and detail of a company's disclosures; the higher the visibility, the more in-depth and substantial the information disclosed (Pollach & Schaper, 2022) . This means that large-scale companies with high profitability tend to operate under strict public scrutiny, which can trigger public criticism regarding the potential exploitation of the environment and natural resources. To mitigate this and maintain a social contract with stakeholders, companies utilize available financial resources to finance the preparation of extensive ESG reporting. This disclosure strategically functions as a justification instrument to legitimize that the market dominance and profits obtained by the company are still within the limits of ethical norms and sustainability responsibilities.

The leverage variable did not show a significant effect on ESG disclosure, with a p-value of 0.965. In legitimacy theory, this indicates that capital structure and the level of dependence on debt funding do not trigger legitimacy pressures in the mining sector. The social contract between companies and creditors in emerging markets remains pragmatic and purely oriented towards evaluating financial ratio capacity. This makes management feel no urgency or existential pressure for non-financial transparency to maintain its legitimacy in the eyes of creditors. Overall, the research model has a within R-square value of 0.3497, indicating that variations in the independent and control variables in the model can explain 34.97% of the changes in ESG disclosure variables.

CONCLUSION

The study provides empirical evidence regarding the influence of asset newness and CAPEX on ESG. Disclosure. In mining companies in Indonesia, asset newness negatively impacts ESG disclosure. This finding suggests that legitimacy theory, with a "reverse legitimacy" perspective, exists in the extractive industry. Expanded disclosure is driven not by ecological superiority but by the high vulnerability of a company's environmental performance. Through the lens of stakeholder theory and signaling theory, companies with new physical assets tend to limit ESG disclosure because the condition of modern assets serves as a quality signal that mitigates public pressure. Furthermore, managerial focus remains on operational efficiency, investment cost recovery, and low stakeholder pressure. Conversely, companies with older assets tend to disclose more ESG practices due to environmental risks and the need for legitimacy from stakeholders, which triggers broader disclosure as a defense mechanism. Furthermore, research shows that CAPEX has no evidence of influencing ESG practices. Disclosure. This indicates that the high allocation of capital expenditure in the extractive sectors of developing countries is still dominated by operational investments and has not been integrated with green technology.

Theoretically, this research contributes by providing a new perspective that transparency can function as a tool to camouflage operational risks in high-risk industries. In the sustainability accounting literature, this research expands the application of legitimacy theory to emerging market countries by filling a gap in the literature. Also show that signaling theory in the market develop No always linear walking, superiority physique precisely can reduce intensity reporting narrative. S practical findings This give signal crucial for

regulators to start formulate guidelines that require separation green CAPEX reporting from conventional shopping model use avoid green washing. For investors and research stakeholders This warn that quantity report Extensive ESG No can made into the only proxy of commitment sustainability without juxtapose them with age data physique asset And substance allocation corporate model shopping.

This study acknowledges the limited availability of literature that explicitly examines asset newness (asset age) and CAPEX in relation to ESG practices, thus providing insufficient material for further exploration. Suggestions for future research include expanding the observation sample to environmentally and socially sensitive sectors such as manufacturing and energy. This would provide valuable comparative analysis opportunities to enrich the literature and understand the influence and differences in company characteristics. Finally, exploratory research using qualitative approaches, such as management interviews, is recommended to delve deeper into the rationale and internal motivations behind physical asset allocation amidst the demands of a green economy in emerging markets.

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