Exploring Environmental Performance and the Impact of Environmental Disclosure on Market Performance: A Literature Review
Febi Saputra
Master of Accounting, University of Lampung
Corresponding Author: Febi Saputra febisaputra03021992@gmail.com

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ABSTRACT
This study explores the intricate relationship between a company’s Environmental Performance (EP), Environmental Disclosure (ED), and Market Performance (MP). To investigate these dynamics, the research employs a literature review methodology, focusing on publications in the Sinta database over the last five years. The inclusion criteria ensure relevance to the relationship between environmental performance, environmental disclosure, and market performance in the Indonesian mining sector. The study aims to deepen our understanding of these variables' interactions, providing valuable contributions to academic and practical knowledge in this field. The findings underscore the crucial link between sustainable practices, transparent communication, and positive market dynamics. Companies with robust environmental performance and effective disclosure not only contribute to sustainability but also gain increased market acceptance and trust. The research suggests avenues for future exploration, including nuanced factors influencing these relationships and the incorporation of moderation variables. Ultimately, this study emphasizes the importance of environmental initiatives and transparent communication for long-term financial success in the mining sector.

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INTRODUCTION

Climate change, triggered by human activities such as fossil fuel combustion, has become a global issue demanding severe attention. The impacts of global warming, including natural disaster risks, weather pattern changes, and increased operational costs, underscore the necessity for concerted cross-sectoral actions on a global scale. Data reveals that Indonesia faces the highest rate of tropical forest deforestation due to the mining industry, particularly coal mining in East Kalimantan. This deforestation contributes to 58.2% of the total deforestation in 26 surveyed countries (Kompas, 2022). The importance of cross-sectoral actions, especially within the mining industry, is emphasized as a response to the impact of global warming.

During the G-20 presidency, Indonesia prioritized environmental recovery and ecosystem management. Corporate responsibility towards the environment, including waste management and stakeholder engagement, is acknowledged as a factor influencing a company’s image (Kompas, 2021). Awareness of the importance of environmental protection is reflected in the Environmental Protection Law No. 32 of 2009, emphasizing the need for integrated efforts to preserve environmental functions and prevent pollution. In line with the perspective of Zabetha et al. (2018), a company’s sustainability is not solely dependent on financial performance but also on the balance between economic performance, social justice, and responsibility for environmental sustainability. Increasing societal awareness of environmental damage reinforces public demands for corporate environmental responsibility. Companies are expected to develop businesses that reduce environmental footprints and create positive social impacts.

LITERATURE REVIEW

Indonesia experiences fluctuations in corporate participation in the Environmental Performance Rating Program (PROPER). Data from proper.menlhk.go.id indicates an increase in participants from 1812 companies in 2013 to 3200 companies in 2022. Despite declining trends in 2016, 2017, and 2020, Non-Compliant companies experienced a significant increase in 2020-2022, reaching 889 companies in 2022. The declining trend of Non-Compliant companies occurred in 2015-2017 but then increased until 2019. In 2020-2021, the number of Non-Compliant companies increased significantly, reaching 645 in 2021. In 2022, the number of Non-Compliant companies rose, reaching 889. Companies need to prioritize environmental performance to avoid the negative impacts of environmental damage. Data from the Ministry of Environment and Forestry shows that companies in Indonesia still need to enhance environmental efforts. Environmental performance becomes crucial, enabling companies to voluntarily integrate environmental concerns into operations and stakeholder interactions (Tahu et al., 2019).

Environmental information disclosure through annual or sustainability reports is part of corporate social responsibility (Yulianti et al., 2022). A favorable or green environment creates a positive reputation for the company, especially in industries directly related to nature, but is also an increasingly demanded aspect by society. Companies must enhance environmental information
disclosure to meet stakeholder demands and maintain trust. Thus, companies can monitor their activities, control environmental costs, influence market reactions, and achieve positive impacts on the company's stock value. This research aims to provide an in-depth and contextual understanding of the relationships between variables within a different framework than previous studies. Using a literature review method, this research seeks to investigate the relationships between these variables, focusing on the context of mining companies in Indonesia. The literature review method is used to develop a theoretical framework and identify key findings from previous research. In this context, the research contributes to our understanding of how environmental performance and disclosure can affect a company's market performance.

METHODOLOGY

The research methodology employed in this study is a literature review with a specific focus on scholarly publications documented in the Sinta database over the past five years. Sinta serves as the chosen national publication source in the database selection. Inclusive criteria were meticulously defined to ensure the relevance of articles to the research topic, encompassing the relationships between environmental performance, environmental disclosure, and market performance of companies in the Indonesian mining sector. The literature search process involved the utilization of keywords such as "environmental performance," "environmental disclosure," and "market performance." Articles meeting these predefined criteria were systematically chosen for subsequent synthesis, extracting critical information to form the basis for analysis. Through analyzing and synthesizing the pivotal findings from these selected articles, this research aims to provide a profound understanding of the interactions among these variables, thereby contributing valuable insights to both academic and practical realms within this domain.

RESULTS

<table>
<thead>
<tr>
<th>Article No.</th>
<th>Name and Year</th>
<th>Title</th>
<th>Journal</th>
<th>Citation</th>
</tr>
</thead>
</table>

3. Angelina dan Nursasi (2021)

Pengaruh penerapan green accounting dan kinerja lingkungan terhadap kinerja keuangan perusahaan.

*Jurnal Manajemen Dirgantara*, 14(2), 211-224.

4. Maesaro et al. (2022)

Pengaruh kinerja lingkungan terhadap nilai perusahaan dengan kinerja keuangan sebagai variabel intervening.


5. Putri (2022)

Pengaruh Kinerja Lingkungan terhadap Kinerja Keuangan pada Perusahaan Manufaktur.

*S: Jurnal Ekobistek*, 323-328.

6. Putri dan Arsjah (2023)


*S: Jurnal Ekonomi Trisakti*, 3(2), 2525-2534.

7. Terry dan Asrori (2021)

Pengaruh Kinerja Lingkungan, Kepemilikan Institusional, Ukuran Perusahaan dan Leverage Terhadap Kualitas Pengungkapan Lingkungan.

*S: Syntax Literate; Jurnal Ilmiah Indonesia*, 6(2), 894-907.

8. Khairiyani et al. (2021)

Kinerja lingkungan terhadap kinerja

*S: ILTIZAM Journal of Shariah*
Theory Used

In navigating the intricate landscape of Environmental Performance (EP) and its implications on Market Performance, several organizational theories come into play. Legitimacy Theory underscores companies' need to cultivate practices that resonate with societal norms and expectations. For a mining company, this could translate into embracing sustainable practices to mitigate environmental impact, striving to be perceived as a socially responsible entity. This safeguards the company's legitimacy in the eyes of stakeholders and lays the groundwork for positive market standing. In parallel, Signal Theory accentuates the strategic role of Environmental Disclosure (ED) as a communication tool. By transparently conveying their environmental initiatives, companies send signals to stakeholders, shaping perceptions and building trust. In the realm of EP, a mining company might disclose efforts to adopt eco-friendly technologies, strategically aligning itself with the growing importance of sustainability. These signals are designed to attract environmentally conscious investors and consumers, thereby positively influencing market performance.

Simultaneously, Stakeholder Theory amplifies the importance of considering the diverse interests of stakeholders in shaping organizational strategies. In the context of EP, this theory propels companies to acknowledge and address the concerns of various stakeholders, ranging from local communities to investors. A mining company embracing Stakeholder Theory might engage in community outreach or environmental initiatives to align with the expectations of affected communities. This proactive approach, driven by a commitment to stakeholder satisfaction, enhances the company's reputation and contributes to positive market outcomes. Essentially, the interplay of Legitimacy Theory, Signal Theory, and Stakeholder Theory form a comprehensive framework. This framework guides companies in navigating the intricate dynamics of EP, ED, and market performance, fostering sustainability and positive societal impact.
Table 2. Article Methodology

<table>
<thead>
<tr>
<th>Article No</th>
<th>Data source</th>
<th>Sample and sampling method</th>
<th>Data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Primary; annual report atau sustainability report</td>
<td>Purposive sampling; mining companies, basic and chemical industries, and consumer goods industries listed on the IDX for the 2017-2019 period</td>
<td>SPSS; Regression</td>
</tr>
<tr>
<td>2</td>
<td>Primary; annual report atau sustainability report</td>
<td>Purposive sampling; manufacturing companies which are listed on the Indonesian Stock Exchange, in the 2017-2020 period</td>
<td>Eviews; Regression</td>
</tr>
<tr>
<td>3</td>
<td>Primary; annual report atau sustainability report</td>
<td>Purposive sampling; manufacturing companies in the basic industrial and chemical sectors listed on the Indonesia Stock Exchange for the 2018-2019 period</td>
<td>SPSS; Regression</td>
</tr>
<tr>
<td>4</td>
<td>Primary; financial report</td>
<td>Purposive sampling; Basic Industry and Chemical Sector Manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2020 period</td>
<td>SPSS; Regression</td>
</tr>
<tr>
<td>5</td>
<td>Primary; annual report</td>
<td>Purposive sampling; manufacturing companies listed on the Indonesia Stock Exchange (BEI) 2016-2020.</td>
<td>SPSS; Regression</td>
</tr>
<tr>
<td>6</td>
<td>Primary; annual report atau sustainability report</td>
<td>Purposive sampling; manufacturing sector companies listed on the IDX in 2019-2021</td>
<td>SPSS; Regression</td>
</tr>
<tr>
<td>7</td>
<td>Primary; annual report atau sustainability report</td>
<td>Purposive sampling; non-financial companies listed on the Indonesia Stock Exchange (BEI) in 2017 – 2019</td>
<td>SPSS; Regression</td>
</tr>
<tr>
<td>8</td>
<td>Primary; annual report atau sustainability report</td>
<td>Purposive sampling; mining sector during the 2015-2017 research period</td>
<td>SPSS; Regression</td>
</tr>
</tbody>
</table>

The table provides a concise summary of eight research articles, detailing key aspects of their methodology. In the first article, the primary data source is annual or sustainability reports, with a purposive sampling method focusing on mining, basic and chemical industries, and consumer goods listed on the IDX from 2017 to 2019. The analysis involved SPSS and regression. Similarly, the second article employed annual or sustainability reports for manufacturing...
companies listed on the IDX from 2017 to 2020, utilizing Eviews and regression. The third article focused on manufacturing companies in specific sectors listed on the IDX for 2018-2019, employing SPSS and regression. The subsequent articles followed suit, with variations in sample characteristics, sampling methods, and data analysis tools, ranging from SPSS to Eviews, and concentrating on diverse sectors such as basic industry, chemicals, non-financial companies, and the mining sector over different time periods, showcasing the versatility and breadth of research approaches in exploring the relationships between environmental performance, disclosure, and financial outcomes.

Table 3. Variable Measurement

<table>
<thead>
<tr>
<th>Article No</th>
<th>Environmental performance</th>
<th>Environmental disclose</th>
<th>Market reaction/Firm Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PROPER</td>
<td>GRI</td>
<td>Tobin’s Q</td>
</tr>
<tr>
<td>2</td>
<td>PROPER</td>
<td>CSR</td>
<td>Tobin’s Q</td>
</tr>
<tr>
<td>3</td>
<td>PROPER</td>
<td>-</td>
<td>Tobin’s Q</td>
</tr>
<tr>
<td>4</td>
<td>PROPER</td>
<td>Environmental Cost</td>
<td>Tobin’s Q</td>
</tr>
<tr>
<td>5</td>
<td>PROPER</td>
<td>-</td>
<td>ROA</td>
</tr>
<tr>
<td>6</td>
<td>PROPER</td>
<td>GRI</td>
<td>ROA</td>
</tr>
<tr>
<td>7</td>
<td>PROPER</td>
<td>GRI</td>
<td>ROA</td>
</tr>
<tr>
<td>8</td>
<td>PROPER</td>
<td>GRI</td>
<td>Price to Book Value (PBV)</td>
</tr>
</tbody>
</table>

The table summarizes the environmental performance, environmental disclosure, and market reaction or firm performance indicators across eight research articles. Environmental performance is commonly measured using the Program for Environmental Performance Rating and Information Disclosure for Industries (PROPER). Environmental disclosure metrics include the Global Reporting Initiative (GRI), Corporate Social Responsibility (CSR), and environmental cost. Market reaction or firm performance is assessed through various indicators such as Tobin's Q, Return on Assets (ROA), and Price to Book Value (PBV). The table underscores the varied methodologies used to explore the relationships between environmental aspects and market or firm performance in different studies.

Table 4. Article Result

<table>
<thead>
<tr>
<th>Article No</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Environmental performance and disclosure exhibit no noteworthy impact on financial performance, while the correlation between environmental performance and disclosure's influence on financial performance is fortified by the company's size.</td>
</tr>
<tr>
<td>2</td>
<td>Financial performance, market capitalization, and corporate social responsibility (CSR) exert an influence on firm value, whereas environmental performance does not affect corporate value.</td>
</tr>
</tbody>
</table>
Moreover, CSR has the capacity to moderate the impact of financial performance on firm value, while it is incapable of moderating the influence of environmental performance and market capitalization on corporate value.

3 Based on the analysis outcomes, it is evident that both the green accounting variable and environmental performance do not exhibit a significant impact on the financial performance of a company. The utilization of green accounting practices, involving the incorporation of environmental costs and benefits into financial reporting, does not seem to result in a noticeable influence on the overall financial performance of the company. Similarly, the initiatives and measures adopted by a company to enhance its environmental performance, encompassing sustainable practices and eco-friendly policies, do not display a statistically significant correlation with the financial outcomes of the company.

4 The study uncovers that environmental performance significantly affects a company's value, emphasizing the importance of sustainable practices. Financial performance independently influences a firm's value. Surprisingly, financial performance does not mediate the impact of environmental performance on a company's value, highlighting the need for further exploration of these complex dynamics.

5 The research findings indicate a notable partial influence, as Kinerja Lingkungan (environmental performance) significantly affects the Kinerja Keuangan (financial performance), specifically Return on Assets (ROA). This highlights the interconnectedness of environmental practices and financial outcomes, underscoring the relevance of sustainable efforts in shaping financial performance metrics.

6 Research outcomes reveal that environmental investment and disclosure don't impact financial performance, while environmental performance positively influences financial outcomes. These findings underscore the nuanced relationship between environmental practices and financial metrics, emphasizing the positive influence of sound environmental performance on overall financial success.

7 The results of moderating effect tests indicate that profitability moderates the relationship between environmental performance and institutional ownership on environmental disclosure quality. In contrast, profitability does not moderate the relationship between firm size and leverage on environmental disclosure quality. In conclusion, environmental performance and institutional ownership positively influence environmental disclosure quality, with profitability acting as a moderator in the relationship between environmental performance and institutional ownership on disclosure quality.
The findings indicate that environmental performance, reflected in PROPER ratings, influences financial performance as measured by ROA and ROE. Environmental performance (PROPER) also affects firm value reflected in PBV and Tobin’s Q. Furthermore, financial performance (ROA and ROE) influences firm value (PBV and Tobin’s Q).

DISCUSSION

Environmental Performance on Market Performance

The relationship between Environmental Performance (EP) and Market Performance (MP) is multifaceted. Positive EP, driven by sustainable and environmentally responsible practices, can enhance a company's market position. Consumers increasingly prefer environmentally conscious brands, leading to improved brand image, customer loyalty, and market share. Additionally, adherence to environmental regulations and proactive sustainability measures can mitigate legal risks, attract socially responsible investors, and drive operational efficiency. On the contrary, poor EP may result in reputational damage, consumer backlash, and regulatory scrutiny, negatively impacting a company's market standing, financial performance, and investor confidence.

The ratings given by the government to companies for their environmental practices (PROPER) significantly influence how investors and customers perceive the company's products (Khairiyani et al., 2019; Terry & Asrori, 2021). This recognition for maintaining environmental balance can lead to increased profits in the long run. A positive reputation and a competitive edge attract more customers, boosting the company’s revenue and overall financial performance. The idea is that when companies focus on creating environmentally friendly products or conduct operations without harming the environment, it adds value (M. I. Putri & Arsjah, 2023). Such products are more likely to be valued by the public, enhancing the company's overall profitability. Therefore, companies participating in environmental assessments like the Program for Environmental Performance Rating and Information Disclosure for Industries (PROPER) are likely to receive positive recognition and environmental legitimacy, ultimately leading to increased financial gains.

The intricate relationship between Environmental Performance (EP) and Market Performance (MP) carries significant implications for companies and stakeholders alike. A positive EP, rooted in sustainable practices, not only enhances market positioning but also aligns with the growing consumer preference for environmentally responsible brands (Angelina & Nursasi, 2021). This translates into improved brand image, heightened customer loyalty, and expanded market share. Conversely, poor EP poses risks of reputational damage, consumer backlash, and regulatory scrutiny, adversely affecting market standing, financial performance, and investor confidence. The government's ratings through programs like the Program for Environmental Performance Rating and Information Disclosure for Industries (PROPER) are instrumental in shaping investor and consumer perceptions. Recognizing companies for their commitment to environmental balance not only fosters positive reputations but also positions
them for sustained profitability, attracting a broader customer base and ensuring long-term financial success.

**Environmental Disclosure on Market Performance**

Environmental Disclosure (ED) plays a pivotal role in shaping Market Performance (MP) dynamics. When companies transparently communicate their environmental initiatives, practices, and performance through disclosure mechanisms such as sustainability reports, it can positively influence their market standing. Clear ED fosters trust among stakeholders, including investors, consumers, and regulators, showcasing a commitment to sustainability. This transparency not only attracts environmentally conscious investors but also resonates with consumers, thereby potentially increasing market share. Moreover, robust ED can mitigate risks associated with environmental controversies, regulatory non-compliance, and resource inefficiencies. Conversely, inadequate or opaque ED may trigger skepticism, erode trust, and expose companies to reputational and financial risks.

Companies that disclose more environmental information tend to attract more customers, influencing them to buy products or services (Sari & Asrori, 2022). This disclosure is not only about attracting customers but also about showcasing the company’s active commitment to social responsibility, leaving a positive impression on consumers and investors to gain a competitive edge (Lathifatussulalah & Dalimunthe, 2022). The increased sales and positive reputation contribute to the company’s higher revenue and improved financial performance. Environmental disclosure becomes a valuable asset for companies, providing additional value. Investors, as stakeholders, often consider a company’s environmental disclosure when making investment decisions. (M. I. Putri & Arsjah, 2023) Effective social and environmental disclosure aims to garner public attention, build a positive reputation, and enhance the company's image, making it more reliable in the eyes of stakeholders. Ultimately, this is expected to boost the company's profits and stock prices.

The implications of effective Environmental Disclosure (ED) on Market Performance (MP) are significant. Transparent communication of environmental initiatives enhances a company's market standing by building trust among stakeholders, including investors and consumers. This can lead to increased market share, especially among environmentally conscious consumers. Robust ED also serves as a risk mitigation strategy, helping companies avoid environmental controversies, regulatory issues, and resource inefficiencies. On the flip side, insufficient or unclear ED can result in skepticism, erosion of trust, and exposure to reputational and financial risks. The positive relationship between environmental disclosure and customer attraction, as indicated by studies (Sari & Asrori, 2022), reinforces the importance of ED in shaping consumer perceptions. Investors, being stakeholders, are influenced by a company's environmental disclosure when making investment decisions, emphasizing the financial significance of ED. Therefore, companies with effective ED not only contribute to sustainability but also stand to gain increased market acceptance, trust, and potentially improved financial performance.
Future Research

Future research in the realm of Environmental Performance (EP) and Market Performance (MP) should delve deeper into the nuanced factors that contribute to the multifaceted relationship between sustainable practices and market dynamics. Exploring the varying degrees of consumer preferences for environmentally responsible brands, dissecting the specific elements of positive EP that most resonate with consumers, and understanding the role of regulatory frameworks in shaping market perceptions can provide valuable insights for businesses and policymakers (S. Y. A. Putri, 2022). Additionally, investigating the long-term impact of government ratings, such as those through programs like the Program for Environmental Performance Rating and Information Disclosure for Industries (PROPER), on companies' financial performance and sustainability practices could offer a more comprehensive understanding of the effectiveness of such initiatives (Maesaroh et al., 2022).

In the realm of Environmental Disclosure (ED) and Market Performance (MP), future research could focus on developing standardized metrics for evaluating the effectiveness of disclosure mechanisms, taking into account the varying disclosure practices across industries and regions. Understanding the specific elements of ED that have the most significant impact on consumer behavior and investor decisions would be instrumental in guiding companies towards more effective communication strategies. Exploring the potential moderating effects of contextual factors, such as cultural differences and industry-specific characteristics, on the relationship between ED and MP could provide a more nuanced understanding of this dynamic.

In future research, incorporating moderation variables, particularly financial indicators such as Return on Equity (ROE) or Return on Assets (ROA), can offer a more nuanced perspective on the complex interplay between Environmental Performance (EP), Environmental Disclosure (ED), and Market Performance (MP). One avenue for exploration is to investigate how the financial performance of a company, as measured by ROE or ROA, may moderate the impact of EP on MP. Researchers can delve into whether companies with stronger financial performance experience more pronounced positive effects on market outcomes when adopting environmentally responsible practices. Additionally, considering industry-specific variations and using ROE/ROA as a moderation variable can shed light on how different sectors respond to EP and ED influences on MP. Exploring the moderating role of company size, temporal changes in financial performance, geographical variations, risk considerations, and strategic alignment can provide valuable insights into the contextual factors influencing these relationships.
CONCLUSIONS AND RECOMMENDATIONS

In summary, the connection between a company's Environmental Performance (EP) and Market Performance (MP) is crucial, emphasizing the impact of sustainable practices on market standing. Positive EP enhances brand image, customer loyalty, and market share, aligning with the rising consumer preference for eco-friendly brands. Adherence to environmental regulations attracts socially responsible investors and ensures operational efficiency. Conversely, poor EP poses risks of reputational damage, consumer backlash, and regulatory scrutiny, negatively affecting market standing and financial performance. Environmental Disclosure (ED) also plays a vital role in shaping Market Performance (MP). Transparent communication of environmental initiatives builds trust among stakeholders, attracting environmentally conscious investors and resonating with consumers. Robust ED serves as a risk mitigation strategy, helping companies avoid controversies and resource inefficiencies. Conversely, inadequate or unclear ED exposes companies to skepticism, erosion of trust, and financial risks. The positive relationship between environmental disclosure and customer attraction emphasizes the financial significance of ED. Companies with effective ED contribute to sustainability, gaining increased market acceptance and trust. Future research can delve into nuanced factors influencing the EP-MP relationship, standardize metrics for evaluating ED effectiveness, and incorporate moderation variables like financial indicators. Understanding consumer preferences, specific elements of positive EP and ED, and the impact of contextual factors will enhance our understanding of these complex relationships. Ultimately, the findings stress the importance of environmental initiatives and transparent communication for positive market dynamics and long-term financial success.
REFERENCES
