

The Effects of Corporate Social Responsibility, Financial Slack, And Environmental Costs on Financial Performance

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ABSTRACT

Purpose: This study aims to analyze the effects of corporate social responsibility, financial slack, and environmental costs on financial performance. The population in this study consists of coal mining companies listed on the Indonesia Stock Exchange (IDX) for the period 2022-2024.

Methodology: A quantitative approach was used, and the sample in this study consisted of 13 companies listed on the Indonesia Stock Exchange for the period 2022-2024, which were determined using purposive sampling.

Results: The panel data regression analysis results showed that the environmental cost variable affected financial performance, whereas corporate social responsibility and financial slack did not.

Conclusions: Financial slack and environmental costs, particularly CSR, play a significant role in improving financial performance in the coal mining sector.

Limitations: This study is limited to the coal mining sector, a short observation period (2022-2024), and selected financial ratios, which may not fully cover all the determinants of financial performance.

Contribution: This study contributes to the literature by providing empirical evidence on the determinants of financial performance in the coal mining sector, which serves as a useful guide for investors in corporate decision-making.

Keywords: *Coal Mining, Corporate Social Responsibility, Environmental Costs, Financial Flexibility, Financial Performance*

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1. Introduction

As a profit-seeking entity, a company constantly strives to find various ways to achieve effective and efficient results to increase profits. In general, there are various ways to assess a company's performance, one of which is to evaluate its financial performance. Financial performance reflects how a company's business operations are conducted and all the outcomes the company has achieved from

those operations. Business success is measured by the benefits achieved by an organization. This aligns with the perspective of [Siregar, Syahyunan, and Miraza \(2022\)](#), who state that a company's ability to generate profits is the primary factor in assessing its financial performance. Thus, a company's financial performance can be assessed through its profitability or profit generation. One sector with strong profit prospects and the highest revenue for the state is coal mining. This is because the coal mining industry plays a significant role in the Indonesian economy. This sector not only contributes substantially to state revenue through exports and taxes owing to its high profits but also plays a role in creating employment opportunities for the public ([Gudio, 2025](#)). CNBC Indonesia compiled a summary of the following coal-related companies:

Table 1. Summary of coal issuers' profits for 2025

Stock Code	6M25	6M24	Growth (%)
BUMI	US\$ 20.4 million	US\$ 84.9M	-75.97
UNTR	IDR 8.13 million	IDR 9.53M	-14.69
CUAN	US\$ 1.94 million	US\$ 29.6M	93.45
PTBA	IDR 833 million	IDR 2.03B	-58.97
INDY	US\$ 2.24 million	US\$ 21M	-89.33
HRUM	US\$ 29.8 million	US\$ 37.4M	-20.32
BYAN	US\$ 349 million	US\$ 377M	-7.43

The sharp decline in coal companies' profits is not surprising. This is because coal prices have fallen significantly in year. According to Refinitiv data, on Thursday (July 31, 2025), coal prices closed at US\$117.4 per ton, up slightly by 0.27% over the course of a single trading day. Unfortunately, since the start of the year, the price of this fossil fuel has remained mired in the red, down by more than 8%. Over the past three years, coal prices have also continued to decline annually. The worst decline occurred in 2023, when prices plummeted by more than 60%, followed by a nearly 15% decrease in 2024. However, the price declines in those two years can be considered a normalization, as 2022 saw an anomaly where coal prices surged past the US\$400 per ton level ([Endri, Utama, Effendi, Santoso, & Bahiramayah, 2021](#)).

Table 2. Profits of the coal issuer PT. BUMI in 2024

Year	Net Profit	Change (%)
2022	US\$ 525.27 million	–
2023	US\$ 10.92 million	Decreased 97.92

In 2024, PT Bumi Resources Tbk (BUMI), a coal mining company affiliated with Bakrie and Salim Groups, reported a significant decline in its performance. According to the financial report submitted to the Indonesia Stock Exchange (IDX) on Monday, April 1, 2024, the company was only able posted a net profit of US\$ 10.92 million for the full year of 2023. This figure plummeted by 97.92% compared to the previous year's profit of US\$ 525.27 million. The decline in corporate profits also impacts a company's financial performance, as financial performance is measured using the company's profits. Consequently, this focus on profitability has led companies to overlook the potential negative environmental impacts of their production processes ([Pramudianti, 2023](#)).

Environmental damage caused by mining companies' operations is not an isolated occurrence; it occurs frequently. This is because companies' operational activities are overly focused on increasing profits and allocating resources to create new investment opportunities that yield greater returns. However, many companies neglect to implement proper environmental management practices, which damages their reputation and leads to poor performance, ultimately affecting their financial results. One strategy that can help organizations reduce negative public perceptions is to disclose their Corporate Social Responsibility (CSR) activities. Corporate Social Responsibility (CSR) refers to the attention that organizations pay to the potential impact of their operational activities on society and the environment. Companies must provide accurate and transparent information regarding the implementation of social initiatives so that the public and the environment can assess the resulting impacts ([Al Daffa, 2024](#)).

The second strategy that companies should consider is building financial slack. Financial slack refers to a reserve of financial resources that a company can use to manage uncertainty and capitalize on investment opportunities without relying on external funding. Companies with high financial slack tend to have a greater capacity to effectively implement robust environmental management initiatives. Conversely, limited funds can constrain a company's ability to execute sustainability programs, which ultimately affects its reputation and financial performance ([Wahyuni & Ahdim, 2025](#)). Additionally, a key strategy that can serve as a form of corporate transparency regarding environmental management aimed at minimizing or even mitigating the impacts of a company's excessive activities is disclosing environmental costs. Environmental costs are defined as expenses arising from the negative impacts of a company's production activities on environmental quality ([Iriyani, Zubaidah, Saputri, & Jati, 2022](#)).

This study was conducted as an update to the research conducted by [Nazwir and Raharja \(2024\)](#) titled "The Effect of Corporate Social Responsibility and Financial Slack on Corporate Financial Performance." That study explained how CSR disclosure and the presence of financial slack can impact a company's performance. The difference between this study and the previous one lies in the addition of one new variable, namely, Environmental Costs. The reason for adding the environmental variable is that companies in the mining sector are one of the sectors that generate good financial performance, yet are accompanied by statements from management or the company indicating that they continue to cause significant environmental pollution. Of the 28 companies in the coal mining sector, approximately 15 companies, or 53.57%, did not disclose the environmental costs incurred by the company.

2. Literature Review and Hypothesis/es Development

2.1 Stakeholder Theory

Stakeholder Theory was first proposed by Freeman and McVea in 1984. This refers to individuals or groups that have the potential to influence or be influenced by the achievement of specific objectives, as defined by [Deswanto and Siregar \(2018\)](#). This theory posits that a company should not only focus on internal interests but also provide benefits to all interested or involved stakeholders. The community is also a stakeholder in the company; therefore, the company is obligated to provide value to the community. One way to do this is by taking responsibility for the surrounding environment through Corporate Social Responsibility (CSR). When a company engages in CSR, the community reaps its benefits.

Consequently, both the community and investors will trust the company because it maintains its image and its reputation. If a company upholds its reputation, it will survive. Investors are also drawn to companies that are expected to have a long-term future. One way to remain sustainable is by maintaining relationships with the community, such as through CSR, and managing environmental costs ([Ardiansyah, 2024](#)). These stakeholders include various parties, such as shareholders, investors, employees, and suppliers. The role of stakeholder theory in this study is to facilitate companies in strengthening relationships with external parties and developing competitive advantages as a means for companies to adapt easily and positively to their financial performance. Companies with high profitability reflect successful management practices. According to stakeholder theory, high profitability is directly proportional to the level of stakeholder satisfaction, given that the company is well managed.

Corporate Social Responsibility (CSR) is a key mechanism for companies to meet stakeholder expectations. For instance, coal mining companies that proactively implement land rehabilitation, waste management, or community development programs enhance public trust and support their long-term reputation. A strong reputation attracts investors and minimizes social conflict, providing operational legitimacy in the eyes of the regulators. Furthermore, stakeholder theory highlights a symbiotic relationship between stakeholder satisfaction and financial performance ([Licandro, Burguete, Ortigueira-Sánchez, & Correa, 2024](#)). Companies that meet stakeholder expectations face reduced social risks, higher community loyalty and enhanced investor confidence. This study assumes that CSR and environmental cost management strengthen stakeholder relationships and positively influence financial performance, particularly in the mining industry, where social and environmental pressures are high. Moreover, managing stakeholder relationships can serve as a competitive differentiation

strategy. Mining companies that demonstrate responsiveness to the community and the environment gain an advantage over their competitors ([Fraser, 2021](#)). Given the sector's exposure to high reputational risk, commodity price fluctuations, and stringent regulations, stakeholder theory justifies investments in CSR and environmental cost management as mechanisms for enhancing long-term financial performance and sustainability.

2.2 Legitimasi Theory

Legitimacy theory states that companies must conduct their operations in accordance with the values and social norms of society in order to gain recognition or legitimacy from the external environment ([Crossley, Elmagrhi, & Ntim, 2021](#); [Gulluscio, 2023](#)). This legitimacy serves as a shared assessment that the company's actions are socially acceptable, thereby becoming a crucial element in ensuring sustainability ([Deswanto & Siregar, 2018](#)). The legitimacy theory provides a theoretical foundation for understanding a company's financial performance. When a company demonstrates concern for social issues, such as workers' rights, community empowerment, and justice, and applies good governance principles, such as transparency and accountability, it is viewed as a socially responsible entity. This positive image can foster investor support, enhance customer loyalty, and strengthen relationships with regulators, ultimately improving financial performance.

In other words, legitimacy theory explains that financial success does not depend solely on internal efficiency but is also significantly influenced by the extent to which a company can secure social legitimacy through the consistent and credible implementation of CSR and the environmental costs it incurs. The disclosure and implementation of CSR aspects, particularly social and environmental aspects that are considered socially legitimate, can strengthen a company's reputation in the eyes of stakeholders, reduce social risks such as consumer boycotts or regulatory pressure, and provide broader opportunities to secure resources such as capital and market access ([Wahyuni & Ahdim, 2025](#)).

Legitimacy theory posits that companies must align their operations with societal values and norms to gain legitimacy. In coal mining, this is crucial because mining activities often generate significant environmental impacts and may provoke public opposition. Transparent CSR implementation, disclosure of environmental costs, and regulatory compliance are ways companies can maintain legitimacy ([Caputo, Pizzi, Ligorio, & Leopizzi, 2021](#)). For example, firms that report land rehabilitation costs or waste management efforts not only comply with regulations but also signal their commitment to sustainability. This strengthens public and governmental trust, facilitates permits, and attracts investment.

Legitimacy theory explains that social perceptions directly impact financial performance. Firms recognized as socially responsible gain investor support, increase customer loyalty, and enhance their regulatory relationships, all of which contribute to financial success ([Glaveli, 2021](#)). In this study, CSR and environmental cost disclosures are viewed as mechanisms for securing social legitimacy while supporting financial performance by reducing social risks and enhancing resource access. Additionally, social legitimacy can act as a strategic lever. By earning legitimacy, companies reduce resistance to new projects, minimize litigation risks, and secure stakeholder cooperation. This theoretical lens helps us understand how CSR and environmental cost management not only meet societal expectations but also indirectly improve financial performance through risk mitigation and strengthened stakeholder trust.

2.3 Financial Performance

According to [Deswanto and Siregar \(2018\)](#), financial performance refers to a company's ability to manage and control its resources. Financial statements are generally used to inform decision making. Appropriate analytical tools are required to make decisions aligned with the entity's objectives. By conducting a financial analysis, a company can monitor its financial condition and design its organizational structure ([Njiru & Nyamute, 2018](#)). In evaluating an entity's business opportunities and assessing corporate performance, financial analysis, which includes financial ratios as well as strengths and weaknesses in the financial sector, is employed.

Financial performance is one of the key aspects to consider when assessing how well a company achieves profitability, which is crucial for the company's sustainability ([Rosmanidar, Putriana, & Nasution, 2024](#)). Financial performance reflects management's success in managing the company's financial aspects. External parties can understand a company's financial condition through various financial activities. These figures can serve as a reference for decision-making by external parties, who can use this information to assess a company's financial performance. Financial performance can be analyzed using ratios calculated based on financial statements or stock price data. Financial performance reflects a company's ability to manage resources to generate profit ([Devie, Liman, Tarigan, & Jie, 2020](#)). In coal mining, performance is influenced by commodity prices, operational efficiency, and strategic decisions regarding investments and CSR. Financial analysis tools, including ratios such as Return on Assets (ROA) and Return on Equity (ROE), measure management effectiveness in resource allocation and operational control.

External factors, such as regulatory compliance, environmental impacts, and public perception, also affect financial performance. Companies must balance short-term profitability with long-term sustainability by integrating CSR and environmental cost management into financial planning ([Celestin, 2018](#)). Strong financial performance indicates the effective integration of these strategies and can facilitate access to capital and risk management. Financial performance also influences firm resilience. Companies with strong financial health can invest in CSR and environmental programs without relying on external funding, thereby enhancing sustainability and stakeholder trust. This study emphasizes that CSR and environmental cost management serve as strategic tools that support financial stability and long-term profitability in the coal mining sector.

2.4 Corporate Social Responsibility (CSR)

Corporate social responsibility (CSR) is a form of collaboration between a company and its stakeholders through the implementation of corporate social responsibility to achieve its objectives, which are not merely based on financial considerations but also involve observing the company's social environment to ensure business sustainability ([Istan, 2024](#)). According to [Deswanto and Siregar \(2018\)](#), Corporate Social Responsibility (CSR) is a concept in which companies voluntarily contribute to improving community well-being and maintaining environmental cleanliness by integrating social and environmental issues into business operations and their relationships with stakeholders.

Over time, CSR has become essential for every business entity because of the urgency of addressing stakeholder interests to ensure the company's sustainability. CSR is a company's obligation to the surrounding environment and community, extending beyond financial profit to include social well-being ([Agustine & Ratmono, 2024](#)). Many organizations allocate resources to CSR activities in response to stakeholders, which can reduce costs and optimize their long-term profits. CSR is crucial for fulfilling commitments to shareholders and other stakeholders, building and maintaining strong relationships with various parties, and strengthening a company's financial performance. Management must actively engage with all stakeholders to formulate effective strategies. Transparency in CSR, which focuses on addressing stakeholder needs, enhances financial performance ([Barlinti & Aris, 2023](#)).

CSR represents a company's commitment to social and environmental responsibility beyond financial profit. In coal mining, CSR programs may include land reclamation, community development, waste management, and transparent reporting of social initiatives ([Singh & Mishra, 2016](#)). CSR positively impacts financial performance indirectly by enhancing the reputation, strengthening stakeholder relationships, and mitigating social risks. Companies actively engaged in CSR are more likely to attract investors, reduce social conflict, and gain operational legitimacy. Effective CSR requires strategic planning, resource allocation, and executive engagement to align social initiatives with corporate objectives. CSR also provides competitive advantages. Transparent and proactive CSR allows mining companies to demonstrate social responsibility, build trust, and secure long-term investments. Therefore, CSR is not just an expense but also a strategic investment that enhances financial performance and sustainability.

2.5 Financial Slack

Financial slack, defined as a surplus of resources exceeding current operational needs, is considered to support companies in expanding their business activities with greater risk, such as the development of new products or services ([Nazwir & Raharja, 2024](#)). From the perspective of financial reserve theory, companies with financial reserves tend to have a greater capacity to invest in increasingly effective CSR activities ([Mandasari & Rikumahu, 2025](#)). [Astuti and Alam \(2025\)](#) revealed that the average levels of shareholder returns, market return stability, stock returns, changes in shareholder dividend patterns, and stock performance contribute significantly to financial performance. This indicates that the presence of excess financial reserves is a key factor motivating companies to participate in CSR activities, which can improve their financial performance. Financial resources play a crucial role in determining whether a company participates in social activity. The presence of reserve resources indicates that the company's financial condition allows investment in social and environmental activities without sacrificing core economic needs that sustain the company's profits and ultimately lead to improved financial performance ([Tarigan & Yuliansyah, 2025](#)).

Financial slack refers to surplus financial resources beyond current operational needs, enabling companies to invest in high-risk initiatives, such as CSR or new project development, without external financing ([Lu, Liu, & Osiyevskyy, 2023](#)). In coal mining, sufficient financial slack allows firms to fund social and environmental programs, manage market fluctuations and respond to regulatory changes. Firms with adequate financial slack can strategically allocate funds to CSR and environmental management, thereby balancing profitability and social responsibility. Conversely, companies with limited slack may postpone or reduce CSR investments, potentially harming their reputation and long-term financial performance. Financial slack also acts as a buffer against operational and social risks, improving resilience to litigation, regulatory shifts, and market volatility. In this study, financial slack supports the effective implementation of CSR and environmental cost management, thereby enhancing the financial outcomes.

2.6 Environmental Costs

Environmental costs arise from a decline in environmental standards due to an institution's operational activities ([Rosmanidar et al., 2024](#)). Companies that openly disclose their environmental costs are considered transparent. This is because they inform shareholders that funds are set aside to protect the environment and comply with applicable regulations. In this context, the disclosure of environmental costs borne by the company can be seen as an effort to promote transparency and inform investors that the company has allocated funds to preserve the environment and comply with existing laws ([Temalagi, Darmawati, & Amiruddin, 2025](#)).

In the coal mining sector, companies generate significant environmental impacts, such as land degradation, water and air pollution, and increased carbon emissions ([Ivanova, Vesnina, Fotina, & Prosekov, 2022](#)). Therefore, disclosing environmental costs is crucial as a form of corporate accountability for the impact of operations. The disclosure of environmental costs reflects the extent to which a company internalizes the external costs arising from natural resource exploitation activities, such as mine reclamation costs, waste management, environmental restoration, and costs associated with compliance with environmental laws. Mining companies use environmental costs to gain and maintain social legitimacy from the public and government, as mining activities are highly vulnerable to social pressure and regulation. The greater the environmental impact, the greater the public demand for companies to transparently disclose environmental costs.

Environmental costs are expenditures associated with the negative impacts of corporate operations, including land rehabilitation, waste management and compliance with environmental regulations ([Gupta, 1995](#)). In coal mining, these costs reflect the transparency and accountability of stakeholders. Companies that disclose environmental costs demonstrate their commitment to sustainability and legal compliance. This disclosure reduces reputational risks, increases investor trust, and strengthens social legitimacy. Environmental cost management also affects financial performance by reducing potential fines, improving resource efficiency, and enhancing operational sustainability. In the mining sector, investing in environmental management mitigates ecological impacts, such as land degradation, water

and air pollution, and carbon emissions. Disclosing these costs ensures that external stakeholders understand the company's commitment to environmental responsibility. Hence, environmental costs serve as both a tool for legitimacy and an indirect mechanism to improve financial performance through risk management and stakeholder engagement.

2.7 Research Gaps and Hypotheses

Based on a review of previous studies over the past decade, there appears to be an inconsistency in the findings regarding the effects of corporate social responsibility, financial slack, and environmental costs on financial performance. This research gap motivates the current study to re-examine these relationships specifically in the coal mining sector during the 2022–2024 period, which reflects the sector's current state. Therefore, the following hypotheses are proposed:

H₁: Corporate Social Responsibility influences the financial performance of coal mining companies listed on the Indonesia Stock Exchange during the 2022–2024 period.

H₂: Financial Slack influences the financial performance of coal mining companies listed on the Indonesia Stock Exchange for the 2022–2024 period.

H₃: Environmental Costs influence the financial performance of coal mining companies listed on the Indonesia Stock Exchange for the 2022–2024 period.

3. Methodology

This study adopted a quantitative approach. The objective of the study is to determine the causal relationship between independent and dependent variables ([Rezaee, Aliabadi, Dorestani, & Rezaee, 2020](#)). The independent variables analyzed in this study include Corporate Social Responsibility, financial slack, and environmental costs, while the dependent variable is Financial Performance. This study focuses on companies in the coal mining sector listed on the Indonesia Stock Exchange between 2022 and 2024. In this study, the population consisted of 28 companies, and the sample comprised 13 coal mining companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period that met the sampling criteria. The financial performance variable is measured using the Return on Assets (ROA) ratio; the CSR variable is measured using the GRI G4 indicators; and financial slack is measured using the formula $FCF = (\text{Net Profit} + \text{Interest Expense} + \text{Non-Cash Expense}) - \text{Increase in Working Capital} - \text{Capital Expenditure}$. $\text{Financial Slack} = FCF / \text{Total Revenue}$; and the environmental cost variable is measured using the environmental management costs incurred by the company. The data in this study were analyzed using EViews software version 12. The theories employed were stakeholder and legitimation theories. Data were collected from the Indonesia Stock Exchange website (www.idx.co), company websites, journals, and other literature that support and form the basis of this study.

4. Results and Discussion

Corporate Social Responsibility on financial performance. Based on the test results, the Corporate Social Responsibility (CSR) variable had no effect on the financial performance of coal mining companies listed on the Indonesia Stock Exchange during 2022–2024. Thus, the first hypothesis (*H₁*), which states that CSR affects financial performance, is rejected in this study. These results indicate that the level of CSR disclosure implemented by companies has not yet been able to directly improved their financial performance.

Financial Slack and Financial Performance. It can be demonstrated that financial slack does not affect the financial performance of coal mining companies listed on the Indonesia Stock Exchange for the period 2022–2024. Thus, the second hypothesis (*H₂*), which posits that financial slack influences financial performance, is rejected. This indicates that the availability of flexible financial resources has not yet significantly improved a company's financial performance. Environmental Costs and Financial Performance. The test results show that environmental costs affect the financial performance of coal mining companies listed on the Indonesia Stock Exchange in 2022–2024. Thus, the third hypothesis (*H₃*), which states that environmental costs affect financial performance, is accepted in this study. These results indicate that the greater a company's investment in environmental management, the better its financial performance is.

Table 3. Results of the partial test

Variable	Coefficient	Significance	Conclusion
CSR	-0.786934	0.4089	Not Supported
Financial Slack	-0.104137	0.6817	Not Supported
Environmental Costs	0.343602	0.0191	Supported

The results of this study provide important insights into how Corporate Social Responsibility (CSR), financial slack, and environmental costs influence the financial performance of coal mining companies listed on the Indonesia Stock Exchange for the 2022–2024 period. The panel data regression model analysis shows that environmental costs have a statistically significant positive effect on financial performance, whereas CSR and financial slack do not have a significant effect. These findings indicate that while investing in environmental management contributes directly to improved financial outcomes, CSR initiatives and financial reserves alone may not immediately translate into higher profitability.

The lack of a significant relationship between CSR and financial performance suggests that companies' CSR activities may be limited in scope, improperly targeted, or insufficiently disclosed to effectively influence investor perception and market valuation. This aligns with previous studies that found that CSR must be strategically aligned with business operations and clearly communicated to stakeholders to enhance financial performance. In the context of the coal mining sector, CSR initiatives often focus on community development and social programs; however, these efforts may not generate immediate financial returns and are instead long-term investments in reputation and legitimacy. Furthermore, the level of CSR disclosure varies among companies, with some failing to provide comprehensive or standardized reporting, which may reduce the observable impact on financial metrics.

Similarly, the non-significant effect of financial slack on financial performance may indicate that while having surplus financial resources provides companies with flexibility, it does not automatically lead to better financial outcomes unless the funds are strategically allocated. Financial slack can support investments in CSR and environmental programs, innovation, and operational efficiency. However, if these resources are not effectively managed or directed toward value-generating activities, their impact on profitability may be minimal. This highlights the importance of financial management decisions and strategic planning in leveraging slack resources to improve performance.

Conversely, the significant positive effect of environmental costs demonstrates that companies that actively invest in mitigating the environmental impact of their operations experience better financial performance. This may be due to several mechanisms, including the following. First, higher environmental expenditure reduces the potential liabilities associated with environmental regulations, fines, and remediation costs. Second, it signals to investors and stakeholders that the company operates sustainably, thereby enhancing its legitimacy, trust, and long-term investor confidence. Third, efficient environmental management can lead to operational efficiencies such as optimized resource usage, energy savings, and reduced waste, which positively influence profitability.

The coefficient of determination (R^2) for the combined model indicates that CSR, financial slack, and environmental costs collectively explain approximately 38.35% of the variation in the financial performance. While this demonstrates moderate explanatory power, it also suggests that other factors, such as corporate governance, market conditions, commodity prices, and operational efficiency, play a substantial role in determining financial performance. Partial effect analysis emphasizes that among the three variables, environmental cost management is the primary driver influencing financial outcomes in the coal mining sector. These findings have practical implications for the management of companies. Firms should prioritize transparent and effective environmental management programs, as they provide measurable financial benefits. While CSR and financial slack remain important for long-term strategic and reputational reasons, managers should ensure that these initiatives are integrated into operational and financial strategies to enhance their contribution to financial performance. This study also underscores the need for standardized CSR reporting and environmental cost disclosure to maximize the value of these initiatives for stakeholders and investors.

5. Conclusions

5.1 Conclusions

This study aims to evaluate the effects of Corporate Social Responsibility (CSR) disclosure, financial slack, and environmental costs on financial performance in the coal mining sector listed on the Indonesia Stock Exchange for the period 2022–2024. Based on the findings described in the previous section, the following conclusions can be drawn. The results show that Corporate Social Responsibility and financial slack do not affect the financial performance of coal mining companies listed on the Indonesia Stock Exchange during the 2022–2024 period. Environmental costs do not influence the financial performance of coal mining companies listed on the Indonesia Stock Exchange during the 2022–2024 period. The results of the coefficient of determination test indicate that the combined influence of Corporate Social Responsibility disclosure, financial slack, and environmental costs on financial performance is 38.35%.

5.2 Research Limitation

This study has several limitations that should be considered by future researchers. These limitations are as follows: First the sample size used in this study is still limited because it focuses on only one sector. Therefore, the results of this study cannot fully describe the conditions in other sectors. Second, the observation period in this study is relatively short, covering only three years (2022–2024), and thus cannot provide a picture of conditions over a longer period of time.

5.3 Suggestion and Directions for Future Research

This study is expected to serve as a reference for future research on similar topics, particularly the impact of corporate social responsibility disclosure, financial slack, and environmental costs on financial performance. Future researchers should include additional variables beyond those used in this study, expand the study population, incorporate variables that may influence financial performance, and extend the study period to provide a broader understanding of the factors affecting financial performance. These include Good Corporate Governance (GCG), Environmental, Social, and Governance (ESG), and other variables that may influence financial performance.

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