GREEN ACCOUNTING EFFECT AT SUSTAINABLE INDUSTRIALIZATION AND FINANCIAL PERFORMANCE IN COVID ERA

Nurul Devi Ariyani[1]*, Wulan Budi Astuti[2], Belinda Apsari Candraningtyas[3]
[1]* Universitas Wahid Hasyim, nuruldeviariyani@gmail.com
[2] Universitas Wahid Hasyim, wulanbudiastuti445@gmail.com
[3] Universitas Wahid Hasyim, belindaapsari03@gmail.com

Abstract

This study aims to examine the green accounting effect at sustainable industrialization and financial performance in the Covid era from 2019 to 2021. Green accounting is a concept in which industrial production processes prioritize effectiveness and efficiency in the use of resources in a sustainable manner. To answer the research hypothesis, stakeholder theory is used which illustrates that the industry does not only aim to maximize profits but also provide social, economic and benefits to environment. Obtaining samples using the purposive sampling method in the mining industry in Indonesia from 2019 to 2021. The research design will be tested using Structural Equation Modeling (SEM). The results show that green accounting has a significant effect on the Corporate Sustainability Management System (CSMS) as a measure of industrialization sustainability of 0.01 and a significant effect on financial performance of 0.03. While CSMS has no significant effect on financial performance of 0.45. This is because in the period from 2019 to 2021 there is a Covid-19 pandemic which is affecting the company's financial performance. It is hoped that the results of this study can be used as material for consideration for regulators to establish rules related to green accounting for sustainable industrialization and improving financial performance.

Keywords : Green Accounting, CSMS, Financial Performance

INTRODUCTION

A good environment can support humans in meeting their needs and activities. Various human activities will have an impact on the environment. Bad environmental impacts can occur because humans tend to over-exploit natural resources and do not think of environmental costs as the responsibility of environmental preservation and sustainability. Industry is one sector that has an impact on the environment. On the other hand, industry also contributes to the economic development of a country. Thus, the industry needs to have a commitment to maintaining environmental and social benefits in the company's operational activities.

Indonesia has abundant natural resources and should be able to be used by the wider community, therefore, management of natural resources must pay attention to environmental interests so that they can be utilized for the long term. Mining is an activity of taking valuable and economically valuable deposits from the earth that can produce oil and gas, coal, iron sands, tin ore, and so on. This industry is one of the biggest contributors to the country's revenue from

natural resources in Indonesia. But on the other hand, mining activities have an impact on the environment. An example is pollution in the form of waste, which can threaten living ecosystems among humans, animals, plants and the environment.

In efforts to preserve the environment, accounting can play a role through voluntary disclosure of environmental costs in financial reports. Disclosure of environmental activities and environmental costs in the company's annual report will provide an overview to the public who use the annual report in making decisions for environmental preservation programs in the future. The disclosure also shows the industry's financial performance. The benefit is that this information will provide trust and loyalty to the community, because the industry has shown a balanced role for itself and feedback to the environment. The accounting system that discloses accounts related to environmental costs is called green accounting.

The purpose of implementing green accounting is to increase the efficiency of environmental management by assessing environmental costs and economic benefits. The topic about green accounting displayed a search interest value of 100 on March 25, 2023 meaning that the term was at the peak of discussion popularity (*Trends.Google.Co.Id*, n.d.). Green accounting encourages changes in human behavior towards environmental concern so that it affects industry sustainability. (Bansal, 2005) says that it is almost certain that companies that do not react to sustainability will face extinction. Thus, the industry needs to incorporate a sustainability strategy.

Higher-technology industries are far more resilient in crises than their lower-tech counterparts (sdgs.un.org, n.d.). This will pose a high risk because it is directly related to the environment where raw materials are taken from nature and returned to the impacted waste environment. The industry is required to improve its performance through productivity, effectiveness and cost efficiency in production and waste management.

Likewise, the Indonesian government supports sustainable industrial development. The goal is to be able to compete globally and influence the development of the national industry. For example, the Indonesian government has a national priority agenda in reducing plastic waste by 70% by 2025. In addition, the government strengthens its commitment to tackling economic, social and environmental problems through low-carbon development and a circular economy, which is expected to meet the Sustainable Development Goals (SDGs) targets and the target of reducing greenhouse gas emissions according to the Paris Agreement in 2030.

At the end of 2019 the world was shaken by the Corona Virus Disease (COVID-19). The presence of COVD-19 has had an extraordinary impact on almost every aspect of people's lives. Not only from a health, social and economic point of view, they are also feeling the effects of the spread of COVID-19 (Astuti & Alfie, 2021). Therefore, regulators and the government issue various policies to minimize the impact (Nicola et al., 2020). And the mining industry is an industry that has strictly implemented related health, safety, and environment.

INTERNATIONAL
STUDENTS' CONFERENCE
ON ACCOUNTING & BUSINESS
FORKOMMSA
Magister Sains Akuntansi
Universitas Jenderal Soedirman

Even though the government takes an important part in this matter, business entities and individuals feel the impact of issuing various existing policies (Jun et al., 2021). Based on the results of a survey by the Central Bureau of Statistics (BPS) Indonesia, information was obtained that there was a decrease in income for workers due to policies on reducing working hours and policies on limiting community activities . On the other hand, companies as business entities have also experienced a decline in financial performance during the pandemic caused by the same problem (Vania, 2020). Therefore, this research also discusses how the industry's financial performance is during this Covid period.

Azapagic (2003) formulated the concept of Corporate Sustainability Management System (CSMS) in five stages, namely policy development, planning, implementation, communication, evaluation, and improvement. This concept will be formulated to indicators and units of economic contribution, environmental performance and social responsibility. Green accounting brings a concept in which the production process prioritizes efficiency and effectiveness in the use of resources in a sustainable manner, so as to be able to balance the company's development with environmental functions and can provide benefits to society (Nga et. al., 2019).

There has not been much research linking green accounting and CSMS, this is what makes researchers interested in taking part in researching this matter. On the other hand, there have been many studies linking green accounting and financial performance, but the results of the research show some differences in results. Hamidi (2019) states that there is a positive effect of green accounting on a company's financial performance. These results are supported by research by ENDIANA et al. (2020) and Anggarkusuma et al. (2022) which show similar results, namely that there is a positive effect between green accounting and financial performance. On the other hand, Anggraeni & Dewi (2022) state that green accounting has a negative effect on a company's financial performance. Different results were also shown by Dita & Ervina (2021)The results of his research show that there is no significant effect between green accounting and company financial performance.

Based on the background description, this study aims to discuss how green accounting through the application of CSMS can improve financial performance and industry sustainability. The formulation of the problem in this study is:
1) Can green accounting implementation improve CSMS implementation?
2) Can the implementation of green accounting improve the company's financial performance?
3) Can the implementation of CSMS improve the company's financial performance?

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Stakeholder Theory

Stakeholder theory illustrates that the industry does not only aim to maximize profits for owners and investors (shareholders) but also provide benefits for society, social and government (stakeholders). Stakeholders have a role in controlling the resources needed for the survival of

the industry. Because basically, the industry does not only operate for its own interests but also for other stakeholders such as creditors, suppliers, shareholders, consumers, society, government and other interested parties. They as a group or individually can influence and be affected by the process of achieving organizational goals.

Stakeholder theory was first introduced by the Stanford Research Institute in 1963 which defined it as a group that can provide support for the existence of an organization (Harmoni, 2013). Companies must maintain relationships with stakeholders by accommodating their wants and needs, especially stakeholders who have power over the availability of resources used for company operational activities, such as workers, customers and owners (Hörisch et al., 2014).

Efforts are made to maintain relationships with stakeholders and to safeguard the interests of each party, so a sustainability report can be issued (Hörisch et al., 2020). In the sustainability report there is transparent information about the company's position and activities on economic, social and environmental aspects. Stakeholders can assess company performance to influence decision making in contributing to the industry. Thus, information in the disclosed sustainability report is expected to help stakeholders achieve sustainable industrialization goals.

Green Accounting

Green accounting is a concept in which industrial production processes prioritize effectiveness and efficiency in the use of resources in a sustainable manner. So as to be able to combine the company's development with environmental functions, and can provide benefits to society. Lako (2018) argues that green accounting is identifying, measuring value, record, summarize, report and disclose objects, transactions, events related to economic, social and environmental activities company to society, the environment and the company itself in a reporting package. Integrated accounting information, so it is useful for users for the evaluation of economic and non-economic decision-making. So, green accounting is accounting that reveals costs in company activities related to the environment.

According to Cohen & Robbins (2012), green accounting is defined as: "a style of accounting that includes the indirect costs and benefits of economic activity, such as environmental effects and health consequences of business decisions and plans." The application of green accounting is very concerned about the concept of saving which is based on the concept of ecosystems, both land, materials and energy. In the last two decades, green accountants have approached one aspect of material cost accounting Jasch (2003); Nguyen (2019). Green accounting measures and recognizes environmental costs and other social costs and presents this information in financial reports. Environmental costs include environmental protection costs and material flow costs (the cost of purchasing raw materials, but forming non-products).

Corporate Sustainability Management System (CSMS)

Sustainability maintains conditions so that community, social, economic and other needs can be met from the current generation to the next through harmonization with nature. According to the US Environmental Protection Agency (EPA), Sustainability is a concept based in the principle

INTERNATIONAL
STUDENTS' CONFERENCE
ON ACCOUNTING & BUSINESS

FORKOMMSA
Magister Sains Akuntansi
Universitas Jenderal Soedirman

that humans depend on the natural environment for survival and well-being, and that humans and nature can exist in productive harmony. Sustainability is the conditions that ensure that human impact on the environment is sufficiently mitigated in pursuit of the protection of natural resources and of future generations' access to water, materials, resources, and social and economic requirements. Azapagic (2003) formulated the concept of Corporate Sustainability Management System (CSMS) into five stages, namely, policy development, planning, implementation, communication, evaluation, and improvement. The five stages will be formulated to address the three issues, indicators and units of economic contribution, environmental performance and social responsibility. So in this case, sustainable industrialization uses CSMS.
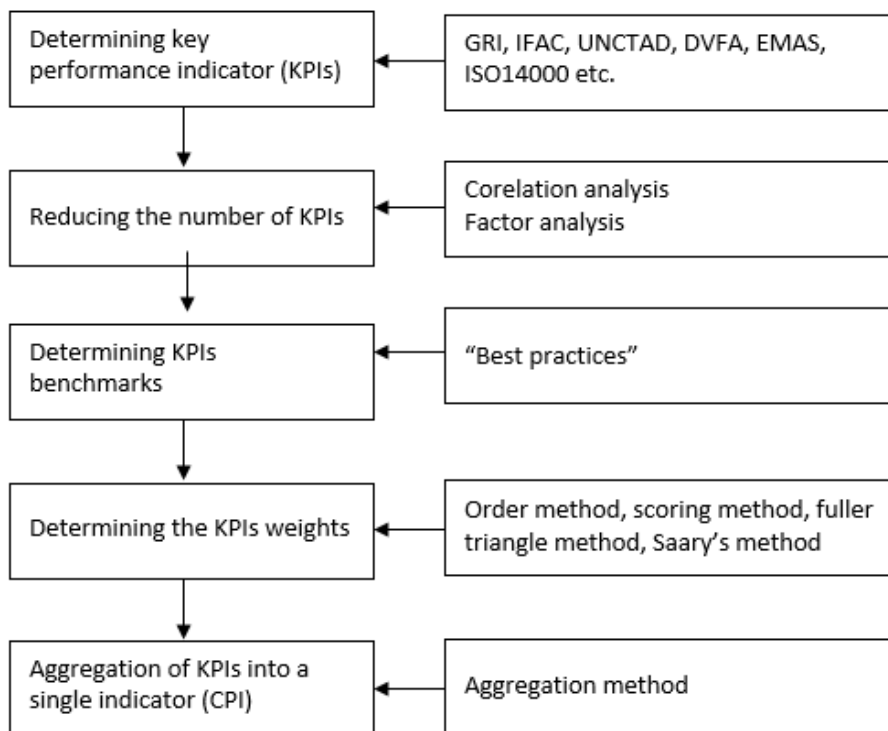

Figure 1. Complex Performance Indicators (CPI)

Dočekalová & Kocmanová (2016) company sustainability measurement uses Complex Performance Indicators (CPI). The CPI model was designed and tested on real data. The data were obtained by way of a questionnaire survey. In order to collect data in an efficient way the questionnaire was designed to verify the proposed basic KPIs while assigning weights to individual Key Performance Indicators (KPIs). There are 32 indicators from the basic sets of environmental, social, economic, and corporate governance.

Financial Performance

Financial performance is the company's work achievements that have been achieved by the company in a certain period and contained in the company's financial statements, so that one of the information can be known by interested parties or users of financial statements to find out company profits (Praise, 2013). Financial performance can be seen from the level of company profitability. Financial performance is indicated by the company's annual return and is the result of decisions made continuously by management. To assess financial performance, it is necessary to analyze the cumulative financial and economic impact of decisions and weigh them using comparative measures.

Green Accounting in the Corporate Sustainability Management System (CSMS)

Green accounting is expected to support sustainable development of the company (ENDIANA et al., 2020). The application of green accounting in industry is carried out by managing costs related to the environment so that the industry is able to carry out sustainability industrialization. Not only cost management, but there is a great need for reporting on policy information, environmental targets, and programs that are being carried out to prepare and disclose environmental risks (Mustofa et al., 2020). Where this disclosure is a form of embodiment of the Corporate Sustainability Management System (CSMS) and has a significant effect to the company's financial position (Miroshnychenko, 2021).

Endiana et al., (2020) stated that the implementation of green accounting can improve the implementation of CSMS for manufacturing companies in Indonesia. This is also supported by research conducted by Arofah et al., (2022). The results of their research show that the implementation of green accounting has a positive effect on the implementation of CSMS. Thus the first hypothesis of this study can be stated as follows:

H1: Green accounting implementation is able to improve CSMS implementation

Green Accounting in The Financial Performance

Industry market value is strongly influenced by positive environmental performance. Industries that apply green accounting will be able to demonstrate good environmental performance and have a good impact on financial performance as well. The relationship between environmental performance and financial performance can be observed in terms of income and costs. In terms of income, it shows that consumers who choose products that are oriented towards them will allow these companies to have market advantages, competitive advantages, and consumers tend to be willing to pay higher prices for products that are environmentally oriented (premium prices). On the cost side, companies benefit from increasing efficiency, avoiding potential liabilities, and creating barriers to entry for potential competitors.

The existence of environmental costs can be a long-term investment for issuers, because costs allocated at the present time will have a positive image impact good for the industry (Dita & Ervina, 2021). Disclosure of environmental costs will reflect business ethics and responsible management of resources to increase the social trust of stakeholders such as the public and

consumers, so as to be able to improve financial performance, such as achieving maximum profitability (ENDIANA et al., 2020). According to Dutta et al. (2020), green accounting issues are related to company profitability.

Research conducted by Hamidi (2019) shows that implementing green accounting can improve a company's financial performance. This is supported by ENDIANA et al. (2020) and Anggarkusuma et al. (2022) which show the same results. Thus the second hypothesis of this study is
H2: Green accounting implementation is able to improve the financial performance.

Corporate Sustainability Management System (CSMS) in the Financial Performance

Companies that practice sustainability have better performance. There is a strong and significant relationship between sustainability practices and good financial performance in which the industry develops management models and strategies for risks and opportunities to create environmental, economic and social values that affect industry performance. The industry needs a financial system that can control and monitor the flow of incoming and outgoing funds, besides that companies also want the strength of a strong financial system for business competition which is currently very tight. From this, strengthening the CSMS is very necessary (Anggarkusuma et al., 2022).

According to research conducted ENDIANA et al. (2020) states that CSMS has a major impact on financial performance. This is supported by Amelia & Hasibuan (2022) and Anggarkusuma et al. (2022) which show the same results. Thus the third hypothesis of this study is
H3: CSMS implementation is able to improve the financial performance.

RESEARCH METHOD

Research Design

This type of research is quantitative with a descriptive approach method. Research design is carried out by analyzing the effect of green accounting on financial performance and sustainable industrialization (corporate sustainability) in mining companies. The research design in this study can be seen in figure 2 below
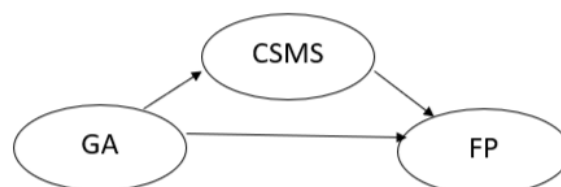

Figure 2. Research Design

GA: Green Accounting, CSMS: Corporate Sustainability Management System, FP: Financial Performance

Population and Sample

The population of this survey is 43 mining companies listed on the Indonesia Stock Exchange (IDX) which have go public and participated in the Environmental Management Company Performance Assessment Program (PROPER) by the Ministry of Environment and Forestry of Republic Indonesia in 2019-2021.

Sampling was done by purposive sampling. The sample selected was 13 mining companies that have go public in the mining sector and participated in PROPER with complete data for the 2019-2021 period.

Data Collection Techniques

The data collection technique uses documentation techniques with secondary data obtained through IDX, the company's website, and the website of the Ministry of Environment of the Republic of Indonesia in the form of company annual reports and PROPER assessment results.

Variable Measurements

Variable measurement in this study are as follows:

Table 1. Variable measurements

Variable	Indicator	Measurement Scale
Green Accounting	The PROPER performance system includes: Gold : score 5 Green : score 4 Blue : score 3 Red : score 2 Black : score 1 ** : score 0	Intervals
Corporate Sustainability Management System (CSMS)	Includes 32 indicators consisting of environmental, social, economic, and corporate governance aspects.	Intervals

Financial Performance	Return on Assets (ROA)	Ratio

Source: processed data

** Occurs if in the year concerned, the company does not receive a PROPER award or has not participated in PROPER.

Data Analysis Techniques

Data Analysis Technique using Structural Equation Modeling (SEM) with Warp PLS 7.0 (Partial Least Square) software. The use of this software is based on the relatively small sample and the research model uses reflective and formative indicators.

RESULTS AND DISCUSSION

From the results of statistical analysis using Warp PLS 7.0 shows that the coefficient value of the relationship between GA and CSMS is 0.46 with a significance value of 0.01. While the coefficient value of the relationship between GA and FP is 0.27 with a significance value of 0.03, this means that both hypotheses are accepted. The coefficient value of the relationship between CSMS and FP is 0.02 with a significance value of 0.45, so this hypothesis is rejected.
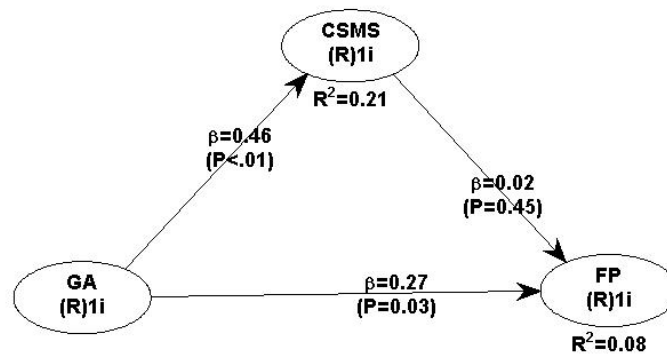

Figure 3. Research Results

Thus the results of testing this hypothesis can be seen in the following summary table:

Table 2. Hypothesis Testing

Variable	Coefficient	P Value	Results	Information
Green Accounting → CSMS	0.46	0.01	+/sig	Accepted
Green Accounting → Financial Performance	0.27	0.03	+/sig	Accepted
CSMS → Financial Performance	0.02	0.45	+/sig	Rejected

Source: processed data

H1: Relationship between Green Accounting and CSMS
The results of the analysis show a coefficient value of 0.46 with a P value of 0.01 which is less than 0.05. This means that there is a significant positive relationship between green accounting and CSMS. When the implementation of green accounting has increased, the implementation of CSMS has also increased. Conversely, if the implementation of green accounting has decreased, the CSMS implementation has also decreased. Thus the first hypothesis of this study can be accepted. The company's ability to manage environmental costs will support sustainable development. This is in line with research by Dewanti (2018), ENDIANA et al., (2020) and (Arofah et al., (2022) that green accounting has a major effect on CSMS.

H2: Relationship between Green Accounting and Financial Performance
The results of the analysis show a coefficient value of 0.27 with a P value of 0.03 which is less than 0.05. This means that there is a significant positive relationship between green accounting and financial performance. When the implementation of green accounting has increased, the financial performance has also increased. Conversely, if the implementation of green accounting has decreased, the financial performance has also decreased. Thus the second hypothesis of this study can be accepted. Increasing the implementation of green accounting in mining companies in Indonesia can maximize revenue potential and improve cost efficiency. In terms of costs, companies can get results from efficiency, can avoid potential liabilities, stakeholders can position the company well because of a high level of trust in the company, and can create barriers to entry for competitors because the company has added value. The results of this study are in line with research (ENDIANA et al., 2020) and (Arofah et al., (2022) which state that implementing green accounting can improve a company's financial performance.

H3: Relationship between CSMS and Financial Performance
The results of the third hypothesis analysis show a coefficient value of 0.02 with a P value of 0.45 greater than 0.05. This means that there is no significant influence between CSMS implementation and financial performance. The ups and downs of financial performance are not significantly affected by CSMS implementation. Thus the third hypothesis of this study was rejected. The results of this study contradict research conducted by (ENDIANA et al., 2020) and Arofah et al., (2022) which state that implementing CSMS can improve a company's financial performance.

Whelan (2021) explains that environmental, social and governance performance individually can only improve financial performance only if it is accompanied by increased risk management and many innovations that the company has.

This is because in the period 2019 to 2021 there is a Covid pandemic where Covid affects the performance of all companies in the world, including in Indonesia. During the Covid pandemic, the company's performance could not run normally. This happened as a result of activity restrictions being implemented to minimize the spread of the corona virus (Astuti & Alfie, 2021).

This certainly affects the company's operational activities. The company's activities, which were originally carried out by fully equipped personnel, have decreased during the pandemic. This is one of the reasons that CSMS has no effect on financial performance.

The government has quite high intervention in reducing the impact of Covid through several policies which can be the main cause in several sectors related to controlling a significant decline in performance. Some of the policies used, such as tax incentives and fiscal stimulus, often occur in developing countries (Huynh et al., 2021).

Aifuwa, Musa, and Aifuwa (2020), explain that the presence of Covid-19 has significantly reduced the economic condition of a country. Meanwhile, other studies explain that Covid-19 causes financial crises throughout the year for companies, or causes a decline in financial performance on the average company (Aifuwa et al., 2020). The decline in financial performance in a company began with the discovery of the first variant of the Covid-19 virus, and was followed by a series of policies issued by the government during the pandemic (Alam et al., 2021).

CONCLUSION

In this section, we will discuss the conclusions of the research that has been done. The results of this study indicate that green accounting is able to improve sustainable industrialization (CSMS) and financial performance, so that the first and second hypotheses are accepted. While CSMS has no significant effect on financial performance of 0.45. This is because in the period 2019 to 2021 there is a Covid-19 pandemic where this affects the company's financial performance and is an extraordinary event.

This research only examines the mining industry in Indonesia. It is hoped that further research on industries in other sectors can be found out whether environmental problems can occur in all sectors and whether green accounting has an effect on financial performance and sustainable industrialization in all industrial sectors. Researchers can also add other variables beyond the independent variables to project CSMS and financial performance.

The results of this study are expected to be taken into consideration for regulators to set rules related to green accounting. Because the disclosure of reports on green accounting so far is still voluntary and there are no standard rules or standards.
Indonesia is committed to succeeding the Sustainable Development Goals (SDGs) by achieving the 2030 development agenda. While the topic of sustainable industrialization is the main key to development. Industries that apply green accounting are expected to have good and supportive financial performance for sustainable industrialization which is an important component driving the world economy and development.

REFERENCE

Aifuwa, H. O., Musa, S., & Aifuwa, S. A. (2020). Corona Virus Pandemic Outbreak And Firms

Performance In Nigeria. *Management and Human Resource Research Journal*, *9*(4), 3363–7036. https://orcid.org/0000-0001-8908-6637

Alam, M. M., Wei, H., & Wahid, A. N. M. (2021). <scp>COVID</scp> -19 outbreak and sectoral performance of the Australian stock market: An event study analysis. *Australian Economic Papers*, *60*(3), 482–495. https://doi.org/10.1111/1467-8454.12215

Amelia, S. R., & Hasibuan, R. R. (2022). Determinasi Financial Literacy dan Penggunaan Fintech terhadap Peningkatan Produktivitas UMKM Purbalingga Dimasa Pandemi Covid-19. *Pekobis : Jurnal Pendidikan, Ekonomi, Dan Bisnis*, *7*(1), 1–11. https://doi.org/10.32493/pekobis.v7i1.p1-11.20264

Anggarkusuma, A., Afianika, D., & Kurniati, R. (2022). Determinasi Implementasi Green Accounting Terhadap Corporate Sustainability dan Kinerja Keuangan Pada Perusahaan Manufaktur. *Jurnal Ekonomi Bisnis*, *6*(2), 588.

Anggraeni, A. A., & Dewi, H. P. (2022). Green Accounting and Corporate Social Responsibility Disclosure: Financial Performance of Mining Companies in Indonesia. *Journal of Auditing, Finance, and Forensic Accounting*, *10*(1), 66–70. https://doi.org/10.21107/jaffa.v10i1.14034

Arofah, Anastasia Anggarkusuma; Maharani, Destin Alfianika; Kurniati, R. (2022). Determinasi Implementasi Green Accounting Terhadap Corporate Sustainability dan Kinerja Keuangan Pada Perusahaan Manufaktur. *Jurnal E-Bis: Ekonomi Bisnis*, *6*(2), 571–588.

Astuti, W. B., & Alfie, A. A. (2021). Covid-19 dan Kinerja Saham Perusahaan Indonesia: Pendekatan Event-Study. *AKSES: Jurnal Ekonomi Dan Bisnis*, *16*(1), 57–62. https://doi.org/10.31942/akses.v16i1.4472

Azapagic, A. (2003). Systems Approach to Corporate Sustainability. *Process Safety and Environmental Protection*, *81*(5), 303–316. https://doi.org/10.1205/095758203770224342

Bansal, P. (2005). Evolving sustainably: a longitudinal study of corporate sustainable development. *Strategic Management Journal*, *26*(3), 197–218. https://doi.org/10.1002/smj.441

Cohen, N., & Robbins, P. (2012). Green Business: An A-to-Z Guide. *Green Business: An A-to-Z Guide*, 128–132. https://doi.org/10.4135/9781412973793

Dewanti, M. P. R. P., & Djajadikerta, H. (2018). Pengaruh Kinerja Keuangan dan Tata Kelola Perusahaan Terhadap Nilai Perusahaan pada Industri Telekomunikasi di Bursa Efek Indonesia. *Jurnal Akuntansi Maranatha*, *10*(1). https://doi.org/10.28932/jam.v10i1.932

Dita, E. M. A., & Ervina, D. (2021). Pengaruh Green Accounting, Kinerja Lingkungan dan Ukuran Perusahaan Terhadap Financial performance (Studi Kasus pada Perusahaan Sektor Pertambangan yang Terdaftar di Bursa Efek Indonesia Tahun 2017-2018). *JFAS : Journal of Finance and Accounting Studies*, *3*(2), 72–84. https://doi.org/10.33752/jfas.v3i2.272

Dočekalová, M. P., & Kocmanová, A. (2016). Composite indicator for measuring corporate sustainability. *Ecological Indicators*, *61*, 612–623. https://doi.org/10.1016/j.ecolind.2015.10.012

Dutta, T. K., Raju, V., & Kassim, R. N. M. (2020). Green accounting in achieving higher corporate profitability and sustainability in ready made garment industry in Bangladesh: A conceptual analysis. *International Journal of Innovation, Creativity and Change*, *10*(10), 181–192.

ENDIANA, I. D. M., DICRIYANI, N. L. G. M., ADIYADNYA, M. S. P., & PUTRA, I. P. M. J. S. (2020). The Effect of Green Accounting on Corporate Sustainability and Financial Performance. *Journal*

of Asian Finance, Economics and Business, *7*(12), 731–738. https://doi.org/10.13106/jafeb.2020.vol7.no12.731

Hamidi. (2019). ANALISIS PENERAPAN GREEN ACCOUNTING TERHADAP KINERJA KEUANGAN PERUSAHAAN. *Encyclopedia of Corporate Social Responsibility*, *6*(2). https://doi.org/10.1007/978-3-642-28036-8_100807

Harmoni, A. (2013). *Stakeholder-Based Analysis of Sustainability Report: A Case Study on Mining Companies in Indonesia*. 204–210. https://doi.org/10.36880/C04.00704

Hörisch, J., Freeman, R. E., & Schaltegger, S. (2014). Applying Stakeholder Theory in Sustainability Management. *Organization & Environment*, *27*(4), 328–346. https://doi.org/10.1177/1086026614535786

Hörisch, J., Schaltegger, S., & Freeman, R. E. (2020). Integrating stakeholder theory and sustainability accounting: A conceptual synthesis. *Journal of Cleaner Production*, *275*, 124097. https://doi.org/10.1016/j.jclepro.2020.124097

Huynh, N., Dao, A., & Nguyen, D. (2021). Openness, economic uncertainty, government responses, and international financial market performance during the coronavirus pandemic. *Journal of Behavioral and Experimental Finance*, *31*, 100536. https://doi.org/10.1016/j.jbef.2021.100536

Jasch, C. (2003). The use of Environmental Management Accounting (EMA) for identifying environmental costs. *Journal of Cleaner Production*, *11*(6), 667–676. https://doi.org/10.1016/S0959-6526(02)00107-5

Jun, J., Toh, Y. N., Sisk, C. A., Remington, R. W., & Lee, V. G. (2021). Do concerns about COVID-19 impair sustained attention? *Cognitive Research: Principles and Implications*, *6*(1), 41. https://doi.org/10.1186/s41235-021-00303-3

Lako, A. (2018). *Akuntansi Hijau Isu, Teori, dan Aplikasi*. Salemba Empat. https://www.researchgate.net/profile/Andreas-Lako/publication/329541377_AKUNTANSI_HIJAU_Isu_Teori_Aplikasi/links/5ea66b92a6fdccd79457f739/AKUNTANSI-HIJAU-Isu-Teori-Aplikasi.pdf

Miroshnychenko, I., De Massis, A., Miller, D., & Barontini, R. (2021). Family Business Growth Around the World. *Entrepreneurship Theory and Practice*, *45*(4), 682–708. https://doi.org/10.1177/1042258720913028

Mustofa, U. A., Edy, R. N. A. P., Kurniawan, M., & Kholid, M. F. N. (2020). Green Accounting Terhadap CSR pada Bus di Indonesia dengan Kinerja Keuangan Sebagai Variabel Intervening. *Jurnal Ilmiah Ekonomi Islam*, *6*(3), 508. https://doi.org/10.29040/jiei.v6i3.1372

Nguyen, T. H. N., Hoang, T. V. H., & Nguyen, T. T. L. (2019). Green accounting and sustainable development of listed Vietnamese enterprises. *Journal of Asian Review of Public Affairs and Policy*, *2018*(November).

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, *78*, 185–193. https://doi.org/10.1016/j.ijsu.2020.04.018

Praise. (2013). *The Influence of Environmental Performance on Financial Performance with Corporate Social Responsibility as an Intervening Variable (Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) 2009-2011)*.

sdgs.un.org. (n.d.). *sdgs.un.org*. United Nations. Retrieved April 3, 2023, from

https://sdgs.un.org/goals/goal9

trends.google.co.id. (n.d.). Trends.Google.Co.Id. Retrieved April 3, 2023, from https://trends.google.co.id/trends/explore?q=green accounting&date=now 1-d&geo=ID&hl=id

Vania, H. F. (2020). *Akomodasi dan Pariwisata Sektor Paling Terdampak Covid-19*. Katadata.Co.Id. https://databoks.katadata.co.id/datapublish/2020/09/21/akomodasi-dan-pariwisata-sektor-paling-terdampak-covid-19

Whelan, T., Atz, U., Van Holt, T., & Clark, C. (2021). ESG and Financial Performance: Uncovering the Relationship by Aggregating Evidence from 1,000 Plus Studies Published between 2015-2020. *NYU | STERN Report*. https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021 Rev_0.pdf

APPENDICES

Table 3. List of Mining Company Samples for 2019-2021

No	Name of Company	Sector
1	PT. Timah Tbk.	Mineral mine
2	PT. Bukit Asam Tbk.	Coal Stockpile
3	PT. Aneka Tambang Tbk.	Mineral mine
4	PT. Perusahaan Gas Negara Tbk.	oil and gas
5	PT. Vale Indonesia Tbk.	Mineral mine
6	PT. Mitrabara Adiperdana Tbk.	Coal mine
7	PT. Kapuas Proma Coal Tbk.	Nickel mine
8	PT. Gunung Raja Paksi Tbk.	Metal smelting
9	PT. Ifishdeco Tbk.	Mineral mine
10	PT. Central Omega Resource Tbk.	Processing mine
11	PT. Surya Eka Perkasa Tbk.	Metal refining and processing
12	PT. Adaro Indonesia Tbk.	Coal mine
13	PT. J Resources Asia Pasifik Tbk.	Mineral mine

Source : idx.co.id

Table 4. Model Fit and Quality Indices

Average path coefficient (APC) = 0.251, P = 0.022
Average R-squared (ARS) = 0.146, P = 0.085
Average adjusted R-squared (AARS) = 0.110, P = 0.119
Average block VIF (AVIF) = 1.136, acceptable if <= 5, ideally <= 3.3
Average full collinearity VIF (AFVIF) = 1.218, acceptable if <= 5, Ideally <= 3.3

Tenenhaus GoF (GoF) = 0.382, small> = 0.1, medium> = 0.25, large> = 0.36
Sympson's paradox ratio (SPR) = 1.000, acceptable if> = 0.7, ideally = 1
R-squared contribution ratio (RSCR) = 1.000, acceptable if> = 0.9, ideally = 1
Statistical suppres Zion ratio (SSR) = 1,000, acceptable if> = 0.7
Nonlinear bivariate causality direction ratio (NLBCDR) = 1.000, acceptable if> = 0.7

Table 5. Indicator loading and cross-loading : View combined loading and cross-loading

	GA	CSMS	FP	Type (as difined)	SE	P Value
Green Accounting	(1.000)	0.000	0.000	Reflective	0.104	<0.001
CSMS	0.000	(1.000)	0.000	Reflective	0.104	<0.001
Financial Performance	0.000	0.000	(1.000)	Reflective	0.104	<0.001

Table 6. Latent variable coefficients

	GA	CSMS	FP
R-squared		0.214	0.077
Adj. R-squared		0.193	0.026
Composite reliab.	1.000	1.000	1.000
Cronbach's alpha	1.000	1.000	1.000
Avg. var. extrac.	1.000	1.000	1.000
Full collin. VIF	1.327	1.273	1.056
Q-Squared		0.238	0.111
Min	-2.232	-2.315	-0.757
Max	1.250	0.421	4.082
Median	-0.143	0.421	-0.261
Mode	-0.143	0.421	-0.757
Skewness	-0.851	-1.919	2.111
Exc. kurtosis	0.238	1.682	5.360
Unimodal-RS	Yes	No	Yes
Unimodal-KMV	Yes	No	Yes
Normal-JB	Yes	No	No
Normal-RJB	No	No	No
Histogram	View	View	View

Table 7. Correlations among l.vs. with sq. rts. Of AVEs

	GA	CSMS	FP
GA	(1.000)	0.463	0.230
CSMS	0.463	(1.000)	0.113
FP	0.230	0.113	(1.000)

Table 8. P values for correlations

	GA	CSMS	FP
GA	1.000	0.003	0.159
CSMS	0.003	1.000	0.495
FP	0.159	0.495	1.000

Table 9. Indicator loading and cross-loading : View combined structure and cross-loading

	GA	CSMS	FP
Green Accounting	(1.000)	0.463	0.230
CSMS	0.463	(1.000)	0.113
Financial Performance	0.230	0.113	(1.000)

Table 10. path coefficients

	GA	CSMS	FP
GA			
CSMS	0.463		
FP	0.271	0.019	

Table 11. P values

	GA	CSMS	FP
GA			
CSMS	<0.001		
FP	0.032	0.453	