



The Effect of Sustainable Business Practices on Company Value in Indonesia Stock Exchange Sri-Kehati Index Companies

Rio Zakarias Widyandaru ^{a*}, Muhammad Zilal Hamzah ^a,
Hamdy Hady ^a, Budi Santosa ^a and Maria R Nindita Radyati ^a

^a Faculty of Economics and Business, Trisakti University, Indonesia.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: <https://doi.org/10.9734/ajebe/2024/v24i111568>

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/126423>

Original Research Article

Received: 10/09/2024
Accepted: 13/11/2024
Published: 16/11/2024

ABSTRACT

The purpose of this study was to examine the effect of economic, environmental, social, and governance performance on firm value moderated by PROPER and COVID-19 in listed companies included in the SRI-KEHATI index for 10 consecutive years. The type of research used is quantitative research using hypothesis testing of the effect of the independent variable on the dependent variable with moderation of certain variables. The research variable includes the dependent variable, firm value, independent variable, which is economic, environmental, social, and governance performance (EESG), as well as moderating variables, PROPER and COVID-19.

*Corresponding author: E-mail: rio.zakaria.trisakti@gmail.com;

Cite as: Widyandaru, Rio Zakarias, Muhammad Zilal Hamzah, Hamdy Hady, Budi Santosa, and Maria R Nindita Radyati. 2024. "The Effect of Sustainable Business Practices on Company Value in Indonesia Stock Exchange Sri-Kehati Index Companies". *Asian Journal of Economics, Business and Accounting* 24 (11):433-56. <https://doi.org/10.9734/ajebe/2024/v24i111568>.

Purposive sampling is used through certain criteria, contain public companies included in the SRI-KEHATI index group for 10 consecutive years This results in a total 130 samples (13 companies during the 2012—2021) The data analysis used are descriptive statistical and multiple regression. The results of this study are (1) economic, environmental, and governance performance have a significant positive effect on firm value. However, social performance does not have a significant positive effect on firm value; (2) PROPER is proven to moderate the positive effect of governance performance on firm value, but not the effect of economic, environmental, or social performance; (3) COVID-19 is not moderate the positive effect of economic, environmental, social, and governance performance on firm value The implication of this study are (1) the implementation of sustainable business practices in economic, environmental, social and governance aspects is an important thing that must be implemented by companies in order to create a sustainable business; (2) PROPER can strengthen environmental management governance performance; (3) The dimensions and indicators used can serve as a reference for the company in sustainable business practices and as a basis for investors to make investment decisions; and (4) To be the basis of reference for the company, investors, and regulators.

Keywords: *Firm value; economic performance; environmental performance; social performance; Governance performance; PROPER.*

1. BACKGROUND

In their business practices, companies must pay attention to environmental, social, and governance (ESG) performance and their primary goal as a business organization that uses various resources to achieve economic goals. The objectives of business organizations in creating economic benefits, compliance with rules and laws, and social and environmental life have been examined as the embodiment of responsible business practices (Tomo & Landi, 2016). Companies do not pay attention to social responsibility and lack investors' trust. In his study, Leins argues that environmental, social, and governance performance allows financial analysts to understand factors related to corporate responsibility as market signals and use them to support their decisions (Leins, 2020).

The corporate vision of the importance of ESG is well captured by the Indonesia Stock Exchange (IDX). IDX answers the needs of global and domestic investors for stock investment in the Indonesian capital market that integrates ESG aspects with the issuance of *Sustainable Responsible Investment* or SRI-KEHATI; SRI-KEHATI is a thematic index that specifically practices ESG and selected companies that are active in environmental protection, maintaining social relations with stakeholders, and implementing good corporate governance. The SRI KEHATI stock index's performance is better than the JCI and LQ45 composite indices, as shown in Fig. 1. Information from the figure shows that the SRI-KEHATI stock price index

during the period from June 2009 to November 2021 was higher than the share prices of companies included in the LQ45 and IDX30 groups, including the Covid-19 condition that reached its peak in the year 2020.

The practice of implementing ESG is becoming increasingly important in the context of modern business because it not only provides social benefits but also contributes to the financial performance and reputation of the company (Zheng et al., 2022). Jin & Lei (2023), in their research, found the findings the positive influence of ESG on the company's financial performance. The positive influence of ESG on company performance is also supported by the results of the research (Zheng et al., 2022). Empirical studies conducted by Fatemi prove that ESG has a positive influence on company performance (Fatemi et al., 2018). Environmental factors or Environmental Score is an assessment that shows issues related to the business environment and the relationship between business and society, such as CO2 emissions, energy use, energy efficiency, waste, and emission reduction policies. Social factors or Social Disclosure is an assessment that is measured through corporate social responsibility information such as the principle of Fair-TradeEquality, the Gender number of employees, the employee turnover rate, and the ratio of women in the management hierarchy. Corporate governance factors are an index that reflects issues about how good corporate governance is, such as corruption, bribery, and disclosure of corporate governance (Alareeni & Hamdan, 2020).



Fig. 1. Development of Index Stock Prices, LQ45 and IDX30
 Source : SRI-KEHATI Index (2021)

Corporate value plays an important role in the company's operational decision-making, investment, and financing in decision-making to sell, buy, or hold shares, formation of investment portfolios, decisions to borrow, public offerings, and in relation to mergers and acquisitions. Acquisition (Alareeni & Hamdan, 2020; Zhou et al., 2022; La Torre et al., 2021; Sandberg et al., 2023) conduct a study on how CSR performance affects the creation of market value measured by using Tobin's Q. Financial Services Authority Regulation (POJK) 51 of 2017 because, in the Indonesian context, public companies use this regulation as a guide in the preparation of sustainability reports. With POJK 51 of 2017, in addition to environmental, social, and governance (ESG) aspects, economic factors can be measured on the company's value to enrich the results of this research analysis as a whole and get several benefits at once, such as the benefits of investment profits and also supporting environmental conservation.

Companies that incorporate ESG principles, as reflected in POJK 51 of 2017, in their annual and sustainability reports, particularly focusing on economic sustainability, stand to gain significantly. These practices, such as energy efficiency, effective resource management, and ethical business conduct, not only boost profitability and reduce operating costs but also open up new market opportunities and enhance competitiveness through continuous innovation. Moreover, they attract investment from stakeholders increasingly valuing ESG factors in their decisions. The results of empirical studies related to ESG with an economic focus,

conducted by Salihi et al. (2024), Poursoleyman et al. (2022), Oncioiu et al. (2020), Hongming et al. (2020), Alhassan & Islam (2021), Lin & Qamruzzaman (2023), Taliento et al. (2019), Keskin et al. (2020), Bouslah et al. (2018), consistently support these benefits. Additional findings also highlight the positive influence of economic performance on company value (Alsayegh et al., 2023).

Companies that are proactive in managing environmental impacts based on ISO 26000 and GRI standard indicators, such as reducing carbon emissions, improving energy efficiency, and adopting green practices, tend to benefit from lower operating costs, reduced regulatory risk, and improved reputation in the eyes of consumers and investors. In addition, companies that are committed to environmental sustainability attract investors who prioritize sustainable investment. The results of empirical studies related to ESG with a focus on the environment and company value have resulted in the finding of a positive influence related to environmental performance on company value (Atayah et al., 2024; Salihi et al., 2024; Lin & Qamruzzaman, 2023; Bouslah et al., 2018; Seth & Mahenthiran, 2022; Jayakumar et al., 2022; El-Deeb et al., 2023; Agbaje, 2021; Oncioiu et al., 2020; Hongming et al., 2020 and Taliento et al., 2019).

The social aspects of the approach from ISO 26000 and GRI Standards include practices related to human rights, fair working conditions, community engagement, diversity and inclusion, and employee safety and well-being. Companies

that excel in these aspects tend to have a more motivated and productive workforce, higher employee retention rates, and more harmonious relationships with local communities and stakeholders. There are diverse empirical studies in the hypothesis related to the social values of companies. The results of the research conducted by Bagh and colleagues found that social performance has a positive effect on the company's value (Bagh et al., 2024). This empirical study is supported by the results of several other empirical studies conducted by Salihi et al. (2024), Atayah et al. (2024), Bouslah et al. (2018), El-Deeb et al. (2023), Jayakumar et al. (2022), Seth & Mahenthiran (2022), Alhassan & Islam (2021), Oncioiu et al. (2020), Taliento et al. (2019) and Titisari et al. (2019).

Good governance under ISO 26000 includes practices such as transparency, accountability, effective risk management, and ethical and strategic decision-making. Companies with strong governance are able to reduce risks related to mismanagement, financial scandals, and conflicts of interest, which in turn increases the confidence of investors and other stakeholders. This trust not only promotes the stability and sustainability of the company's operations but also attracts long-term investments. In addition, good governance is often followed by more solid financial performance due to tighter oversight and control, as well as more efficient use of resources. As a result, companies with high governance practices tend to have higher market valuations and better performance over the long term. The results of the research conducted by Bagh et al. (2024) found that governance performance has a positive effect on company value. This empirical study is supported by the results of several other empirical studies conducted by Salihi et al. (2024), Atayah et al. (2024), Bouslah et al. (2018), El-Deeb et al. (2023), Jayakumar et al. (2022), Seth & Mahenthiran (2022), Alhassan & Islam (2021), Oncioiu et al. (2020), Taliento et al. (2019) and Titisari et al. (2019).

This research was carried out because no researcher has conducted research by taking samples of companies that have been consistently included in the SRI-Kehati index for ten consecutive years, and no one has researched the environmental performance rating program (PROPER) as a moderation of economic, environmental, social, and governance aspects. The research period uses the time range 2012-2021, where in 2020-2021

covid, COVID-19 has a significant influence on various aspects of economic activities. Covid 19 was included as a moderation variable to test the influence of COVID-19 as a variable that moderated the influence of economic performance, environmental performance, social performance, and governance performance on company value.

From the explanation above, this study was conducted with the aim of testing and analyzing the influence of sustainable business practices in economic aspects, environmental aspects, social aspects, and governance aspects on company values, testing and analyzing PROPER and COVID-19 moderating the influence of sustainable business practices in economic, environmental, social and governance aspects on company values.

2. LITERATURE STUDIES

2.1 Sustainability

The term sustainability first appeared in the history of forestry science. It refers to efforts to prevent humans from exploiting natural resources, such as forests, excessively. Sustainability in the context of forestry means harvesting timber or utilizing forest products within the limits of a forest's ability to naturally produce those resources without damaging its ecosystem. In other words, it means maintaining a balance between the exploitation of natural resources and the preservation of the environment (Kuhlman & John, 2010).

Attention to sustainability issues grew about half a century after Meadow and his colleagues published "*The Limits to Growth*" in 1972 (Meadows et al., 1972). This publication is the result of research that studies the consequences of the interaction between human systems and the Earth. The variables analyzed include population, food production, industrialization, pollution, and consumption of non-renewable natural resources. The results of the study concluded that if no changes are made, it is estimated that by 2072, the earth will reach its growth limit. This publication has increased the awareness of many parties on the importance of development (Meadows et al., 1972).

Bruntland, in his paper, defines sustainability as intergenerational well-being, which highlights transformational and long-term change, rather than merely short-term planning cycles and

strategies (Brundtland, 2017). According to Blackburn, in his book, *"The Sustainability Handbook,"* the concept of sustainability is divided into two "R" or 2Rs, which are *Resources* and *Respect* (Blackburn, 2012). *Resources* include the prudent management and use of natural and economic resources, while *respect* refers to respect for life, both humans and other living things. The concept of sustainability continues to evolve to date and is adopted by various organizations with the belief that sustainability combines Perspectives, namely economic, environmental, and social aspects, as well as other issues related to these three aspects (Haugh & Talwar, 2010). In another opinion, Clarke defines a company's sustainability performance in its development as being integrated with corporate governance (Clarke et al., 2020). Social, environmental, and economic sustainability will always face challenges in the post-carbon era that can change the orientation of businesses and society. It is therefore important to reformulate the company's goals and objectives related to sustainability performance and integrate them with a strong and quality governance system.

2.2 Environmental, Social and Governance (ESG) Concepts

The International Monetary Fund (IMF) in its report stated the importance of sustainability The International Monetary Fund (IMF), in its report, stated the importance of sustainability for financial markets. ESG can significantly affect business profitability and threaten financial stability if the financial sector suffers losses due to climate change (IMF, 2019). In 2004, the United Nations Global Compact and the Swiss Ministry of Foreign Affairs published the Who Cares Wins report, in which the term 'ESG' was coined. A working group, including the IFC, compiled this report in which analysts are urged to "better include environmental, social and governance (ESG) factors. IFC defines ESG as a set of environmental, social, and governance factors that are considered by companies when managing their operations and investors when making investments, with respect to the risks, impacts, and opportunities related to: (IFC, 2021)

1. Environmental issues that include potential or actual changes to the physical or natural environment (e.g., pollution, biodiversity impacts, carbon emissions, climate change, use of natural resources)

2. Social issues: which include potential or actual changes to surrounding communities and workers (such as health and safety, supply chains, diversity and inclusion); and
3. Governance: the corporate governance structure and processes in which the company is directed and controlled (e.g., board structure and diversity, ethical conduct, risk management, disclosure, and transparency), including governance of key environmental and social policies and procedures.

2.3 Firm Value

A company must provide value that can maintain quality, attract attention, and support from various parties (Gharaibeh & Qader, 2017). Parkash and Singhal define corporate value as the condition under which a company gains public trust through its operational activities since its inception (Fu et al., 2017). This value can be interpreted as a price that is agreed upon and acceptable to the buyer. Pham and Bui added that the value of a company relates to investment opportunities, primarily when it is based on stock market value indicators. This relationship has the potential to increase the company's future growth and contribute to an increase in the company's value (Bui et al., 2023).

The primary purpose of company value creation is to describe the company's current condition to external parties, including shareholders, the wider public, and potential investors, through indicators such as stock prices. The high and low stock prices will affect the decision of potential investors regarding the company's prospects. A high stock price usually attracts investors, signaling that the company is worthy of receiving investment. The increase in returns for investors indicates that the company's share price is at a reasonable level, so the company's goal of maximizing shareholder welfare can be achieved due to the company's high value (Bui et al., 2023).

Several calculation methods are used in assessing a company, such as:

1. Price to Book Value (PBV)

Price to Book Value (PBV) compares a company's stock price and book value per share, which describes how much the market appreciates its net assets. A high PBV value

indicates market confidence in a company's ability to create value. The PBV formula is as follows (Gharaibeh & Qader, 2017) ::

$$PBV = \frac{\text{Share Price}}{\text{Book Value}} \times 100\%$$

2. Price Earning Ratio (PER)

Price Earning Ratio (PER) is a ratio that compares the stock market price with earnings per share. The PER is often used to measure a company's profit growth expectations, where a higher PER signals that the market expects higher profit growth in the future. The formula of PER is as follows (Fu et al., 2017)

$$PER = \frac{\text{Share Price}}{EPS} \times 100\%$$

3. Tobin's Q

Tobin's Q theory, introduced by James Tobin in 1969, measures the ratio between market value and the replacement value of a company's assets. A value of Tobin's Q greater than one indicates that the market perceives the company's value to be higher than the cost of replacing its assets, which is considered a positive indicator of the company's future growth. Tobin's Q formula is as follows (Bui et al., 2023)

$$\text{Tobin's Q} = \frac{\text{MVE} + \text{Debt}}{TA}$$

Tobin's Q is essential because it provides a comprehensive picture of the market's perception of the company's value and prospects. The increase in the value of Tobin's Q indicates the company's potential to generate greater future profits, making it stand out among other indicators in signaling investors about the company's investment attractiveness.

2.4 Hypothesis Development

In corporate finance theory, a company's financial performance is often measured through profitability indicators such as *earnings per share* (EPS), *return on assets* (ROA), and *Return on Equity* (ROE). These indicators are important in assessing a company's effectiveness in generating profits for shareholders and play an essential role in analyzing a company's value. Zhou and colleagues explained that shareholders, as exclusive residual claimants, have the right to the profits generated by the

company (Zhou et al., 2022). Therefore, EPS is the primary quantitative metric to measure net profit distributed per share. This approach reinforces that solid financial performance can demonstrate a company's stability and sustainability in creating value (Zhou et al., 2022). The relationship between financial performance and company value is very close, where various financial indicators such as EPS and ROA are often associated with market reactions and the value of abnormal accumulated returns (CARs) that companies receive. Found that high EPS is likely to trigger a positive reaction in the market, indicating that the market is responding positively to the company's solid financial contribution. Poursoleyman added that EPS and ROA significantly influence stock prices on the Indonesia Stock Exchange, so these indicators shape investors' perception of the company's value (Poursoleyman et al., 2022). In this case, the relationship between financial performance and company value is theoretical and can also be observed in market reactions that favor an increase in company value. Several empirical studies further strengthen this relationship. For example, Talieto and colleagues assert that EPS is a significant predictor of stock market prices, supporting previous findings that show a positive correlation between financial indicators and company values (Talierto et al., 2019). However, research conducted by Seth and Mahenthiran found that the effect of EPS on stock prices is not always significant, suggesting the existence of other factors that may moderate or mediate this relationship (Seth & Mahenthiran, 2022). Recent studies have also highlighted the additional influence of variables such as creative culture and ESG investment on company value by Oncioiu et al. (2020), Hongming et al. (2020), Alhassan & Islam (2021), and Lin & Qamruzzaman (2023). Several studies find different findings. Research conducted by Bagh et al. (2024), Seth & Mahenthiran (2022), and Titisari et al. (2019) Explains the above; the hypothesis proposed in this study is:

H1 : There is a positive influence of economic performance on the value of the company.

A number of studies show that investments that focus on various studies show that investments that focus on environmental, social, and governance (ESG) have a significant positive relationship with a company's financial performance, as well as influence investors' decisions in choosing stocks. For example, a study conducted by Brogi and Lagasio on

companies in the United States between 2000 and 2016 found that there was a significant relationship between ESG performance and corporate profitability, providing important implications for policymakers regarding corporate social responsibility (CSR) (Brogi & Lagasio, 2018). Attention to CSR and ESG has increased in the last four decades, in line with the recognition that corporate social performance contributes positively to financial performance (Brogi & Lagasio, 2018). Research in Korea also supports this, where environmental performance has been shown to have a positive impact on economic performance in the electronics sector (Bouslah et al., 2018). In addition, an analysis of manufacturing companies in Indonesia listed on the Indonesia Stock Exchange shows that environmental performance measured through the Company Performance Rating Assessment Program (PROPER) has a positive influence on company value (Atayah et al., 2024). However, there are variations in the impact of environmental performance; For example, studies in Latin America show that environmental performance does not have a significant influence on financial performance as measured through *return on assets* (ROA) (Lin & Qamruzzaman, 2023). Meanwhile, research in China indicates that green innovation has a significant positive effect on corporate value, but this is not the case with environmental management (Shaikh, 2021). The variation in the results of this study indicates the existence of a significant research gap, although many studies have investigated the relationship between environmental performance and company value, the results vary depending on the context and methodology used. Therefore, the researcher plans to analyze the influence of environmental performance on the company's value using the environmental performance proxy from PROPER, as well as analysis based on ISO 26000 indicators and GRI standards. Therefore, the researcher plans to analyze the influence of environmental performance on the company's value using the environmental performance proxy from PROPER, as well as analysis based on ISO 26000 indicators and GRI standards.

H2 : There is a positive influence of environmental performance on the company's value.

Based on an empirical study that discusses investor behavior towards the disclosure of corporate information that pays attention to social performance and Environmental, Social, and

Governance (ESG) principles, good social performance can contribute positively to the company's value to create trust among investors. Research shows that companies active in social and environmental responsibility tend to get more attention from investors, which can potentially increase the company's share price (Jayakumar et al., 2022). However, these influences are not always consistent and can be influenced by various external factors, including investors' perceptions of risk and expected returns (Shaikh, 2021). ESG is seen as a factor that not only meets stakeholders' expectations but also contributes to the sustainability and long-term growth of the company (Atayah et al., 2024). While no single theory explicitly links ESG to company value, much literature suggests that good practices in ESG can improve a company's reputation and reduce risk, thereby increasing a company's market value (Zhou et al., 2022). This approach encourages companies to invest in ESG practices as a business strategy. Empirical studies have revealed various results that reflect the relationship between social performance and company value. Research conducted by Hongming and colleagues highlighted the positive impact of ESG ratings on abnormal returns in FTSE MIB-listed companies, showing that investors responded well to high social performance (Hongming et al., 2020). In addition, a study by Oncioiu shows that environmental and social performance significantly affects a company's value, mainly when supported by technological innovation (Oncioiu et al., 2020). However, research conducted by Shaikh shows that ESG performance does not always have a significant effect on a company's value directly (Shaikh, 2021), highlighting the need for further research to explore the complexity of these relationships and the factors that influence them.

H3 : There is a positive influence of social performance on the company's value.

Good Corporate Governance (GCG) in Indonesia is an essential element in the market economy system that can increase public confidence in corporate governance and reflect the national business climate (Titisari et al., 2019). Good governance is essential, especially in public companies involving local and international investors, as it can ensure transparency and accountability. The main focus of GCG includes the roles, powers, and responsibilities between shareholders and management (Hongming et al., 2020), intending to improve the quality of financial reports through effective monitoring

(Seth & Mahenthiran, 2022). Some large companies face agency issues due to differences in interests between managers and shareholders. However, a robust GCG mechanism can mitigate this problem by aligning the interests of both parties (Atayah et al., 2024). The characteristics of a company's ownership, including the concentration of ownership and the structure of the independent board of commissioners, affect the quality of governance. Research in Brazil shows that the absence of controlling shareholders can improve the quality of GCG. At the same time, the concentration of ownership by other families or companies tends to have a negative impact (Shaikh, 2021). In the Indonesian context, Titisari found that improving GCG quality is related to increasing company value, supported by stock returns and financial performance as moderation variables (Titisari et al., 2019). Similar research by Ivana and colleagues at LQ45 shows that the implementation of GCG significantly influences the company's value (Ivanka et al., 2022). However, other studies have found that the effect of GCG on stock returns is not always significant, especially in large companies with solid institutional ownership (Bagh et al., 2024). As such, there is an opportunity for further research to deepen our understanding of GCG-specific dimensions, such as the concentration of ownership and compliance with ISO 26000 principles and their implications for the stock market (Atayah et al., 2024).

H4 : There is a positive influence of governance performance on the company's value.

Environment (PROPER) is an effort by the Indonesian government to realize transparency and democracy in environmental management, driven by the low level of corporate compliance with environmental management practices. PROPER is regulated in several vital regulations, including the Decree of the Minister of Environment Number 127/MENLH/2002, which sets out criteria for controlling water and air pollution and managing toxic and hazardous waste (B3). One of the benefits of PROPER for companies is improving their image and reputation in the eyes of the public and investors, which can contribute to the company's positive value. Research showing a positive relationship between PROPER and company values indicates that good environmental performance can attract the attention of stakeholders and increase trust in the company (Ahmad, 2021). A

similar study by Hasibuan evaluated the impact of environmental performance and corporate social responsibility (CSR) on market reactions in companies listed on the Indonesia Stock Exchange and had a PROPER rating from 2014–2018. However, their findings show that environmental and CSR performance has not yet significantly impacted market reactions, although the PROPER rating remains an essential indicator of the sustainability of the company's business (Ahmad, 2021).

With the relationship between PROPER and sustainable business practices implemented by companies, this study aims to develop a further understanding of the influence of PROPER on business sustainability strategies and presents the following hypotheses.:

H5: PROPER strengthens the positive influence of sustainable business practices, namely economic aspects, on the company's value.

H6: PROPER reinforces the positive influence of sustainable business practices, namely environmental aspects, on the company's value.

H7: PROPER strengthens the positive influence of sustainable business practices, namely the social aspect, on the company's value.

H8: PROPER strengthens the positive influence of sustainable business practices, namely governance aspects on corporate value.

The COVID-19 pandemic, in general, has had a significant negative impact on most companies, especially in sectors that rely on direct interaction with consumers or are affected by global supply chain disruptions (Bai et al., 2021). Sectors such as tourism, transportation, and manufacturing experienced a drastic decline in economic activity due to social restrictions and a decline in demand. On the other hand, some sectors, such as pharmaceuticals, healthcare, and telecommunications, are likely to experience increased demand due to public health needs and the shift of activities to digital (Balakrishnan & Sambasivan, 2022). The high level of uncertainty associated with the physical and financial impact of COVID-19 presents new challenges for investors who need help to predict their long-term impact on company performance.

In Indonesia, an increase in COVID-19 cases began in March 2020, followed by various social distancing policies and mobility restrictions that directly impacted business operations. Based on a survey conducted by the Ministry of Manpower, around 88% of companies in Indonesia admit to experiencing the negative impact of this pandemic. The impact was mainly felt through a significant decline in demand and sales, leading to substantial financial losses for most industry sectors. Research (Balakrishnan & Sambasivan, 2022) further shows that COVID-19 acts as a moderating variable that strengthens the influence of sustainable business achievement on company value, indicating that the pandemic magnifies the risks and potential decline in company value in the long term. As a result of this analysis, the COVID-19 crisis not only tests the operational resilience of companies but also emphasizes the role of sustainability and adaptive response of companies in maintaining corporate value amid global economic uncertainty. Based on this understanding, the hypothesis proposed in this study is as follows: the role of COVID-19 as a moderator has a significant impact on the relationship between sustainability efforts and company values, especially in the face of unexpected changes in market demand and long-term economic uncertainty.

H9: The COVID-19 pandemic has moderated the positive influence of sustainable business practices, namely economic aspects, on company value.

H10: The COVID-19 pandemic has moderated the positive influence of sustainable business practices, namely environmental aspects, on company value.

H11: The COVID-19 pandemic has moderated the positive influence of sustainable business practices, namely social aspects, on company values.

H12: The COVID-19 pandemic has moderated the positive influence of sustainable business practices, namely governance aspects, on company values.

3. METHODOLOGY

The type of research used in this study is causality research, which aims to examine the influence of independent variables, namely economic performance, social performance,

environmental performance, and governance performance, with dependent variables in the form of company value proxied through *Tobin's Q*.

This study uses five main variables, consisting of one dependent variable, namely *company value*, and four independent variables that represent various dimensions of business sustainability: economic performance, environmental performance, social performance, and corporate governance.

The dependent variable in this study is the value of the company measured using Tobin's Q proxy, which is formulated as:

$$Tobin's\ Q = \frac{MVE + Debt}{TA}$$

MVE (*Market Value of Equity*) reflects the company's market capitalization, Debt is total liabilities, and TA (*Total Assets*) shows the company's total assets. This ratio provides an overview of how the market assesses a company's performance. A Tobin's Q value higher than 1 indicates that the market considers the company more valuable than the cost of replacing its assets, reflecting positive expectations for business sustainability and vice versa.

The independent variables used consist of four main aspects: economic, environmental, social, and governance performance, which are measured through specific indicators based on standards such as GRI, ISO 26000, and POJK 51 of 2017, as can be seen in Table 1. Economic performance has seven indicators and measurement; environmental performance is measured using six dimensions and 41 indicators; social performance consists of 30 dimensions with a total of 210 measurement indicators; and governance performance consists of 12 dimensions with 72 measurement indicators.

Measurements for economic performance, environmental performance, social performance, and governance performance use *content analysis* where the number 1 is given if the company discloses information contained in indicators that make up economic, environmental, social, and governance performance disclosed correctly in both the annual report and sustainability report and vice versa the number zero is given if the company

does not disclose information related to the indicators measurement of economic, environmental, social and governance performance. The formation of disclosure for the four performances uses the following formulations:

$$DisD_i = \frac{D_i}{Total D_i} \times 100\%$$

Where D_i is the performance disclosure for a particular performance, $Total D_i$ is the total disclosure of each performance dimension with a value of 1, and $Total D_i$ is the total number of indicators of that performance.

The moderation variables used are 2 variables, namely:

1. PROPER is a rating given to companies related to the Company Performance Rating Assessment Program in Environmental Management (PROPER) from the Ministry of Environment and Forestry (KLHK) of the Republic of Indonesia where the assessment is divided into five criteria, namely a value of 5 for companies that receive a gold rating, a number 4 for companies who received a green increase, number 2 for companies that received a blue assessment, number 2 for companies that received a red assessment, number 1 for companies that received a black assessment and number 0 for companies that did not carry out a PROPER assessment. PROPER divides community development activities into four typologies, namely charity programs which are the lowest level, supporting infrastructure development, community capacity building, and the highest typology is community empowerment so that the community can be independent and dignified. PROPER is a supervision program from KLHK for industries to encourage industry compliance with environmental regulations and apply green economy principles. Evaluation of compliance includes environmental

permits, water pollution control, air pollution control, and hazardous waste management. Evaluation of green economy principles includes Environmental Management System (EMS), energy efficiency, emission reduction, water efficiency, hazardous waste reduction and utilization, 3R waste, biodiversity, community development, and innovation.

2. Covid 19 using the Dami variable where the number 1 is given for the period before covid 19, namely before 2020, and the number 0 is given for the period during covid, namely from 2020 to 2021.

The data collection method uses purposive sampling: samples taken using criteria.

1. Companies in the constituents of the SRI KEHATI index were listed on the Indonesia Stock Exchange during the period 2012-2021 (there were 46 companies)
2. The company has consistently been included in the constituents of the SRI KEHATI index listed on the Indonesia Stock Exchange during 2012-2021 (there are 13 companies).

Based on the criteria above, the total sample is 130 samples (13 companies for 10 years, namely the period 2012-2021). The names of companies that are included in the research sample criteria can be seen in Table 2.

3.1 Analytical Tools

There are two analytical tools used, namely, descriptive statistical analysis, which is used to provide an overview of the research variables, namely $tobins'Q$, economic, environmental, social, governance, proper and covid-19 performance and multiple regression by considering the homogeneous characteristics of the sample, which is consistently included in the SRI-KEHATI group during the 2012-2021 period. The following formulation shows the proposed research model:

$$\begin{aligned} FV = & \beta_1 t + \beta_2 EC + \beta_3 ENV + \beta_4 CG + \beta_5 PROPER \\ & + \beta_6 COVID + \beta_7 EC * PROPER + \beta_8 ENV * PROPER \\ & + \beta_9 SOS ** PROPER + \beta_{10} CG * PROPER \\ & + \beta_{11} EC * COVID + \beta_{12} ENV * COVID \\ & + \beta_{13} SOS ** COVID + \beta_{14} CG * COVID + \varepsilon \end{aligned}$$

Where:

- FV = Company values
- EC = Disclosure of the company's economic performance
- ENV = Disclosure of the company's environmental performance
- SOS = Corporate social performance disclosure
- CG = Disclosure of Corporate Governance Performance
- PROPER = PROPER score obtained by the company

Table 1. Definition of variable measurement

Variable	Dimension	Indicators	Source
Economics	1. Economic Performance	7 Indicators	Noronha et al., (2018); Madhani, (2016); Pongsaporamat (2020); IDX Decree no: 00183/BEI/12-2018, ISO 26000, and POJK 51 of 2017
Milieu	1. Pollution prevention 2. Sustainable resource use 3. Climate change mitigation 4. Climate change adaptation 5. Environmental protection, biodiversity, and natural habitat restoration 6. Material	41 Indicators	Noronha et al. (2018); Zhang et al. (2020); GRI 201-1, 203, 300 & 400 (2016); ISO 26000; Moratis (2017); Chakroun et al. (2019); Licandro et al. (2019)
Social	1. Community Engagement 2. Education and Culture 3. Job Creation and Skills Development 4. Technology Development and Access 5. Creation and Prosperity 6. Health 7. Social Investment 8. Product 9. Employment 10. Social Society 11. Human Rights and 12. Human Rights Risk Situations 13. Avoiding Disputes 14. Resolving Complaints 15. Discrimination of Vulnerable Groups 16. Civil and Political Rights 17. Basic Principles and Rights in the Workplace 18. Socio-economic and cultural rights 19. Needs Practice 20. Working Conditions and Social Protection 21. Social Dialogue 22. Occupational Health and Safety 23. HR Development and Workplace Training 24. Consumer Issues	210 Indicators	Noronha et al. (2018); Zhang et al. (2020); GRI 201-1, 203, 300 & 400 (2016); ISO 26000; Moratis (2017); Chakroun et al. (2019); Licandro et al. (2019)

Variable	Dimension	Indicators	Source
	25. Protecting Health and Safety		
	26. Sustainable Consumers		
	27. Service, support and resolution of consumer complaints and disputes		
	28. Data protection and consumer privacy		
	29. Access to basic services		
	30. Education and care		
Governance	1. Decision-Making Process and Structure	72 Indicators	Noronha et al., (2018); Madhani, (2016); Pongsaporamat (2020); IDX Decree no: 00183/BEI/12-2018, ISO 26000, and POJK 51 of 2017
	2. Accountability		
	3. Ethical Behavior		
	4. Respecting Stakeholder Interests		
	5. Respect the rule of Law		
	6. Respecting International Norms of Conduct		
	7. Respect for Human Rights		
	8. Anti-Corruption		
	9. Engaging in Responsible Politics		
	10. Fair Business Competition		
	11. Promoting Social Responsibility in the Value Chain		
	12. Respecting Ownership Rights		

*Source : Data Processed by Researchers

Table 2. Daftar Perusahaan yang Memenuhi Kriteria Sampel Penelitian

No	Code	Company
1	ASII	Astra International Tbk
2	BBCA	Bank Central Asia Tbk
3	BBNI	Bank Negara Indonesia Tbk
4	BBRI	Bank Rakyat Indonesia Tbk
5	BMRI	Bank Mandiri Tbk
6	INDF	Indofood Tbk
7	JSMR	Jasa Marga Tbk
8	KLBF	Kalbe Farma Tbk
9	PGAS	Perusahaan Gas Negara Tbk
10	SMGR	Semen Indonesia Tbk
11	TLKM	Telkom Indonesia Tbk
12	UNTR	United Tractors Tbk
13	UNVR	Unilever Tbk

Source: Data processed

The stages of multiple regression analysis using the Ordinary Least Square (OLS) method are 1) testing classical assumptions, namely normality with the Jarque Bera test, multicollinearity with VIF, autocorrelation with LM test and heteroscedasticity using the Arch Test; 2) testing the fit model using the determination coefficient

(adjusted R square); 3) simultaneous testing (F test) which aims to test that there is at least one independent variable that has a significant effect on the dependent variable and 4) partial test (t test) which aims to test the influence of each independent variable on the dependent variable.

4. RESULT AND DISCUSSION

4.1 Descriptive Statistics

The descriptive statistics of the research variables are shown in Table 3. The descriptive statistics for the company value variables that are proxied using Tobin's Q produce an average value of 2.934, which means that the average company that is included in the SRI-KEHATI group has a good company value, namely having a Tobin's Q value of > 1. A standard deviation value of 4.5480 shows that the company's value varies quite a bit from one company to another. The minimum value of 0.73 and the maximum value of 27.72 indicate that the market responded well to the company value of all companies used in the study because none had a negative value.

The results of descriptive statistical calculations for the variables of sustainable practice in the economic aspect produced a relatively high average of 87.582. The standard deviation value of 14.602 indicates a variation in economic performance data that is quite heterogeneous between one company and another, where the minimum value of the economic performance index is 42.86%, and the maximum value reaches 100%. The processing of descriptive statistics for the environmental aspect sustainability practice variable resulted in an average value of 77.035%, which means it is still in the relatively high category. The standard deviation value of 19.359 indicates a variation in environmental performance that is quite heterogeneous. Descriptive statistics for social performance achieved a relatively high-performance index of 71.457 on average. The standard deviation value of 15.011 indicates a considerable variation in data for social performance between companies. Judging from the development trend of social performance achievements, there has been an increase during the 2012-2021. Overall, the governance performance index reached 72.735%. The standard deviation value of 15,498 shows that the variation in governance performance between one company and another is quite varied.

4.2 Regression Analysis Results

The results of the regression model processing can be seen in Table 4. The first stage of regression analysis is to perform a classical assumption test. For the normality test, the p-value of the bark Berra test was obtained at $0.042 > 0.01$, which means that H_0 was accepted so that it could be concluded that the model produced met the normality assumption. After the autocorrelation improvement, the multicollinearity test results produced a VIF value of < 10 for all independent variables, which means that the resulting model was free from the

multicollinearity problem. After the autocorrelation improvement, the results of the autocorrelation test produced a p-value value of obs^*R^2 Square of $0.4067 > 0.05$, which means that H_0 is accepted so that a hypothesis stating that no autocorrelation is acceptable can be concluded. The heteroscedasticity test produced a p-value of Obs^*R^2 Square of $0.7997 > 0.05$, which means that H_0 is accepted, so it can be concluded that there is no heteroscedasticity in the model used. The four assumptions required in the regression model are met so that it can be continued with the testing of the research hypothesis.

The fit model was carried out to determine the extent to which independent variables can explain dependent variables in a model by looking at *Adjusted R2*. The results of the determination coefficient test are shown in Table 3. The results of the processing obtained an *Adjusted R2* value of 0.5675, meaning that the variation or behavior of the independent variables, namely economic disclosure, environmental disclosure, social disclosure, governance disclosure, PROPER, COVID-19, and PROPER and COVID-19 moderation on the company's value was 56.75%. In comparison, the remaining 43.25% was a variation of other independent variables that affected the company's value but were not included in the model. These results show that the resulting model has a good fit model.

The F test was carried out to test whether at least one independent variable had a significant effect on the dependent variable. The processing results for the F test can be seen in Table 4. Based on the data in the table, the p-value of F was obtained from $0.0000 < 0.05$. Thus, it can be concluded that the H_0 model is rejected (H_a is accepted), so it is proven that at least one independent variable will significantly affect the dependent variable.

Table 3. Descriptive statistics of research variables

Variable	Mean	Std. deviation	Minimum	Maximum
Tobin's Q	2.934	4.547	0.726	27.71
Economic Performance	87.582	14.601	42.860	100.00
Environmental Performance	77.035	19,359	19.512	100.00
Social Performance	71.457	15.011	27.143	89.04
Governance Performance	72.735	14.853	23.611	93.056

Source: Data processed

Table 4. Enterprise value model regression

Variable	Coefficient	tstat	P-value	VIF
EC	0.0095	2.661	0.0046***	2.2666
ENV	0.0069	2.526	0.0066***	2.1475
SOS	-0.0038	-1.654	0.0506	1.5767
CG	0.0040	1.314	0.0960*	1.6320
EC_PROPER	-0.0170	-0.656	0.2564	2.0977
ENV_PROPER	-0.1417	-3.112	0.0012	3.4720
SOS_PROPER	-0.1564	-3.804	0.0001	1.7569
CG_PROPER	0.0599	2.208	0.0148**	2.2478
EC_COVID	-0.0411	-0.429	0.3344	1.5172
ENV_COVID	-0.0408	-0.301	0.3817	1.7038
SOS_COVID	0.0425	0.300	0.3823	1.5440
CG_COVID	0.0667	0.456	0.3244	1.4567
R2	0.6276			
Adj R2	0.5675			
Fstat	10.4510			
p-value	0.0000			
p-value Jarque Beera	0,042***			
p-value LM test	0,4067			
p-value Arrch Test	0,7977			

* $\alpha = 10\%$ ** $\alpha = 5\%$ *** = $\alpha = 1\%$

Source : processed data

The results of the impact test of sustainable practices show that economic performance is proven to have a significant effect on the value of companies listed on the IDX in 2012-2021 and categorized as SRI-KEHATI as shown by an estimated coefficient value of 0.095 with a p-value of 0.0046 < 0.01 (H1 supported). Sustainable practices for environmental performance significantly positively influence the value of companies listed on the IDX in 2012-2021 and are categorized as SRI-KEHATI, as shown by an estimated coefficient value of 0.0069 with a p-value of 0.0066 < 0.01 (H2 is supported). Sustainable practices for social performance have not been proven to have a significant positive effect on the value of companies listed on the IDX in 2012-2021 and categorized as SRI-KEHATI as shown by the value of the negative estimation coefficient of -0.038 (H3 is not supported). The results of the processing show that sustainable practices for governance performance have a positive effect on the company's value in companies listed on the IDX in 2012-2021 and categorized as SRI-KEHATI as shown by the estimated coefficient value of 0.0040 with a p-value of 0.096 < 0.1 (H4 is supported).

Testing with PROPER moderation showed that PROPER was not proven to strengthen the influence of economic performance on the company's value because it resulted in a

negative estimation coefficient value of -0.0170 (H5 is not supported). PROPER was not proven to strengthen the positive influence of environmental performance on the company's value, as it resulted in an estimated coefficient value of -0.417 (H6 not supported). The H7 hypothesis, namely PROPER, strengthens the positive influence of social performance on the company's value and is not supported, as shown by the estimated coefficient value of -0.1564. PROPER has been proven to strengthen the positive influence of governance performance on the company's value, as shown by the estimated coefficient value of 0.0599 with a p-value of 0.0148 < 0.05 (H6 supported).

The results of the Covid variable test weakened the influence of sustainable practices on economic performance, which was not proven, as shown by an estimated coefficient value of -0.0411 with a p-value of 0.3344 > 0.05 (H9 not supported). Covid was not proven to weaken the influence of environmental performance on the company's value, as shown by an estimated coefficient value of -0.408 with a p-value of 0.3817 > 0.05 (H10 not supported). The value of the estimated coefficient of 0.0425 indicates that COVID-19 is not open, weakening the positive influence of social performance on the company's value (H11 is not supported). The hypothesis that covid weakens the positive influence of governance performance on

company value is shown by an estimated coefficient value of 0.0667 (H12 is not supported).

4.3 Discussion

Investors will respond positively to companies with high economic performance by increasing the company's value. The findings of a significant favorable influence of economic performance on company value can be evidenced by the achievement of economic performance from companies that are included in SRI-KEHATI and included in the PROPER group already have high economic performance achievements, resulting in an average index of 87.58% during the period 2010-2022. The positive influence of economic performance on the value of the company is strengthened by the achievement of 7 economic performance indicators, which produce a high average for five indicators while the achievement of the other two indicators at the medium level, as shown in Fig. 2 From the figure, it can be seen that the achievement of increasing production compared to the previous year reached 97.69%, which means that almost all companies experienced an increase in sales from the previous year. All companies included in the SRI-KEHATI group experienced an increase in sales compared to the previous year, as shown by the achievement of an index figure of 100%. The market also responded positively to the company's value due to the increase in the index from the increase in the company's profit compared to the previous year, as shown by the achievement of the index figure of 99.23%. The increase in revenue, sales, or profit from the previous year is in line with the data requested by POJK 51 of 2017 and supported by the results of the research (D' Costa & Habib, 2024; Hasanudin et al., 2020; Bagh et al., 2024; Bouslah et al., 2018).

Companies with high environmental performance tend to get a positive response from investors in the form of increasing company value. This is due to the view of investors who see the company not only focusing on business profits but also showing a commitment to the sustainability of the surrounding environment. The descriptive statistical analysis results show that the environmental performance variable has an average value of 77.04%, which is included in the high category. Evidence of a positive influence between environmental performance and company value is reflected in the achievement in six dimensions measured by ISO

26000 and GRI Standards, as shown in Fig. 3. Of the six dimensions of environmental performance, as many as five dimensions have achieved a high average index value of above 75%. The five dimensions are dimension 6 (material (Kim et al., 2021) with an average score of 85.38; Dimension 3 (Climate Change Mitigation (Rusmana & Purnaman, 2022; Kong et al., 2023) with an average score of 85.29; dimension 4 (climate change adaptation [ISO 26000]) with an average value of 84.42; Dimension 1 (Pollution Prevention (Kim et al., 2021; Kong et al., 2023)) with an average score of 79.13; and dimension 2 (sustainable use of resources (Kim et al., 2021; Kong et al., 2023)) with an average score of 77.69. Only one dimension achieved a moderate index number, namely dimension 5 (environmental protection, biodiversity, and natural habitat restoration (ISO, 2010; Global Reporting Initiative, 2016)).

Companies with high social performance are among the main reasons investors invest. This is because investors consider the company's contribution to the sustainable development goals (SDGs). In the end, good social performance will have a positive impact on the company's value. Overall, the average achievement of the social performance dimension was at a moderate level of 71.46. Companies that have good social performance not only focus on the sustainability of their business but also think about sustainability as a whole. It encompasses various social aspects that are important to the community and the surrounding environment. Thus, the company has managed to attract investors who care about social and sustainable aspects. The company's social performance is measured based on 30 dimensions. Of the 30 dimensions, 18 are at the highest level, with an average score above 75. The highest achievement was found in the dimension of human resource development and workplace training, with an index of 90.77%. In addition, there are nine dimensions that achieve a moderate index with values between 50.1% to 75%. These dimensions show that companies have made significant efforts in improving and improving their social performance. On the other hand, there are still six dimensions that record a very low average value, so they need improvement. These dimensions include avoiding collusion, with an average score of 1.54; human rights, with an average score of 54.46; social community, with an average score of 49.23; social dialogue, with an average score of 25.77; discrimination and vulnerable groups, with

an average score of 21.15; and employment with an average score of 12.77. The very low achievement of the six aspects of the social performance dimension, which is very important

in the achievement of social performance as a whole which is the cause of social performance has not been proven to have a positive effect on the company's value.

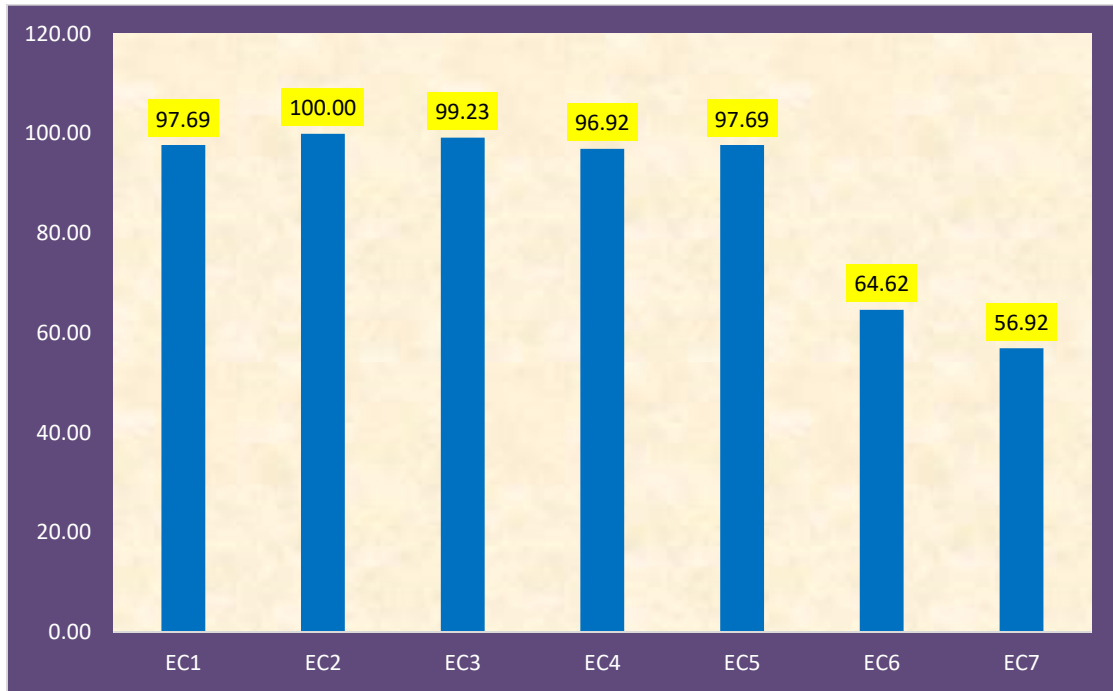


Fig. 2. Performance of 7 economic indicators
 X Axis = Economic Indicators, Y Axis = Indicator Economic Index (%)
 Source: Data processed

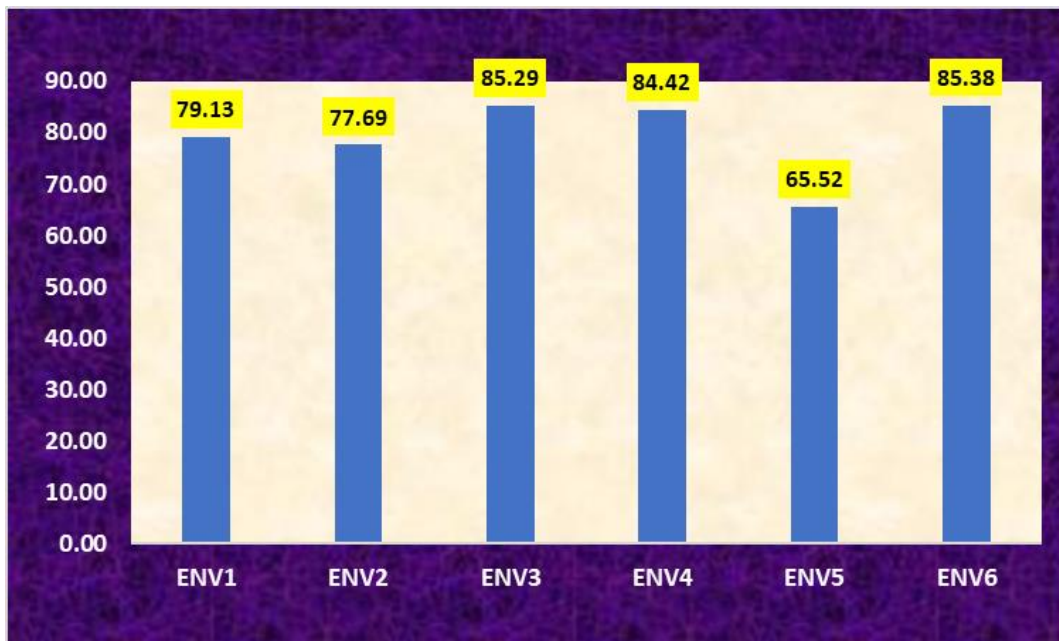


Fig. 3. Performance of 7 environmental dimension
 X Axis = Environmental dimension, Y Axis = Dimension Environmental Index (%)
 Source: Data processed

Companies with good GCG management are a major concern for investors because they demonstrate the company's commitment to transparent, accountable, and ethical business practices. Good GCG management not only increases investor confidence but also ensures that the company is free from conflicts of interest that can harm all stakeholders. The success in implementing GCG is reflected in the governance performance index value which reached the highest level, with an achievement of 72.735%. GCG consists of 13 dimensions, with 5 of them at a high level because they produce an average value of 75%. These dimensions include decision-making processes and structures, ethical behavior, transparency, accountability, and anti-corruption. Success in these dimensions shows that the company has implemented strong and trustworthy governance practices. In addition, there are six dimensions at the medium level with quite good performance achievements, namely having an average index between 50.1% and 75%. These dimensions indicate areas where the company has made adequate efforts, but there is still room for improvement. There are two dimensions that are still below 50%, so improvements are needed. These dimensions are fair business competition, with an index value of 32.31%, and involvement in responsible politics, with an index achievement of 28.92%. Companies need to pay special attention to these dimensions to ensure that all aspects of GCG are carried out properly.

The results of the quantitative analysis show that there is no significant influence of economic performance on the value of companies moderated by PROPER because the average company value between companies that are included in the PROPER group and those that are not included in the PROPER group results in insignificant calculations, namely as shown by the p-value value from t statistics of $0.226 > 0.05$ where the average value of non-PROPER companies is 1.4079 while the PROPER is 1.5606. On the other hand, economic performance produced the finding that there was a significant difference between non-PROPER companies and PROPER companies, where PROPER companies had higher economic performance compared to non-PROPER companies. This condition is shown by the average economic performance of non-PROPER companies of 83.2649 and PROPER companies of 89.2855 with a p-value of $0.035 < 0.05$. More details can be seen in Table 5.

The results of the quantitative analysis showed that there was no significant influence of environmental performance on the company's value moderated by PROPER because the average company value of companies that were included in the PROPER group and not included in the PROPER group resulted in insignificant calculations, namely as shown by the p-value value from t statistics of $0.226 > 0.05$ where the average value of non-PROPER companies is 1.4079 while the PROPER is 1.5606. Environmental performance itself resulted in the finding that there was a significant difference between non-PROPER companies and PROPER companies, where PROPER companies had higher environmental performance than non-PROPER companies. This can be seen from the average environmental performance of non-PROPER companies of 66.5509 and PROPER companies of 88.2320 with a p-value of $0.000 < 0.05$. More details can be seen in Table 6.

The results of the quantitative analysis show that there is no significant influence of social performance on the value of the company moderated by PROPER because the average company value between companies that are included in the PROPER group and not included in the PROPER group (non-PROPER) produces an insignificant calculation, which is as shown by the p-value of the statistical t of $0.226 > 0.05$ where the average value of the group company non-PROPER is 1.4079 while PROPER group companies are 1.5606. The processing results showed that for social performance, there was a significant difference between non-PROPER group companies and PROPER group companies, where PROPER group companies had higher social performance than non-PROPER group companies. This is shown by the average social performance value of non-PROPER companies 69.1556 and PROPER companies 75.5115 with a p-value of $0.045 < 0.05$. More details can be seen in Table 7.

PROPER strengthens corporate governance, especially in environmental, social, and governance related to environmental and social management practices. Then, based on the Financial Services Authority (OJK), public companies must carry out governance practices that the Financial Services Authority has regulated, namely POJK Number 20/POJK.04/2015 concerning the Implementation of Public Company Governance Guidelines and POJK Number 51/POJK.03/2017 concerning Sustainable Finance so that PROPER practices

that regulate corporate governance in environmental aspects will strengthen corporate governance practices based on other guidelines and regulations. This shows that good governance, which supports the optimal implementation of PROPER, can increase the value of the company even if the effect is indirect. This statement is in line with the findings of Hasibuan (2018), which found that environmental and CSR performance did not significantly impact market reactions.

The results of the quantitative analysis show that there is no significant influence of economic performance on the value of moderated companies by COVID-19 because the average value of companies after COVID-19 has decreased compared to before COVID-19 as shown by the average value of companies before

COVID-19 of 1.5339. In contrast, during COVID-19 it has decreased to 1.1816. Statistically, the decline in the company's value is proven to be significant between before and during COVID-19, as shown by the p-value of the statistical t of $0.000 < 0.05$. On the other hand, the economic performance of the companies included in the group resulted in the finding that there was no significant difference between economic performance before and after COVID-19, as shown by a p-value of $0.438 > 0.05$. Descriptive statistics show an increase in economic performance, although statistically insignificant, where the average economic performance before COVID-19 was 84.9022 and increased to 87.6623. The conditions that caused COVID-19 could not moderate the influence of economic performance on the company's value. More details can be seen in Table 8.

Table 5. Test of difference in company value and economic performance of PROPER and non-PROPER companies

	PROPER	Mean	T stat	p-value	Conclusion
TOBINSQ	Non-PROPER	1.4079	-1.223	0,226	No difference
	PROPER	1.5606			
Economics	Non-PROPER	83.2649	-2.137	0,035	There is a difference
	PROPER	89.2855			

Source: Data processed

Table 6. Test of difference in corporate value and environmental performance of PROPER and non-PROPER companies

Variable	PROPER	Mean	T stat	p-value	Conclusion
TOBINSQ	Non-PROPER	1.4079	-1.223	0,226	No difference
	PROPER	1.5606			
Milieu	Non-PROPER	66.5509	-7.846	0,000	There is a difference
	PROPER	88.2320			

Source: Data processed

Table 7. Test of difference in corporate value and corporate social performance of PROPER and non-PROPER

Variable	PROPER	Mean	T stat	p-value	Conclusion
Tobins'Q	Non-PROPER	1.4079	-1.223	0,226	No difference
	PROPER	1.5606			
Social	Non-PROPER	69.1556	-2.029	0,045	There is a difference
	PROPER	75.5115			

Source: Data processed

Table 8. Test of the Difference in Company Value and Economic Performance Before and After COVID-19

Variable	PROPER	Mean	T stat	p-value	Conclusion
Tobins'Q	Before Covid	1.5339	2.699	0,008	There is a difference
	During Covid	1.1816			
Economics	Before Covid	84.9022	-0,778	0,438	None difference
	During Covid	87.6623			

Source: Data processed

Table 9. Test of difference in company value and environmental performance before and after COVID-19

Variable	PROPER	Mean	T stat	p-value	Conclusion
Tobin's Q	Non-PROPER	1.5339	2.699	0,008	There is a difference
	PROPER	1.1816			
Milieu	Non-PROPER	83.2649	-1.843	0,068	None difference
	PROPER	89.2855			

Source: Data processed

The results of the quantitative analysis show that there is no significant influence of environmental performance on company value moderated by COVID-19 because the average company value between companies after COVID-19 has decreased compared to before COVID-19, as shown by the average value of companies before COVID-19 of 1.5339. In contrast, during COVID-19 it has decreased to 1.1816. Statistically, the decline in the company's value is proven to be significant between before and during COVID-19, as shown by the p-value of the statistical t of $0.000 < 0.05$. For the environmental performance of companies included in group I, it was found that there was no significant difference between environmental performance before and after COVID-19, as shown by a p-value of $0.068 > 0.05$. Although there is no statistically significant difference in environmental performance before and during COVID-19, there is a tendency to increase environmental performance even though it is not statistically significant where the average economic performance before COVID-19 was 72.7553 and increased to 81.1532 during COVID-19. This condition is the cause of COVID-19's inability to moderate the influence of environmental performance on the company's value. More details can be seen in Table 9.

The results of the quantitative analysis showed that there was no significant influence of social performance on the value of companies moderated by COVID-19 because the average value of companies after COVID-19 decreased compared to before COVID-19, as shown by the average value of companies before COVID-19 of 1.5339. In contrast, during COVID-19, it decreased to 1.1816. Statistically, the decline in the company's value is proven to be significant between before and during COVID-19, as shown by the p-value of the statistical t of $0.000 < 0.05$. For the social performance of companies included in the SRI-KEHATI group, there was no significant difference in social performance

before and after COVID-19, as shown by a p-value of $0.138 > 0.05$ which means that statistically, there was no significant difference in social performance before and during COVID-19. However, there was a tendency to increase social performance from the average social performance before COVID-19 after COVID-19, whereas, before COVID-19, the average value of social performance was 70.1976 and increased to 76.9036 during COVID-19. This condition is the cause of COVID-19's inability to moderate the influence of social performance on the company's value. More details can be seen in Table 10.

The results of the quantitative analysis show that there is no significant influence of governance performance on company value moderated by COVID-19 because the average company value between companies after COVID-19 has decreased compared to before COVID-19, as shown by the average value of companies before COVID-19 of 1.5339. In contrast, during COVID-19 it has decreased to 1.1816. Statistically, the decline in the company's value is proven to be significant between before and during COVID-19, as shown by the p-value of the statistical t of $0.000 < 0.05$. For the governance performance of companies included in the SRI-KEHATI group, there was no significant difference in governance performance before and after COVID-19, as shown by a p-value of $0.097 > 0.05$ which means that statistically, there was no significant difference in governance performance before and during COVID-19 even though there was a tendency to increase governance performance from the average governance performance manage before COVID-19 with after COVID-19 where before COVID-19 the average value of governance performance was 70.6128 and increased to 76.5159 during COVID-19. This condition is the cause of COVID-19's inability to moderate the influence of social performance on the company's value. More details can be seen in Table 11.

Table 10. Test of difference in corporate value and corporate social performance of PROPER and non-PROPER

Variable	PROPER	Mean	T stat	p-value	Conclusion
Tobin's Q	Before Covid	1.5339	2.699	0,008	There is a difference
	During Covid	1.1816			
Social	Before Covid	70.1076	-1,495	0,138	There is a difference
	During Covid	76.9036			

Source: Data processed

Table 11. Test of difference in corporate value and PROPER and non-PROPER corporate social performance

Variable	PROPER	Mean	T stat	p-value	Conclusion
Tobin's Q	Non-PROPER	1.5339	2.699	0,008	There is a difference
	PROPER	1.1816			
Social	Non-PROPER	70.1076	-1,495	0,138	There is a difference
	PROPER	76.9036			

Source: Data processed

The findings have several implications. For companies, the practice of organizational social responsibility based on ISO 26000 must be carried out holistically and integrated throughout the company's sphere of influence. CSR programs based on ISO 26000 guidelines should be in accordance with the core subjects, conducted to employees, consumers and society as well as throughout the company's sphere of influence,. Companies should improve the knowledge and expertise of human resources on sustainable business practices in terms of economic, environmental, social and governance aspects so as to develop a holistic and comprehensive strategy that is based on the ISO 26000 guidelines. Companies must pay attention to their risk rating by answering the needs of stakeholders, especially rating agencies based on their respective industries and sub-industries by carrying out integrated and holistic sustainable business practices in their respective companies, because the company's risk rating will affect investors to invest.

The findings of this study also provide implications for decision makers. Information regarding sustainable business practices on firm value can be a reference for the government in strengthening the company's sustainable business practices guidelines to be in line with government expectations and targets in climate change adaptation and mitigation, poverty reduction and improving community welfare in accordance with applicable regulations. Incentives here can be in the form of ease of obtaining environmental permits. In addition, the benefits of PROPER implementation must be

directly visible, namely the efficiency of environmental and social costs while strengthening corporate governance.

5. CONCLUSION

From the results of the research findings described above, here are some conclusions that can be drawn

1. Economic performance is proven to have a significant positive effect on firm value and indicators that have a significant influence on the formation of economic performance are an increase in production compared to the previous year, an increase in revenue/sales from the previous year, an increase in the company's net profit compared to the previous year, an increase in investment and portfolio (increase in share price) from the previous year, while indicators of environmentally friendly products and involvement of local parties related to financial business processes are still relatively not optimal. PROPER strengthened the positive influence of governance performance practices on company value. In contrast, PROPER was not proven to strengthen the positive influence on company value in terms of economic, environmental, and social performance.
2. Environmental performance is proven to have a significant positive effect on firm value. as many as five dimensions of environmental performance, namely pollution prevention, sustainable

resource use, climate change mitigation, climate change adaptation and materials are proven to make a significant contribution to the formation of environmental performance variables while one dimension, namely biodiversity and natural habitat restoration, makes a moderate contribution to the formation of environmental performance.

3. Social performance is not proven to have a significant positive effect on firm value and the dimensions with the weakest contribution that cause social performance not to affect firm value are the conspiracy dimension, human rights dimension, social dimension, social dialogue, discrimination and vulnerable groups, and employment.
4. Governance performance is proven to have a significant positive effect on firm value and seen from the contribution to the formation of governance performance, some dimensions make the largest contribution in the formation of governance performance is the process and structure of decision making, ethical behavior, transparency, accountability, and anti-corruption with the achievement of an average index above 80%.
5. PROPER strengthened the positive influence of governance performance practices on company value. In contrast, PROPER was not proven to strengthen the positive influence on company value in terms of economic, environmental, and social performance.
6. COVID-19 has not been proven to weaken the positive influence of sustainable practices on economic performance, environmental performance, social performance, and governance performance.

The recommendations for further research, including adding moderation variables other than COVID-19 and PROPER, such as company size, increasing the number of research respondents not only from 13 companies that were consistently included in the SRI-Kehati index from 2012-2021, namely ESG.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image

generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- Agbaje, Y. T. (2021). Environmental stewardship and strategy for business sustainability: Evidence from small and medium packaged water enterprises in Nigeria. *Management and Economics Review*, 6(1), 15–32. <https://doi.org/10.24818/mer/2021.06-02>
- Ahmad, N. (2021). The role of PROPER rating and environmental costs on the value of SOEs in Indonesia. *Jurnal Akuntansi*, 9(3), 10–19. <https://doi.org/10.26740/akunesa.v9n3.p10-19>
- Alareeni, B. A., & Hamdan, A. (2020). ESG impact on performance of US S&P 500-listed firms. *Corporate Governance*, 20(7), 1409–1428. <https://doi.org/10.1108/CG-06-2020-0258>
- Alareeni, B. A., & Hamdan, A. (2020). ESG impact on performance of US S&P 500-listed firms. *Corporate Governance: The International Journal of Business in Society*, 20(7), 1409–1428. <https://doi.org/10.1108/CG-06-2020-0258>
- Alhassan, I., & Islam, K. M. A. (2021). Sustainability reporting and financial performance of listed industrial goods sector in Nigeria. *International Journal of Accounting and Finance Review*, (December), 46–56. <https://doi.org/10.46281/ijaf.v9i1.1541>
- Alsayegh, M. F., Abdul Rahman, R., & Homayoun, S. (2023). Corporate sustainability performance and firm value through investment efficiency. *Sustainability*, 15(1), 1–13. <https://doi.org/10.3390/su15010305>
- Atayah, O. F., Najaf, K., Ali, M. H., & Marashdeh, H. (2024). Sustainability, market performance and FinTech firms. *Meditari Accountancy Research*, 32(2), 317–345. <https://doi.org/10.1108/MEDAR-08-2021-1405>

- Bagh, T., Zhou, B., Alawi, S. M., & Azam, R. I. (2024). ESG resilience: Exploring the non-linear effects of ESG performance on firms' sustainable growth. *Research in International Business and Finance*, 70, 102305. <https://doi.org/10.1016/j.ribaf.2024.102305>
- Bai, C., Quayson, M., & Sarkis, J. (2021). COVID-19 pandemic digitization lessons for sustainable development of micro- and small-enterprises. *Sustainable Production and Consumption*. [Online]. Available: <https://www.sciencedirect.com/science/article/pii/S2352550921001482>
- Balakrishnan, J., & Sambasivan, M. (2022). Impact of COVID-19 on tourism image, commitment and ownership: A longitudinal comparison. *International Journal of Tourism Cities*, 8(4), 1042–1061. <https://doi.org/10.1108/IJTC-11-2021-0225>
- Blackburn, W. R. (2012). *The Sustainability Handbook: The Complete Management Guide to Achieving Social, Economic and Environmental Responsibility*. Taylor & Francis. [Online]. Available: <https://books.google.co.id/books?id=miNjQr8DPjoc>
- Bouslah, K., Liñares-Zegarra, J., M'Zali, B., & Scholtens, B. (2018). CEO risk-taking incentives and socially irresponsible activities. *British Accounting Review*, 50(1), 76–92. <https://doi.org/10.1016/j.bar.2017.05.004>
- Brogi, M., & Lagasio, V. (2018). Environmental, social, and governance and company profitability: Are financial intermediaries different? *Corporate Social Responsibility and Environmental Management*, 26, 1380–1393. <https://doi.org/10.1002/csr.1704>
- Brundtland, G. H. (2017). Our common future ("The Brundtland Report"): World Commission on Environment and Development. In *Top 50 Sustainability Books* (pp. 52–55). <https://doi.org/10.4324/9781351279086-15>
- Bui, T. N., Nguyen, X. H., & Pham, K. T. (2023). The effect of capital structure on firm value: A study of companies listed on the Vietnamese stock market. *International Journal of Financial Studies*, 11(3). <https://doi.org/10.3390/ijfs11030100>
- Clarke, P., Sheffield, D., & Akehurst, S. (2020). Personality predictors of yips and choking susceptibility. *Frontiers in Psychology*, 10, 1–15. <https://doi.org/10.3389/fpsyg.2019.02784>
- D' Costa, M., & Habib, A. (2024). Local creative culture and firm value. *Finance Research Letters*, 59, 104701. <https://doi.org/10.1016/j.frl.2023.104701>
- El-Deeb, M. S., Ismail, T. H., & El Banna, A. A. (2023). Does audit quality moderate the impact of environmental, social and governance disclosure on firm value? Further evidence from Egypt. *Journal of Humanities and Applied Social Sciences*, 5(4), 293–322. <https://doi.org/10.1108/JHASS-11-2022-0155>
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, 38, 45–64. <https://doi.org/10.1016/j.gfj.2017.03.001>
- Fu, L., Parkash, M., & Singhal, R. (2017). Tobin's q ratio and firm performance. *International Research Journal of Applied Finance*, April 2016. <https://doi.org/10.0704/article-2>
- Gharaibeh, A. M. O., & Qader, A. A. A. A. (2017). Factors influencing firm value as measured by the Tobin's Q: Empirical evidence from the Saudi Stock Exchange (TADAWUL). *International Journal of Applied Business and Economic Research*, 15(6), 333–358.
- Global Reporting Initiative. (2016). *Consolidated set of GRI*.
- Hasanudin, H., Nurwulandari, A., Adnyana, I. M., & Loviana, N. (2020). The effect of ownership and financial performance on firm value of oil and gas mining companies in Indonesia. *International Journal of Energy Economics and Policy*, 10(5), 103–109. [Online]. Available: <https://www.econjournals.com/index.php/ije/article/view/9567>
- Hasibuan, N. F. A. (2018). The effect of PROPER and CSR on company value in mining companies listed on the Indonesia Stock Exchange in 2011-2015. *Majalah Ilmiah Informasi dan Teknologi Ilmiah*, 13(2), 298–305.
- Haugh, H., & Talwar, A. (2010). How do corporations embed sustainability across the organization? *Academy of Management Learning & Education*, 9(3), 384–396. <https://doi.org/10.5465/amle.9.3.zqr384>
- Hongming, X., Ahmed, B., Hussain, A., Rehman, A., Ullah, I., & Khan, F. U. (2020). Sustainability reporting and firm performance: The demonstration of Pakistani firms. *SAGE Open*, 10(3). <https://doi.org/10.1177/2158244020953180>

- ISO. (2010). *ISO 26000 on Social Responsibility*.
- Ivanka, I., Dianta, A. S. K., IP, M. E. S. (2022). Implementation of good corporate governance (GCG) green economy for MSME sustainability (Case study of Zero Waste Naked Inc stores) *International International Journal of Current Economics & Business Ventures*.
<https://scholarsnetwork.org/journal/index.php/ijeb/article/view/33>
- Jayakumar, S., K.R., S., & Prasad, K. (2022). Does GRI compliance moderate the impact of sustainability disclosure on firm value? *Social Business Review*, 18.
<https://doi.org/10.1108/SBR-06-2022-0172>
- Jin, X., & Lei, X. (2023). A study on the mechanism of ESG's impact on corporate value under the concept of sustainable development. *Sustainability*, 15(11).
<https://doi.org/10.3390/su15118442>
- Keskin, A. I., Dincer, B., & Dincer, C. (2020). Exploring the impact of sustainability on corporate financial performance using discriminant analysis. *Sustainability*, 12(6).
<https://doi.org/10.3390/su12062346>
- Kim, S. T., Lee, H. H., & Lim, S. (2021). The effects of green SCM implementation on business performance in SMEs: A longitudinal study in the electronics industry. *Sustainability*, 13(21), 11874.
<https://doi.org/10.3390/su132111874>
- Kong, Y., Agyemang, A., Alessa, N., & Kongkuah, M. (2023). The moderating role of technological innovation on environment, social, and governance (ESG) performance and firm value: Evidence from developing and least-developed countries. *Sustainability*, 15(19).
<https://doi.org/10.3390/su151914240>
- Kuhlman, T., & John, F. (2010). What is sustainability? *Sustainability*, 2(11), 3436–3448. <https://doi.org/10.3390/su2113436>
- La Torre, M., Leo, S., & Panetta, I. C. (2021). Banks and environmental, social and governance drivers: Follow the market or the authorities? *Corporate Social Responsibility and Environmental Management*, 28, 1–14.
<https://doi.org/10.1002/csr.2132>
- Leins, S. (2020). "Responsible investment": ESG and the post-crisis ethical order. *Economy and Society*, 49(1), 1–21.
<https://doi.org/10.1080/03085147.2020.1702414>
- Lin, J., & Qamruzzaman, M. (2023). The impact of environmental disclosure and the quality of financial disclosure and IT adoption on firm performance: Does corporate governance ensure sustainability? *Frontiers in Environmental Science*, 11(January), 1–16.
<https://doi.org/10.3389/fenvs.2023.1002357>
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (1972). *The Limits to Growth*. Universe Books. [Online]. Available:<https://search.library.wisc.edu/catalog/999473210902121>
- Oncioiu, I., Petrescu, A. G., Bilcan, F. R., Petrescu, M., Popescu, D. M., & Anghel, E. (2020). Corporate sustainability reporting and financial performance. *Sustainability*, 12(10), 1–13.
<https://doi.org/10.3390/su12104297>
- Poursoleyman, E., Mansourfar, G., Homayoun, S., & Rezaee, Z. (2022). Business sustainability performance and corporate financial performance: The mediating role of optimal investment. *Management and Finance*, 48(2), 348–369.
<https://doi.org/10.1108/MF-01-2021-0040>
- Rusmana, O., & Purnaman, S. M. N. (2022). The effect of carbon emission disclosure and leverage on company value. *COMSERVA: Indonesian Journal of Community Service and Development*, 2(6), 510–518.
<https://doi.org/10.59141/comserva.v2i6.364>
- Salihi, A. A., Ibrahim, H., & Baharudin, D. M. (2024). Environmental governance as a driver of green innovation capacity and firm value creation. *Innovations in Green Development*, 3(2), 100110.
<https://doi.org/10.1016/j.igd.2023.100110>
- Sandberg, H., Alnoor, A., & Tiberius, V. (2023). Environmental, social, and governance ratings and financial performance: Evidence from the European food industry. *Business Strategy and the Environment*, 32(4), 2471–2489.
<https://doi.org/10.1002/bse.3259>
- Seth, R., & Mahenthiran, S. (2022). Impact of dividend payouts and corporate social responsibility on firm value – Evidence from India. *Journal of Business Research*, 146(April), 571–581.
<https://doi.org/10.1016/j.jbusres.2022.03.053>
- Shaikh, I. (2021). Environmental, social, and governance (ESG) practice and firm performance: An international evidence. *Journal of Business Economics and Management*, 23(1), 218–237.
<https://doi.org/10.3846/jbem.2022.16202>

- Taliento, M., Favino, C., & Netti, A. (2019). Impact of environmental, social, and governance information on economic performance: Evidence of a corporate "sustainability advantage" from Europe. *Sustainability*, 11(6).
<https://doi.org/10.3390/su11061738>
- Titisari, K. H., M. gt, Ratnawati, K., & Indrawati, N. (2019). The roles of cost of capital, corporate governance, and corporate social responsibility in improving firm value: Evidence from Indonesia. *Investment Management and Financial Innovations*, 16(4), 28–36.
[https://doi.org/10.21511/imfi.16\(4\).2019.03](https://doi.org/10.21511/imfi.16(4).2019.03)
- Tomo, A., & Landi, G. (2016). Behavioral issues for sustainable investment decision-making: A literature review. *International Journal of Business and Management*, 12(1), 1.
<https://doi.org/10.5539/ijbm.v12n1p1>
- Zheng, Y., Wang, B., Sun, X., & Li, X. (2022). ESG performance and corporate value: Analysis from the stakeholders' perspective. *Frontiers in Environmental Science*, 10(December), 1–16.
<https://doi.org/10.3389/fenvs.2022.1084632>
- Zhou, G., Liu, L., & Luo, S. (2022). Sustainable development, ESG performance and company market value: Mediating effect of financial performance. *Business Strategy and the Environment*, 31, 1–16.
<https://doi.org/10.1002/bse.3089>
- Zhou, Y., Clarke, A., & Cairns, S. (2022). Toward achieving local sustainable development: Market-based instruments (MBIs) for localizing UN Sustainable Development Goals. *Urban Science*, 6(1), 1–22.
<https://doi.org/10.3390/urbansci6010024>

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of the publisher and/or the editor(s). This publisher and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

© Copyright (2024): Author(s). The licensee is the journal publisher. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:

<https://www.sdiarticle5.com/review-history/126423>