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The Effect of Environmental, Social, and Governance (ESG), COVID-19 on Firm Performance with Firm Life Cycle as a Moderating Variable

Muthiya Dwi Febrianty[1], Pratana Puspa Midiastuty[2], Eddy Suranta[3], Danang Adi Putra[4]
[1234]Bengkulu University, Indonesia
Correspondent: muthiya12@gmail.com[1]

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ABSTRACT: This research endeavors to present tangible evidence on the impact of environmental, social, and governance (ESG) factors as well as the COVID-19 pandemic on firm performance, while also considering the moderating influence of the firm life cycle. The conceptual framework applied is the Legitimacy theory, which is utilized to examine the connection between ESG performance, COVID-19, and firm performance. The evaluation of firm performance involves Tobin's Q for assessing firm value and Return on Assets (ROA) for financial performance. Six hypotheses are formulated and subjected to testing. The study utilizes purposive sampling, encompassing all companies listed on the Indonesia Stock Exchange (BEI) between 2017 and 2022, resulting in 235 data observations. The analysis of hypotheses is conducted through the SPSS Statistics 26 application. The findings demonstrate a noteworthy correlation between ESG performance and COVID-19 with financial performance, and the firm life cycle moderates this relationship. However, ESG performance and COVID-19 do not significantly affect market performance or firm value. Additionally, the firm life cycle does not moderate the relationship between ESG and firm value. The implications of the study suggest that ESG factors play a legitimizing role, contributing to an overall improvement in firm performance.

Keywords: COVID-19, Environmental, Social, and Governance (ESG), Firm Life Cycle, Firm Performance

INTRODUCTION

Investors base their investment decisions on the performance of a company, which is a reflection of its activities and a key indicator of its success. The evaluation of performance involves two methods: the first is an immediate quantification using Tobin's Q to assess firm value, and the second is the assessment of financial performance by examining return on assets (ROA).

When making investment decisions, investors aim to mitigate risks while concurrently considering a company's performance to achieve desired returns. Effectively utilizing resources and generating revenue are crucial benchmarks for assessing a company's financial performance. Subsequently,

investors consistently make investment choices by relying on the same fundamental data or Firm Value that they have determined, guided by the company's underlying fundamentals. To obtain high returns, investors will also take the size of the company into account because larger companies have greater freedom from management to use their assets to raise the firm value and pay out a higher dividend ratio than smaller ones (Richard, 1989; Zainudin et al., 2018).

When making investment decisions, it is crucial for investors to anticipate how a company operates at different stages of its development in order to assess its overall health. This includes evaluating factors such as the company's ESG (Environmental, Social, and Governance) rating and performance at each phase of its entire life cycle. By understanding the patterns of a company's growth, investors can better identify and assess the risks associated with the different stages of its development (Alregab, 2022; De Masi et al., 2021; Dempere & Abdalla, 2023).

Furthermore, Mulianty and Safrianyah (2019) demonstrate how the corporate social responsibility performance is influenced by the life cycle of the firm. This also means investors can further assess a company's performance through its life cycle. Companies that are in the early stages are generally more dependent on external funding, while companies that are at a high stage or mature phase tend to be able to pay dividends because they have achieved high profits (Nur & Koe, 2016). Moreover, as a company reaches the mature phase, it becomes imperative to divulge a broader range of information, encompassing responsibilities related to the environment, social aspects, and corporate governance (Tanin et al., 2019).

The financial markets experienced adverse effects on their performance due to the COVID-19 pandemic in both 2020 and 2021. This impact was characterized by a sharp decline in share values in developed and developing country markets (Basuony et al., 2022). Therefore, investors must also assess the company's efforts to reduce financial risks during the pandemic to make better investment decisions. According to the findings by (Mousa et al., 2022), organizations that embraced sustainable finance or exhibited stronger environmental, social, and governance practices experienced increased resilience and reduced risk in times of crisis (Aung et al., 2021; Borda et al., 2017; Chandrapala & Knápková, 2013).

In the context of investment decision-making, (Dyck et al., 2019) argue that investors evaluate company performance by considering various metrics, including environmental and social performance. The investors do so to minimize the risks that will arise later. To reduce this risk, investors will likely choose companies that provide reports that are useful for investors. This information can be obtained by revealing Environmental, Social, and Governance (ESG) practices, as emphasized by Hoepner et al. (2017), who pointed out that investments based on ESG criteria help mitigate potential risks. Furthermore, consistent with the discoveries of Albuquerque et al. (2020), businesses with lower ESG ratings undergo more pronounced decreases in stock returns, while those with superior ratings in environmental and social dimensions demonstrate reduced volatility.

ESG, functioning as a guiding framework in investment strategies, consists of three fundamental dimensions: environmental, social, and corporate governance. Investors can gain insights into a company's approach to social and environmental considerations, such as workforce health, diversity, and human rights, through ESG disclosures. Environmental factors involve how a company uses natural resources, its carbon emissions, energy efficiency, pollution levels, and efforts towards sustainability initiatives. Then, through ESG disclosure, investors can find further information regarding corporate governance, which examines company management, shareholder rights, and CSR strategies (Boffo & Patalano, 2020).

Several ESG research conducted by companies use legitimacy theory. Companies legitimize themselves as a strategy to position themselves amidst the rules and norms that apply in society. According to (Scholtens, 2008), a company's ability to sustain itself mostly depends on its relations with the community and immediate surroundings. Consequently, companies are becoming more conscious of their social responsibilities.

Referring to several previous research results that have been conducted have yet to provide consistent evidence. This research is based on research conducted by (Mounir & Ali, 2022), which presents the relationship between ESG issues and the immunity of a company during periods of crisis and pandemics through a future research approach. Companies with high ESG ratings are shown to exhibit superior stock performance and reduced volatility, as indicated by Hoepner et al. (2017). The influence of ESG on the performance of a company may differ based on the context and the particular industry. It is noteworthy that the performance in ESG (Environmental, Social, and Governance) aspects has a constructive impact on driving transformation and creating value for shareholders. Given the variations in results observed in earlier studies, this research reassesses the connection between ESG and corporate performance, distinguishing it from prior investigations.

Darley et al. (2010) emphasize that proficient environmental responsibility aligns with a company's strategy to cultivate a positive and environmentally friendly image from the consumer's perspective. This implies that ESG practices contribute to shaping a favorable company reputation. Additionally, Rahman and Bahari (2023) emphasize the favorable influence of ESG (Environmental, Social, and Governance) factors on the performance of companies. This viewpoint is reinforced by Gao et al. (2023), who identify a robust correlation between a company's ESG performance and its overall performance, particularly when the company provides high-quality information.

Sandberg et al. (2023) add that companies actively addressing ESG risks can gain competitive advantages and attain superior financial results. Chouaibi et al. (2022) assert that there is a favorable connection between the implementation of Environmental, Social, and Governance (ESG) practices and a company's financial performance. Similarly, Adhi and Cahyonowati (2023) argue that the disclosure of ESG-related information can positively impact how a company is perceived, ultimately leading to an improvement in its overall value. This is in line with Aydoğmuş et al.'s (2022) research, which suggests that companies that embrace robust ESG practices tend to achieve higher assessment scores. Furthermore, Yoon et al. (2018) discover a positive correlation between elevated firm value and superior ESG scores, particularly in emerging markets.

Engelhardt et al. (2021) argue that businesses possessing elevated ESG ratings demonstrate enhanced resilience to the economic impacts of the COVID-19 pandemic, experiencing reduced volatility throughout the crisis. Pisani & Russo (2021) observe that funds with superior ESG ratings demonstrate more resilience throughout the epidemic. Hoang et al. (2021) further suggest that a higher ESG rating is linked to lower stock volatility.

However, Duque-Grisales and Aguilera-Caracuel (2021) present contrasting findings, suggesting a negative correlation between ESG ratings and financial performance. According to Xaviera and Rahman (2023), ESG disclosure significantly affects firm market performance (Tobin's Q) but has an adverse relationship. Yu et al. (2018) do not find sufficient evidence of a substantial impact of ESG disclosure on business performance measured by market performance (Tobin's Q). Hong and Kacperczyk (2009) argue that market prices reflecting firm value inadequately represent higher

ESG performance, a sentiment supported by Fatemi et al. (2018), who explain the adverse effect of ESG disclosure on firm performance.

With the inconsistent results of other research, this study aims to reevaluate the relationship between ESG performance and the COVID-19 epidemic and corporate performance. This research is unique in that it examines the relationship between company success and ESG performance while accounting for the firm life cycle moderating variable. The research uses Return on Assets (ROA) as a financial performance indicator and Tobin's Q as a measure of company value for companies listed on the Indonesia Stock Exchange (BEI) that are included in an ESG index.

Dickinson (2011) divides enterprises into five stages: introduction, development, maturity, shake-out, and decline—all within the framework of the corporate life cycle. According to Khuong and Anh (2023), the integration of Environmental, Social, and Governance (ESG) practices is impacted by the need for distinct strategies and goals at each step with the goal of increasing profitability. The claims made by Jan et al. (2021), according to which the effect of a company's ESG performance on its value may alter depending on the stage of its life cycle, provide credence to this point of view. With resources and experience at their disposal, mature businesses may concentrate on enhancing their reputation and investments. Conversely, companies going through a shake-out or decline period could place more of an emphasis on making ends meet and saving money than on long-term sustainability programs including Environmental, Social, and Governance (ESG) reporting and activities. This study's main goal is to investigate how a company's life cycle stage influences the relationship between Environmental, Social, and Governance (ESG) variables and overall performance. This endeavor is driven by investors' growing desire to evaluate strong corporate governance, social responsibility, and environmental standards in order to fully weigh the risks and possible rewards. The growing trend of investors including environmental, social, and governance (ESG) factors into their investment decisions highlights how important it is for businesses to give effective ESG policies a priority.

The study's findings will provide an explanation for the ESG practices carried out by companies as an effort to legitimize themselves to capital market players (legitimacy theory), as well as to help companies understand the consequences of implementing ESG. This study introduces a novel perspective to the academic literature by examining the correlation between ESG (Environmental, Social, and Governance) performance and firm performance within the context of the firm life cycle. The aim is for this research to serve as a benchmark for future scientific advancements. This research also strengthens awareness regarding the importance of ESG practices. Through the insights gained from this research, companies can identify causal relationships between sustainability practices and business performance. In addition, this research might encourage companies to adopt ESG practices and help companies that have implemented ESG to improve their ESG practices to improve firm performance.

Legitimacy Theory

Organizations are integral components of the societal social structure, endeavoring to foster a congruence between the prevailing social norms and values within the broader community (Ahmed Riahi, 2016). Legitimacy theory states that companies must be able to adapt to the value system that society has implemented (Baxter, 2014).

Legitimacy theory posits that companies conform to environmental regulations and concerns to uphold their perceived legitimacy, particularly in the eyes of stakeholders such as investors, as

outlined by Jadiyappa & Krishnankutty (2022). This concept emphasizes the importance for businesses to uphold a favorable image by following societal expectations, particularly in the areas of Environmental, Social, and Governance (ESG) practices. Conforming to ESG standards allows companies to avoid controversial circumstances, gain backing from stakeholders, and improve their overall operational performance. This aligns with the assertion by Safriani & Utomo (2020) that companies garner community recognition when there is alignment between their values and societal norms, ultimately influencing sustainability and firm performance. Additionally, Drempetic et al. (2020) note that ESG safeguards companies by cultivating positive perceptions and fostering legitimacy among stakeholders. Hence, Schaltegger and Hörisch (2017) assert that according to legitimacy theory, which encompasses a sociological viewpoint, organizations, such as companies, seek to uphold a favorable public image and legitimacy by aligning with stakeholder expectations and complying with social and environmental standards.

The Environmental, Social, and Governance (ESG) framework is crafted with the intention of promoting sustainable and ethical business conduct, incorporating considerations related to the environment, social responsibility, and corporate governance. As posited by Qodary and Tambun (2021), the application of ESG in the realm of investment practices revolves around three fundamental dimensions: environmental, social, and corporate governance. This framework enables companies to recognize and manage risks related to these factors, strengthen ties with stakeholders, and improve the company's positive perception. The disclosure of responsibilities related to environmental, social, and corporate governance is anticipated to build a positive reputation for the company.

Tabel 1. ESG Score Criteria

Index Score	Category	Description	Level
0-10	Negligible	Considered to have negligible ESG risk	5
10-20	Low	Considered to have low ESG risk	4
20-30	Medium	Considered to have moderate ESG risk	3
30-40	High	Considered to have high ESG risk	2
>40	Severe	Considered to have severe ESG risks	1

Source: www.idx.co.id

Amid the COVID-19 pandemic, companies faced heightened scrutiny regarding their financial stability, with a focus on assessing their ability to withstand challenges posed by the pandemic. Basuony et al. (2022) demonstrated that the pandemic had a detrimental effect on the value of firms, evident in the decline of their stock prices. However, companies that had implemented sustainable practices garnered attention during the crisis, as indicated by Rubbaniy et al. (2021), who suggested that global investors showed heightened interest in the ESG aspects of companies amidst the pandemic. This is consistent with the research conducted by Albuquerque et al. (2020), which underscores that firms with strong ESG (Environmental, Social, and Governance) practices typically have more efficient risk management systems. This advantage assists them in successfully navigating obstacles amid the ongoing pandemic.

The theory of the firm life cycle, introduced by Adizes (1990), likens company development to biological growth, traversing a journey from prosperity to decline. During the initial phase, organizations typically depend on equity financing to sustain their operations (Xu et al., 2023). The growth stage witnesses swift progress, marked by the company's expansion in scale and the emergence of numerous new investment opportunities (Miller & Friesen, 1980). Following this, the mature stage is characterized by stability, reaching peak profitability, and experiencing positive net operating cash flow. This stage concludes when the pace of sales growth slows down, the

market contracts, and profits decrease, prompting the company to explore new avenues for profit growth. Failure to identify new sources of profit growth leads companies into the decline stage, marked by a swift loss of market share and financial decline. Hence, the performance of a company is indicative at every phase of its life cycle, offering valuable observations into its current state and health. Dickinson (2011) proposed a measure for life cycle stages, utilizing cash flow patterns resulting from net operating activities, investments, and finances. The business life cycle is divided into stages such as introduction, growth, maturity, shake-out, and decline, as depicted in the table provided below.

Tabel 2. Firm Life Cycle Classification Based on Cash Flow Pattern

Cash flow	1	2	3	4	5	6	7	8
	Intro	Growth	Mature	Shake-out	Shake-out	Shake-out	Decline	Decline
Operational Activities	-	+	+	-	+	+	-	-
Investment Activities	+	+	-	-	+	-	+	-
Funding Activities	-	-	-	-	+	+	+	+

Source: Dickinson (2011)

Based on Table 2 above, companies classified in the introduction life cycle have a cash flow pattern of negative operating activities, positive investment activities, and negative funding. In the growth stage, the company has a positive cash flow pattern in operating and investment activities and negative cash flow in financing activities. Furthermore, companies in the mature stage have a positive cash flow pattern in operating activities and negative investment and funding activities. Companies classified in the shake-out life cycle have cash flow patterns from operating activities that can be positive or negative, investment can be positive or negative, and funding can be positive or negative. In the decline stage, the cash flow pattern in operating activities is negative, investment activities can be positive and negative, and operating activities are positive.

The Influence of Environmental, Social, and Governance (ESG) Factors on Firm Performance

Disclosing information about Environmental, Social, and Governance (ESG) practices has the potential to enhance a company's favorable standing among stakeholders, such as customers, business partners, and society at large. According to (Vinet & Zhedanov, 2011), adhering to ESG practices can contribute to the development of a positive social image, the restoration of a company's reputation, and the cultivation of positive external perceptions. Good ESG disclosure ensures that a company has complied with rules and regulations relating to the environment, society, and governance. This aligns with the statement that companies can decrease information asymmetry, boost transparency, draw in investment, and boost company value by establishing outstanding ESG responsibility performance (Bissoondoyal-Bheenick et al., 2023). ESG disclosure, according to (Adhi & Cahyonowati, 2023), can provide a positive perspective of the company and ultimately increase the company's value. Additionally, (Yoon et al., 2018) found a correlation between higher company value and higher ESG scores in emerging markets. In terms of company performance, (Sandberg et al., 2023) also mentioned that companies can improve their

financial performance and acquire a competitive edge by actively pursuing initiatives and overcoming ESG concerns. (Chouaibi et al., 2022) also found a positive correlation between financial performance and ESG practices. Therefore, this research hypothesis is formulated as follows:

H1: ESG positively influences ROA

H2: ESG positively influences Tobin"s Q

The Influence of the COVID-19 Pandemic on Firm Performance

The COVID-19 pandemic may cause an increase in stock price volatility and negatively impact the performance and stability of financial markets. This can result in notable fluctuations in stock prices, ultimately affecting the overall value of companies (Mounir & Ali, 2022). (Basuony et al., 2022) also stated that this situation caused a sharp decline in share values in developed and developing country markets. The adverse effects can also stem from the company's constrained capacity to meet customer demands, resulting in a reduction in earned profits and a deterioration in the company's financial performance. (Tampakoudis et al., 2021) found a significant negative value impact on ESG performance for shareholders of acquiring companies, especially during the COVID-19 pandemic. This means that ESG activities are likely to cost more than the benefits gained during the crisis, negatively impacting shareholder wealth. This is reinforced by (Zhang, 2022), which shows that although ESG performance plays a positive role in corporate value creation regularly, its positive impact has weakened during the COVID-19 pandemic due to the increasing importance of cash flow, making ESG activities expensive. Additionally, the research hypothesis is articulated in the following manner:

H3: COVID-19 negatively influences ROA

H4: COVID-19 negatively influences Tobin's Q

The Moderating Influence of the Firm Life Cycle on the Correlation between Environmental, Social, and Governance (ESG) Factors and Firm Performance

The life cycle of a company is indicative of its financial situation during various stages, mirroring the status of its cash flow at each point in time. As organizations grow in size and age, they follow predictable patterns represented through a series of developmental phases (Khuong & Anh, 2023). Through this cash flow condition, investors can determine whether a company's operating, investment, and funding activities are running well or vice versa. Each stage of company development also has different strategies, structures, and ways of making business decisions (Miller & Friesen, 1980). In the introduction stage, companies prioritize survival, innovation, and consistent cash flow over ESG initiatives and reporting. Similarly, during the shake-out/decline stage, companies place a strong emphasis on survival and cost-cutting measures. This is a critical phase where the company confronts challenges such as diminished market share and declining profitability (Jan et al., 2021). According to (Jan et al., 2021), mature companies characterized by robust financial ratios and a steady cash flow tend to be more attuned to crucial aspects like reputation and relationships with stakeholders. The higher a company's position in the life cycle stage means that the company has more responsibility to disclose valuable information to stakeholders. The connection between variations in the adoption of ESG (Environmental, Social, and Governance) practices at different stages of a company's life cycle plays a crucial role in shaping the overall firm performance. This is significant as investors evaluate company

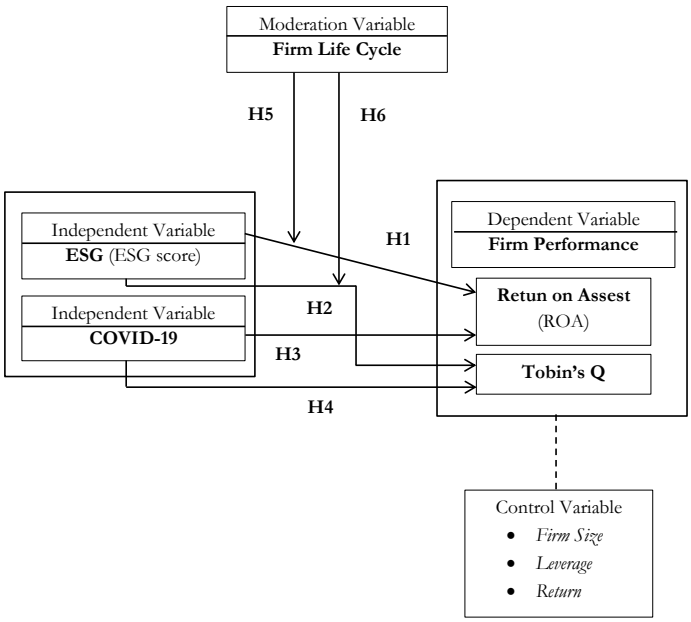
performance by considering its position within the life cycle. (Mulianty & Safriansyah, 2019b) conducted research highlighting the influence of the firm life cycle on the performance of corporate social responsibility. Therefore, this research formulates the following hypothesis:

H5: Firm life cycle moderates the relationship between ESG and ROA

H6: Firm life cycle moderates the relationship between ESG and Tobin's Q

Research Framework

Table 3. Framework of the Research



METHOD

Model and Research Design

This research employs a quantitative methodology utilizing numerical data and analyzes the information through statistical formulations. The use of a quantitative approach allows for the measurement of relationships between variables, facilitating the creation of strong empirical evidence. The research investigates independent variables such as Environmental, Social, and Governance (ESG) factors and the influence of the COVID-19 pandemic. The dependent variables under examination are firm value and financial performance, and control variables include company size, leverage, stock returns, and the firm life cycle, acting as a moderating variable.

Population and Sample Selection Method

The study population for this research includes all firms that are listed between 2017 and 2022 on the Indonesia Stock Exchange (BEI). As a population, 52 companies report on environmental, social, and governance issues. Purposive sampling is the sampling technique employed, and the criteria comprise publicly traded companies on the Indonesia Stock Exchange that have disclosed

their full financial reports, implemented Environmental, Social, and Governance (ESG) practices, and sustained their ESG scores over the specified observation period. Through the purposive sample method, 47 companies reported ESG in line with 235 observations.

Data Collection Method

The secondary sources used to gather the data for this study include the ESGI dataset, which includes companies listed on the Indonesia Stock Exchange (BEI) that have disclosed their implementation of Environmental, Social, and Governance (ESG) policies between 2017 and 2022. The official websites of the individual corporations or www.idx.co.id were the sources of the annual reports. When businesses disclosed financial data in currencies other than Indonesian Rupiah, the data was translated to the local currency at the end of the observation period using the conversion rates listed on Bank Indonesia's official website.

Definition Operational and Variable Measurement

Table 4. Explain the operationalization and measurement process of research variables

Variables		Measurement	Sources
Dependent Variable	**Tobin's Q**	Tobin's Q = (BV of $Assets_{it}$ – BV of $Equity_{it}$ – MV of $Equity_{it}$) / Tai_t	(Aqabna et al., 2023)
	ROA	ROA = Ni_{it} / Ta_{it}	(Marietza et al., 2020)
Independent Variable	**ESG Score**	ESG score index	ESGI Dataset
	COVID-19	Dummy, Variable (0) for the period before the COVID-19 pandemic and (1) for the period during the COVID-19 pandemic.	(Aqabna et al., 2023)
Control Variable	**Firm Size**	SIZE = Ln (Total $Assets_{it}$)	(Suranta et al., 2014)
	Leverage	LEV = Total $Liabilities_{it}$ / Total $Assets_{it}$	(Ruchiatna, Midiastuty & Suranta, 2020)
	Return	R_{it} = (P_{it} – P_{it-1}) / P_{it-1}	(Lestari, 2008)
Moderating Variable	**Firm Life Cycle**	Value (1) for the introduction category, value (2) for growth, value (3) for mature, and value (0) for the shake-out/decline category.	(Dickinson, 2011)

RESULT AND DISCUSSION

Referring to the research criteria established earlier, the number of companies with ESG scores during the observation period amounted to 47 companies with 235 observation data. The following table presents the parameters of the dependent variable, independent variable, control variable, and moderating variable in this research.

Table 5. Descriptive Statistics of Dependent, independent, Control, and Moderating Variables

	Minimum	***Maximum***	***Mean***	***Standar Deviation***
ROA	-0.090	0.470	0.085	0.085
TOBINSQ	0.110	14.410	1.871	1.774
ESG SCORE	15.09	63.25	33.335	10.148
COVID-19	0	1	0.40	0.491
RETURN	-0.85	2.80	0.099	0.496
SIZE	28.84	33.66	31.257	0.996
LEV	0.03	2.46	0.449	0.244
FLC	0	3	2.49	0.907

Source: Secondary data that has been processed in 2023

Table 5 illustrates the range of ROA values spanning from -0.090 to 0.470. Both the average and standard deviation are recorded at 0.085, indicating a high concentration of ROA data around the mean. The ROA values across the research observations show very little variation. Furthermore, Tobin's Q exhibits a minimum value of 0.110 and a high value of 14.410, with an average value of 1.871 and a standard deviation of 1.774. Tobin's Q statistics appear to have less variance, as indicated by the smaller standard deviation when compared to the average. With an average score of 33.335 and a standard deviation of 10.148, ESG scores for independent variables show variability ranging from 15.09 to 63.25. Because of the limited variance seen here, the observed data for ESG scores are stable. The next independent variable is COVID-19, which indicates a well-distributed set of data with a standard deviation of 0.496, an average of 0.099, and a range of values from 0 to 1. In addition, the firm's life cycle, which serves as a moderating factor, has a standard deviation of 0.907 and an average of 2.49 throughout a range of 0 to 3. This shows that the dataset, on average, consists primarily of businesses that are in the growth and mature stages. It also validates the validity of the observed facts concerning the firm life cycle.

Hypothesis Test

Table 6. The results of multiple linear regression of return on assets (ROA)

	Panel A	**Panel B**	**Panel C**	**Panel D**
Variabel	**Koef t Sig**	**Koef t Sig**	**Koef t Sig**	**Koef t Sig**
Konstanta	0.475 4.983 0.000	.479 5.072 0.000	0.463 4.973 0.000	0.473 5.101 0.000
ESG SCORE	-0.001 -2.315 0.022	-0.001 -2.463 0.015	-0.001 -2.453 0.015	-0.002 -3.281 0.001
COVID-19		-0.020 -2.252 0.025	-0.020 -2.262 0.025	-0.019 -2.229 0.027
FLC			0.010 2.241 0.026	
FLC × ESG				0.000 2.330 0.021
RETURN	0.014 1.588 0.114	0.015 1.753 0.081	0.013 1.524 0.129	0.014 1.609 0.109
SIZE	-0.028 -4.159 .000	-0.027 -4.144 0.000	-0.027 -4.194 0.000	-0.027 -4.187 0.000
LEV	-0.047 -2.108 0.036	-0.047 -2.154 0.032	-0.040 -1.848 0.066	-0.041 -1.857 0.065
R Square	0.135	0.154	0.172	0.173
Adjusted R Square	0.120	0.135	0.150	0.151
F	8.915	8.273	7.836	7.913
Sig.	0.000	0.000	0.000	0.000

Source: Secondary data that has been processed with IBM SPSS Statistics 26

When the information in Table 6 is examined, the F test results show a significance value of 0.000, which indicates that the model used to test the hypothesis is both valid and satisfying because it is less than the 0.05 cutoff. Turning our attention to Panel A on Table 6's Determination Coefficient Test results, we can see that the Adjusted R Square value is 0.120, or 12%. Panel B intends to test the influence of ESG performance on financial performance and result in an Adjusted R Square of 0.135, which means that the ESG Score variable and control variables can explain the influence by 13.5%. Then, Panel C also intends to test the impact of the COVID-19 pandemic on Return on Assets (ROA), which results in an Adjusted R Square of 0.150, which means that there is an influence of 15% by ESG Score, COVID-19 firm life cycle, and control variables. For the last, Panel D shows an Adjusted R Square value of 0.151 or the equivalent of 15.1%. This suggests that variables like ESG performance, COVID-19, firm life cycle, returns, business size, and leverage

can account for around 15.1% of the observed variability in the return on assets (ROA) variable. It should be highlighted that the parameters included in this model are still unable to account for an additional 84.9% of the variability. The presence of extraneous variables that are not accounted for in the study model is probably the source of this lack of explanation.

Table 7. The results of multiple linear regression of Tobin's Q

	Panel A	**Panel B**	**Panel C**	**Panel D**
Variable	**Koef t Sig**	**Koef t Sig**	**Koef t Sig**	**Koef t Sig**
Konstanta	11.183 6.015 0.000	11.085 5.994 0.000	11.222 5.977 0.000	11.293 5.874 0.000
ESG SCORE	-0.032 -2.591 0.010	-0.032 -2.556 0.011	-0.032 -2.559 0.011	-0.040 -1.747 0.082
COVID-19		0.057 0.320 0.749	0.056 0.312 0.755	0.046 0.254 0.800
FLC			-0.007 -0.072 0.942	0.004 0.042 0.966
FLC × ESG				0.007 0.435 0.664
RETURN	0.373 2.170 0.031	0.371 2.153 0.032	0.370 2.123 0.035	0.365 2.088 0.038
SIZE	-0.711 -5.243 0.000	-0.713 -5.240 0.000	-0.711 -5.227 0.000	-0.709 -5.216 0.000
LEV	0.205 0.458 0.648	0.207 0.463 0.644	0.202 0.445 0.657	0.203 0.447 0.656
R Square	0.157	0.157	0.158	0.158
Adjusted R Square	0.142	0.139	0.135	0.132
F	10.673	8.523	7.075	6.072
Sig.	0.000	0.000	0.000	0.000

Source: Secondary data that has been processed with IBM SPSS Statistics 26

The F test findings are shown in Table 7, where a significance value of 0.000 is indicated. This result indicates that the model used in the hypothesis test meets the significance level of less than 0.05. Panel A intends to test the influence of ESG performance on firm value and result in an Adjusted R Square of 0.142, which means that the ESG Score variable and control variables can explain the influence by 14.2%. Then, Panel B also intends to test the impact of the COVID-19 pandemic on Tobin's Q, which produces an Adjusted R Square of 0.139, which means that there is an influence of 13.9% by ESG Score, COVID-19, and control variables. Panel C tests the influence of ESG Score, COVID-19, firm life cycle, and other control variables on Tobin's Q of

0.135 or 13.5%. Last, Panel D shows an Adjusted R Square value of 0.132, meaning that around 13.2% of Tobin's Q variable can be explained by various factors, including ESG performance, COVID-19, firm life cycle, returns, company size, and leverage. It is crucial to understand that the remaining 86.8% of variability, on the other hand, cannot be explained by the study model and is ascribed to outside variables.

Hypothesis Testing and Discussion

Hypothesis 1: Effect of ESG on ROA

The first hypothesis examines the relationship between a firm's financial performance (ROA) and its environmental, social, and governance (ESG) performance. The findings, which are presented in Table 6, indicate a statistically significant inverse relationship between financial and ESG performance. The ROA measure's coefficient is -0.001, and its significance value is 0.022. This suggests that a rise in ESG performance has an adverse effect on the financial performance of corporations. The research indicating a positive correlation between ROA and ESG performance is at odds with this outcome. Nonetheless, this finding is consistent with studies by Bahadori et al. (2021) and Fadhillah (2023), which found a detrimental connection. (Xaviera & Rahman, 2023) states that implementing ESG in companies depends on the availability of financial resources. Therefore, the test results showing a negative and significant relationship could mean that companies implementing ESG will decrease profit figures because ESG is considered a burden. After all, ESG practices require high costs. Using these high costs will reduce company profits, which is the main component of ROA. This negative relationship can be attributed to factors such as the considerable costs of ESG practices and the potential drag of standard operating procedures on employee productivity, leading to the rejection of the first hypothesis.

Hypothesis 2: Effect of ESG on Tobin's Q

The second hypothesis investigates how ESG performance affects firm performance as measured by firm value (Tobin's Q). ESG performance and business value have a negative and statistically significant association, according to Table 7's findings. Improving ESG performance has a negative impact on company value, as indicated by the Tobin's Q coefficient of -0.032 and significance value of 0.010. While Yu et al. (2018) and Hong & Kacperczyk (2009) underline the negative association between ESG performance and company value due to the significant related expenses, this conclusion deviates from research that suggests a favorable correlation. The negative relationship between ESG performance and firm value can be caused by environmental, social, and governance (ESG) disclosure requiring enormous costs. High expenditure will reduce the profits generated so that the implementation of ESG practices will damage the firm value, as reflected in Tobin's Q. Then, the negative and significant test results for the relationship between ESG performance and firm value can be concluded that the company carries out ESG practices because the company wants to legitimize that they are a good company. However, the market did not give a great response to the stock prices. This could be caused by ESG practices, which are relatively new in Indonesia, so the market responds negatively. As a result, the second hypothesis is unfounded.

Hypothesis 3: Effect of COVID-19 on ROA

The third hypothesis looks into how the COVID-19 epidemic has affected business success as shown by financial performance (ROA). The COVID-19 pandemic and financial performance have a negative and statistically significant link, according to Table 6's data. With a significance value of 0.025 and a ROA coefficient of -0.020, financial performance is negatively impacted. This

finding supports the confirmation of the third hypothesis, as stated by Tampakoudis et al. (2021), who claim that the pandemic impacts enterprises by decreasing their capacity to satisfy demand, raising operating expenses, and restricting access to financing.

Hypothesis 4: Effect of COVID-19 on Tobin's Q

The objective of the fourth hypothesis is to comprehend the impact of the COVID-19 pandemic on business value. The COVID-19 pandemic and business valuation have a positive, but not statistically significant, association, according to Table 7's data. There is no discernible effect on company value, according to the Tobin's Q coefficient of 0.057 and significance value of 0.749. The fourth hypothesis is refuted by this data, which is consistent with research showing that sustainable practices may shield businesses from financial constraints.

Hypothesis 5: Corporate Life Cycle Moderation on ESG and ROA

In order to evaluate the effect of the corporate life cycle on the link between ESG performance and firm performance, Table 6 offers hypothesis testing using financial performance proxies. A positive and statistically significant regression coefficient on financial success is demonstrated by the data, indicating that organizations' ESG performance improves with maturity. Consequently, the fifth hypothesis is validated.

Hypothesis 6: Moderation of Corporate Life Cycle on ESG and Tobin's Q

The purpose of Hypothesis 6 is to evaluate if the business life cycle modifies the link between firm value and ESG performance. A positive but statistically insignificant regression coefficient on firm value is displayed in Table 7's results. The constant effect of ESG on company value at every point of the life cycle may be the cause of this discrepancy, indicating intermittent moderation by life cycle. As a result, the sixth hypothesis is unfounded.

CONCLUSION

The objective of this research is to enhance our current empirical understanding about the impact of environmental, social, and governance (ESG) variables and COVID-19 on the operational performance of businesses. This research is unique in that it looks at how the corporate life cycle influences the link between company success and ESG performance. The following is a brief summary of the key conclusions drawn from hypothesis testing: (1) There is a statistically significant negative correlation between ESG performance and financial performance; (2) There is a substantial and negative correlation between ESG performance and firm value; (3) The COVID-19 pandemic has a statistically significant negative impact on companies' financial performance; (4) The pandemic has a positive impact on firm value, but this impact is not statistically significant; (5) The firm life cycle positively moderates the relationship between ESG performance and financial performance; and (6) The firm life cycle has a limited moderating role in the relationship between ESG performance and firm value. The test results show that companies that implement ESG will decrease profit figures because ESG is considered a burden. For this reason, companies must still care about and maintain the company's willingness to report ESG performance while improving financial performance. With the application of ESG being relatively new to Indonesia, perhaps the market has not yet responded positively, so with the results of this research, it is hoped that capital market players will provide a positive response to companies voluntarily willing to report Environmental, Social, and Governance reporting. It's important to

recognize that the scope of this study was limited to Indonesian businesses, which restricts the findings' generalizability to other national settings. Potential avenues for further study include investigating the more comprehensive effects of COVID-19 and ESG performance on business success, taking into account other factors like as Return on Equity (ROE), Price to Book Value (PBV), and Earnings per Share (EPS). Extending the duration of the study and broadening the range of research subjects are expected to improve our comprehension of this topic.

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