How ESG Performance Drives Corporate Performance: Can they protect the company during the COVID-19 crisis?

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Abstract. The COVID-19 phenomenon provides a reason to understand the impact of Environment, Social, and Governance (ESG) Performance on a company's business performance, especially when most businesses have gone bankrupt during difficult times. However, research in several countries shows that companies with good ESG performance tend to have better business performance. This study investigates two countries, Indonesia, a developing country, and Singapore, a developed country in ASEAN countries. This study uses a 3-stage data analysis technique, namely (1) the path analysis stage of all research data in each country, Indonesia and Singapore, during the 2017-2021 period and (2) the regression analysis stage, which separates the timeline before the Covid-19 pandemic (2017-2019) and during the Covid-19 pandemic (2020-2021). Stage 1 analysis will be used for decision-making research hypotheses, and stage 2 analysis will be used to enrich the analysis and see whether ESG performance influences protecting the company's performance during the crisis. The test results show that ESG performance in Indonesia and Singapore affects the company's business performance. All test results show that information on ESG performance in a certain period significantly affects company performance but has not become important information when entering a country's crisis period. In this case, the COVID-19 pandemic in the last three years has impacted the entire world's economy, so perhaps this has resulted in the influence of good ESG performance not being enough to protect the company's performance from the crisis. Therefore, this study enriches the literature by increasing the understanding of research in developed and developing countries. In addition, this study documents empirical findings on the topic of ESG and company performance during the crisis due to the COVID-19 pandemic.

Keywords: ESG Performance, Covid-19 Crisis, Company Performance.

1 Introduction

The Central Statistics Agency reported that the economic condition in Indonesia during the pandemic decreased to minus 5.32% in the second quarter of 2020. The weak financial performance resulted in 4156 companies cutting their working relationships

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with employees; also, 87.5% of household businesses experienced a significant decline in income during the pandemic [1]. The spread of COVID-19 has also significantly impacted financial markets [2]. Excessive fluctuations make market conditions unfavourable and detrimental to investors and national interests. However, this impact was not markedly seen for several companies. For example, in China, the stock price of China state construction companies Ping Ann Insurance decreased by 3.78% and 3.02%; this figure was below the decline in the industry average of 6.55% and 4.86%, the fact that the company has a good ranking in the criteria of corporate social responsibility (CSR) [3]. In Indonesia, in August 2020, the daily stock trading volume increased by 16.3% compared to the previous year, and 73% of them were in retail companies with a good Environment, Social, and Governance (ESG) Performance rating.

This phenomenon is evidence that applying ESG for companies can improve performance under normal conditions and increase the investment stakeholders make in crisis conditions caused by covid 19 [3–7]. Simionescu & Dumitrescu (2014) argue that companies with high Corporate Social Responsibility (CSR) activities anticipate changes in economic, social, cultural, political, and environmental terms because they communicate better. In addition, companies with high CSR activities have better stock prices than companies that do not have high CSR activities [6]. Lee et al. (2022) stated that CSR activities are related to financial performance and investor behaviour during the pandemic. Individual investors were more active in making stock exchange purchases than institutional investors. Therefore, it can be assumed that CSR can mitigate the negative impact of unstable macroeconomic conditions that can negatively impact company performance.

UBS Financial Services (2020) estimates that there will be an increase in investor focus on environmental, social, and corporate governance (ESG) considerations after the COVID-19 pandemic. This is because investors need greater transparency and accountability of stakeholders for decision-making in crisis conditions. This will continue to influence the company's behaviour and investors' actions in the future (Bae et al., 2021. The question, "Should companies maximise shareholder value or stakeholder welfare?" has been debated since the New York Times published an essay by Milton Friedman in 1970. This question received attention during the 2008-2009 global financial crisis, until after the COVID-19 pandemic, at the moment. The urgency of this study is whether good corporate social responsibility (CSR) activities can increase value, especially during times of crisis, where the pandemic has a negative multiplier effect on the business world, which causes a sharp increase in government and market players' attention to CSR considerations.

Previous research on CSR and performance for four decades found different results [10] caused by several things such as sample, measurement method, and time dimension. For example, a study by [11] states that CSR performance has a significant relationship with performance in the aviation industry. Using the same framework with a different formula, Bahouel et al. [5] found that CSR performance had no significant relationship with company performance. Other than Zhai et al. (2022) and Ding et al. (2021), this study uses the measurement of Return on Assets (ROA) and Common Ratio (CR) performance. This study investigates two countries, Indonesia and Singapore, to increase the robustness of the research results. There are two reasons why the two countries were chosen as the research sample. First, Indonesia is a developing country, while Singapore is a developed country in ASEAN. Differences in policies regarding CSR in developed and developing countries may give different results in CSR studies and company performance. Second, Singapore's market cap difference, higher than Indonesia's, is also expected to provide different results in the relationship between CSR and company performance during the crisis due to the COVID-19 pandemic.

This study has two important contributions. Firstly, it enriches the literature by adding to the understanding of research in this area in the context of both developed and developing countries. Second, this study documents empirical findings on CSR and company performance in times of crisis due to the COVID-19 pandemic.

2 Method

This research on the influence of Environment, Social, and Governance (ESG) performance on company performance during the COVID-19 pandemic uses the object of study in the form of companies listed on the Indonesia and Singapore Stock Exchanges for the 2017-2021 period. Data was obtained from Revinitiv Eikon Datasets and the Indonesia Stock Exchange and Singapore Stock Exchange websites. In addition, this quantitative research uses data obtained from financial statements and company annual reports.

2.1 Environment, Social, and Governance (ESG) Performance

This study measures ESG performance using ESG Company Scores from the Refiniv database. The Refinitiv ESG Score presents objective measurements of the company's ESG performance on each pillar: Environment, Social, and Governance [11]. In this study, the measurement used is the overall ESG Score and each pillar's score. Thus, in this study, there are four independent variables to be studied, namely, ESG Score (X1), Environmental Pillar Score (X2), Social Pillar Score (X3), and Governance Pillar Score (X4).

2.2 Company Financial Performance

Financial performance describes the company's health condition in terms of finances in a certain period, generally measured by the capital adequacy index, liquidity, and profitability index. This study uses two financial performance ratios: Return on Assets (ROA) and Current Ratio (CR).

2.3 Data Analysis Technique

This study uses a 3-stage data analysis technique, namely (1) the path analysis stage of all research data in each country, Indonesia and Singapore, during the 2017-2021 period and (2) the regression analysis stage, which separates the timeline before the Covid-19 pandemic (2017-2019) and during the Covid-19 pandemic (2020-2021). Stage 1 analysis will be used for decision-making research hypotheses, and stage 2 analysis will be used to enrich the analysis and see whether ESG performance influences protecting the company's performance during the crisis.

In the first stage of this study, the path analysis method with Structural Equation Modeling (SEM) is described as follows:

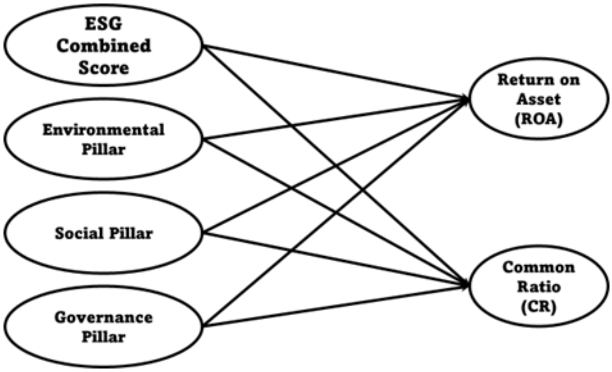


Fig. 1. Structural Equation Modeling (SEM)

This study wants to analyse the effect of ESG performance on financial performance. The ESG performance in this study is separated into four variables, namely the total ESG score and the respective scores of the three environmental, social, and governance pillars. The first relationship this research wants to reveal is that if ESG performance positively affects company performance, a high ESG score will result in high company performance. Companies with an exemplary ESG commitment will be more stable and resilient in terms of their operations and finances [12], so the hypothesis in this study is divided into four hypotheses, which are derived into the following eight hypotheses.

H1a : ESG Combined Score has a positive effect on Return on Assets
H1b : ESG Combined Score has a positive impact on Common Ratio
H2a : Environmental Pillar Score has a positive effect on Return on Assets
H2b : Environmental Pillar Score has a positive impact on Common Ratio
H3a : Social Pillar Score has a positive effect on Return on Assets
H3b : Social Pillar Score has a positive impact on Common Ratio
H4a : Governance Pillar Score has a positive effect on Return on Assets
H4b : Governance Pillar Score has a positive impact on Common Ratio

In stage 2 analysis, this study conducted two tests, namely (a) on how the influence of ESG performance on the company's financial performance in the period before the Covid-19 pandemic and (b) how the influence of ESG performance on the company's financial performance during the Covid-19 pandemic. The analysis uses multiple regression models on each test of financial performance. The following is the formula for the regression equation in stage 2 of this research:

$$ROA_{it} = \alpha + \beta_1.ESG_{it} + \beta_2.E\_Pillar_{it} + \beta_3.S\_Pillar_{it} + \beta_4.G\_Pillar_{it} + \varepsilon \quad (1)$$

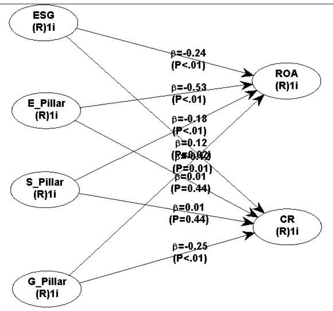
$$CR_{it} = \alpha + \beta_1.ESG_{it} + \beta_2.E\_Pillar_{it} + \beta_3.S\_Pillar_{it} + \beta_4.G\_Pillar_{it} + \varepsilon \quad (2)$$

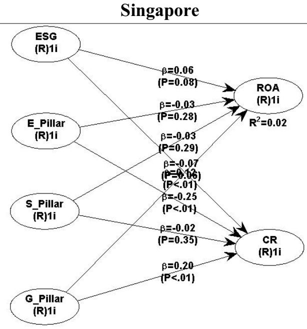
3 Result

This study uses two stages of analysis, the first is to conclude hypotheses, and the second is for further discussion before and during the COVID-19 pandemic. The following are the analysis results using Structural Equation Modeling (SEM) in Indonesia and Singapore. Table 1 below presents the results of the SEM analysis in Indonesia and Singapore. The analysis of these two countries shows different results.

Table 1. Results of Structural Equation Modeling (SEM) Analysis of Indonesia and Singapore

Indonesia				Singapore			





	ROA	p-value	Hypothesis		ROA	p-value	Hypothesis
ESG	-0.244	0.000	not accepted	ESG	0.064*	0.040	accepted
E Pillar	-0.530	0.000	not accepted	E Pillar	-0.026	0.142	not accepted
S Pillar	-0.181	0.000	not accepted	S Pillar	-0.026	0.143	not accepted
G Pillar	-0.122	0.007	not accepted	G Pillar	0.116**	0.003	accepted
	CR	**p-value**	**Hypothesis**		**CR**	**p-value**	**Hypothesis**
ESG	0.117	0.009	not accepted	ESG	-0.073*	0.028	not accepted
E Pillar	0.009	0.218	not accepted	E Pillar	-0.253**	0.000	not accepted
S Pillar	0.008	0.220	not accepted	S Pillar	-0.018	0.176	not accepted
G Pillar	-0.253	0.000	not accepted	G Pillar	0.201**	0.000	accepted
R^2		**0.00**		**R^2**		**0.02**	

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Indonesia's SEM analysis shows that none of the ESG performance indicators (ESG Combined Score, Environmental Pillar Score, Social Pillar Score, Governance Pillar Score) affects the company's financial performance—Return on Assets and Common Ratio. Thus, in the case of Indonesia as a whole, good ESG performance is not proven to have a role in improving company performance. These results align with previous studies [13,14]. The results of this analysis in Indonesia show that environmental, social, and good governance aspects are still insufficient to impact the company's financial performance [14] because ESG performance is seen as inadequate to influence consumer decisions to buy a product or service.

Meanwhile, in the SEM analysis, Singapore showed results that differed from Indonesia's. The analysis results show that the ESG performance indicators, namely the ESG Combined Score and Governance Pillar Score, have a positive effect on the company's financial performance, namely ROA and Current Ratio (Hypothesis 1a, 4a, and 4b accepted). This shows that ESG aspects of excellent governance can improve company performance in Singapore, as research conducted by Zhang et al. (2022) in China shows [15]. However, the results of this analysis are only reflected by an R2 value of 2%, which shows a low impact. Therefore, the two countries showed different results, which can be explained by the fact that Singapore, a developed country, has a higher ranking in achieving ESG performance than Indonesia [16].

The analysis is continued with a second stage analysis in each country by separating the observation period into two timelines: before the COVID-19 pandemic and during the COVID-19 pandemic. The results of the study are shown in Table 2 and Table 3 below.

Table 2. Analysis Results Before and During the Covid-19 Pandemic (Indonesia)

	INDONESIA Before and During the Covid-19 Pandemic			
	2017-2019 ROA	**2017-2019 CR**	**2020-2021 ROA**	**2020-2021 CR**
ESG Score	-0.115	0.545**	0.157	0.092*
	(0.137)	(0.000)	(0.078)	(0.022)
Environmental Pillar	-0.114	-0.181	0.111	-0.138
	(0.139)	(0.072)	(0.055)	(0.080)
Social Pillar	0.024	-0.120*	0.082	-0.064*
	(0.411)	(0.037)	(0.041)	(0.045)
Governance Pillar	-0.115	-0.176*	0.160	0.154
	(0.070)	(0.020)	(0.080)	(0.124)
Adjusted R Square	0.000	**0.269**	0.000	**0.032**

** Correlation is significant at the 0.01 level
* Correlation is significant at the 0.05 level

In the period before the pandemic, Indonesian data showed that the overall ESG performance positively influenced financial performance, namely the Current Ratio. In contrast, social and governance performance showed a negative effect. This indicates that in the 2017-2019 period, ESG performance is an aspect that has quite an impact on the company's performance, with a relatively high R2 value of 26.9%. Meanwhile, during the 2020-2021 pandemic, the analysis results in Indonesia show that only overall performance indicators influence the Current Ratio. In addition, the R2 value decreased drastically to 3.2%.

In Singapore's data analysis (Table 3), the results show that overall ESG performance positively influences financial performance, namely ROA, while environmental performance has a negative effect. However, consistent with the stage 1 analysis, the impact is not too significant, indicated by the relatively low R^2 value, which is only 2.4%. Meanwhile, during the 2020-2021 pandemic, the analysis results in Singapore were not in line with the results of stage 1 because, in this period, none of the ESG performance indicators influenced the company's performance, both ROA and Current Ratio.

Table 3. Analysis Results Before and During the Covid-19 Pandemic (Singapore)

	SINGAPORE Before and During the Covid-19 Pandemic			
	2017-2019 ROA	**2017-2019 CR**	**2020-2021 ROA**	**2020-2021 CR**
ESG Score	0.266*	0.096	0.160	0.133
	(0.011)	(0.162)	(0.095)	(0.145)
Environmental Pillar	-0.210*	0.112	0.082	0.051
	(0.024)	(0.125)	(0.250)	(0.342)
Social Pillar	-0.217	0.077	0.111	0.116
	(0.071)	(0.215)	(0.182)	(0.178)
Governance Pillar	-0.053	0.112	0.157	0.166
	(0.368)	(0.126)	(0.098)	(0.093)
Adjusted R Square	**0.024**	0.000	0.000	0.000

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Information on the company's performance in social and environmental aspects shows its relevance in reflecting the company's performance but is not good enough and consistent [17,18]. Regarding pandemics or crises, the environment and social performance information didn’t impact the company's financial performance. The different results in stage 1 and stage 2 testing show the inconsistent impact of ESG performance on the company's financial performance. This could be because stakeholders still struggle to identify the significant effects, risks, and opportunities on environmental and social information [19]. From the inner side, in terms of ESG performance, companies find it very difficult to convey accurate, timely, and meaningful information that can attract the attention of stakeholders [20]. Concerning the COVID-19 pandemic crisis, this study shows results that align with research by Bae et al. (2021) that ESG performance is still ineffective in protecting companies from the harmful effects of the crisis.

The results of stage 1 and stage 2 show that information on ESG performance in a certain period significantly affects company performance but does not become meaningful information when entering a country's crisis period. In this case, the COVID-19 pandemic in the last three years has impacted the entire world's economy, so perhaps this has resulted in the influence of good ESG performance not being enough to protect the company's performance from the crisis. As Guidry (2010) [21] stated, sustainability performance reports or environmental and social performance are considered positive actions for the company but have not been paid much attention to by stakeholders.

4 Conclusion

This study aims to analyse the effect of environmental, social, and governance performance on the performance of companies in Indonesia and Singapore. This research was conducted in two timelines before and during the Covid-19 pandemic. Indonesia's SEM analysis shows that none of the ESG performance indicators affects the company's financial performance. Thus, in the case of Indonesia as a whole, good ESG performance is not proven to have a role in improving company performance. Meanwhile, Singapore showed results that differed from Indonesia's. The analysis results show that the ESG performance indicators, namely the ESG Combined Score and Governance Pillar Score, positively affect the company's financial performance. However, the results of this analysis shows a low impact depict by low R2 Score.

All test results show that information on ESG performance in a certain period significantly affects company performance but has not become important information when entering a country's crisis period. In this case, the COVID-19 pandemic in the last three years has impacted the entire world's economy, so perhaps this has resulted in the influence of good ESG performance not being enough to protect the company's performance from the crisis.

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