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ESG Performance and Share Price Recovery During COVID-19 Pandemic Crisis in Asia: An Empirical Analysis

Asniati Bahari[1], Khalilul Rahman[2], Dian Yuni Anggraeni[3],
Muhammad Arif Khan[4]

ABSTRACT

This study delves into the relationship between Environmental, Social, and Governance (ESG) performance and stock price recovery amidst the Asian Covid-19 pandemic between March and December 2020. Using data from 2,092 companies and SmartPLS 4 software, the analysis employed a one-tailed hypothesis with a 10% significance level. While the overall results indicate that ESG practices, as a whole, didn't significantly hasten stock price recovery, a more granular exploration uncovers compelling insights. Environmental performance exhibited a notable, albeit negative, impact on the duration of stock price recovery, whereas social performance had a positive influence. Governance performance, however, did not significantly affect the recovery timeline. Importantly, control variables such as ESG controversies and Return on Assets (ROA) showed no substantial influence on stock price recovery duration. These findings carry substantial implications for businesses, underlining the importance of aligning social performance with financial health and actively communicating ESG initiatives through various media channels to boost investor awareness of sustainability's value. They accentuate the pivotal role of sustainability principles in shaping our collective future, emphasizing the imperative for collaborative efforts to enhance awareness and adoption of ESG practices.

ملخص

تنظر هذه الدراسة في العلاقة بين الأداء البيئي والاجتماعي والحوكمة (ESG) وانتعاش أسعار الأسهم في ظل جائحة كوفيد 19 بين مارس وديسمبر 2020. باستخدام بيانات من 2092 شركة وبرامج SmartPLS 4 الاحصائي، استخدم التحليل فرضية الاختبار أحادي الذيل عند مستوى فدره 10%. وبينما تشير النتائج الإجمالية إلى أن ممارسات الأداء البيئي والاجتماعي والحوكمة ككل، لم تسرع بشكل كبير في

[1] Department of Accounting, Faculty of Economics and Business, Universitas Andalas, Indonesia E-mail: asniati@eb.unand.ac.id
[2] Department of Accounting, Faculty of Economics and Business, Universitas Andalas, Indonesia E-mail: khalilulrahman2000@gmail.com
[3] Department of Accounting, Faculty of Economics and Business, Universitas Andalas, Indonesia E-mail: dianyuni@eb.unand.ac.id
[4] Department of Economics and Management, University of Pisa, Italy
E-mail: khan.arif.uclm@gmail.com

استرداد أسعار الأسهم، فإن بحثا أكثر دقة قد يكشف عن رؤى مقنعة. أظهر الأداء البيئي تأثيرا ملحوظا، وإن كان سلبيا، خلال انتعاش أسعار الأسهم، في حين كان للأداء الاجتماعي تأثير إيجابي. بيد أن أداء الحوكمة لم يؤثر تأثيرا كبيرا على الجدول الزمني للانتعاش. الملفت للانتباه أن متغيرات التحكم مثل الخلافات حول الأداء البيئي والاجتماعي والحوكمة والعائد على الأصول (ROA) لم تظهر أي تأثير كبير خلال فترة انتعاش أسعار الأسهم. لهذه النتائج تأثير كبير على الشركات، مما يؤكد أهمية مواءمة الأداء الاجتماعي مع الصحة المالية والترويج لمبادرات الأداء البيئي والاجتماعي والحوكمة من خلال وسائل الإعلام المختلفة لتعزيز وعي المستثمرين بأهمية الاستدامة. فهي تبرز الدور المحوري لمبادئ الاستدامة في تشكيل مستقبلنا الجماعي، مع التأكيد على حتمية الجهود التعاونية لتعزيز الوعي واعتماد ممارسات الأداء البيئي والاجتماعي والحوكمة.

RESUME

Cette étude examine la relation entre les performances environnementales, sociales et de gouvernance (ESG) et le redressement du cours des actions dans le contexte de la pandémie asiatique de Covid-19 entre mars et décembre 2020. En utilisant les données de 2 092 entreprises et le logiciel SmartPLS 4, l'analyse a utilisé une hypothèse unilatérale avec un niveau de signification de 10 %. Si les résultats globaux indiquent que les pratiques ESG, dans leur ensemble, n'ont pas accéléré de manière significative le redressement du cours des actions, une exploration plus fine permet de découvrir des éléments convaincants. Les performances environnementales ont eu un impact notable, quoique négatif, sur la durée de la remontée des cours, tandis que les performances sociales ont eu une influence positive. En revanche, les performances en matière de gouvernance n'ont pas eu d'incidence significative sur le délai de redressement. Il est important de noter que les variables de contrôle telles que les controverses ESG et le rendement des actifs (ROA) n'ont pas eu d'influence substantielle sur la durée du redressement du cours des actions. Ces résultats ont des implications importantes pour les entreprises, car ils soulignent l'importance d'aligner les performances sociales sur la santé financière et de communiquer activement sur les initiatives ESG par le biais de divers canaux médiatiques afin de sensibiliser les investisseurs à la valeur de la durabilité. Ils soulignent le rôle essentiel des principes de durabilité dans l'élaboration de notre avenir collectif, et mettent l'accent sur la nécessité d'efforts concertés pour améliorer la sensibilisation et l'adoption des pratiques ESG.

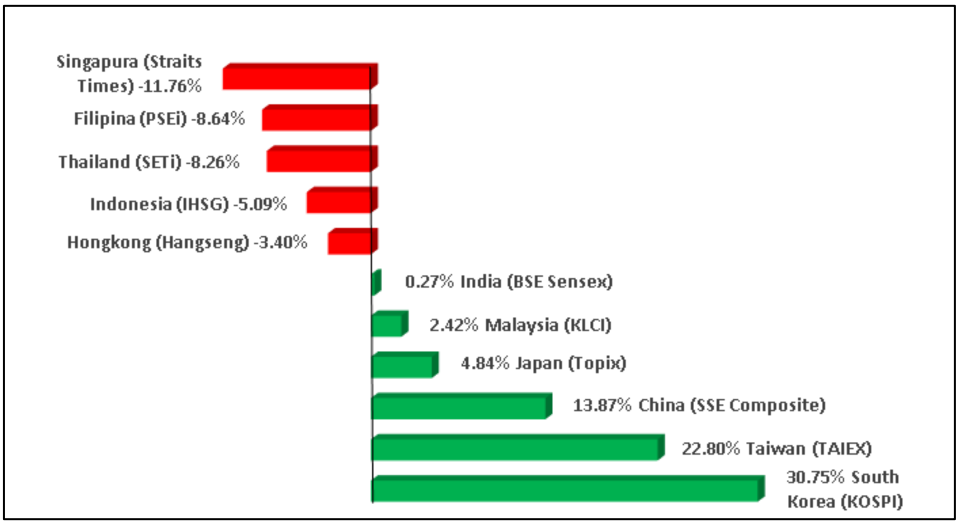
Keywords: ESG Performance, ESG Controversies, Stock Price Recovery, ROA, Covid-19 Pandemic, and Asia.

JEL classification: G21, C53, G32, D62, G14.

1. Introduction

As of March 11 2020, WHO declared Covid-19 a global pandemic, resulting in a drastic decline in the world economy. Policies issued by the government to break the chain of the spread of the virus have also resulted in decreased sales, changes in consumer behavior, reduced production, companies are under serious financial burdens, and unemployment rates have increased worldwide (Darmayanti et al., 2020). Furthermore, Cheema-Fox et al., (2020) explained that the Covid-19 pandemic had a direct impact on employees, operating models, supply chains, sales of products and services, so that stock prices fell due to fear of uncertainty (Cheema-Fox et al., 2020). Of course, this will have a big impact on the performance of the capital market, because there is panic on the stock exchange floor which causes many investors crowdedly sell their shares (Chrysnamurti, 2020).

Figure 1: Performance of Major Asian Stock Indices in 2020



Source: Pranata (2021)

Figure 1 shows that South Korea (KOSPI) is the country with the best capital market performance in Asia, which experienced growth of 30.75% year to date (YTD) during the 2020 Covid-19 pandemic. Then followed by Taiwan, China, Japan, Malaysia and India. However, Singapore (Straits Times) experienced the worst capital market performance, which decreased by 11.76%. Then followed by the Philippines, Thailand, Indonesia and Hong Kong which also experienced low capital market performance during the COVID-19 pandemic. So, several countries in Asia really need good fundamental encouragement, so that their financial markets can recover.

Some parties are starting to question whether ESG-based investments will have a more resilient performance during a pandemic compared to non-ESG-based traditional investments. DesJardine et al., (2019) explained that resilient companies also indicate their ability to recover more quickly from crises that occur. There is still a gap in the results of different studies regarding the effect of ESG performance on the firm's market performance resilience. A study from R. A. Albuquerque et al., (2022) shows that in the first quarter of 2020 in Europe, the higher the ES rating of a stock, the greater the return it will provide with a lower level of return volatility, and higher financial performance. Giove et al., (2021) revealed that the negative impact of COVID-19 was less pronounced for companies with better sustainability performance. Research from Liu et al., (2023) found that ESG activities can mitigate the risk of falling stock prices and increase company value. However, it is in contrast to studies from Ahmed et al., (2022), Shakil (2022), Torre et al., (2020) which explain that ESG performance cannot restore company market performance during the Covid-19 pandemic.

Almost all companies in Asia have been badly affected by the COVID-19 pandemic, but some companies have the resilience to respond to the pressures caused by the pandemic, so they can recover better. It is very important to increase sustainability activities to deal with epidemics like Covid-19 with the aim of creating sustainability for the business in the future (Schaltegger, 2021). In line with Khan (2022), explained that the study of ESG metrics in corporate sustainability is a new research area that is on the agenda both in academic research and in the business world. So, the author considers this to be quite interesting to analyze in order to get a broader picture of the application of ESG in Asia, because in discussions with investors who are aware of the ESG aspect, most said that the COVID-19 pandemic would accelerate positive growth trends in the financial aspect of sustainability (Fender et al., 2020, 17).

The purpose of this study is to provide empirical evidence regarding the ability of ESG performance and the performance of ESG components partially (environmental, social, and governance) in accelerating the stock price recovery process, considering that previous research still focused on market performance and company value. So that the results of this study can contribute to adding empirical evidence and filling in the reference gap regarding ESG's ability to accelerate the recovery of company stock prices during the Covid-19 pandemic crisis.

SmartPLS 4 is used for data analysis, data processing and hypothesis testing. The findings in this study indicate that the integration of ESG activities in Asia has no significant effect on accelerating stock price recovery during the Covid-19 pandemic. However, the results of research on the performance of each ESG component show unique findings, where the company's environmental performance has a negative and significant impact on the magnitude of the recovery time for the company's stock price. Then the company's social performance has a positive and significant impact on the recovery time of the company's stock price. Finally, the company's governance performance did not have a significant impact on accelerating the recovery time for stock prices during the Covid-19 pandemic. This finding shows a unique phenomenon, in which investors in Asia tend to prefer short-term gains (short-sighted). So that being a good company (in terms of implementing ESG) will create an additional burden for the company, which in the end will not be able to help speed up the recovery time for the company's stock price.

The findings in this study also provide broad insights for management, investors, regulators and subsequent researchers regarding the impact of ESG Performance on the company's stock price recovery process. The remainder of the paper is structured as follows: Section 2 provides literature on ESG and Corporate Resilience, a discussion of the theoretical underpinnings, and development of hypotheses. Section 3 discusses the methodology, including data collection and analysis techniques used and the operationalization of research variables. Presentation of results and discussion is in Section 4. Finally, conclusions and suggestions for further research are presented in Section 5.

2. Literature Review

2.1 Socially Responsible Investment (SRI)

Prior to ESG, the term SRI was used first. However, in contrast to SRI which underlies aspects of ethical and moral values as well as negative aspects, for example companies that do not invest in the tobacco, alcohol or weapons sectors, ESG investments tend to base decision making on assumptions that have relevance to financial aspects (Kell, 2018). Socially responsible investment (SRI) is a collective term used to describe a variety of approaches that can be used to incorporate environmental, social and governance (ESG) considerations into the investment process.

According to Korwatanasakul (2020), investors are starting to realize that ESG criteria contribute to efficiency, productivity, long-term risk management, and improving business operations. ESG-based investments represent an approach when companies can operate in a sustainable manner by taking actions related to environmental, social and governance aspects. By applying this approach, corporate resilience can be created because the company is able to provide added value to investors, in addition to profits or capital gains. ESG-based investments provide a signal that the company is oriented towards continuing to grow in a sustainable manner, operating responsibly, and trying to provide added value to the wider community and stakeholders. So that ESG's performance is able to reduce the company's vulnerability to the pandemic crisis and recover faster than their competitors.

2.2 The Effect of ESG Performance on the recovery of company stock prices during the Covid-19 pandemic crisis

Based on the SRI literature, the COVID-19 shock affected investors' attitudes towards risk and resulted in many investors selling their holdings, however, the SRI literature shows that ESG stocks are more resilient than other stocks (Tett et al., 2020). Giove et al., (2021) explained that the negative impact of Covid-19 was less pronounced for companies with better sustainability performance. The pandemic crisis signaled to investors the increasing importance of managing risk and building resilience for a faster stock recovery. Thus, the topic of sustainability is becoming increasingly important to the investment world, so the demand for solutions that have a positive impact is growing rapidly. Mohammad & Wasiuzzaman (2021) explain that ESG-based investments have gained considerable attractions in recent years and are supported by increased interest from the investors, both at the international and domestic levels.

A company's poor ESG score is an indicator of idiosyncratic (specific) risk. Lack of company ESG disclosure can result in poor company investment performance in high-risk sectors that can pollute the environment or discriminate against employees. ESG integration into company investment decisions will assist investors in making decisions based on overall performance, not just financial performance. As a result, green companies, arguably companies with high ESG ratings, have higher valuations. If the COVID-19 shock causes investors to leave the market, but not the ESG investors, then ESG's share price will show resilience and not fall too much, thus having the ability to recover faster than its competitors.

Some experts argue that the pandemic has revealed the need for systemic thinking. This pandemic also shows a consequence that human life depends on economic, environmental and social systems more than perhaps realized before the pandemic. Several factors link the crisis due to the current pandemic with aspects of sustainability. In discussions with investors who are aware of the ESG aspect, most said that the COVID-19 pandemic will be an acceleration of positive growth trends in the financial aspect of sustainability (Fender et al., 2020).

There are no studies that explain how the ESG performance influences the process of recovering of the company stock prices, but several literature studies appear to be relevant to use. Because corporate resilience also describes a company's ability to quickly recover from a pandemic crisis (DesJardine et al., 2019). Quoted from Bernama (2021), explains that investors' growing concern about environmental damage during the pandemic crisis has encouraged them to give more value to companies with good ESG risk management. Cheema-Fox et al., (2020), explained that companies that maintain employee security and actions to safeguard the supply chain have been perceived as businesses with workforce and supply chain strategies that have increased institutional cash flow and fewer negative returns. Christian et al., (2020) and Rahman & Bahari (2023) found that the existence of a good corporate governance mechanism can increase the resilience of company stock prices, because it can restore investor confidence in the company.

H1 = "The company's ESG performance has a significant negative effect on the recovery time for the company's stock price during the Covid-19 pandemic crisis"

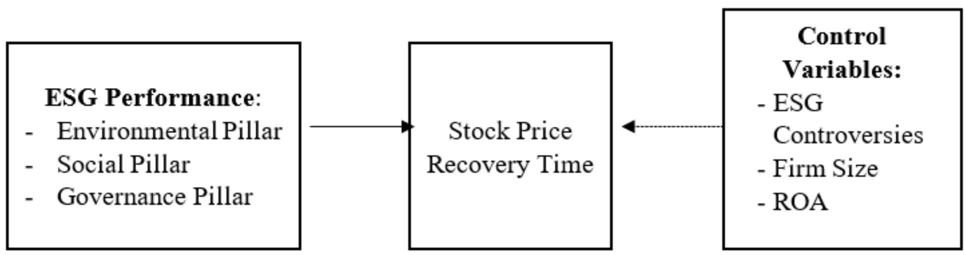
H1a = "The company's environmental performance has a significant negative effect on the recovery time for the company's stock price during the Covid-19 pandemic crisis"

H1b = "Company social performance has a significant negative effect on the recovery time for company stock prices during the Covid-19 pandemic crisis"

H1c = "Company governance performance has a significant negative effect on the recovery time for company stock prices during the Covid-19 pandemic crisis"

Based on the hypothesis above, a research framework used in this study can be compiled as shown in Figure 2.

Figure 1: Research Framework



3. Data and Methodology

3.1 Research Design

This research is quantitative research with a hypothesis that aims to identify the effect of value relevance of ESG performance and the performance of ESG components partially (environmental, social, and governance) on stock recovery time during the COVID-19 pandemic crisis in the Asian region by looking at stock price movements of the company from March to December 2020. SmartPLS 4 software is used for data processing and hypothesis testing on a one-way hypothesis with an alpha of 10%.

3.2 Sampling Method

The population in this study are all public companies listed in 2020 in the Asian region based on the Refinitiv Eikon Datastream. The selection of the sample in this study was by using a purposive sampling technique. Table 1 is the criteria used in selecting the sample in this study.

Table 1: Sampling Criteria

No.	Sampling Criteria	Total
1.	All companies listed on the stock exchange of each country in Asia in 2020	32.083
2.	Companies that do not have an ESG score by Refinitiv Eikon	(29.911)
3.	Companies that have an ESG score by Refinitiv Eikon	2.172
4.	Companies that do not have complete data regarding closing stock prices during the research time period	(2)
5.	Companies that did not experience stock price recovery during the study period	(78)
Total Sampel Penelitian		**2.092**

Table 2 will describe the number of companies listed in 2020 along with ESG activities in the Asian region:

Table 2: Listed Company and ESG activities Variable

No.	Region	Total Listed	ESG Activities
1	**South Asia**		
1.1	Afghanistan	0	0
1.2	Bangladesh	374	0
1.3	Bhutan	0	0
1.4	British Indian Ocean Territory	0	0
1.5	India	6908	142
1.6	Iran	0	0
1.7	Maldives	0	0
1.8	Nepal	0	0
1.9	Pakistan	541	5
1.1	Sri Lanka	293	1
2	**West Asia**		
2.1	Armenia	9	0
2.2	Azerbaijan	0	0

2.3	Bahrain	42	6
2.4	Georgia	0	0
2.5	Iraq	107	0
2.6	Israel	538	14
2.7	Jordan	183	2
2.8	Kuwait	153	12
2.9	Lebanon	10	0
2.10	Oman	116	10
2.11	Palestine	47	0
2.12	Qatar	49	18
2.13	Saudi Arabia	246	36
2.14	Syria	27	0
2.15	Turkey	462	53
2.16	United Arab Emirates	138	17
2.17	Yemen	0	0
3	**South East Asia**		
3.1	Brunei Darussalam	0	0
3.2	Cambodia	0	0
3.3	Indonesia	792	44
3.4	Laos	11	0
3.5	Malaysia	979	62
3.6	Myanmar, Formerly Burma	2	0
3.7	Philippines	281	26
3.8	Singapore	659	77
3.9	Thailand	858	63
3.10	Timor-Leste	0	0
3.11	Vietnam	1612	2
4	**East Asia**		
4.1	China	4890	573
4.2	Hongkong	2494	275
4.3	Japan	4110	439
4.4	Korea, Democratic Peoples Republic	0	0
4.5	Korea, Republic (S. Korea)	2805	139
4.6	Macau	0	0
4.7	Mongolia	158	0
4.8	Taiwan	2101	154
5	**Central Asia**		
5.1	Kazakhstan	88	2
5.2	Kyrgyzstan	0	0
5.3	Tajikistan	0	0
5.4	Turkmenistan	0	0
5.5	Uzbekistan	0	0
TOTAL		**32083**	**2172**

3.3 Definitions and Measurements

ESG Performance and partial performance of ESG components (environmental, social and governance) are the independent variables used in this study, which were obtained through the Refinitiv Eikon Datastream. Recovery time is the dependent variable which is measured by the amount of time it takes for the company's stock price to return to normal. To test the robustness of the research model, the authors added three control variables, namely ESG Controversies, ROA and Firm Size. Table 3 describes the measurement of the variables in this study:

Table 1: Variable Measurement

Variabel		**Measurement**	**Source**
Recovery Time (Y)		Recovery Time is measured by the number of days it takes for the stock price to recover to pre-pandemic prices (11 March 2020). **RT** = $(\sum number\ of\ recovery\ days)$	(DesJardine et al., 2019; Sajko et al., 2021; Xia et al., 2022)
ESG Performance (X)	**Environmental Pillar**	The Environmental Pillar Score consists of three assessment category scores, namely resource use, emission, and innovation.	Refinitiv Eikon (2022)
	Social Pillar	Social Pillar Score which consists of four scoring category scores, namely workforce, human rights, product responsibility, and community.	
	Governance Pilar	Governance Pillar Score which consists of three assessment category scores, namely management, stakeholders, and CSR Strategy.	
Control Variables	**Return on Asset**	**ROA** = $\frac{Net\ Income}{Total\ Assets}$	Januar et al., (2022); Pang (2021)
	ESG Controversies	ESG controversies score consists of 23 ESG controversy topics, including environmental issues, business ethics, diversity & opportunity, anti-competition, tax fraud privacy, intellectual property, etc.	Refinitiv Eikon (2022)
	Firm Size	**FS = Ln (Market Capitalization)**	(Zengfu Li et al., 2022; Shakil, 2022)

4. Empirical Results

This section will present the results of the research, discuss the results of the research which are in line with the existing literature, as well as additional analysis, namely examining the robustness of the research model.

4.1 Descriptive Statistics

Table 4 provides information regarding the descriptive statistics of the variables used in this study. Where the ESG Performance, Environmental Pillar, Social Pillar, Governance Pillar and ESG Controversies variables have a standard deviation value that is smaller than the mean value, indicating that the ESG performance variables, ESG performance per component and ESG Controversies of public companies in Asia as a whole are very good and there is no significant difference. The Recovery Time variable has a standard deviation value that is greater than the mean value, so there is a significant difference in the recovery rate of stock prices between companies in Asia. The ROA variable has a standard deviation value that is greater than the mean value, which indicates that there are significant differences between the profitability of companies in Asia. Finally, the Firm Size variable has a standard deviation value that is smaller than the mean value, so there is a significant difference in size between companies in Asia.

Table 4: Descriptive Statistics

	Mean	Standard Deviation	Median	Max	Min
ESG Performance	43.804	20.409	43.497	94.305	0.723
Environmental Pillar	39.347	27.171	39.358	97.517	0
Social Pillar	41.705	24.898	40.535	97.204	0.34
Governance Pillar	48.865	22.117	49.505	97.925	0.579
ESG Controversies	96.485	14.407	100	100	0.94
Recovery Time	28.767	49.337	13	293	1
ROA	0.056	0.123	0.042	4.524	-0.961
Firm Size	31.766	1.274	31.726	37.991	23.61

Source: Output of SmartPLS 4, (2022)

4.2 Validity and Reliability Tests

Validity and reliability tests were carried out to assess the internal suitability of the constructs used in the path model analysis. The reliability and internal consistency of the construction is assessed by looking at the CR (Composite Reliability) value which must be greater than 0.7 (Hair et al., 2017). Table 5 is the result of the test and shows that all constructs have a CR value above 0.7, so that the reliability and internal consistency of the constructs are acceptable. The Convergent Validity Test is evaluated by looking at the AVE (average variance extracted) value where all constructs have an AVE value above the threshold of 0.5, so that all variables can be used for hypothesis testing.

Table 2: Outer loadings of indicators and composite reliability

	Loadings	Composite Reliability	Average Variance Extracted (AVE)
Firm Size	1	1	1
ESG Controversies	1	1	1
ESG Performance	1	1	1
Environmental Pillar	1	1	1
Governance Pillar	1	1	1
ROA	1	1	1
Recovery Time	1	1	1
Social Pillar	1	1	1

Source: Output of SmartPLS 4, (2022)

With regard to the discriminant validity test, it was evaluated using the Fornell-Lacker criteria where the AVE square root of a construct must exceed its correlation with other constructs (Hair et al., 2017). Table 6 shows the results of the discriminant validity test and proves that all constructs pass the Fornell-Lacker criterion test.

Table 3: Discriminant validity test (Fornell-Lacker Criteria)

	Firm Size	ESG Contro	ESG Perform.	Envir. Pillar	Govern. Pillar	ROA	Recovery Time	Social Pillar
Firm Size	1							
ESG Contr	-0.091	1						
ESG Perform	0.257	-0.2	1					
Environ Pillar	0.238	-0.172	0.847	1				
Govern Pillar	0.141	-0.106	0.638	0.318	1			
ROA	0.026	0.058	-0.053	-0.038	-0.044	1		
Recovery Time	-0.079	-0.012	0.124	0.057	0.051	-0.018	1	
Social Pillar	0.229	-0.196	0.914	0.748	0.379	-0.038	0.162	1

Source: Output of SmartPLS 4, (2022)

To assess the uniqueness of an item, a collinearity test is performed using the collinearity statistic (VIF) value of a construct. As presented in Table 7, it shows that the constructs used in this formative study can be considered different from each other because the VIF value of each construct is below the threshold of 5 (Hair et al., 2017).

Table 7: Multicollinearity Testing

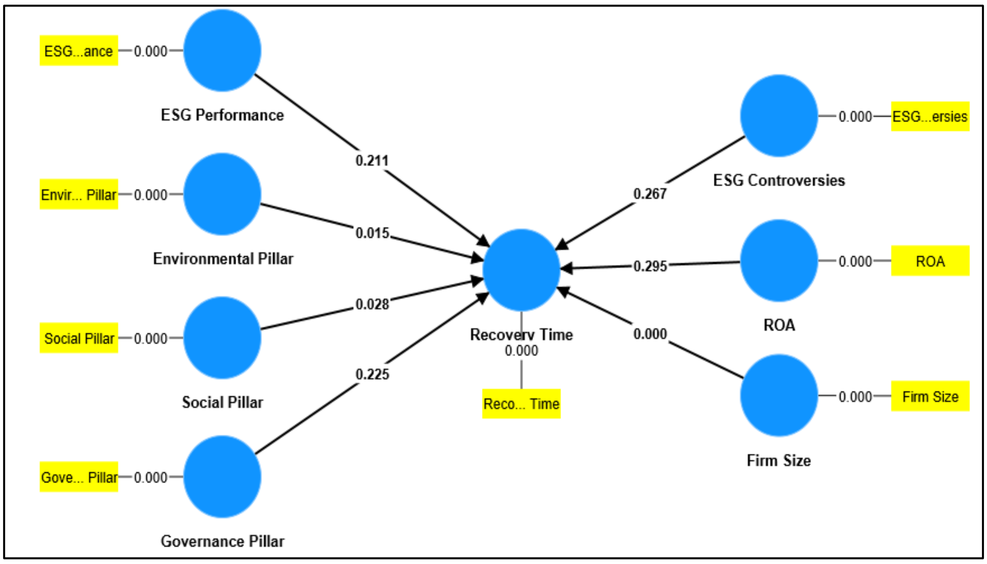
	VIF
Firm Size	1
ESG Controversies	1
ESG Performance	1
Environmental Pillar	1
Governance Pillar	1
ROA	1
Recovery Time	1
Social Pillar	1

Source: Output of SmartPLS 4, (2022)

4.3 Structural Model Analysis

After the construct has passed the validity and reliability tests, the next step is to describe the structural relationship of the proposed hypothesis. Figure 3 shows the structural relationship of the hypotheses used in this study.

Figure 3: Structural Model



Source: SmartPLS Output 4, (2022)

Through the Bootstrapping function, path analysis is carried out from the hypothesized structural model to produce T-statistics and test its significance. Table 8 shows the partial results of hypothesis testing regarding the effect of ESG performance, ESG component performance and the effect of control variables (ESG Controversies, ROA and Firm Size) on the recovery time of the company's stock price.

Our findings show that ESG Performance has a positive (Original Sample 0.16) and insignificant (P Values 0.211 > 0.1) effect on the stock price recovery time, so that Hypothesis 1 (H1) is **rejected**. Consistent with Hypothesis 1a (H1a), where the Environmental Pillar has a negative (Original Sample -0.185) and significant (P Values 0.015 <0.1) effect on the stock price recovery time, so Hypothesis 1a (H1a) is **accepted**. The results of this study also show that the Social Pillar has a positive

(Original Sample 0.202) and significant (P Values 0.028 <0.1) effect on the stock price recovery time, so that Hypothesis 1b (H1b) is **rejected**. Our findings are inconsistent with Hypothesis 1c (H1c) which has been given, where the Governance Pillar has a negative effect (Original Sample -0.052) and not significant (P Values 0.225 > 0.1) on the magnitude of the stock price recovery time, so that Hypothesis 1c (H1c) is **rejected.**

Table 8: Hypothesis Testing

Path	Original sample	T statistics	P values
H1 : ESG Performance -> Recovery Time	0.16	0.801	0.211
H1a : Environmental Pillar -> Recovery Time	-0.185	2.178	0.015*
H1b : Social Pillar -> Recovery Time	0.202	1.92	0.028*
H1c : Governance Pillar -> Recovery Time	-0.052	0.755	0.225
ESG Controversies -> Recovery Time	0.012	0.622	0.267
ROA -> Recovery Time	-0.009	0.539	0.295
Firm Size -> Recovery Time	-0.113	4.469	0*
Notes : *Significant P Values < 0,10 (one tailed test).			

Source: Output of SmartPLS 4, (2022)

This study also investigates that ESG Controversies has a positive (Original Sample 0.012) and not significant (P Value 0.267 > 0.1) effect on the stock price recovery time. This finding explains that company controversies related to their ESG activities did not affect the recovery time for company stock prices during the Covid-19 pandemic in Asia. This finding is in line with the results of research from de Vincentiis (2022) which found that ESG Controversies are used by investors only for consideration in determining the investment decisions. Even investors are sometimes better off waiting a few days after the announcement of negative company news to reduce exposure, so that ESG Controversies have no significant impact to the Recovery Time. The author argues that companies should continue to minimize negative company news related to their ESG activities, because the market will respond excessively, where investors will leave ESG shares that have too much controversy or negative news, so that it will have a negative impact on decreasing the value of company shares (Cui & Docherty, 2020).

ROA has a negative effect (Original Sample -0.009) and not significant (P value 0.295 > 0.1) on the stock price recovery time. This finding explains that the financial performance of companies in Asia has no effect on the magnitude of the loss in the decline in company stock prices during the Covid-19 pandemic. This finding is in line with the results of research from Pang (2021) which found that Corporate Financial Performance (ROA) had no significant effect on increasing stock returns during the COVID-19 pandemic. The author believes that these findings are in line with the COVID-19 pandemic which has led to a lockdown policy and has had a significant impact on reducing the company's overall operating profit, while their costs continue to increase (Carletti et al., 2020). Therefore, ROA does not have a significant impact on the recovery time of the company's stock price.

Corporate Size has a negative (Original Sample -0.113) and significant (P value 0 <0.1) effect on the stock price recovery time. This finding is consistent with the results of research from Li et al., (2022) and Shakil (2021) who also found firm size to have a significant effect on increasing company stock prices. The results of this study also explain that the larger the size of the company which is calculated by the greater the number of shares outstanding indicates the strength possessed by the company to maintain their share price during the Covid-19 pandemic, so that their share price does not fall significantly. In line with investor perceptions that the larger the size of a company, the greater the investor's confidence in the company's ability to maintain their share price, the larger the company indicates, and the greater their ability to recover from the Covid-19 pandemic crisis.

4.4 Supplementary Analysis

To test the robustness of the results we got in this study, we conducted an additional analysis, namely testing the effect of endogeneity. The endogeneity problem causes the research results to be inconsistent and biased, so that the research results cannot be interpreted causally. Huit et al., (2018) explained the detection of endogeneity problems through the Gaussian Copula approach in PLS-SEM, where endogeneity problems occur if the regression results of the Gaussian Copula approach in each construct are less than 5%. The results of testing the Gaussian Copula approach are presented in table 9 and show that it is based on T statistics and also P values of non-endogeneity are statistically significant (P values

> 0.05). So, it can be concluded that the model used has passed the robustness test, because there are no signs of endogeneity in the research model.

Table 4 Endogeneity Test: The Gaussian Copula Approach

Path	T statistics	P values
GC (ESG Performance) -> Recovery Time	0.027	0.979
GC (Environmental Pillar) -> Recovery Time	0.395	0.693
GC (Social Pillar) -> Recovery Time	1.652	0.099
GC (Governance Pillar) -> Recovery Time	0.777	0.437
GC (ESG Controversies) -> Recovery Time	0.227	0.82
GC (ROA) -> Recovery Time	0.16	0.873
GC (Firm Size) -> Recovery Time	1.29	0.197
Notes : GC = Gaussian Copula		

Source: Output of SmartPLS 4, (2022)

4.5 Discussion of Research Results

4.5.1 Effect of ESG Performance on Recovery Time

ESG performance has a positive and insignificant impact on Recovery Time. This finding explains that the better the ESG performance of companies in Asia, it will not speed up the time needed for the recovery of company stock prices during the COVID-19 pandemic, and vice versa. The results of this study are not in line with the SRI literature and research from Albuquerque et al., (2020), Gianfrate et al., (2021), Li et al., (2022), Buallay (2022) and Eng et al., (2022) which explain that a company's ESG performance has an impact significantly to the increase in the company's market performance. According to the SRI literature, companies that practice sustainable finance, in this case performing well on ESG, should show that the company is building positive relationships with stakeholders, society and the environment. Investors as one of the stakeholders should respond to this with positive behavior. On the other hand, Giakoumelou et al. (2022) stated that in a state of panic (the Covid-19 pandemic) and high uncertainty, it is likely that investors will only focus on the company's financial condition, while for investment managers (sophisticated investors), taking into account the ESG performance is something that needs to be adapted immediately.

The results of this study are in line with research from Ahmed et al., (2022), Shakil (2022) and Torre et al., (2020) which show that a company's ESG performance is not able to heal the company's stock performance which was damaged due to the COVID-19 pandemic. This is possible because the integration of ESG will create value for long-term shareholders, so that when a pandemic crisis occurs, ESG's performance has not been able to accelerate the recovery time for the company's share price. The positive correlation of ESG performance with the stock price recovery time indicates that the majority of investors seem to give punishment to the companies that perform well in ESG aspects. Therefore, various other factors are needed, such as financial flexibility to improve the company's stock performance in the face of unexpected shocks from the COVID-19 pandemic, so as to speed up the recovery time for company stock prices (Demers et al., 2020).

These findings indicate that the ESG performance is one aspect that is not considered by the shareholders or investors in Asia in making investment decisions. Because the majority of investors in Asia tend to behave short-sighted or short-term oriented investors. They have a view that the ESG aspect is one of the factors that weighs on the company's market performance. According to the results of this study, the investors' assessment of ESG shows that they tend not to realize the importance and essence of implementing ESG in the long term. Thus, the integration of ESG activities cannot accelerate the process of recovering the company's share price during the Covid-19 pandemic crisis. It takes joint efforts from various parties to build awareness that the principle of sustainability is important for our common future.

4.5.2 Effect of the Environmental Performance on Recovery Time

The research findings show that the ESG performance on the environmental pillar has a negative and significant effect on the recovery time of the company's stock price. This means that the better the company's environmental performance, the faster the recovery time for the company's stock prices during the Covid-19 pandemic in Asia. These findings are in line with the SRI literature and research results from Engelhardt Ekkenga, Jens, Posch, Peter, (2021) and Zeyun Li et al., (2022) which explains that the more companies' involvement in environmental performance, the better the stock performance. Thus, good environmental performance makes companies more resilient when market uncertainty is high, and therefore managers must increase their commitment to develop appropriate CSR strategies. Researchers believe that if the company's market performance increases, it shows the company's resilience so that the company has the ability to recover more quickly when a crisis occurs. Results that have a significant effect indicate that the more information disclosed by companies regarding the company's performance on the environment, will accelerate the process of recovering stock prices during a pandemic crisis, thereby influencing investors' decisions in making investment decisions.

Apart from causing a health crisis, the Covid-19 pandemic has also put pressure on economic and social conditions throughout the world. Investors are concerned that pandemic response activities will also have a negative impact on environmental conditions such as an increase in medical waste, errors in the disposal of personal protective equipment, an increase in municipal waste production, and a reduction in recycling activities (Facciolà et al., 2021). In addition, investors' attention to the company's environmental performance is also based on its future survival that depends on the environment. The author argues that the disclosure of environmental performance by companies also shows the company's concern for the investors and provides added value to the company from investors. Ultimately, the investors don't leave ESG stock with good environmental performance, so ESG's share price doesn't drop too badly and has a faster recovery time than their competitors.

4.5.3 Effect of Social Performance on Recovery Time

This study investigates that ESG performance on the Social Pillars has a positive and significant effect on the recovery time of a company's stock price. Results that have a significant effect indicate that the more information disclosed by companies regarding the company's social performance, the greater the recovery time for stock prices during a pandemic crisis, thereby influencing investors' decisions in making investment decisions. These findings are in contrast to the SRI literature and research from Managi et al., (2021) and Utami & Hasan (2021) which explain that better corporate social performance has an impact on higher returns and lower volatility. Furthermore, Zhou et al., (2021) and Bahari (2023) explained that a company's social performance significantly reduces the risk of falling stock prices during the Covid-19 pandemic crisis, even social contributions from charitable donations for pandemic relief have no impact on the risk of stock crashes.

This finding is in line with research from Buallay (2022) in a study related to the effect of social aspects on the performance of banking companies in Europe which revealed that social disclosure has a negative effect on the performance of Tobin's Q, ROA, and company ROE. This finding is consistent with Hypothesis 1 (H1) where the integration of ESG activities is only seen as a burden for the majority of investors in Asia, because they tend to be short-sighted or short-term oriented investors. In line with Mahmud et al., (2021), who explained that during the Covid-19 pandemic crisis, companies carried out a lot of social performance to support key stakeholders such as employees, customers, and society (community) as a whole through their ESG initiatives, such as companies donated many goods, including donations of personal protective equipment for health workers, medical equipment, food security, shelter, and support for small and medium enterprises. So that the better the company's social performance, it gives a signal to the investors that a lot of funds will be spent to finance these activities and if not supported by good financial conditions it will burden the company, which in turn has an impact on the longer time it takes for stock prices to recover from the pandemic crisis.

4.5.4 Effect of Governance Performance on Recovery Time

The research findings show that the ESG performance on the Governance pillar has a negative and insignificant effect on the recovery time of the company's stock price. That is, the better the company's Governance performance, the less influential it will be in accelerating the recovery time for company stock prices during the Covid-19 pandemic in Asia, and vice versa. The results of this study are inconsistent with the SRI literature and research from Amelia et al., (2021), Dezi et al., (2021), Hsu & Liao (2022) and Wang et al., (2021) which explain that governance performance will affect significantly on the company's market performance. They also explained that good corporate governance performance will reduce the risk of falling stock prices during a crisis which will ultimately improve the company's sustainable and stable market performance.

This finding is in line with research from Hafidzi (2021) and Kurniaty et al., (2019) that no matter how many disclosures of corporate governance performance are, it will not have a significant effect on the company's market performance. Furthermore, Bătae et al., (2020) explained that the quality of corporate governance has a negative contribution to market valuation, this indicates that market investors do not appreciate the company's involvement in supporting the implementation of best governance practices that can reduce the risk of the company's portfolio. This finding indicates that the investors do not pay attention to the ESG performance in the Governance Pillar, both during normal conditions and during a crisis due to the COVID-19 pandemic. In other words, the application of the ESG to the Governance Pillars does not change the views of the investors, so it does not accelerate the recovery of the company's share price in times of crisis due to the pandemic.

This shows a unique phenomenon, in which investors in Asia tend to prefer short-term profits (short-sighted). Investors tend to assume that the implementation of good governance policies will not potentially increase the company's stock price, at least in the short term. The author suspects that the investors tend to prefer investing in companies with moderate, or even poor, governance aspects, as long as they provide short-term profits, rather than investing in companies with good governance performance but the potential for long-term value increases. Another argument that strengthens this phenomenon is that investors in Asia consider the disclosure of good governance to be only a management gimmick to fulfill the company's institutional obligations to regulators and the public without providing significant added value to the company. So based on this, Governance performance did not have a significant effect on accelerating the recovery time for company stock prices in Asia during the Covid-19 pandemic crisis.

5. Conclusions

The findings in this study indicate that the integration of the ESG activities in Asia has no significant effect on accelerating the recovery time for stock prices during the Covid-19 pandemic. However, the results of research on the performance of each ESG component show unique findings, where the company's environmental performance has a negative and significant impact on the magnitude of the recovery time for the company's stock price. Then the company's social performance has a positive and significant impact on the recovery time of the company's stock price. Finally, the company's governance performance did not have a significant impact on accelerating the recovery time for stock prices during the Covid-19 pandemic. This finding shows a unique phenomenon, in which investors in Asia tend to prefer short-term gains (short-sighted). So that being a good company (in terms of implementing ESG) will create an additional burden for the company, which in the end will not be able to help speed up the recovery time for the company's stock price.

The application of ESG as reflected in the ESG score has not been fully implemented by the companies in Asia. This is reflected in the fact that there are only a few companies that have an ESG score from the ESG rating provider, Refinitiv Eikon. The decision to use a rating agency has the potential to provide different results and findings. Authors get access to ESG data from Refinitiv. If data from other providers is used, it is possible to produce different findings.

This research provides implications in the form of several benefits for various parties such as management, investors, regulators and further researchers. For company management, the results of this study have implications for company management to be increasingly motivated to focus more on sustainability aspects and align them with financial conditions and the wishes of stakeholders. As well as company management should more frequently promote the integration of their ESG activities in the mass media, company websites and other reporting media, so that the investors become more aware of the importance of sustainability performance in providing added value to hem. It takes joint efforts from various parties to build awareness that the principle of sustainability is important for our common future. The findings in this study can be used as feedback for governments around the world, especially in the Asian region, and can be used as consideration or input in improving the quality of the existing regulations and standards related to ESG activities and corporate sustainability reports.

Finally, the authors recommend that the future research is expected to (1) be able to analyze and add other factors or aspects of sustainability that can affect Corporate Resilience, such as Sustainable Development Goals (SDGs) and others, (2) use analyst coverage as a moderating variable, to find out whether analysts' assessments related to ESG are able to change the investors' views or not, and (3) extend the research time, because the Covid-19 pandemic does not only take place in 2020. For more concrete results, the future researchers are advised to provide an analysis of the effect of the ESG performance based on worldwide evidence. This research is proposed to be used as additional reference material for further research in the same field, such as financial accounting and sustainable accounting, so as to improve the quality of the research results.

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References

Ahmed, D., Demers, E., Hendrikse, J., Joos, P., & Lev, B. I. (2022). Are ESG Ratings Informative About Companies' Socially Responsible Behaviors Abroad? Evidence From the Russian Invasion of Ukraine. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4151996

Albuquerque, R. A., Koskinen, Y. J., & Santioni, R. (2022). Mutual Fund Trading and ESG Stock Resilience During the Covid-19 Stock Market Crash. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4154455

Albuquerque, R., Koskinen, Y., Yang, S., & Zhang, C. (2020). Resiliency of environmental and social stocks: An analysis of the exogenous COVID-19 market crash. *Review of Corporate Finance Studies*, *9*(3), 593–621. https://doi.org/10.1093/rcfs/cfaa011

Amelia, D. F., Adam, M., Isnurhadi, I., & Widiyanti, M. (2021). Market performance and corporate governance in banking sector Indonesia stock exchange. *International Journal of Business, Economics & Management*, *4*(1), 1–7. https://doi.org/10.31295/ijbem.v4n1.400

Bahari, A. (2023). Corporate Social Responsibility Dan Ketahanan Perusahaan Dalam Menghadapi Pandemik Di Asia Tenggara. *Jurnal Akademi Akuntansi*, *6*(1), 1-19.

Bătae, O. M., Dragomir, V. D., & Feleagă, L. (2020). Environmental, Social, Governance (ESG), and Financial Performance of European Banks. *Journal of Accounting and Management Information Systems*. https://doi.org/10.24818/jamis.2020.03003

Bernama. (2021). *Companies with good ESG practices more resilient during Covid-19 pandemic, says Bursa CEO*. The Edge Market. https://bursasustain.bursamalaysia.com/droplet-details/news/companies-with-good-esg-practices-more-resilient-during-covid-19-pandemic-says-bursa-ceo

Buallay, A. M. (2022). Sustainability Reporting in Different Regions. In *International Perspectives on Sustainability Reporting* (pp. 167–187). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80117-856-320221010

Carletti, E., Oliviero, T., Pagano, M., Pelizzon, L., & Subrahmanyam, M. G. (2020). The COVID-19 Shock and Equity Shortfall: Firm-Level Evidence from Italy. *The Review of Corporate Finance Studies*, 534–568. https://doi.org/10.1093/rcfs/cfaa014

Cheema-Fox, A., LaPerla, B. R., Serafeim, G., & Wang, H. (2020). Corporate Resilience and Response During COVID-19. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3578167

Christian, J., Juanda, B., & Bandono, B. (2020). Good Corporate Governance on Stock Prices of Companies Listed in the KOMPAS 100 Index 2014-2018. *International Research Journal of Business Studies*, *13*(3), 293–306. https://doi.org/10.21632/irjbs.13.3.293-306

Chrysnamurti, E. (2020). *Setahun Corona di Indonesia, Pasang Surut IHSG dan Generasi Baru Investor Saham*. Bisnis.Com. https://market.bisnis.com/read/20210302/7/1362610/setahun-corona-di-indonesia-pasang-surut-ihsg-dan-generasi-baru-investor-saham

Cui, B., & Docherty, P. (2020). Stock Price Overreaction to ESG Controversies. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3559915

Darmayanti, N., Mildawati, T., & Dwi Susilowati, F. (2020). Dampak Covid-19 Terhadap Perubahan Harga Dan Return Saham. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, *4*(4), 462–480. https://doi.org/10.24034/j25485024.y2020.v4.i4.4624

de Vincentiis, P. (2022). Do international investors care about ESG news? *Qualitative Research in Financial Markets*. https://doi.org/10.1108/QRFM-11-2021-0184

Demers, E., Hendrikse, J., Joos, P., & Lev, B. (2020). ESG Didn’t Immunize Stocks Against the Covid-19 Market Crash. *SSRN Electronic Journal*. https://coller.tau.ac.il/sites/coller.tau.ac.il/files/media_server/Recanati/management/seminars/account/2021/DHJL_August31st.pdf

DesJardine, M., Bansal, P., & Yang, Y. (2019). Bouncing Back: Building Resilience Through Social and Environmental Practices in the Context of the 2008 Global Financial Crisis. *Journal of Management*, *45*(4), 1434–1460. https://doi.org/10.1177/0149206317708854

Dezi, L., Paolone, F., Santamaria, R., Cucari, N., & Bresciani, S. (2021). Non-financial Strategy Disclosure and Environmental, Social and Governance Score: Insight From a Configurational Approach. *Business Strategy and the Environment*. https://doi.org/10.1002/bse.2728

Duque-Grisales, E., Grisales, E. A. D., & Aguilera-Caracuel, J. (2019). Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-019-04177-w

Eikon, R. (2022). *Environmental, social and governance (ESG) scores from Refinitiv*. https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/refinitiv-esg-scores-methodology.pdf

Engelhardt Ekkenga, Jens, Posch, Peter, N. (2021). ESG Ratings and Stock Performance During the COVID-19 Crisis. *Sustainability*. https://doi.org/10.3390/su13137133

Eng, L. L., Fikru, M., & Vichitsarawong, T. (2022). Comparing the informativeness of sustainability disclosures versus ESG disclosure ratings. *Sustainability Accounting, Management and Policy Journal*, *13*(2), 494–518. https://doi.org/10.1108/SAMPJ-03-2021-0095

Facciolà, A., Laganà, P., & Caruso, G. (2021). The COVID-19 pandemic and its implications on the environment. *Environmental Research*, *201*(July). https://doi.org/10.1016/j.envres.2021.111648

Fender, R., Stammers, R., & Urwin, R. (2020). *Future of Sustainability in Investment Management: From Ideas to Reality (R. Preece, Ed.)* (p. 17). CFA Institute.

Giakoumelou, A., Salvi, A., Bertinetti, G. S., & Micheli, A. P. (2022). 2008's Mistrust vs 2020's Panic: Can ESG Hold Your Institutional Investors? *Management Decision*. https://doi.org/10.1108/md-12-2021-1669

Gianfrate, G., Kievid, T., & Dijk, M. van. (2021). On the resilience of ESG stocks during COVID-19: Global evidence. *Covid Economics: Vetted and Real-Time Papers*, *83*, 25–53. https://www.researchgate.net/profile/Gianfranco-Gianfrate/publication/352907595_On_the_resilience_of_ESG_stocks_during_COVID-19_Global_evidence/links/60df4367299bf1ea9eda52a0/On-the-resilience-of-ESG-stocks-during-COVID-19-Global-evidence.pdf#page=33

Giove, S., Angelova, D., Bosello, F., & Bigano, A. (2021). Sovereign Rating Methodologies, ESG and Climate Change Risk: An Overview. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3841948

Hafidzi, A. H. (2021). The Effect of GCG on Stock Returns through the Performance of Manufacturing Companies During the Covid 19 Pandemic. *IOSR*, *23*(1), 46–51. https://doi.org/10.9790/487X-2301044651

Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA.

Hsu, Y. L., & Liao, L. K. (Connie). (2022). Corporate governance and stock performance: The case of COVID-19 crisis. *Journal of Accounting and Public Policy*, *41*(4), 106920. https://doi.org/10.1016/j.jaccpubpol.2021.106920

Huit, G. T. M., Hair, J. F., Proksch, D., Sarstedt, M., Pinkwart, A., & Ringle, C. M. (2018). Addressing endogeneity in international marketing applications of partial least squares structural equation modeling. *Journal of International Marketing*, *26*(3), 1–21. https://doi.org/10.1509/jim.17.0151

Januar, F., Prastyo, T. J., & Syaipudin, U. (2022). EFFECT OF FINANCIAL PERFORMANCE ON STOCK RETURN DURING COVID-19. *Jurnal Akuntansi Dan Pajak*, *23*(1), 1–7. https://doi.org/10.29040/jap.v23i1.5377

Kell, G. (2018). *The Remarkable Rise Of ESG*. Forbes.Com. https://www.forbes.com/sites/georgkell/2018/07/11/the-remarkable-rise-of-esg/?sh=ed232f816951

Khan, M. A. (2022). ESG disclosure and Firm performance: A bibliometric and meta analysis. *Research in International Business and Finance*, *61*(February), 101668. https://doi.org/10.1016/j.ribaf.2022.101668

Korwatanasakul, U. (2020). *Environmental, Social, and Governance Investment: Opportunities and Risks for Asia*. ADBI.

Kurniaty, S., Ragil Handayani, S., & Mangesti Rahayu, S. (2019). *Stock return and financial performance as moderation variable in influence of good corporate governance towards corporate value*. *4*(1), 18–34. https://doi.org/10.1108/AJAR-07-2018-0021

Li, Zengfu, Feng, L., Pan, Z., & Sohail, H. M. (2022). ESG performance and stock prices: evidence from the COVID-19 outbreak in China. *Humanities and Social Sciences Communications*, *9*(1), 1–10. https://doi.org/10.1057/s41599-022-01259-5

Li, Zeyun, Wei, S. Y., Chunyan, L., Mahfod, M. M., Qadus, A., & Hishan, S. S. (2022). The impact of CSR and green investment on stock return of Chinese export industry. *Economic Research-Ekonomska Istrazivanja* , *35*(1), 4971–4987. https://doi.org/10.1080/1331677X.2021.2019599

Liu, Y., Li, W., & Meng, Q. (2023). Influence of distracted mutual fund investors on corporate ESG decoupling: evidence from China. *Sustainability Accounting, Management and Policy Journal*, *14*(1), 184–215. https://doi.org/10.1108/SAMPJ-10-2021-0401

Mahmud, A., Ding, D., & Hasan, M. M. (2021). Corporate Social Responsibility: Business Responses to Coronavirus (COVID-19) Pandemic. *SAGE Open*, *11*(1). https://doi.org/10.1177/2158244020988710

Managi, S., Yoo, S., Keeley, A. R., & Managi, S. (2021). Does Sustainability Activities Performance Matter During Financial Crises? Investigating the Case of COVID-19. *Energy Policy*. https://doi.org/10.1016/j.enpol.2021.112330

Mohammad, W. M. W., & Wasiuzzaman, S. (2021). Environmental, Social and Governance (ESG) Disclosure, Competitive Advantage and Performance of Firms in Malaysia. *Cleaner Environmental Systems*. https://doi.org/10.1016/j.cesys.2021.100015

Pang, J. (2021). The Impact of Financial Performance on Stock Return in China's High-Tech Industry. *World Scientific Research Journal*, *7*(6), 186–195. https://doi.org/10.6911/WSRJ.202106_7(6).0023

Pranata, C. D. (2021). *Bursa Saham Asia 2020: Korea Juara, Singapura Nelangsa*. CNBC Indonesia. https://www.cnbcindonesia.com/market/20210101140405-17-212915/bursa-saham-asia-2020-korea-juara-singapura-nelangsa

Rahman, K., & Bahari, A. (2023). The Influence Of Environmental, Social And Governance (ESG) Performance On The Severity Of Losses And The Recovery Time Of Stock During The Crisis Of The Covid-19 Pandemic In Southeast Asia. *Management Studies and Entrepreneurship Journal (MSEJ)*, *4*(4), 4624-4638.

Sajko, M., Boone, C., & Buyl, T. (2021). CEO Greed , Corporate Social Responsibility , and Organizational Resilience to Systemic Shocks. *Journal of Man*, *47*(4), 957–992. https://doi.org/10.1177/0149206320902528

Schaltegger, S. (2021). Sustainability learnings from the COVID-19 crisis. Opportunities for resilient industry and business development. *Sustainability Accounting, Management and Policy Journal*, *12*(5), 889–897. https://doi.org/10.1108/SAMPJ-08-2020-0296

Shakil, M. H. (2021). Environmental, Social and Governance Performance and Financial Risk: Moderating Role of ESG Controversies and Board Gender Diversity. *Resources Policy*. https://doi.org/10.1016/j.resourpol.2021.102144

Shakil, M. H. (2022). Environmental, social and governance performance and stock price volatility: A moderating role of firm size. *Journal of Public Affairs*, *22*(3), 1–11. https://doi.org/10.1002/pa.2574

Tett, G., Nauman, B., Temple-West, P., & Edgecliffe-Johnson, A. (2020). *ESG shines in the crash; legal milestone for ratings*. Financial Times. https://www.ft.com/content/dd47aae8-ce25-43ea-8352-814ca44174e3

Torre, M. La, Mango, F., Cafaro, A., & Leo, S. (2020). Does the ESG Index Affect Stock Return? Evidence From the Eurostoxx50. *Sustainability*. https://doi.org/10.3390/su12166387

Utami, E. S., & Hasan, M. (2021). The Role Of Corporate Social Responsibility On The Relationship Between Financial Performance And Company Value. *Journal of Asian Finance, Economics and Business*, *8*(3), 1249–1256. https://doi.org/10.13106/jafeb.2021.vol8.no3.1249

Wang, Q., Li, X., & Liu, Q. (2021). Empirical research of accounting conservatism, corporate governance and stock price collapse risk based on panel data model. *Connection Science*, *33*(4), 995–1010. https://doi.org/10.1080/09540091.2020.1806204

Xia, Y., Qiao, Z., & Xie, G. (2022). Corporate resilience to the COVID-19 pandemic : The role of digital finance. *Pacific-Basin Finance Journal*, *74*(June), 101791. https://doi.org/10.1016/j.pacfin.2022.101791

Zhou, F., Zhu, J., Qi, Y., Yang, J., & An, Y. (2021). Multi-dimensional corporate social responsibilities and stock price crash risk: Evidence from China. *International Review of Financial Analysis*, *78*(October), 101928. https://doi.org/10.1016/j.irfa.2021.101928