

The Impact of Corporate Social Responsibility to Corporate Resilience During Covid-19 Pandemic: Case of IDX Listed Company

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Abstract – During the coronavirus (COVID-19) pandemic, many companies became actively involved in various corporate social responsibility (CSR) activities to highlight their resilience to investors. However, there are still many companies that don't publish sustainability report to provide an overview of their social responsibility disclosures. This research aims to know the effect of corporate social responsibility interpreted by GRI Index on corporate resilience during the COVID-19 pandemic in Indonesia. The research conducted on all sector publicly listed companies in Indonesia Stock Exchange for 2020. The methodology used in this research is data panel fixed effect model (FEM) regression with *cross-section weights* to examine the corporate resilience interpreted by the *abnormal stock return*. Firm performance is used as a control variable interpreted by *return on asset (ROA)*. The result indicated that corporate social responsibility simultaneously has a significant effect on corporate resilience. ROA has no relationship and influence to support CSR's strong influence on *abnormal stock return*. The result also emerges that perhaps there is a pronounced individual and time effect. This research suggests it is better for investors to be selective in the selecting the stock of the companies and suggest the company to focus on disclosing CSR using GRI Index 2016.

Keywords – Corporate Social Responsibility, Corporate Resilience, *Abnormal Stock Returns*, GRI Index, COVID-19.

I. INTRODUCTION

The world is being hit by the global coronavirus pandemic (COVID-19), including in Indonesia. It was reported to have spread to Indonesia on March 2, 2020, and it is expected to have substantial impact over time. This pandemic is disrupting the economy, political, and also social crises globally. In 2020, the global economy was on the verge of collapsing, putting low-income households in a particularly difficult position. By April 2020, Indonesia has already lowered its 2020 GDP growth forecast from 5.3% to 2.3%. The pandemic has an impact on all industries. Companies suffer a variety of obstacles, including reduced product demand, raw material shortages, transportation disruptions, and so on (Shafi et al., 2020). The availability of workforce and materials has decreased, while more and more balance sheets and cash flows are becoming capital-distressed. The biggest drop was seen in IHSG markets when compared to the end of 2019. By the end of 2020, IHSG fell into minus 5.09%. The property, real estate, and building construction became the most affected sector during the pandemic with a fall of minus 21.23% at the end of 2020. While the mining sector succeeded in maintaining its resilience, it

became the most not affected with an increase to 23.69% compared to the last year, minus 12.83%.

TABLE I
STOCK RETURN OF IHSG AND SECTORS IN 2019 AND 2020

Sector	2019	2020
IHSG	1.70%	-5.09%
Mining	-12.83%	23.69%
Trade, Services, and Investment	-1.79%	-0.45%
Finance	15.22%	-1.59%
Agriculture	-2.55%	-1.74%
Basic Industry and Chemicals	14.44%	-5.84%
Consumer Goods	-20.11%	-10.74%
Miscellaneous	-12.23%	-11.67%
Infrastructure, Utilities, and Transportation	6.88%	-12.00%
Property, Real Estate, and Building Construction	12.54%	-21.23%

Businesses were under pressure from the COVID-19 pandemic to quickly adapt to the financial crisis and demonstrate their resiliency to all stakeholders. Business may demonstrate their stability, flexibility, and ability to withstand threats and adapt to new conditions by focusing on resilience to prove their resilience to the stakeholders. Corporate resilience is defined as the ability of a firm or service to mobilize traits that enable it to tolerate, overcome, and be strengthened by negative events and experiences (Mowbray, 2011). DesJardine et al. (2019) defines resilience as an essential in the management of external disruptions, such as natural disaster, economic crises, and common diseases.

The urgency has brought the government to issue social distancing, working from home, self-isolation, and travel restrictions policies to stop the COVID-19 virus from spreading. According to Cheema-Fox et al. (2020), because of the fear of uncertainty, these restrictions impacted labor force, supply chains, also product and service sales right away, as well as stock price decreases. It caused investors to sell their stocks, causing significant economic harm, and long worldwide supply lines to break down, resulting in a loss of trust in the company's performance. Investors must project how much of a market reaction the COVID-19 pandemic will have, so the company's stock return performance can convey corporate resilience. To prove resiliency, companies tried to act through corporate social responsibility (CSR) as government assistance programs. Previous studies such Huang et al. (2020) stated that higher CSR performance companies will suffer fewer losses before the shock and need a faster recovery time from the shock. In line with

Albuquerque et al. (2020) and Ding et al. (2020) that looked at the impact of pre-2020 features on company resilience and discovered that companies with higher CSR activities and high ES rating are less vulnerable to stock price decreases. Lee and Lu (2020) also states investors had more confidence in CSR companies during the stock market downturn and that the share prices of CSR companies are relatively resistant to declines. CSR participations adds to corporate resilience in favorable way.

While several companies have contributed via taxed and CSR programs to the country, the lack of awareness of the advantages of proper CSR programs has prevented some companies from fully enforcing their CSR. To assist those affected and in efforts to avoid the COVID-19 pandemic, several businesses in Indonesia have slightly shifted their course of CSR. In 2017, OJK has issued a regulation that requires all financial services institutions, issuers, and publicly traded firms in Indonesia to develop and implement sustainable action plans and sustainability reports by 2020. There are 716 Indonesian Listed firms in IDX by 2020 and only 77 companies have published sustainability report according to GRI Index 2016 in 2019-2020. There are some various results regarding the study on the effect of CSR on firms during the COVID-19 pandemic. Below the table of research gaps of previous studies during COVID-19 pandemic between 2020 and 2021.

TABLE 2
RESEARCH GAPS

Research Gap	Research Result	Researcher
Various studies on the impact of CSR on stock performance during the COVID-19 pandemic have raised several concerns.	There is evidence that CSR affected stock performance	Albuquerque et. al, 2020; Ding et. al, 2020; Huang, Chen, and Nguyen., 2020; Lee and Lu, 2021; Safira Anisa, 2021
	There is no evidence that CSR affected stock performance	Bae, Ghoul, Gong, and Guedhami, 2020

II. METHODOLOGY

This research's population covers Indonesia listed companies that are listed on IDX for 2020. This research used purposive sampling technique to obtain representative samples following predetermined criteria.

TABLE 3
SAMPLING TECHNIQUES FOR POPULATION AND SAMPLE

No	Description	N
1	Population (All companies listed on IDX for 2020)	725
2	Sample used	77
	a. Publish the complete annual report and sustainability report based on GRI standards 2016 for 2019 and/or 2020	
	b. The company has complete data related to research variables, in this research is the GRI Index on sustainability report and firm performance ratio on annal report during 2019 and/or 2020	
3	Sample not used	648

According to GRI Reporting Principles, the information in the report is presented on year-to-year basis (GRI, 2016). So, the author use annually data to find out its time effect and consider 2019 as pre-COVID-19 pandemic and 2020 as during COVID-19 pandemic, since in Indonesia COVID-19 pandemic started in March 2, 2020.

The highest total of listed companies' sample which is sector with highest CSR or sustainability report published during 2019-2020 are Mining sector (n = 12) followed by Basic Industry and chemicals (n = 11) and Finance (n = 10).

TABLE 4
RESEARCH' SAMPLE

Sector	Population	Sample			Total Sample
		SR 2019*	SR 2020*	SR 2019 and 2020***	
Mining	49	2	1	9	12
Consumer Goods	64	3	0	5	8
Trade, Service, and Investment	180	1	5	3	9
Agriculture	24	4	1	2	7
Miscellaneous	53	1	1	1	3
Finance	94	0	0	10	10
Infrastructure, Utilities, and Transportation	83	5	1	3	9
Basic Industry and Chemicals	80	6	0	5	11
Property, RE, and Build-	98	2	0	6	8
TOTAL	725				77

*Companies that only published Sustainability Report in 2019 and not yet published in 2020 per June 2021

**Companies just started to publish Sustainability Report in 2020

***Companies already published Sustainability Report in 2019 and 2020

TABLE 5
DETAILED COMPANIES SAMPLE

Sector	Companies (Stock code)
Mining	ANTM, INCO, MDKA, ADRO, PTBA, TINS, ITMG, INDY, BUMI, BRMS, TOBA, PTRO
Consumer Goods	UNVR, KLBK, SIDO, KAUF, MLBI, INAF, MERK, PEHA
Trade, Services, and Investments	UNTR, EMTK, AMRT, ACES, SCMA, AKRA, SRTG, SILO, EPMT
Agriculture	AALI, SMAR, SSMS, LSIP, SIMP, DSNG, ANJT
Miscellaneous	ASII, AUTO, BRAM
Finance	BBCA, BBNI, BBRI, BBTN, BJBR, BMRI, BNGA, BNLI, PNBK, BTPS
Infrastructure, Utilities, and Transportation	PGAS, TBIG, JSMR, EXCL, POWR, TAMU, PSSI, MBSS, WINS
Basic Industry and Chemicals	BRPT, SMGR, INKP, INTP, TKIM, JPFA, SMCB, GGRP, WTON, FPNI
Property, RE, and Building Construction	PWON, WSKT, WIKA, PTPP, ADHI, PPRO, BSDE, WEGE

2.1 Dependent Variable

Following previous studies, Cheema-Fox et. al. (2020) and Ding et. al. (2020), this research uses *abnormal stock return* to interpret corporate resilience during COVID-19 pandemic. By evaluating stock price recovery, corporate resilience could be shown to have an indirect impact on other organizational outcomes.

$$R_t = IHSIt - IHSIt-1 / IHSIt-1$$

$$R_{mt} = IHSgt - IHSgt-1 / IHSgt-1$$

$$AR_{it} = R_{it} - R_{mt}$$

2.2 Independent Variable

The independent variable used in this research is corporate social responsibility. Following the MSCI ESG research method, this research will only examine environmental (*CSR_ENV*), social (*CSR_SOC*), and governance (*CSR_GOV*) disclosure based on GRI Standards 2016. The Corporate Social Disclosure Index (CSDI) is used to assess CSR disclosures with checklist technique, which mean that an item that is disclosed is given a value of 1 and an item that is not disclosed is given a value of 0.

The environmental topics (GRI 300) consists of 28 disclosures serves as a baseline for environmental issues. This indicator is used to show information about a company's environmental impact from its operations. The social topics (GRI 400) consists of 33 disclosures used to disclose information on the social impacts of a company's operations. Lastly, the governance topics from GRI 102 General Disclosures consists of 22 disclosures give a high-level overview of the governance system and its components.

$$CSDI_j = \sum X_{ij} / n_j$$

2.3 Control Variable

To examine the effect of CSR, this research will use *return on assets* (ROA) ratio as a control variable to interpret the financial performance of a company. Following previous studies, identifying and treating corporate financial situations might affect stock prices responses to the expansion of COVID-19 cases, considering the pandemic's negative impact on cash flows and liquidity.

$$ROA = \text{Net Income} / \text{Total Assets}$$

III. RESULTS

3.1 Descriptive Statistics

Descriptive statistical analysis is to provide a general description or explanation of data from a variable under study which includes independent variables, namely

CSR_ENV, *CSR_SOC*, and *CSR_GOV* and dependent variable, namely *STOCK_RETURN*. Since, this research also uses control variables, the table below includes the control variable, namely *ROA*.

TABLE 5
DESCRIPTIVE STATISTICS

	ST_RET	CSR_ENV	CSR_SOC	CSR_GOV	ROA
Mean	0.1239	0.2620	0.2532	0.1806	0.042
Median	0.0069	0.2500	0.2121	0.0454	0.026
Max	3.6809	1.0000	0.9090	1.000	0.416
Min	-1.700	0.0000	0.0000	0.0000	-0.11
Std. D	0.5909	0.2406	0.2169	0.3027	0.075
Jarque-Bera	866.63	21.813	10.168	133.22	450.0
Prob.	0.000	0.0000	0.0061	0.0000	0.000
Sum	19.091	40.357	39.000	27.818	6.504

The dependent variable for *abnormal stock return* shows a mean value of 0.1239 or 12.39% with a standard deviation of more than 0.5909 greater than the mean value, which means that statistically during 2019-2020 the *abnormal stock return* has not met the standard which indicates that the data deviation is relatively poor. The minimum value of -1.700 owned by BSDE in the property, real estate, and building construction sector as a sector that has the lowest return during 2020. While the maximum value of 3.6809 is owned by INAF in the consumer goods sector, pharmaceutical sub-sectors consider to provide health requirements throughout this pandemic.

The *CSR_ENV* variable shows a mean value of 0.2620 with a standard deviation of 0.2406 which is smaller than the mean value, means that statistically during 2019-2020 the amount of environmental disclosure of companies has met standard which shows that the data deviation is relatively good. The minimum value is owned by AMRT during 2020 in trade, service, and investment sector and some companies that did not publish SR. While the maximum value of 1.00 is owned by MERK both during 2019 and 2020 in the consumer goods sector.

The *CSR_SOC* variable shows a mean value of 0.2532 with a standard deviation of 0.2169 smaller than the mean value, which means that statistically during 2019-2020 the amount of social disclosures of companies has met the standard which shows the data deviation is relatively good. The minimum value of 0 is owned by some companies that did not publish SR. While the maximum value of 0.9090 is owned by MERK during 2020 in the consumer goods sector.

The *CSR_GOV* variable shows a mean value of 0.1806 with a standard deviation of 0.3027 which is higher than the average value, means that statistically during 2019-2020 the amount of governance disclosure has not met the standard which shows that the data deviation is relatively poor. The minimum value of 0 are owned by some companies that did not publish SR. While

the maximum value of 1.00 are owned by INCO, ITMG, ANJT, MERK, PGAS, WIKA, BBRI, BJBR, and BNGA.

3.2 Panel Data Regression Model

To allow the intercept to vary between individuals and time effect, this research uses dummy variables, particularly, the differential intercept dummies. The author differentiates individuals from company that published SR between 2019 and 2020. One observation, $D1 = 1$ for the company that published report that year and zero the other. For time series, this research took data and samples during 2019 and 2020. One observation, $D1 = 1$ for the year 2020 and zero for the other.

Common Effect Model

Common effect model is the simplest panel data regression model since it only combines time series and cross-section data. This model ignores the dimensions of time and individuals, it is assumed that the behaviour of the company's data remains consistent across time. Based on the regression result, it shows that there is a constant value of -0.1315 with a probability of 0.2761. The CEM regression equation has an adjusted R-squared of 0.0961 which means the variance of *CSR_ENV*, *CSR_SOC*, and *CSR_GOV* interaction with *abnormal stock return* is 9.61% and the remaining is influenced by other independent variable that are not used in this research.

Fixed Effect Model

Fixed effect model assumes that differences in intercepts may accommodate differences in individuals. Based on the regression result, it shows that there is a constant value of -0.2621 with a probability of 0.1431. The FEM regression equation has adjusted R-squared of 0.4798 which means the variance of *CSR_ENV*, *CSR_SOC*, and *CSR_GOV* interaction with *abnormal stock return* is 47.98% and the remaining is influenced by other independent variable that are not used in this research.

Random Effect Model

Random effect model will estimate panel data when the disturbance variables are connected through time and between people. The number of cross-sections must be greater than the number of study variables when using a panel data analysis with a REM. The intercept difference is compensated by error in this model. The REM has the advantage of eliminating heteroscedasticity. Based on the regression result, it shows that there is a constant value of -0.1315 with a probability of 0.3182. The REM regression equation has an adjusted R-squared of 0.0961 which means the variance of *CSR_ENV*, *CSR_SOC*, and *CSR_GOV* interaction with *abnormal stock return* is 9.61% and the remaining is influenced by other independent variable that are not used in this research.

3.3 Panel Data Regression Model Selection

Chow Test

The chow test is used to assess whether a fixed effect or common effect model should be used to estimate panel data. The following are the result of chow test:

TABLE 6
MODEL TEST RESULT USING THE CHOW TEST

Redundant Fixed Effects Test			
Equation: Untitled			
Test Cross-section fixed effects			
Effect Test	Statistic	d.f.	Prob.
Cross-section F	6.592208	(76,71)	0.0000
Cross-section Chi-square	321.316804	76	0.0000

Based on the result, the probability value (P-value) of cross-section F is $0.0000 < 0.05$. As a result, the null hypothesis is rejected. Fixed effect model (FEM) is more appropriately used.

Hausman Test

Since the chow test result is H_0 rejected, and choose FEM, the next testing is the Hausman Test. The following are the result of Hausman Test:

TABLE 7
MODEL TEST RESULT USING THE HAUSMAN TEST

Correlated Random Effects – Hausman Test			
Equation: Untitled			
Test Cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.0000000	6	1.0000
*Cross-section test variance is invalid. Hausman statistic set to zero.			
**WARNING: estimated cross-section random effects variance is zero.			

Based on the result, the probability value (P-value) of cross-section random is $1.0000 > 0.05$ with an information cross-section test variance is invalid. Hausman statistic set to zero. The result is the null hypothesis is rejected, so that the Fixed effect model (FEM) is precisely used.

3.4 Classic Assumption Test Result

If the estimation method used is Ordinary Least Square (OLS), then the classical assumption test that must be carried out are normality, heteroscedasticity, multicollinearity, and autocorrelation tests.

Normality Test

The normality test is used to verify whether the collected data is normally distributed or not. The chosen method for the normality test in this research is Jarque-Bera. Based on the result, the probability value is 0.00 which is lower than 0.05, namely $0.00 < 0.05$. It can be concluded that the data is not normally distributed. The data considered to not normally be distributed is the presence outliers.

Basically, the fixed effect estimators estimate the equation without needing normal distribution.

Heteroscedasticity Test

The Glejser test is performed by plotting the absolute residual value (resabs) against other independent variables. Based on the result, it can be interpreted that in the regression analysis there are symptoms of heteroscedasticity, showing the significance value (P-value) of the *DUM_YEAR* variable showing a value of 0.0017, *CSR_ENV* variable of 0.0000, *CSR_SOC* variable of 0.0000, and *ROA* variable of 0.0001. Simultaneously, the value of significance coefficient shows the result of $0.0000 < 0.05$. These results clearly indicate that there is statistically significant independent variable affecting the dependent variable *RESABS* value, this is because the probability value of significance is less than 0.05.

Multicollinearity Test

When at least two strongly correlated predictors are evaluated in a regression model at the same time, multicollinearity occurs. Multicollinearity is a need for a linear relationship between independent variables. Based on the result, the collinearity between each variable is not greater than 0.08 as the rule of thumb of multicollinearity test. It can be stated that there is no multicollinearity problem.

Autocorrelation Test

The Durbin-Watson test can be used. To determine whether a regression is free of autocorrelation if it fits the requirement $dU < d < (4 - dU)$. Based on the result, the Durbin-Watson obtained a d-value of 3.9487 which indicates that the regression model used cannot make decision regarding autocorrelation because the d-value is $4 - dU \delta d \delta 4$ ($dL = 1.6565$, $dU = 1.8181$). So, the assumption of autocorrelation cannot be decided.

3.5 Panel Data Regression Analysis

Panel data regression analysis aims to test the extent of the influence of the independent variables on the dependent variables where there are several companies in several time periods. From panel data regression selection, both Chow Test and Hausman Test shows the reject the null hypothesis. So that Fixed effect model (FEM) is more appropriately used. Moreover, based on the classic assumption test, the author found out the data has heteroscedasticity. It means with the model selected which is FEM, this research will use *Cross-section Weights* on the GLS model.

The panel data regression equation can be described as follows to consider slope coefficient constant but the intercept varies over individuals as well as time according to Gujarati (2003):

$$Y_{it} = \alpha_1 + \alpha_2 D1 + \lambda_0 + \lambda_1 Dum1 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \beta_4 X4_{it} + \epsilon_{it}$$

Before ROA

TABLE 8
RESULT OF REGRESSION ANALYSIS

Dependent Variable: STOCK_RETURN				
Method: Panel EGLS (Cross-section weights)				
Date: 06/17/21 Time: 23:23				
Sample: 2019 2020				
Periods included: 2				
Cross-section included: 77				
Total panel (balanced) observations: 154				
Linear estimation after one-step weighting matrix				
Variable	C	Std. Error	t-Stat	Prob.
C	-0.1891	0.0136	-13.8225	0.0000
DUM_CSR	0.4721	0.0331	14.2471	0.0000
DUM_YEAR	0.2626	0.0099	26.3613	0.0000
CSR_ENV	-1.4766	0.1199	-12.3142	0.0000
CSR_SOC	1.0104	0.1404	7.1965	0.0000
CSR_GOV	-0.3050	0.1038	-2.9359	0.0045
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
Root MSE	0.4111	R-squared	0.9907	
Mean dependent var	0.4567	Adjusted R-squared	0.9804	
S.D. dependent var	4.3251	S.E. of regression	0.6012	
Sum squared resid.	26.0269	F-statistic	95.5766	
Durbin-Watson stat	3.9487	Prob(F-statistic)	0.0000	
Unweighted Statistics				
R-squared	0.4756	Mean dependent var	0.1239	
Sum squared resid.	28.0134	Durbin-Watson stat	3.9487	

After ROA

Based on the data panel regression result, the constant value is -0.2221, which means that if *CSR_ENV*, *CSR_SOC*, and *CSR_GOV* with *ROA* as control variable are considered constant (value = 0), then the annual *abnormal stock return* value is -0.2221. The value of *CSR_ENV* regression coefficient is -1.4683, which indicates that each one unit increase in environmental disclosure will decrease the stock return value by 1.4683. The value of *CSR_SOC* regression coefficient is 0.8478, which indicates that each one unit increase in social disclosure will increase the stock return value by 0.8478. The value of *CSR_GOV* regression coefficient is -0.1560, which indicates that each one unit increase in governance disclosure will decrease the stock return value by 0.1560. Both value of *DUM_CSR* and *DUM_YEAR* regression is positive, which indicates there is a positive individual and time effect. *ROA* as control variable has positive coefficient which indicates there is causal relationship between variables with the financial performance.

TABLE 9
 RESULT OF REGRESSION ANALYSIS WITH ROA

Dependent Variable: STOCK_RETURN				
Method: Panel EGLS (Cross-section weights)				
Date: 06/17/21 Time: 23:24				
Sample: 2019 2020				
Periods included: 2				
Cross-section included: 77				
Total panel (balanced) observations: 154				
Linear estimation after one-step weighting matrix				
Variable	C	Std. Error	t-Stat	Prob.
C	-0.2221	0.00297	-7.4627	0.0000
DUM_CSR	0.4771	0.0510	9.3393	0.0000
DUM_YEAR	0.2743	0.0104	26.2490	0.0000
CSR_ENV	-1.4683	0.1224	-11.9938	0.0000
CSR_SOC	0.8478	0.1640	5.1684	0.0000
CSR_GOV	-0.1560	0.1216	-1.2822	0.2038
ROA	0.8373	0.4858	1.7236	0.0891
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
Root MSE	0.4168	R-squared		0.9939
Mean dependent var	0.5691	Adjusted R-squared		0.9869
S.D. dependent var	5.5241	S.E. of regression		0.6135
Sum squared resid.	26.7252	F-statistic		142.5533
Durbin-Watson stat	3.9487	Prob(F-statistic)		0.0000
Unweighted Statistics				
R-squared	0.4792	Mean dependent var		0.1239
Sum squared resid.	27.8187	Durbin-Watson stat		3.9487

3.6 Hypothesis Test

Partial Regression Coefficient Test (t-test)

Based on the result, the panel data regression result can be described as follows:

1. The first null hypothesis in this research is that environmental disclosure has no significant effect on corporate resilience interpreted by *abnormal stock return* during COVID-19 pandemic. The result of the statistical test shows that the value of probability is smaller than the significance level ($0.00 < 0.05$) with -1.4683 coefficient. Based on the result of this test, it means that the null hypothesis is rejected. It can be interpreted that *CSR_ENV* has significant effect on *abnormal stock return* during COVID-19 pandemic.
2. The second null hypothesis in this research is that social disclosure has no significant effect on corporate resilience interpreted by *abnormal stock return* during COVID-19 pandemic. The result of the statistical test shows that the value of probability is smaller than the significance level ($0.00 < 0.05$) with 0.8478 coefficient. Based on the result of this test, it means that the null hypothesis is rejected. It can be interpreted that *CSR_SOC* has significant effect on

abnormal stock return during COVID-19 pandemic.

3. The third null hypothesis in this research is that governance disclosure has no significant effect on corporate resilience interpreted by *abnormal stock return* during COVID-19 pandemic. The result of the statistical test shows that the value of probability is bigger than the significance level ($0.2038 > 0.05$) with -0.1560 coefficient. Based on the result of this test, it means that there is no empirical evidence to reject the null hypothesis. It can be interpreted that *CSR_GOV* has no significant effect on *abnormal stock return* during COVID-19 pandemic.
4. The regression shows the individual dummy (*DUM_CSR*) as well as the time effect dummy (*CSR_YEAR*) are statistically significant ($0.00 < 0.05$). The overall conclusion emerges is that perhaps there is a pronounced individual on sustainability report published effect as well as time effect.
5. The regression shows *ROA* as a control variable is statistically has no significant effect ($0.0891 > 0.05$). It can be interpreted that *ROA* has no effect as control variable to support *CSR*'s strong influence on *abnormal stock returns*.

Simultaneous Regression Coefficient Test (f-test)

The result of the F-test in the regression result that the F-count value of 142.55 is bigger than the F-table value ($142.55 > 2.436$) with a probability value of 0.00 is smaller than significance level of 0.05 ($0.00 < 0.05$). From these results it can be concluded that all independent variables have an effect on *abnormal stock return* during the pandemic.

Determination Coefficient Test (c')

Based on the regression result, the coefficient of determination seen from adjusted R-squared is 0.9896 or 98.96%. It means that all independent variables are able to explain the variance of the dependent variable.

IV. DISCUSSION

4.1 The Effect of Corporate Social Responsibility on Corporate Resilience During the COVID-19 Pandemic

Following the Ho1 hypothesis proposed, corporate social responsibility simultaneously has no significant effect on corporate resilience during COVID-19 pandemic is rejected. The result indicates that the higher the *CSR* disclosure, the higher the *abnormal stock return*, and hence the corporate resilience can be achieved. However, *DUM_CSR* and *DUM_YEAR* on the regression result shows a positive and significant effect on corporate resilience. It emerges that perhaps there is a pronounced individual as well as time effect. The result indicates the

companies with CSR published based on GRI index are likely to have higher probability of resilience years after the pandemic because the pandemic seems not over yet into now. On the other hand, this research adds financial performance interpreted by *ROA* as a control variable to explore the CSR effect with the reason that the more companies that include CSR in their annual report and sustainability report, the more profitable the company will be. From this research result, *ROA* has a positive insignificant effect on *abnormal stock return*. It shows that there is no significant relationship as a control variable to support CSR's strong influence on *abnormal stock return*.

This research provides consistent results according to Huang et al. (2020), the coefficient of CSR shows negatively significant which indicates that a higher level of CSR is related to a lower level of decline in stock price. However, they also found that companies with a higher level of CSR have a better chance of recovering after a shock. In contradicted with Bae et al. (2020), found that pre-crisis CSR is ineffective at protecting shareholder wealth from the negative effects of a crisis. It also stated that none of the additional control variables is related to a firm's excess return during the crisis. Because there is a potential gap between a company's CSR approach and real action, there are several probable causes. They also argue that investors can tell the difference between genuine CSR and cheap rhetoric. In line with the findings of Albuquerque et al. (2020) and Ding et al. (2020), who investigated the impact of pre-2020 features on business resilience in COVID-19 and discovered that firms with greater CSR activities and high ES ratings are less vulnerable to stock price decreases.

Until June 2021, only 11 companies became the new sustainability report publisher. The disclosure that must be disclosed are 83, meanwhile the mean of disclosure by companies in Indonesia that published sustainability reports 2019-2020 are only 19-20 disclosures or 23.70%. It is proved that disclosure of CSR on GRI index in the company's sustainability report cannot convince investors to be able to increase the company's stock return during COVID-19 pandemic. In line with signaling theory, CSR can be a good news signal for shareholders to invest in a company. To conclude, this suggests that in the COVID-19 pandemic it is better for investors to be selective in selecting the stock of the companies. Meanwhile, for the company this research suggests to focus on disclosing CSR, using the same standards for establishing the sustainability reports following GRI Index 2016.

4.2 The Effect of Environmental Disclosure on Corporate Resilience During the COVID-19 Pandemic

Following the Ho1a hypothesis proposed, environmental disclosure has no significant effect on corporate resilience during COVID-19 pandemic is rejected. The small ratio of disclosures has become a factor for the absence of a negative influence between

environmental disclosure on corporate resilience in this research. The mean value for this disclosure between the 77 companies in 2019-2020 only 7.33 or 26.21%, while the total disclosures are 28. This research has the same result of research conducted by Alsahlawi et al. (2021) that found out the impact of environmental sustainability disclosure on stock returns is significant and negative, demonstrating that differences in environmental disclosures ratings are not recognized by investors as a sign of a lower or higher risk. In line with Hariyanti (2014) and Brammer et al. (2005), which shows that corporate social responsibility – environmental disclosure does not increase its stock return. According to Brammer et al. (2005), socially responsible shareholders will not invest in companies with questionable environmental policies, and that the only demand for their stock will come from “neutral” shareholders. This was expected, given that some industrial sectors have high environmental implications (e.g., mining; FMCG with pharmaceuticals, cosmetics, and household subsector; agriculture, and basic industry), and environmental performance is likely to be more relevant in these sectors.

There are still many investors do not understand the essence of the feedback obtained from environmental disclosures. Environmental disclosures should be reflected by companies in order to improve their reputation and attract investors. That is, in order for businesses to benefit from environmental performance, environmental sustainability policies and strategies must be essential to their strategic planning (Alsahlawi et al, 2021). As a result, environmental disclosures should be responsible rather than merely a means of mitigating the effects of particular environmental issues.

4.3 The Effect of Social Disclosure on Corporate Resilience During the COVID-19 Pandemic

Following the Ho1b hypothesis proposed, social disclosure has no significant effect on corporate resilience during COVID-19 pandemic is rejected. This result is consistent with Albuquerque et al., (2020) that states the CSR – social disclosure successfully strengthens the relationships of the customer, employee, supply chain, and investors loyalty to the company resiliency in facing pandemic. Improved stakeholder interactions, according to stakeholder theory, can lead to better corporate business outcomes as these relationships become strategic resources. As a result, corporate resilience can be achieved by maintaining stakeholder management relationships. It is also supported by Cheema-Fox et al. (2020) that states less negative returns are associated with higher levels of positive sentiment surrounding a company's response.

The result shows investors value CSR disclosure provided by firms as one of the factors used to make investment decisions. In accordance with agency theory that states Disclosure of corporate CSR information will reduce the use of publicly available information as a basis for investment choices. This research suggests the

company should focus on disclosing CSR, using the same standards for establishing the sustainability report, and focusing more on social responsibility since it can maintain the stakeholder management.

4.4 The Effect of Governance Disclosure on Corporate Resilience During the COVID-19 Pandemic

Following the Ho1c hypothesis proposed, governance disclosure has no significant effect on corporate resilience during COVID-19 pandemic as there is no empirical evidence to reject the null hypothesis. The small ratio of disclosures has become a factor for the absence of a significant influence between governance disclosure on corporate resilience in this research. The mean value for this disclosure between the 77 companies in 2019-2020 only 3.97 or 18.06%, while the total disclosures are 22. Another possibility is during the pandemic the investors are more considering short-term returns, proven by the number of trading increased. Meanwhile, corporate governance practices are suitable for a long-term preference for investors. The companies suggested increasing the quality of good corporate governance implementation since the stock price of firms with good corporate governance were more stable than the others in times of crisis (Huang et al, 2010). In line with the agency theory, investors seem to take a richer model of governance that focuses on the company's health and resilience. This research suggests the company should focus on disclosing CSR, using the same standards for establishing the sustainability report, and focusing more on the quality of good governance since it protects shareholder interest and reduces principal-agent problems.

V. CONCLUSION

5.1 Conclusions

The research aims to examine the effect of CSR that is interpreted by environmental disclosure (*CSR_ENV*), social disclosure (*CSR_SOC*), and governance disclosure (*CSR_GOV*) on corporate resilience that is interpreted by *abnormal stock return* during the COVID-19 pandemic. This research's sample amounted to 77 companies listed on Indonesian Stock Exchange (IDX) in 2019-2020. The research findings can be summarized as follows:

1. Corporate social responsibility (CSR) has a negative and significant effect on corporate resilience during COVID-19 pandemic, so that the hypothesis Ho1 is rejected.
 - a. Environmental disclosure has a negative and significant effect on corporate resilience during the COVID-19 pandemic, so that the hypothesis Ho1a

is rejected.

- b. Social disclosure has a positive and significant effect on corporate resilience during the COVID-19 pandemic, so that the hypothesis Ho1b is rejected.
- c. Governance disclosure has an insignificant effect on corporate resilience during the COVID-19 pandemic, so that there is no empirical evidence to reject the null hypothesis or Ho1c.

The research also emerges that perhaps there is a pronounced individual on sustainability report published effect as well as time effect. The result indicates that companies with CSR published based on GRI Standards 2016 are likely to have higher probability of resilience years after the pandemic because the pandemic seems not over yet into now. On the other hand, this research adds financial performance interpreted by *ROA* as a control variable to explore the CSR effect with the reason that the more companies that include CSR in their annual reports and sustainability reports, the more profitable the company will be. From this research's result, *ROA* has a positive insignificant effect on *abnormal stock return*. It shows that there is no significant relationship as a control variable to support CSR's strong influence on *abnormal stock return*.

5.2 Recommendations

Based on the above conclusion, suggestions that can be taken from the research result are as follows:

1. For the management of companies
Companies are encouraged to provide more extensive information about CSR disclosure in order to promote openness and clearly express CSR information in their sustainability reports using the GRI Standards 2016, especially social disclosure since the disclosure explains social impacts and connects to all stakeholders that consider to really matters during the COVID-19 pandemic. On the other hand, for environmental disclosure should be reflected by companies in order to improve their reputation and attract investors. The companies are encouraged to provide more information, socialization, and education of corporate social responsibility to investors in order to signify a good signal to invest in the company.
2. For investors
During the COVID-19 pandemic, it is preferable for investors to be selective in their stock selection. Investors should learn more about the impact of corporate social responsibility disclosure quality on corporate resilience. As a result, CSR will become more essential

component in making investment decisions in the future, in order to reduce risks and raise company understanding of the importance of taking greater responsibility. The result of this research is recommended for investors to invest in mining and finance sector since they have higher score for social disclosures and proven by higher abnormal stock return during COVID-19 pandemic.

5.3 Research Limitations and Further Research Development

1. Limitations

This research only used a research period of 2 years, 2019 and 2020. This research only selects companies that fit the research criteria with purposive sampling, so that the total sample obtained is less. The quality element of CSR information disclosure has not been examined in this research because the guidelines employed in this research do not address these quality features. Disclosure of corporate social responsibility is only assessed based on the criteria for completeness of CSR disclosure.

2. Further research development

Given that the COVID-19 pandemic is still ongoing, the next researcher should broaden the scope of their research observations. The next researcher should compare the data of CSR companies and non-CSR companies so that the significance of CSR can be more examined.

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