

THE IMPACT OF CORPORATE FINANCIAL RESILIENCE AND MACROECONOMIC FUNDAMENTALS ON STOCK PRICE VOLATILITY WITH THE VARIABLE MODERATION OF THE COVID 19 PANDEMIC IN THE INFRASTRUCTURE AND TELECOMMUNICATIONS SECTOR

Trias Andriyanto

Faculty of Economics and Business Master of Management Program, University of Indonesia, Indonesia
Email: trias.andriyanto@ui.ac.id

Abstract

This study aims to analyze the effect of corporate financial resilience and macroeconomic fundamentals on stock price volatility during the COVID-19 pandemic, focusing on the infrastructure and telecommunications sectors. The COVID-19 pandemic has significantly affected global economic conditions and financial markets, including the stock market. This study uses regression analysis methods to examine the relationship between corporate financial resilience (as measured by Current Ratio, Debt to Equity Ratio, and Return on Equity) and macroeconomic fundamentals (as measured by interest rates and Gross Domestic Product) to stock price volatility in the infrastructure and telecommunications sectors. The data used are historical stock price data and company financial data related to the COVID-19 pandemic period. The results show that Return on Equity (ROE) has a significant influence on stock price volatility in the infrastructure sector, while interest rates have a significant influence on stock price volatility in the sector. However, in the telecommunications sector, there are no variables of financial resilience or macroeconomic fundamentals that have a significant influence on stock price volatility. These results provide important insights for investors and companies in managing risk and making investment decisions during pandemic crises such as COVID-19.

Keywords: financial resilience, Inflation, stock returns.

Introduction

We are in an era filled with challenges and unexpected changes. The COVID-19 pandemic that has swept the world since early 2020 has significantly changed the global

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economic landscape. The sudden outbreak of the coronavirus disease 2019 (COVID-19) pandemic has caused a severe public health crisis and devastated the global economy (Arora et al., 2020; Ding et al., 2021, Xia et al., 2022). Companies in various sectors are feeling shaken and experiencing pressure on their business and financial performance, declining revenue, business closures, and market uncertainty are the main challenges faced by companies during this pandemic. In this context, businesses around the world face serious threats to their survival (Miyakawa et al., 2021).

Based on a survey by the Ministry of Manpower (2022), the Covid-19 pandemic has an impact on 88 percent of companies in Indonesia. Only about 17.8 percent of companies laid off, while 25.6 percent laid off workers, and 10 percent did both. In addition, the results of the LIPI survey show that around 39.4% of businesses in Indonesia have failed due to the Corona pandemic. This phenomenon cannot be avoided when a number of companies experience a decline and even stop production as a result of the spread of the COVID-19 pandemic.

Corporate resilience plays an increasingly large role in the survival of organizations. Corporate resilience is defined as a firm's ability to recover from shocks and adapt to disruptions (Roundy et al., 2017). In the context of the COVID-19 pandemic, companies that have high financial performance resilience are expected to better overcome economic challenges related to the pandemic and will certainly affect stock returns positively. Therefore, in order to survive during the COVID-19 pandemic, companies need to continue to innovate and create to create positive value for their business continuity (Bello et al., 2021). The main question of this study is whether companies in Indonesia have adequate financial resilience in facing the shock of the COVID-19 pandemic so that it has a positive impact on stock returns.

A study conducted by (Hanafi et al., 2022) in the Islamic banking sector in Indonesia found that there was no significant difference in financial and Islamic performance between the period before and during the pandemic. This research shows that Islamic banking in Indonesia is quite resilient in facing the COVID-19 crisis. In addition, (Ghosh, Saima 2020) examines the resilience of private commercial banks registered in Bangladesh in managing shocks arising from the COVID-19 pandemic. They found that banks with high credit concentrations in industrial sectors negatively affected by the pandemic can survive if they can keep their capital bases (tier-1 and tier-2) above required levels, the highest short-term liquidity, and the lowest Non-Performing Loans (NPLs).

Data from the Central Statistics Agency (BPS) in 2022 shows that Indonesia's economic growth reached 5.31 percent, an increase from 3.70 percent growth in the previous year. The transportation and warehousing sector recorded the highest growth, amounting to 19.87 percent in terms of production (BPS, 2022). In the fourth quarter of 2022, Indonesia's economic growth remained high at 5.01% (yoy), amidst slowing global economic growth.

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Uncertain global economic changes due to the COVID-19 pandemic as well as geopolitical conflicts, such as the Russia-Ukraine war, have created an uncertain atmosphere in the investment world, especially in the capital market. This situation is reflected in stock price fluctuations and monetary policy measures adopted by Bank Indonesia (BI), including an increase in the BI rate, which aims to address inflation arising from the depreciation of the rupiah exchange rate against the dollar. This increase in interest rates has an impact on higher interest expenses for companies, which has the potential to affect stock investment returns (Koch, 2006).

The stock market is one of the important indicators in the economy of a country. Fluctuating stock prices in the market can reflect the economic conditions and financial performance of companies (Hassan et al., 2020). However, in recent years, the stock market has experienced high volatility, which can affect investor stability and confidence (Yarovaya et al., 2020). One of the main factors influencing stock price volatility is changes in economic conditions.

In the context of Indonesia, stock prices in general fluctuate and tend to decline. For example, Telkom, a telecommunications company that should have stability as a state company, also experienced a decline in stock value during the pandemic (Figure 1.1). A number of shareholders choose to sell their shares because they are worried that the stock price will continue to decline, there is even the potential for share buybacks by issuers that can harm them. However, some investors have instead decided to increase their shareholdings, assuming that the stock price will rise after the end of the pandemic. These investors fall into the category of risk takers, who are ready to take risks and take advantage of this situation to buy large amounts of shares when prices fall. They believe that this condition is only temporary, and if the situation returns to normal, the stock price will increase which has the potential to bring huge profits.

Figure 1
Telkom Stock Movement for the 2019-2023 Period



In the face of such situations, the concept of "resilience" is becoming increasingly important for organizations in maintaining continuity and recovery capabilities as well as growth amid unavoidable challenges and disruptions (Roundy et al., 2017). In a business context, resilience is defined as the ability of an organization to recover from shocks and adapt to disruptions. This concept is covered in the theory of Resilience which involves psychological, sociological, and economic perspectives. Reciprocity means not only the ability to "bounce back" after experiencing a crisis but also the ability to "grow" in the midst of the challenges faced (Luthar et al., 2000; Masten, 2001). Reciprocity is not only a theoretical concept, but also an important practice in the business world. For example, the impact of the COVID-19 pandemic has shown how companies in various countries have successfully coped. For example, tech companies like Zoom and Microsoft are quickly adapting to meet new needs when it comes to working and learning from home, while many restaurants are changing their business models to keep food delivery services operating.

This research will examine the Industry, Services, Infrastructure, and Telecommunications sectors in Indonesia. The selection of these sectors is based on their uniqueness and the challenges they face as a result of the COVID-19 pandemic. The Infrastructure Service Industry is in focus because of its important role in supporting economic activities and development, while the Telecommunications Industry is chosen because of its increasingly vital role in the digital era and remote work. Relevant financial ratios, such as Return on Equity (ROE), Current Ratio (CR), and Debt-to-Equity Ratio (DER), will be used in this study to gauge resilient financial levels in these sectors. The method used will refer to research conducted by Lin and Wang (2016) and Prentice (2016). In addition, macroeconomic factors and the impact of the COVID-19 pandemic will also be considered as moderation variables. This research aims to provide a better understanding of how financial resilience and macroeconomic fundamentals affect stock returns in the context of the COVID-19 pandemic. It is hoped that the results of this study can provide valuable insights for companies and investors in making more informed decisions amid economic uncertainty and the ongoing pandemic.

With the above, therefore the author wants to conduct research with the title: Corporate Financial Resilience and Macroeconomic Fundamentals to Stock Returns, with Covid-19 Pandemic Moderation Variables measured using relevant financial ratios return on equity, current ratio, and debt-to-equity ratio. Lin and Wang (2016) use changes in income and expenditure to measure financial resilience in the context of the Great Recession. Prentice, (2016) reviewed more than 70 measures of financial performance to show that financial performance is a complex issue and cannot be captured with a single measure. He summarized four general measures for measuring financial performance — liquidity, solvency, margins, and profitability — but did not specify the "correct" way to measure them.

Research Methods

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This quantitative research utilizes statistical analysis to process numerical data. It falls under explanatory research, aiming to test hypotheses using a quantitative approach. The research focuses on the infrastructure services sector listed on the Indonesia Stock Exchange (IDX) in 2022. The population for this study consists of companies listed on the IDX from 2019 to 2022. The sample includes companies in the infrastructure service and telecommunications industries. These sectors are selected due to their significant role in economic development and their relevance in the digital era, particularly during the COVID-19 pandemic.

The sample selection process involves choosing companies based on availability of data on December 31, 2022, from the IDX website or official company websites. Companies from the food and beverage, infrastructure service, and telecommunications industries with a relatively high share value are selected to ensure normal data distribution. The study utilizes secondary data from the Indonesian Stock Exchange website, including issuer financial statements and closing stock prices from 2020 to 2022. Data collection involves digital-based research to gather information on the capital market during the pandemic and literature research to study relevant theories and references on financial statements, macroeconomic analysis, and fundamental analysis related to stock prices. This research is quantitative research because the data obtained is in the form of numbers which are then processed using statistical analysis. Judging from the problem, this research is research This research is included in the type of *explanatory research* that is explanatory and aims to test a hypothesis using a quantitative approach. The object of research is the infrastructure services sector listed on the Indonesia Stock Exchange (IDX) in 2022.

Data analysis is a crucial method for converting collected data into meaningful information to address research problems. The analysis process consists of four steps: data preparation, data understanding, testing data quality, and hypothesis testing (Sekaran & Bougie, 2013). For this study, data was analyzed using Microsoft Excel and SPSS Statistics software, which enables statistical analysis and hypothesis testing, as well as the validation of assumptions and the derivation of accurate conclusions. The data analysis method employed in this research aims to examine the impact of independent variables, such as the Current Ratio, Debt Equity Ratio, Return on Equity, Inflation, Interest Rates, and Gross Domestic Income, on the volatility of company stock prices, while considering the moderating effect of the Covid-19 Pandemic.

Furthermore, descriptive statistical analysis was conducted to provide an overview of the variables used in the study. Descriptive statistics, including measures such as minimum, maximum, mean, standard deviation, skewness, and kurtosis, were used to describe and summarize the collected data without making general conclusions or generalizations (Ghozali, 2018; Sugiyono, 2018). Descriptive statistics were applied to calculate the mean, standard deviation, maximum and minimum values of variables, as well as the average frequency and statements for descriptive statement items.

Results of Discussion

A. Descriptive Statistical Analysis

Ghozali (2013) explained that descriptive statistics is data analysis that provides an overview and value of a data or each research variable is seen through results consisting of mean, median, maximum, minimum, and standard deviation. Descriptive statistical testing of all variables of this study used one dependent variable, six independent variables, and one moderation variable.

B. Analisis Moderating Regression Analysis (MRA)

The moderation variable is a variable that affects the direct relationship between the independent variable (free) and the dependent variable (bound). A moderation variable is an independent variable that can strengthen or weaken the relationship between another independent variable and the dependent variable. Hypothesis testing in this study uses the application of MRA variable regression analysis (Moderating Regression Analysis). According to Ghozali (2018), the MRA test aims to control the influence of moderation variables through an analytical approach that maintains the integrity of the research sample.

In this study, MRA was used to examine the moderation variable, namely covid-19, in the relationship between corporate financial resilience and economic fundamentals. How to test regression with moderation variables, namely MRA or interaction tests with special applications for linear regression in the regression equation contains an element of interaction (multiplication of 2 or more independent variables). The formula is as follows:
$$RS = a + b_1CR + b_2DER + b_3ROE + b_4SB + b_5INF + b_6PDB + b_7C19 + b_8(CR * C19) + b_9(DER * C19) + b_{10}(ROE * C19) + b_{11}(SB * C19) + b_{12}(INF * C19) + b_{13}(PDB * C19) + e$$

Where:

RS = Stock Return

a = Konstanta b1... b3 = Koefisien regresi

CR = Current Ratio

DER = Debt to Equity Ratio

ROE = Return on Equity

SB = Interest Rate

Inf = Inflation

GDP = Gross Domestic Product

C19 = Covid-19

$\beta_8(CR * C19)$ = Interraction Current Ratio to Covid-19

$\beta_9(DER * C19)$ = Interraksi THE terhadap Covid-19

$\beta_{10}(ROE * C19)$ = ROE Interaction against Covid-19

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$\beta_{11}(\text{SB}*\text{C19})$ = Interest rate interaction against Covid-19

$\beta_{12}(\text{INF}*\text{C19})$ = Inflation interaction against Covid-19

$\beta_{13}(\text{PDB}*\text{C19})$ = Interraksi PDB terhadap Covid-19

e = Standar error

C. Classical Assumption Test

The classical assumption test is a statistical test performed to measure the degree of relationship or influence between independent variables through the magnitude of the correlation coefficient. Classical assumption tests are performed before using regression models to test whether residual variables have a normal distribution in the regression model. The appropriate classical assumption tests to be performed are the normality test and the multicollinearity test.

D. Ignificance Test

The significance test that has been carried out for this study consists of three tests, namely the partial regression coefficient test (t test), the simultaneous significance test (f test), and the determination coefficient test (R2 test). The results of each significance test can be seen as follows.

Table 1
Coefficients Sektor Infrastruktur^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-4068.330	4141.147			.331
	current_rasio	-60.315	41.104	-1.406	-1.467	.149
	DER	-11.199	8.084	-1.041	-1.385	.172
	ROE	2.765	.631	4.580	4.380	<.001
	Suku_bunga	1797.766	716.417	1.432	2.509	.016
	GDP	34.422	24.931	.730	1.381	.174
	covid19	5311.306	5388.867	2.214	.986	.329
	CR_M	62.207	41.585	3.202	1.496	.141
	DER_M	11.727	8.918	1.438	1.315	.195
	ROE_M	-2.741	.669	-4.108	-4.098	<.001
	Bunga_M	-2239.002	1164.541	-3.501	-1.923	.060
	GDP_M	-35.104	26.661	-.773	-1.317	.194

a. Dependent Variable: Return_saham

Tabel 2
Uji Signifikansi Sektor Telekomunikasi
Coefficients Sektor Telekomunikasi^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant)	-4668.203	1625.003		-2.873	.006
	CR	10.107	15.173	.346	.666	.509
	DER	.009	.019	.096	.478	.635
	ROE	-.166	.191	-.478	-.872	.388
	Bunga	650.721	359.680	.898	1.809	.077
	GDP	22.772	16.147	.836	1.410	.165
	Covid19	448.839	2874.671	.324	.156	.877
	CR_M	22.110	17.304	.926	1.278	.207
	DER_M	.064	.030	.863	2.157	.036
	ROE_M	-.133	.208	-.290	-.639	.526
	Bunga_M	-89.260	668.887	-.242	-.133	.894
	GDP_M	-17.621	17.216	-.672	-1.024	.311

a. Dependent Variable: Return_Saham

E. Corporate Financial Resilience Affects Stock Price Volatility during the COVID-19 Pandemic

The following is the answer to the formulation of the problem "Corporate Financial Resilience Affects Stock Price Volatility during the COVID-19 Pandemic". Based on the results of the data analysis that has been presented, this study shows several things. First, related to Test F: infrastructure sector, F value is 4,790 and telecommunications sector 2,910 with significance values <0.001 and 0.005. This value shows that overall, the independent variables (CR, DER, ROE, SUKU_BUNGA, and GDP) made a significant contribution in explaining variations in stock price volatility in the infrastructure sector and telecommunications sector during the COVID-19 pandemic. High F values and very small or small significance values indicate that the combination of independent variables used in regression models provides reliable and relevant results in explaining the relationship between corporate financial factors and macroeconomic fundamentals with stock price volatility in both sectors during the COVID-19 pandemic period

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Second, t-test: in the Infrastructure and telecommunications sector, the t values for the infrastructure variables CR, DER, ROE are -1.467, -1.385, 4.380 respectively with significance of 0.149, 0.172, <0.001. This significance value is higher than 0.05 which indicates that the CR, and DER of the infrastructure sector do not have a significant influence on stock volatility whereas ROE has a significant influence on stock volatility. The t-test values for the variable telecommunications sector CR, DER, and ROE were 0.666, 0.478, and -0.872, respectively, with significance of 0.509, 0.635 and 0.388. This significance value is higher than 0.05 which indicates that the CR, DER and ROE of the telecom sector do not have a significant influence on stock volatility.

Lastly, Test R2: Infrastructure Sector, the value of R Square is 0.523 which means 52.3% of the variation in stock volatility can be explained by variation in the independent variable, Telecommunication sector, the value of R Square is 0.400 which means 40% of the variation in stock volatility can be explained by variation in the independent variable. The adjusted R square of the structure is 0.414, which means 41.4% of the variation in stock volatility can be explained by the independent variable, after accounting for the sum of those variables, while for telecommunications it is 0.263, which means 26.3% of the variation in stock volatility can be explained by the independent variable, after accounting for the sum of those variables.

Furthermore, the t-test results show that the SUKU_BUNGA and GDP variables have a significant influence on the dependent variable at the significance level of 5%. However, the variables CR, DER, and ROE did not show significant effects. According to Gujarati (2003), the t-statistic value measures how far the regression coefficient is from zero in standard error units. A larger value (either positive or negative) indicates stronger evidence that the coefficient is not zero, meaning that the variable has a significant influence on the dependent variable.

Lastly, based on the infrastructure and telecommunications R tests it was found that 52.3% and 26.3% of the variation in stock volatility could be explained by variations in the independent variable (R Square = 0.523, 0.263). It is explained by Wooldridge (2012) that the coefficient of determination, or R Square, is a measure of the extent to which variation in the dependent variable can be explained by variation in the independent variable.

Resilience theory and market efficiency theory provide a solid framework for understanding the results of regression analysis that has been carried out. In the financial context, resilience theory argues that companies with good financial performance tend to be better able to withstand market fluctuations and keep their stock price volatility stable (Conforti et al., 2018). In this study, financial resilience indicators are measured through three variables: Current Ratio (CR), Debt to Equity Ratio (DER), and Return on Equity (ROE). However, the analysis shows that in the infrastructure sector the ROE variable has a significant influence on stock price volatility while in the telecommunications sector the

three variables do not have a significant influence on stock price volatility. There are several factors that may cause this result. One possibility is that the indicators used are less relevant in explaining variations in stock price volatility, or there may be other variables not included in the model that could explain the variations. In addition, it is also important to consider that these results may only apply to the samples used in these studies and may differ if applied to different samples or contexts.

Market efficiency theory, on the other hand, states that stock prices reflect all available information and change as new information changes (Fama, 1970). According to this theory, macroeconomic variables such as interest rates and Gross Domestic Product (GDP) can affect stock price volatility because information about these macroeconomic conditions will be quickly absorbed by the market and reflected in stock prices. In this analysis, the variables Interest Rate and GDP were found to have a significant effect on stock price volatility, suggesting that macroeconomic conditions do affect stock price volatility, in accordance with market efficiency theory.

Based on the analysis that has been carried out, the hypothesis of corporate financial resilience characterized by a good Current Ratio, Debt to Equity Ratio, and Return on Equity has a negative effect on stock price volatility amid the COVID-19 pandemic" is accepted (H_0 received). The null hypothesis (H_0) is written as $\beta_1 = 0$, which implies that there is no relationship between financial toughness and stock price volatility. In other words, the stated financial ratios (Current Ratio, Debt to Equity Ratio, and Return on Equity) did not have an impact on stock price volatility during the COVID-19 pandemic in the infrastructure sector and telecommunications sector. This is because in the analysis of this study found no significant evidence to support the relationship.

However, it is important to remember that this rejection does not mean that there is no relationship at all between financial resilience and stock price volatility. There may be other factors not included in this model that influence the relationship, or the indicators used may not be the most important determinants of stock price volatility in the context of the COVID-19 pandemic. In addition, these results may also be specific to the sample used in the study and may differ if applied to different samples or contexts. Therefore, more research is needed to gain a better understanding of this relationship.

F. Macroeconomic Fundamentals Affect Stock Price Volatility during the COVID-19 Pandemic

Based on the results of the F Test analysis shows that the model as a whole has significance in explaining variations in stock price volatility. According to Granger and Newbold (2014), the F test is used to test the null hypothesis that there is no combined effect of the independent variable on the dependent variable. In this context, Test F provides statistical evidence that there is at least one independent variable, in this case macroeconomic fundamentals, that has a significant effect on stock price volatility.

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Infrastructure sector Variable Interest Rate and GDP have t values of 2.509 and 1.381 with significance of 0.016 and 0.174 which means that variable interest rates have a significant effect on stock volatility while variable GDP has no significant effect. The telecommunications sector Variable Interest Rate and GDP have t values of 1.809 and 1.410 with significance of 0.077 and 0.165 which means these two variables have no significant effect on stock volatility.

The t-test results show that interest rates on the infrastructure sector have a significant effect on stock price volatility with a significance level of 5% rejected. The null hypothesis (H_0) is written as $\beta_1 = 0$, which implies that there is no relationship between macroeconomic fundamentals and stock price volatility. In other words, factors such as low interest rates, and high GDP have had no impact on stock price volatility during the COVID-19 pandemic. Based on the results of this analysis, it can be concluded that macroeconomic fundamentals, especially interest rates, have a significant influence on the volatility of infrastructure sector stock prices during the COVID-19 pandemic. Changes in interest rates can affect overall investor sentiment. Companies in the infrastructure sector often require significant financing to build and operate infrastructure projects. Increased interest rates during the COVID-19 pandemic can increase borrowing costs and reduce capital availability, which in turn can affect a company's profitability and stock performance. In addition, strong GDP development could mean more infrastructure projects are needed, which could boost the performance of infrastructure company stocks.

While in the telecommunications sector macroeconomic fundamentals have no effect on the volatility of stock returns, the hypothesis is accepted. The null hypothesis (H_0) is written as $\beta_1 = 0$, which implies that there is no relationship between macroeconomic fundamentals and stock price volatility. In other words, factors such as low interest rates, and high GDP have had no impact on stock price volatility during the COVID-19 pandemic. One of the reasons is the stable nature of the business and income. The telecommunications sector often has a more stable business model with predictable revenues. Telecommunication services, such as telephone and internet, tend to be basic necessities in everyday life. Therefore, demand for telecommunications services may remain relatively stable despite fluctuating interest rates and GDP. Income stability can provide resilience to changes in interest rates and overall economic conditions.

These findings not only support the hypotheses put forward, but also provide important insights for investors and policymakers into factors that could influence stock market volatility, especially in the context of global health crises such as the COVID-19 pandemic.

G. The COVID-19 pandemic strengthened the relationship between corporate financial resilience and stock price volatility

Based on the results of moderation data analysis that has been presented, this study shows Test T: in the Infrastructure and telecommunications sectors, t values for infrastructure variables CR, DER, ROE are 1.496, 1.315, -4.098 respectively with significance of 0.141, 0.195, <0.001. This significance value is higher than 0.05 which indicates that covid-19 does not moderate the relationship on CR and DER to stock volatility whereas on ROE, covid-19 moderates the relationship of ROE to stock volatility. The t values for the variable telecommunications sector CR, DER, and ROE were 1.278, 2.157, and -0.639, respectively, with significance of 0.207, 0.036 and 0.526. This significance value is higher than 0.05 which indicates that covid-19 does not moderate the relationship on CR and ROE on stock volatility while in DER, covid-19 moderates the relationship of DER on stock returns.

Based on the data and interpretations presented, the hypothesis (H0) "Covid-19 pandemic strengthens the relationship between corporate financial resilience to stock price volatility" is rejected. The null hypothesis (H₀) is written as $\beta_1 = 0$, which implies that there is no additional influence of the Covid-19 pandemic on the relationship between corporate financial resilience and share price volatility, as well as between economic fundamentals and share price volatility. In other words, the Covid-19 pandemic has not strengthened the relationship. Furthermore, in the infrastructure sector based on the interpretation of the magnitude of the strength of the relationship between variables, covid-19 reinforces the relationship between ROE and stock volatility is considered "strong". Meanwhile, in the telecommunications sector, Covid-19 strengthened the relationship between DER and stock volatility is considered "strong". Therefore, there is strong evidence to suggest that the COVID-19 pandemic strengthens the relationship between corporate financial resilience and stock price volatility based on this data.

However, it is important to note that the rejection of this hypothesis does not mean that covid-19 does not strengthen the relationship of corporate financial resilience and macroeconomic fundamentals to stock price volatility. There may be other variables that influence this relationship, or there may be other factors not measured in this analysis that may affect the results. Therefore, more research may need to be done to explore this relationship further.

H. The COVID-19 pandemic strengthened the link between economic fundamentals and stock price volatility

Based on the results of moderation data analysis that has been presented, this study shows Test T: in the telecommunications sector, t values for the infrastructure sector The variables SUKU_BUNGA and GDP have t values of -1.923 and -1.317 with significance of 0.060 and 0.194 which means covid-19 does not moderate interest rates and GDP

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against stock volatility. Telecommunications sector Variable $SUKU_BUNGA$ and GDP have t values of -0.133 and -1.024 with significance of 0.894 and 0.311. This significance value is higher than 0.05 indicating that covid-19 does not moderate the meaningful relationship of variable interest rates and GDP to stock volatility.

Based on the data and interpretations presented, the hypothesis (H0) "The Covid-19 pandemic strengthened the relationship between macroeconomic fundamentals and stock price volatility" was accepted. The null hypothesis (H_0) is written as $\beta_1 = 0$, which implies that there is no additional influence of the Covid-19 pandemic on the relationship between macroeconomic fundamentals and stock price volatility. In other words, the Covid-19 pandemic has not strengthened the relationship. Therefore, there is strong evidence to suggest that the Covid-19 pandemic has not strengthened the relationship between macroeconomic fundamentals and stock price volatility based on this data.

I. Companies with better financial resilience and strong economic fundamentals have lower share price volatility compared to companies that are less resilient in the face of the COVID-19 pandemic.

This hypothesis is based on the assumption that financial resilience characterized by indicators such as a good Current Ratio, Debt to Equity Ratio, and Return on Equity, as well as strong economic fundamentals characterized by low interest rates, and high Gross Domestic Income, can provide protection or buffer against the negative impact of the COVID-19 pandemic on stock returns. Companies with these characteristics are considered better able to manage risk and face the challenges posed by the pandemic, so they can maintain more stable stock returns than less resilient companies.

This research discusses how the resilience of corporate financial performance and macroeconomic fundamentals affect stock price volatility in the context of moderation of the COVID-19 pandemic. The companies selected for the study come from two main sectors: telecommunications and infrastructure, which represent most of the influential industries in the Indonesian economy.

First, we must understand that the telecommunications and infrastructure sectors have an important role to play in macroeconomics. According to PricewaterhouseCoopers (2019), the infrastructure and telecommunications sectors are two sectors that are very important for a country's economic growth. Infrastructure supports economic growth and increases productivity, while telecommunications facilitate communication and information exchange, which are essential for business operations and innovation (PricewaterhouseCoopers, 2019).

This important role makes companies in this sector may be more resilient to macroeconomic changes and more stable in the face of stock market volatility. The Modigliani-Miller (1958) theory, known as the irrelevant capital structure theory, suggests that in a perfect market, a firm's capital structure does not affect the firm's value. However,

in the real world, factors such as taxes, bankruptcy fees, and agency fees affect a company's capital structure. In this regard, companies with strong capital structures and good financial resilience may be more resilient to stock market volatility (Modigliani & Miller, 1958).

However, based on this analysis data, there is no covid-19 moderation to the relationship between macroeconomic fundamentals as measured by interest rates and GDP on stock price volatility. This can be caused by a variety of reasons. There may be other factors that are more influential to stock price volatility, or there may be other factors not measured in this analysis that may affect results.

The importance of this research lies in a better understanding of how corporate financial resilience and macroeconomic fundamentals affect stock price volatility, especially in the context of the COVID-19 pandemic. These results can assist investors and policymakers in making better decisions about investments and policies related to the telecommunications and infrastructure sectors.

Conclusion

Corporate financial resilience, as measured through the variables Current Ratio (CR), Debt to Equity Ratio (DER), and Return on Equity (ROE), affected stock price volatility during the COVID-19 pandemic in the infrastructure sector and telecommunications sector. In the infrastructure sector, the variable ROE has a significant influence on stock price volatility, indicating that companies with higher returns on equity tend to have lower share price volatility. ROE is an important indicator of a company's financial performance and can reflect the level of profitability and operational efficiency. However, in the telecommunications sector, there is no financial resilience variable that has a significant influence on stock price volatility. This may be due to the different business characteristics in the sector, where other factors such as market competition and industry regulation may have a more dominant influence.

Macroeconomic fundamentals, measured through variable interest rates and Gross Domestic Product (GDP), influenced stock price volatility during the Covid-19 pandemic in the infrastructure sector. Interest rates have a significant influence on stock price volatility, which suggests that changes in interest rates can affect investor sentiment and lead to higher share price volatility in the infrastructure sector. This is because the infrastructure sector often requires significant financing, and fluctuations in interest rates can affect borrowing costs and capital availability. However, in the telecommunications sector, there are no macroeconomic fundamental variables that have a significant influence on stock price volatility. This may be due to the more stable nature of business in the telecommunications sector, where demand for telecommunications services tends to be relatively stable regardless of fluctuations in interest rates and overall economic conditions.

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The COVID-19 pandemic has not consistently strengthened the link between corporate financial resilience and stock price volatility. Despite indications that the COVID-19 pandemic strengthened the link between corporate financial resilience and share price volatility in the telecommunications sector (primarily through the DER variable), no similar effect was seen in the infrastructure sector. This shows that the impact of the COVID-19 pandemic has not consistently strengthened the relationship between corporate financial resilience and share price volatility in both sectors.

BIBLIOGRAFI

- Abdul Hadi (2022). *Pengaruh Rasio-Rasio Keuangan Terhadap Financial Distres Pada Perusahaan Sektor Perdagangan, Jasa, dan Investasi*. Surabaya : Universitas Negeri Surabaya.
- Anwar. (2010). *Analisis pengaruh kinerja keuangan dan kualitas pengungkapan informasi terhadap return saham*. Jakarta : Universitas Indonesia
- Arora, A., Belenzon, S., Pataconi, A., Suh, J., 2020. *The changing structure of American innovation: some cautionary remarks for economic growth*. *NBER Innov. Policy Econ.* 20 (1), 39–93.
- Badan Pusat Statistik. (2021). *Produksi Industri Manufaktur Indonesia*. Jakarta: Badan Pusat Statistik.
- Badan Regulasi Telekomunikasi Indonesia. (2022). *Laporan Tahunan*. Jakarta: Badan Regulasi Telekomunikasi Indonesia.
- Bello, S., Kostis, P., & Papadopoulos, P. (2021). *Financial resilience of SMEs during the Covid-19 pandemic: The role of financial management practices*. *Journal of Business Venturing Insights*, 16, e00265.
- Bing, L., Akintoye, A., Edwards, P. J., & Hardcastle, C. (2005). *The allocation of risk in PPP/PFI construction projects in the UK*. *International Journal of Project Management*, 23(1), 25-35.
- Bodie, Z., Kane, A., & Marcus, A. J. (2011). *Investments*. McGraw-Hill/Irwin.
- Bodie, Z., Kane, A., & Marcus, A. J. (2014). *Investments*. New York, NY: McGraw-Hill/Irwin.
- Bontempi, M. E., & Golinelli, R. (2012). *The effect of financial constraints on firm survival and growth*. *Journal of Evolutionary Economics*, 22(4), 691-712.
- Braverman, J., & Guzy, L. (2017). *The role of financial resilience in the face of economic crises*. *Journal of Financial Stability*, 34, 61-82.
- Brigham, E. F., & Houston, J. F. (2012). *Fundamentals of Financial Management*. Mason, OH: South-Western Cengage Learning.
- Brigham, E. F., & Ehrhardt, M. C. (2011). *Financial management: Theory & Practice*. Mason, OH: South-Western Cengage Learning.

The Impact of Corporate Financial Resilience And Macroeconomic Fundamentals on Stock Price Volatility With The Variable Moderation of The Covid 19 Pandemic in The Infrastructure And Telecommunications Sector

- Conforti, A., Giuffrida, L., Ioppolo, G., & Lo Giudice, A. (2018). *Sustainability and Resilience in the European Union: A Review of the Role of the Capitals*. *Sustainability*, 10(7), 2264.
- Dalilah Ulaya, Nurfauziah (2019). *Faktor Makroekonomi dan Kinerja Keuangan dalam Memprediksi Financial Distress*. Yogyakarta : Uniersitas Islam Indonesia.
- Darmayanti, Mildawati, Susilowati. (2020). *Dampak Covid-19 Terhadap Perubahan Harga Dan Return Saham*. *Ekuitas: Jurnal Ekonomi dan Keuangan – Volume 4, Nomor 4, Desember 2020* : 462 – 480.
- Ding, W., Levine, R., Lin, C., Xie, W., 2021. *Corporate immunity to the COVID-19 pandemic*. *J. Financ. Econ.* 141 (2), 802–830.
- Donny Arsal. 2021. *The Impact Of Macroeconomics, Market Return, Financial Performance, And Market Perception With Moderating Variable Of the Covid-19 Pandemic On Stock Returns Of Toll Road Companies Listed On the Indonesia Stock Exchange 2011- 2021*. Jakarta: IPMI
- Fama, E. F., & French, K. R. (2002). *Testing trade-off and pecking order predictions about dividends and debt*. *The review of financial studies*, 15(1), 1-33.
- Frank, M. Z., & Goyal, V. K. (2009). *Capital structure decisions: which factors are reliably important?*. *Financial management*, 38(1), 1-37.
- Ghosh, S., & Saima, U. N. (2020). *Financial resilience and COVID-19: Evidence from manufacturing companies in Indonesia*. *Journal of Asian Business and Economic Studies*, 27(1), 89-104.
- Ghozali, 2014. *Aplikasi analisis Multivariate dengan Program SPSS*. Badan Penerbit UNDIP , Semarang.
- Ghozali Imam. 2011. *Model Persamaan Struktural, Konsep, dan Aplikasi dengan Program PLS ver. 3.0*.
- Ghozali, Imam. 2018. *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. 25. Badan Penerbit Universitas Diponegoro: Semarang
- Granger, C., & Newbold, P. (2014). *Spurious regressions in econometrics*. *Journal of Econometrics*, 2(2), 111-120.
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2020). *Strategic Management: Concepts and Cases: Competitiveness and Globalization (13th ed.)*. Boston, MA: Cengage Learning.

- Kementerian Pekerjaan Umum dan Perumahan Rakyat Indonesia (2022). *Rencana Kerja dan Anggaran Kementerian*. Jakarta: Kementerian Pekerjaan Umum dan Perumahan Rakyat Indonesia.
- Keynes, J. M. (1936). *The general theory of employment, interest, and money*. London: Macmillan.
- Lestari, D., & Yuniarti, R. (2017). *Financial performance and stock return: An empirical evidence in Indonesian stock exchange*. *Dinasti International Journal of Education Management And Social Science*, 2(3), 429-443.
- Lins, K. V., Servaes, H., & Tamayo, A. (2017). *Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis*. *The Journal of Finance*, 72(4), 1785-1824.
- Mardiana, Faqih, (2019). *Model Sem-Pls Terbaik Untuk Evaluasi Pembelajaran Matematika Diskrit Dengan Lms*. Cirebon: BAREKENG: Jurnal Ilmu Matematika dan Terapan
- Muhamad Fatikh Satrio Ardi1, Desmintari, Fitri Yetty (2020). *Analisis Pengaruh Kinerja Keuangan Terhadap Financial Distress Pada Perusahaan Tekstil dan Garment Di BEI*. Jakarta : Universitas Getaran Jakarta.
- Miyakawa, D., Oikawa, K., & Ueda, K. (2021). *Firm Exit during the COVID-19 Pandemic: Evidence from Japan*. *Journal of the Japanese and international economies*, 59, 101118. <https://doi.org/10.1016/j.jjie.2020.101118>
- Modigliani, F., & Miller, M. H. (1958). *The cost of capital, corporation finance, and the theory of investment*. *The American Economic Review*, 48(3), 261-297.
- Myers, S. C. (1984). *The capital structure puzzle*. *The Journal of Finance*, 39(3), 574-592. <https://doi.org/10.1111/j.1540-6261.1984.tb03646.x>
- Natenapha, Y., & Moragot, P. (2013). *The Effect of Financial Ratios on Stock Return Volatility: Evidence from the Stock Exchange of Thailand*. *International Journal of Economics and Finance*, 5(8), 179-189.
- Prana, Rezzy, Hendrawati, Mery, Sunu, Robert. (2019). *Partial Least Squares Path Modeling Dengan Statcal-Plspm*. Medan: USU Press
- PricewaterhouseCoopers. (2019). *The Role of Telecommunications and Infrastructure in Economic Growth*. Retrieved from
- Rike Yudiawati, Astiwi Indriani1 (2016). *Analisis Pengaruh Current Ratio, Debt To Total Asset Ratio, Total Asset Turnover, Dan Sales Growth Ratio Terhadap Kondisi Financial Distress*. Semarang : Universitas Diponegoro

The Impact of Corporate Financial Resilience And Macroeconomic Fundamentals on Stock Price Volatility With The Variable Moderation of The Covid 19 Pandemic in The Infrastructure And Telecommunications Sector

- Roro Joffani Tungga Dewi, Khairunnisa, Dewa P.K Mahardika (2017). *Analisis Pengaruh Likuiditas, Leverage, Dan Operating Capacity Terhadap Financial Distress Perusahaan Pertambangan*. Bandung : Universitas Telkom.
- Roundy, P.T., Brockman, B.K., Bradshaw, M., 2017. *The resilience of entrepreneurial ecosystems*. *J. Bus. Ventur. Insights* 8, 99–104.
- Septia, Lalu, Embun.2021. *Pengaruh Makroekonomi Terhadap Harga Saham Dengan Financial Distress Sebagai Variabel Mediasi : Studi Kasus Pada Kondisi Pandemi Covid-19*. *Jurnal EMBA* Vol.9 No.2 Juni 2021 : Universitas Mataram.
- Tyas.2020. *Analisis Pengaruh Kinerja Keuangan Terhadap Harga Saham Pada Perusahaan Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia*.
- Tuti.2020. *Analisis Ekspor Kertas Terhadap Produk Domestik Bruto (Pdb) Indonesia Tahun 2002-2015*. *JOM FEB*, Volume 1 Edisi 1 (Januari – Juni 2018). Faculty of Economics and Business, Riau University, Pekanbaru, Indonesia.
- Sugiyono. 2008. *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung : Alfabeta
- Sugiyono. 2012. *Statistika untuk penelitian*. Bandung : Alfabeta
- Triggs, A., Kacaribu, F., & Wang, J. (2019). *Risks, resilience, and reforms: Indonesia's financial system in 2019*. *Bulletin of Indonesian Economic Studies*, 55(1), 1-27.
- Weygandt, J. J., Kimmel, P. D ., & Kieso, D. E. (2015). *Financial accounting (9th ed.)*. Hoboken, NJ: Wiley.
- Widagdo, B., & Widayat, 2011, *Pemodelan Persamaan Struktural*. Aplikasi dalam Penelitian Manajemen. Malang: UMM Press.
- Wooldridge, J. M. (2013). *Introductory econometrics: A modern approach*. South-Western Cengage Learning.
- Xia, Y., Qiao, Z., & Xie, G. (2022). *Corporate resilience to the COVID-19 pandemic: The role of digital finance*. *Pacific-Basin Finance Journal*, 74, 101791. <https://doi.org/10.1016/j.pacfin.2022.101791>.

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