

THE EFFECT OF MACROECONOMIC, MARKET RETURN, AND FINANCIAL PERFORMANCE WITH MODERATING VARIABLE OF COVID-19 PANDEMIC ON STOCK RETURN: A CASE STUDY OF MOBILE OPERATOR COMPANIES LISTED IN IDX PERIOD 2012-2021

Fajrul Ihsan
Roy Sembel
Melinda Malau

ABSTRACT

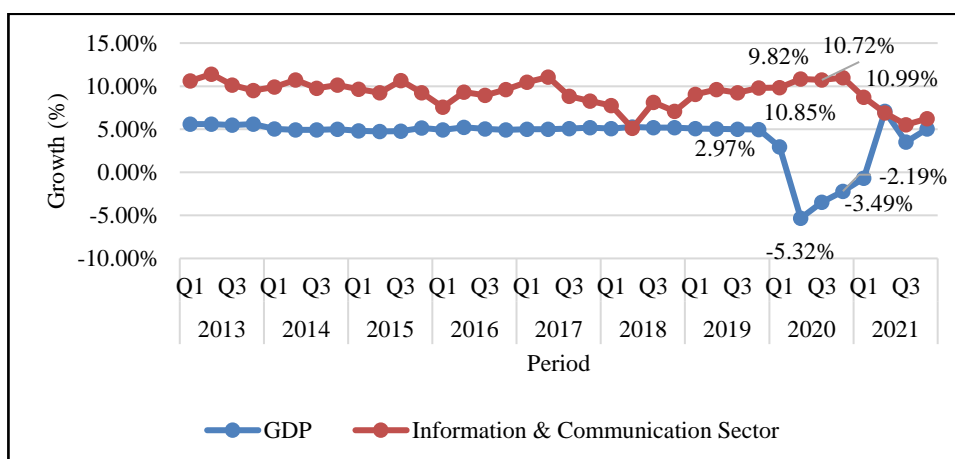
There are variances in the stock returns of mobile operator companies listed on the IDX, and earlier study on the impact of fundamental factors on the stock returns of mobile operator companies did not account for the existence of the COVID-19 pandemic that entered Indonesia in early 2020. The objective of this study is to analyse, evaluate, and comprehend the impact of external fundamental factors, such as macroeconomic factors and market returns as well as internal fundamental factors, such as financial ratios, on the stock return of a mobile operator companies listed on the IDX period 2012 to 2021, with the COVID-19 pandemic serving as a moderating variable. GDP growth (GDP), Exchange Rate (ER), Market Return (MR), Return on Equity (ROE), Net Profit Margin (NPM), Current Ratio (CR), Debt-to-Equity Ratio (DER), and COVID-19 are utilized as independent variables. This study used companies' stock returns as the independent variable and COVID-19 as the moderating variable. This study used a quantitative approach. The methodology being used was panel data regression using the Common Effect Model (CEM), through 157 observations. This study found that partially MR and ROE had a positive and significant effect on the companies' stock returns. The COVID-19 pandemic moderates the effect of ER on the companies' stock returns. Simultaneously GDP, ER, MR, ROE, NPM, CR, DER, and COVID-19 affected the companies' stock return. The result of this study supports the efficient market hypothesis, which states that stock prices reflect all available information, including fundamental information. Furthermore, the results of this study can be used as a reference for investors and management who run the cellular operator company. They must consider MR, ROE, and COVID-19 which moderates the impact of ER on stock returns.

Keywords: Macroeconomic, JKSE, Financial Ratio, Stock Return, COVID-19 Pandemic

INTRODUCTION

COVID-19 that comes to Indonesia on second of march 2020 not only affecting the health issue but also to the economics and business (Basri, 2020). Indonesia's Gross Domestic Product (GDP) was corrected and finally made Indonesia experienced a recession in the third quarter of 2020 (Figure 1). In the same year COVID-19 also made the weakening of the rupiah exchange rate against the USD that reach the all-time high in the first quarter of 2020 as well as made Jakarta Composite Index (JKSE) price dropped below 4000 in the same quarter.

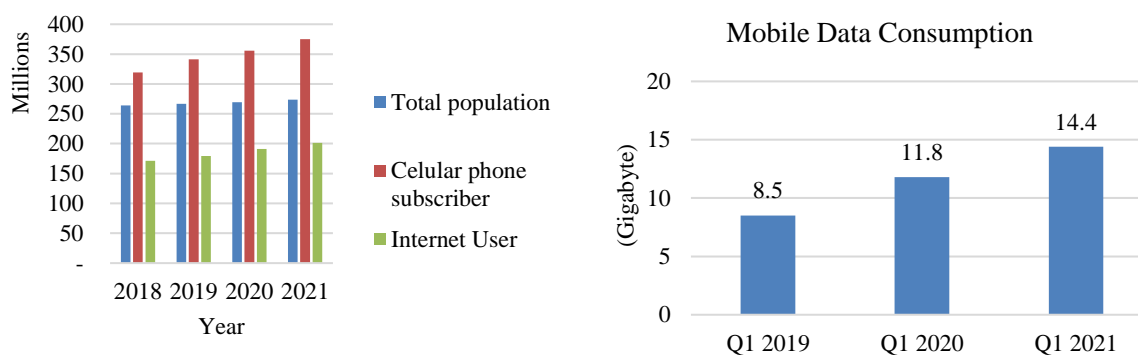
Figure 1. Indonesia's GDP VS Information & Communication Sector Growth Rate (Y-ON-Y)



Source: www.bps.go.id

Social restriction and physical distancing are some policies issued by Government to prevent the spread of COVID-19. Almost all activities include working and studying are required to be carried out from home via online by doing work from home (WFH) and school from home (SFH). This behaviour changes increasing the needs for internet and telecommunication service (Junaidi et al., 2021). The growth in the communication and internet services has resulted in the information and communication sector's GDP consistently experiencing positive growth year-on-year (y-o-y) in the 2020 (Figure 1). This phenomenon shows that this sector is able to capitalize on momentum despite adverse conditions.

Figure 2. Total Population vs Cellular phone subscriber's vs internet user in Indonesia and Indonesia Smartphone Users' Average Monthly Mobile Data Consumption



Source: www.statista.com, www.bps.go.id, and www.opensignal.com

Internet penetration, monthly data consumption, and cellular phone subscriber in Indonesia consistently increase year by year even before pandemic (Figure 2). The number of cellular phone subscriber is larger than Indonesian population and internet penetration at least already reaches 70% in 2021. However, the increase in demand for internet and telecommunication services has not had the same impact on the stock returns of mobile operator companies listed in IDX period 2012 to 2021. Many previous researches prove that macroeconomic factor, market return, and company's financial performance have an impact on the stock return. However, what is also a research problem in this study is that there is no research that explores the moderating effect of COVID-19 on the relationship between fundamental factors and stock returns of mobile operator companies listed on the IDX. Based on the background and problem statements that have been explained, the scope of this research will be focused on cellular operator companies listed on the IDX for the period 2012 to 2021.

RESEARCH QUESTIONS

Based on the background and problem statement that has been explained, the research questions are how does (1) GDP growth affect stock return?, (2) the exchange rate (ER) affect stock return?, (3) the market return (MR) affect stock return? (4) return on equity (ROE) return affect stock return? (5) net profit margin (NPM) return affect stock return?, (6) current ratio (CR) affect stock return?, (7) debt-to-equity ratio (DER) affect stock return?, (8) COVID-19 affect stock return?, (9) COVID-19 moderate the effect of GDP growth on stock return?, (10) COVID-19 moderate the effect of ER on stock return?, (11) COVID-19 moderate the effect of MR on stock return?, (12) COVID-19 moderate the effect of ROE on stock return?, (13) COVID-19 moderate the effect of NPM on stock return?, (14) COVID-19 moderate the effect of CR on stock return?, and (15) COVID-19 moderate the effect of DER on stock return?.

RESEARCH OBJECTIVES

Research objectives are formed to answer the research questions, the research objectives are to analyse and evaluate (1) the effect of GDP growth on stock return, (2) the effect of the exchange rate (ER) on stock return, (3) the effect of market return (MR) on stock return, (4) the effect of return on equity (ROE) on stock return, (5) the effect of net profit margin (NPM) on stock return, (6) the effect of current ratio (CR) on stock return, (7) the effect of debt-to-equity ratio (DER) on stock return, (8) the effect of COVID-19 on stock return, (9) whether COVID-19 moderate the effect of GDP growth on stock return, (10) whether COVID-19 moderate the effect of ER on stock return, (11) whether COVID-19 moderate the effect of MR on stock return, (12) whether COVID-19 moderate the effect of ROE on stock return, (13) whether COVID-19 moderate the effect of NPM on stock return, (14) whether COVID-19 moderate the effect of CR on stock return, and (15) whether COVID-19 moderate the effect of DER on stock return.

LITERATURE REVIEW

Efficient Market Hypothesis

The Efficient Market Hypothesis (EMH) proposed by Fama, (1970) states that the price of a stock reflects all the information contained in it, including past, present, and confidential information, as well as information that is only available to company insiders or internal parties. Fama, (1970) identifies three types of market efficiency levels based on the level of information absorption: weak form of the efficient market hypothesis, semi-strong form of the efficient market hypothesis, and strong form of the efficient market hypothesis.

Macroeconomics

Macroeconomics is the study of the structure and performance of national economies, as well as the policies employed by governments to influence economic performance (Abel et al., 2011). Macroeconomics can be viewed as the external factor that influences the daily operations of a company. Investment in a country is correlated with a number of macroeconomic factors, including gross domestic product (GDP), exchange rates, inflation rates, interest rates, national income, employment, international trade, industrial output, and retail sales (Abel et al., 2011).

Gross Domestic Product (GDP)

Gross Domestic Product is one of the macroeconomic factors that is the most comprehensive measure of aggregate economic activity, as well as the most well-known and widely used indicator of a country's economic health. GDP is the total value of all final goods and services produced in a nation over a specific time period (Abel et al., 2011). The Gross Domestic Product (GDP) is an indicator of economic health. An increase in GDP indicates better economic growth and a rise in people's purchasing power to buy goods and services and invest in the stock market. The high demand for goods and services influences increasing sales and company profits, which improves the company's financial performance or company fundamentals (Ratnaningrum et al., 2022). In addition, an increase in demand on the stock market will cause the company's stock price to rise, which will influence increasing stock returns.

Exchange Rate

The definition of exchange rates is the rate at which domestic currency can be exchanged for foreign currency (Abel et al., 2011). According to Kalam, (2020), the exchange rate is the price of one country's currency in relation to that of another. A weak exchange rate is indicative of an economy that is weak and vulnerable, while a strong exchange rate may indicate economic stability and viability (Gunarto and Sembel, 2019). According to Kalam, (2020) as a macroeconomic factor, the exchange rate affects stock returns. Research conducted by Thamrin and Sembel (2020) show that exchange rate has a negative significant effect to the stock return of consumer goods companies listed in IDX period 2009 to 2018.

Market Return

According to Hayes (2021) a return, also known as a financial return, is the amount of money gained or lost on an investment over a certain period. Whereas market return means market index return. Jakarta Composite Index (JKSE) is the biggest and the most important index on the Indonesian stock exchange (IDX). Previous study conducted by Thamrin and Sembel, 2020 show that market return that represented by JKSE return has a positive significant effect on the stock return of consumer goods companies listed on the IDX

Financial Performance

Financial Performance is the value of the company as outlined in the company's financial statements contained in the annual and quarterly financial reports. The company's financial performance can be seen through financial ratios, such as liquidity ratios, solvency, activity ratios, profitability, and market valuation (Aruan et al., 2022; Bertuah & Sakti, 2019; Razak et al., 2020; Thamrin & Sembel, 2020). Financial ratios are intended to assess the company's financial health at the time of preparation of financial statements. The results of financial ratios can reflect the state of financial performance or the fundamental condition of a company (Malau & Murwaningsari, 2018).

Stock Return

According to Hayes (2021) the money gained or lost on an investment over some period is referred to as a return, and also known as a financial return. According to Gitman and Zutter, (2015) return refers to the profit or loss realized on an investment over a specified time frame. Therefore, stock return refers to the gains or losses realized by investors over a specified time period. Investors' motivation for putting money into the stock market is to earn returns that meet their expectations for their investment activities.

COVID-19

COVID-19 began with the first reports of the COVID-19 outbreak originating from a cluster of pneumonia cases in Wuhan, China, since the end of December 2019. According to Junaedi and Salistia, (2020), COVID-19 pandemic has affected the economic growth of 135 countries, including Indonesia. After the announcement of the entry of COVID-19 into Indonesia on March 2 2020, the performance of the manufacturing and service sectors declined significantly. The government is trying hard to minimize the spread of this virus. One of the government's efforts to prevent the spread of the COVID-19 virus is the implementation of restrictions with social and physical distancing policies, which results in a severe economic downturn. Almost all business sectors have suffered losses due to the COVID-19 pandemic, but several businesses in the health and telecommunications sector, such as health insurance companies, pharmaceutical, healthcare and nutrition companies, and cellular operator service providers and internet providers, have survived and even benefited from the social distancing and physical distancing policies set by the government (Hadiwardoyo, 2020).

Hypothesis Development

Based on various previous studies and literature the research framework was designed as in Figure 3. From the framework, author develop the hypothesis as follow:

- H1. GDP growth has a positive effect on stock return
- H2. Exchange rate has a negative effect on stock return
- H3. Market return has a positive effect on stock return
- H4. Return on equity (ROE) has a positive effect on stock return
- H5. Net profit margin (NPM) has a positive effect on stock return
- H6. Current ratio (CR) has an effect on stock return
- H7. Debt-to-Equity Ratio (DER) has an effect on stock return
- H8. COVID-19 has a negative effect on stock return
- H9. COVID 19 moderates the effect of GDP on stock return
- H10. COVID 19 moderates the effect of exchange rate on stock return
- H11. COVID 19 moderates the effect of market return on stock return
- H12. COVID 19 moderates the effect of return on equity (ROE) on stock return

- H13. COVID 19 moderates the effect of net profit margin (NPM) on stock return
- H14. COVID 19 moderates the effect of current ratio (CR) on stock return
- H15. COVID 19 moderates the effect of debt-to-equity ratio (DER) on stock return

METHODOLOGY

Population and Sample

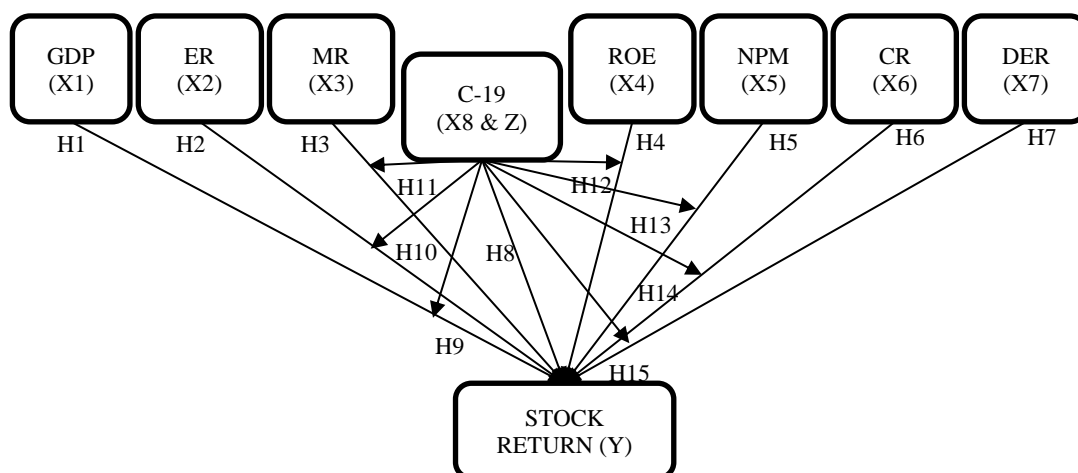
The population of this study is all companies listed on the Indonesia Stock Exchange. The sampling technique used in this study is nonprobability sampling with purposive sampling technique. Some of the criteria set as the basis for selecting the sample are (1) the companies have a cellular service provider business, (2) had listed (IPO) on the Indonesia Stock Exchange before 2012, (3) the company consistently publishes financial statements and (4) share price data for the period 2012 to 2021.

Data Collection

Sources of data used in this study are secondary data in the form of macroeconomic data (GDP and Exchange Rate), market returns, and financial report data of mobile operator companies listed on the Indonesia Stock Exchange using quarterly reports for the period 2012 to 2021. GDP data is taken from the Badan Pusat Statistik (BPS) website (<https://www.bps.go.id/>), Exchange rate data is taken from Bank Indonesia website (<https://www.bi.go.id/>), market return data and company stock prices are taken from the yahoo finance website (<https://finance.yahoo.com/>) and the company's financial statement data are taken from the Indonesia Stock Exchange website (<https://www.idx.co.id/>). After all the data was downloaded, the researcher then recapitulated the data according to the needs of each research variable.

Research Framework

Figure 3. Research Framework



Variables of Study

Table 1. Variable of Study

NO	VARIABLES	REFERENCE	EQUATION / FORMULA
1	GDP Growth Rate (X1)	Bertuah & Sakti (2019), Ratnaningrum et al., (2022), and Thamrin & Sembel (2020)	$GDP\ Growth_t = \frac{GDP_t - GDP_{t-1}}{GDP_{t-1}} \times 100\%$
2	Exchange Rate (X2)	Bertuah & Sakti (2019), Ratnaningrum et al., (2022), and Thamrin & Sembel (2020)	$ER_t = \frac{MR_t - MR_{t-1}}{MR_{t-1}} \times 100\%$
3	Market Return (X3)	Daniswara & Daryanto, (2019), Halim et al., (2020), and Thamrin & Sembel (2020)	$MR_t = \frac{JKSE_t - JKSE_{t-1}}{JKSE_{t-1}} \times 100\%$

4	Return on Equity (X4)	Anthony et al., (2012), Kowoon et al., (2022); Malau, (2017), and Malau (2020)	$ROE_{it} = \frac{Net\ Income_{it}}{Shareholders'\ Equity_{it}} \times 100\%$
5	Net Profit Margin (X5)	Anthony et al., 2012 and Daryanto et al., (2021)	$NPM_{it} = \frac{Net\ Income_{it}}{Sales\ Revenues_{it}} \times 100\%$
6	Current Ratio (X6)	(Anthony et al., 2012; Thamrin & Sembel, 2020)	$CR_{it} = \frac{Current\ Assets_{it}}{Current\ Liabilities_{it}} \times 100\%$
7	Debt to Equity Ratio (X8)	(Anthony et al., 2012; Ratnaningrum et al., 2022; Thamrin & Sembel, 2020)	$DER_{it} = \frac{Total\ Liabilities_{it}}{Shareholders'\ Equity_{it}} \times 100\%$
8	The moderating variable in this study is COVID-19 which was created using a dummy variable (Z) (Arsal et al., 2021)		$Z_t \begin{cases} 0, t=Q1\ 2012\ to\ Q4\ 2019 \\ 1, t= Q1\ 2020\ to\ Q4\ 2021 \end{cases}$
9	Stock Returns (Y)	Ristyawan, (2019) and Thamrin & Sembel, (2020)	$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} \times 100\%$

Where:

t = period of time

t-1 = periode of t-1 (previous period)

i = company

JKSE = Jakarta Composite Index

Data Analysis

The author uses IBM SPSS, EViews, and Microsoft Excel to perform statistical analysis. Data analysis was carried out to determine the effect of the independent variables on the dependent variable. Descriptive analysis is used to analyse data by describing the collected data as it is, without drawing conclusions or making generalizations. The type of data used in this study is panel data. According to Greene (2018) and Widarjono (2005), to estimate the relationship between the dependent variable and the independent variable in the panel data type, a panel data regression method is needed. There are three approaches that can be taken in estimating the right panel data regression model, namely the Common Effect Model (CEM), Fixed Effect Model (FEM) and Random Effect Model (REM). After testing the panel data regression, then the most appropriate regression model was selected for this study. Selection is carried out by involving tests such as the Chow test, Hausman test, and Lagrange Multiplier test (Bjørn, 2017; Greene, 2018; Widarjono, 2005). Then, classic assumption test is performed to find out whether there are deviations in the regression model to produce a statistical test on an accurate regression model. The classic assumption test in this study includes the normality test, multicollinearity test, and heteroscedasticity test. The significance test was carried out using the most appropriate panel regression model obtained from the determination of the panel data estimation model that had been carried out previously. The significance test was carried out to test the effect of the independent variables on the dependent variable either partially or simultaneously. Meanwhile, to measure the ability of the regression model to explain how much influence the independent variables simultaneously have on the dependent variable, a coefficient of determination test is carried out.

Research Process

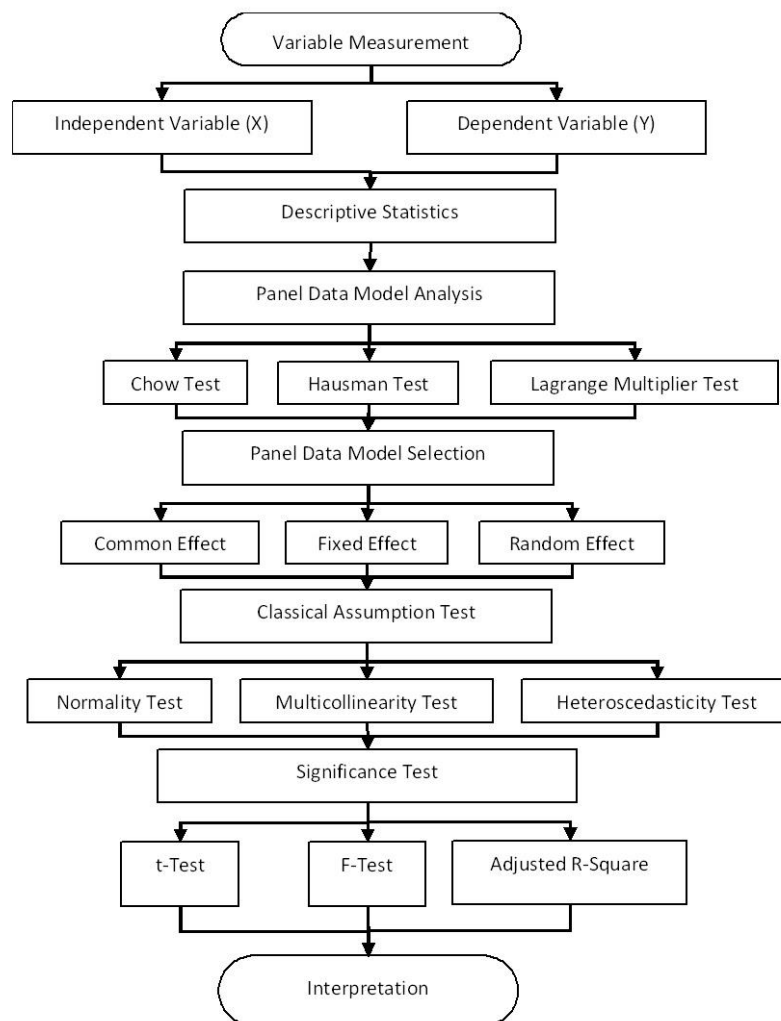


Figure 4. Research Process

RESULT AND DISCUSSION

Descriptive Statistical Analysis

The Table 2 describes the data collected in this study. Total observations in this study were 157 data obtained from four cellular operator companies in the time span from the first quarter of 2012 to the fourth quarter of 2021. Three outlier data, namely data for the 2nd quarter of 2018 from PT Smartfren Telecom Tbk (FREN), data for the 1st quarter of 2019 from PT Smartfren Telecom Tbk (FREN) and data for the 4th quarter of 2020 from PT Indosat Tbk (ISAT) were omitted to fulfil the normality test requirements on the classical assumption test.

Table 2. Descriptive Statistical Analysis Result

	GDP	ER	MR	ROE	NPM	CR	DER	SR	C-19
Mean	0.011	0.013	0.016	-0.007	-0.092	0.600	2.059	0.016	0.197
Median	0.011	0.011	0.023	0.011	0.024	0.498	2.023	0.008	0.000
Maximum	0.050	0.177	0.228	0.292	0.710	1.482	5.153	0.565	1.000
Minimum	-0.042	-0.126	-0.279	-0.373	-1.709	0.192	0.581	-0.551	0.000
Std. Deviation	0.025	0.053	0.081	0.075	0.370	0.305	1.029	0.206	0.399
Observations	157	157	157	157	157	157	157	157	157

Selected Regression Model

The author did not test the Random Effect Model due to the limited number of cross-section data so the Hausman test and Lagrange Multiplier test were not carried out. Only the Chow test was performed to select the best regression model, which resulted in the Common Effects Model being the most suitable model for this study as shown in Table 3.

Table 3. Panel Data Regression Model Test Comparison

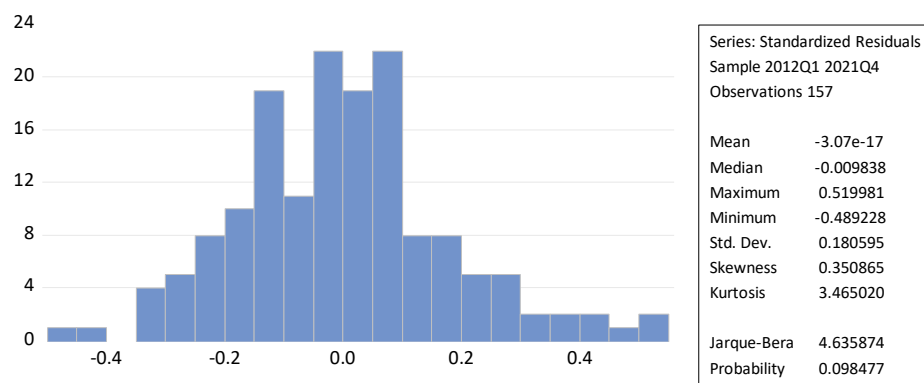
Test	Compared Model	P-Value	Result
Chow Test	CEM vs FEM	0.6783	P > 0.05 means CEM is better than FEM
Hausman Test	FEM vs REM	-	-
Lagrange Multiplier Test	CEM vs REM	-	-

Classical Assumption Test

Normality Test

Figure 5 shows the results of the panel data normality test in this study. The probability value obtained is 0.098477, greater than the significance threshold of 0.05 so it can be concluded that the panel data is normally distributed.

Figure 5. Normality Test Result



Multicollinearity Test

According to (Bougie and Sekaran, 2020) the multicollinearity test can be known by looking at the tolerance value and variance inflation factor (VIF). If the VIF value is below 10, then multicollinearity does not occur.

Table 4. Multicollinearity Test Result

Variables	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.005549	25.34136	NA
GDP	0.386527	1.349207	1.124856
ER	0.203377	2.779635	2.619081
MR	0.081549	2.499467	2.401865
ROE	0.223021	5.684931	5.628901
NPM	0.008513	5.603577	5.275345
CR	0.004734	9.796204	2.002784
DER	0.000348	8.407518	1.670751
C-19	0.001739	1.568114	1.258486

Dependent Variable: Stock Return (Y)

Table 4 describing the result of multicollinearity test. The variance inflation factor (VIF) of all independent variables and the moderation has a value below 10. Meaning that multicollinearity does not occur and there is no strong correlation between the independent variables.

Heteroskedasticity Test

The heteroscedasticity test is a test that functions to detect whether in the regression model there is an inequality of variance from the residuals of one observation to another (Basuki, 2017; Widarjono, 2005). If the variance from the residuals of one observation to another observation remains, then the regression model is called homoscedasticity which is characterized by a probability or significant value > 0.05.

Table 5. Heteroskedasticity Test Result

Heteroskedasticity Test: White
Null hypothesis: Homoskedasticity

F-statistic	1.209216	Prob. F (43,113)	0.2132
Obs R-squared	49.47637	Prob. Chi-Square (43)	0.2305
Scaled explained SS	54.18917	Prob. Chi-Square (43)	0.1178

Table 5 shows the probability value of 0.2305 which is above 0.05. So, it can be concluded that there is no heteroscedasticity, meaning that the residual variance from one observation to another is the same

Significance Test

This study's significance test comprises of three different tests: the partial significance test (t-test), the simultaneous significance test (F-test), and the coefficient determination test (Adjusted R-Square). The outcomes of each statistical significance test are shown in Table 6.

Table 6. Common Effect Model Regression Result

Variables	Coefficient	t-Statistics	Probability (one-tailed)
C	-0.1013	-1.2220	0.1119
GDP	0.8276	1.1269	0.1309
ER	-0.2884	-0.5542	0.2902
MR	0.7301	2.0946	0.0190
ROE	1.0597	1.8465	0.0335
NPM	-0.1471	-1.3618	0.0877
CR	0.0557	0.7730	0.2204
DER	0.0280	1.2673	0.1036
C-19	0.1203	0.6956	0.2439
GDP*C-19	-1.3352	-0.8503	0.1983
ER*C-19	-2.5224	-2.2947	0.0116
MR*C-19	-1.0012	-1.4354	0.0767
ROE*C-19	-1.4874	-1.3873	0.0838
NPM*C-19	0.2915	1.3732	0.0860
CR*C-19	-0.0309	-0.1392	0.4448
DER*C-19	-0.0139	-0.3223	0.3739
Adj. R-Square		0.2242	
F-Statistics		4.0069	
Probability		0.0000	

The following regression equation is derived from the results of the significance test presented in Table 6.

$$Y_{it} = -0.1013 + 0.8276GDP_t - 0.2884ER_t + 0.7301MR_t + 1.0597ROE_{it} - 0.1471NPM_{it} + 0.0557CR_{it} + 0.0280DER_{it} + 0.1203C19_t - 1.3352GDP_tC19_t - 2.5224ER_tGDP_t - 1.0012MR_tC19_t - 1.4874ROE_{it}C19_t + 0.2915NPM_{it}C19_t - 0.0309CR_{it}C19_t + 0.0139DER_{it}C19_t + e_{it}$$

The results of a partial significance test using the t-test indicate that the market return and return-on-equity (ROE) ratio have a positive and statistically significant effect on the stock return of mobile operator companies' period 2012 to 2021. The results also show that COVID-19 moderates the effect of the Rupiah exchange rate against USD on mobile operator companies stock return for the same period.

JKSE is the largest index on the Indonesian stock market which is also an indicator of capital market movements because it is derived from the average price of all shares listed on the Indonesian stock exchange in real time and can be used to evaluate the performance of portfolios owned by individuals or companies (Yusuf, 2022). Therefore, market returns represented by JKSE returns can indicate the potential stock returns of companies listed on the IDX, such as mobile operator companies. When market conditions are unfavourable, investors will avoid the stock market because a decline in stock returns will prevent them from achieving their desired return. Previous research conducted by Daniswara & Daryanto (2019), Thamrin & Sembel (2020), and Suwito (2020) proved that market return has a positive significant effect on the stock return.

ROE measures the return on the investment of common stockholders in the company's profits over a specified time period. According to Anthony et al., (2012) ROE reflect how much the firm has earned on the funds invested by the shareholders (either directly or through retained earnings). The ROE ratio is considered important for current or prospective shareholders, and this is also a concern of management because it is seen as an important indicator of shareholder value creation. The higher the ROE, the more effective the company's management is in generating profit from its equity financing (Kowoon et al., 2022). Previous research conducted by Adawiyah and Setiyawati (2019), Fitria et al., (2021), and Ramlah (2021) proved that return-on-equity ratio has a positive significant effect on the stock return of food and beverage companies.

The result of this study also shows that COVID-19 moderates the effect of Rupiah exchange rate against USD on company stock return negatively. In line with previous research conducted by (Suharyanto and Zaki, 2021; Thamrin and Sembel, 2020) that proved rupiah exchange rate against USD has a negative significant effect on the company's stock return. At the beginning of 2020, the COVID-19 pandemic had hit most countries in the world. The impact of the spread of the COVID-19 outbreak is not only detrimental to human health but also detrimental to the country's economy. According to Junaedi and Salistia, (2020), COVID-19 pandemic has had an impact on economic condition in 135 countries. According to the wordometer report, Indonesia itself is in 20th place based on the highest total cases of COVID-19 in the world (Worldometers, 2023).

The exchange rate is one of the macroeconomic factors affected by the COVID-19 pandemic (Çütçü and Dineri, 2021; Jamal and Bhat, 2022; Salim, 2022). The increase in the number of COVID-19 cases has had the effect of weakening the currency exchange rates of affected countries (Jamal and Bhat, 2022). Meanwhile, the USD currency is considered more stable because it is a global currency whose shift in value is considered more measurable than the currencies of other countries affected by COVID-19 (Salim, 2022). So, with the uncertainty regarding the COVID-19 pandemic at that time, investors felt safer to hold USD than other currencies because USD was considered a "safe haven".

According to Salim (2022) the increased demand for the USD currency increases the value of the USD currency itself and weakens the currencies of countries affected by COVID-19, such as the Rupiah, one of them. According to Kalam, (2020) as a macroeconomic factor, the exchange rate affects stock market returns. Research conducted by Thamrin and Sembel (2020) show that exchange rate has a negative significant effect to the stock return of consumer goods companies listed in IDX period 2009 to 2018. On the other hand, fluctuations in exchange rates influence how investors structure their investment portfolios. Occasionally, the instability of the Rupiah exchange rate versus the USD causes stock price volatility and this condition tends to create doubts among investors, who then prefer to sell their share ownership, resulting in a greater supply and a lower demand (Gunarto and Sembel, 2019). This is one of the factors contributing to the decline in the performance of the stock exchange including stock return, both in terms of the performance of the company's stock and the JKSE Index (Ratnaningrum et al., 2022).

The result from simultaneous significance test (F-test) show that all independent variables simultaneously have a significant effect on stock returns of mobile operator companies listed on IDX in the period 2012 to 2021 of 21.49% on the variable dependent namely stock return and the remaining 78.51% explained by other variables outside the research model.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the result tested using common effect it can be concluded that:

1. Market return and return on equity has positive significant effect on the stock return
2. COVID-19 moderates the impact of exchange rate on the stock return
3. Simultaneously macroeconomic variables, market return, companies' financial performance have significant effect on stock return

Recommendation

1. Recommendation for further research:
 - a. Other macroeconomic factors, such as the interest rate or the inflation rate, can be included
 - b. Changes can be made to the observation period in subsequent studies to obtain more precise or potentially distinct research results and a greater number of research samples
 - c. The measurement of the COVID-19 variable can be changed based on the daily number of COVID-19 sufferers or the death rate of COVID-19 patients in Indonesia
 - d. This research can also be applied to other sectors or companies within a particular index to obtain a variety of potential results regarding the impact of fundamental factors on company stock returns.
2. Recommendation for managers:
 - a. Management who runs a mobile operator company needs to pay attention to the company financial performance especially to the Return on Equity (ROE) ratio that has a positive significant effect to the company stock return. It is undeniable that profit is the same thing that companies and investors seek and desire. The

significance of ROE on stock returns indicates that the greater the company's ability to generate profits from the total shareholder's equity, the more confident investors will be in the company, which in turn will assist investors in deciding to increase their investment in the company, resulting in a rise in stock prices and an increase in the company's stock returns.

- b. Management also needs to pay attention to the market return or JKSE return which can be seen from the fluctuations in the JKSE on the Indonesian stock exchange, because this variable has a positive and significant direct effect on the company's stock return.
- c. The COVID-19 pandemic and the exchange rate of the Rupiah (IDR) against the United States Dollar (USD) also require management's attention because these two variables have a negative effect on the stock return of the companies, and the moderate effect of the COVID-19 pandemic on the exchange rate of IDR against the USD has a significant negative effect on the stock return of the companies.

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Fajrul Ihsan
Sekolah Tinggi Manajemen IPMI, DKI Jakarta 12750, Indonesia
E-mail: fajrul.ihsan@ipmi.ac.id

Roy Sembel
Sekolah Tinggi Manajemen IPMI, DKI Jakarta 12750, Indonesia
E-mail: roy.sembel@ipmi.ac.id

Melinda Malau
Universitas Kristen Indonesia, DKI Jakarta 13630, Indonesia
E-mail: melinda.malau@uki.ac.id