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The Effect of Exchange Rate, BI Rate, and Inflation on Stock Return during Pandemic Covid-19 in Indonesia

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Keywords

Exchange Rate, BI Rate, Inflation, Stock Return

Abstract

Since the spread of Covid-19 at the end of 2019 in China then spread to countries in the world including Indonesia, making the capital market also exposed. The Covid-19 pandemic in Indonesia affects the capital market and causes changes in trading times on the Indonesian stock exchange and this is a negative signal that causes investors to be more interested in selling their share ownership (Kusnandar & Bintari, 2020). It's caused the stock market price to decline, especially after the WHO declared that Covid-19 was a pandemic (AlAli, 2020). This study aims to analyse the effect of the exchange rate, BI Rate, and Inflation on stock returns during the Covid-19 pandemic in Indonesia. The research method used is Multiple Linear Regression Analysis. The Result is exchange rate, BI rate, and Inflation does not have any correlation.

Introduction

Since the spread of Covid-19 at the end of 2019 in China then spread to countries in the world including Indonesia, making the capital market also exposed. The Covid-19 pandemic in Indonesia affects the capital market and causes changes in trading times on the Indonesian stock exchange and this is a negative signal that causes investors to be more interested in selling their share ownership (Kusnandar & Bintari, 2020). This caused the stock market price to decline, especially after the WHO declared that Covid-19 was a pandemic (AlAli, 2020).

The existence of the capital market has a role in increasing national economic activity because with the capital market, it will be easier for companies to obtain funds so as to encourage the national economy to be more advanced (Tambunan, 2020). The development of the Indonesian capital market is currently volatile since Covid-19. Seeing that the economic situation in Indonesia is very worrying, it has caused quite a correction in the Indonesian capital market. The Indonesian capital market is one of the capital markets that has experienced a drastic decline. Based on data obtained from infrastructure, agriculture, various industries, mining and others, it has begun to weaken while the financial sector has increased (Kusnandar & Bintari, 2020). The stock market panic in Indonesia affects investors in making investment decisions (Pitaloka, Al Umar, Hartati, & Fitria, 2020).

Research on the relationship between the exchange rate, BI Rate, and inflation on stock returns has been conducted by Suciwati and Machfoedz (2002) found that the effect of the rupiah exchange rate on stock returns differs between the periods before and after the depreciation of the rupiah. This research is not supported by that produced by Kewal (2012) which states that

interest rates have a negative effect on stock returns. Ajayi and Mougoue (1996) found that there was a negative effect of the relationship between the exchange rate on stock returns.

Empirical evidence above results from research that has not been consistent raises interesting questions, whether stock returns can be influenced by the exchange rate, BI Rate, and inflation. Based on this explanation, this research takes the title "The Effect of Exchange Rate and BI Rate and Inflation on Stock Returns during the Covid-19 Pandemic in Indonesia".

Method

Sample / Participants

The population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2012: 115). The population of this study are all Kompas100 companies listed on the Indonesia Stock Exchange, with a population of 100 companies. The sampling method used in this study is Non Probability Sampling, which is a technique that does not provide equal opportunities/opportunities for each element or population to be selected as samples (Sugiyono, 2012:117).

Instrument(s)

Definition of Operational Variables and Their Measurement

In the operationalization of this research, the author uses the independent variable and the dependent variable. Independent variables or independent variables are variables that affect or are the cause of changes or the emergence of the dependent variable (Sugiyono, 2012: 59). In relation to this title, the independent variables are the exchange rate, BI Rate, and inflation. While the dependent variable or dependent variable is a variable that is influenced or becomes a result, because of the independent variable, the variable in this study is the stock return of the Kompas100 company listed on the Indonesian stock exchange for the period 2020. To facilitate data management, this study uses the definition operational variables as follows:

Exchange Rate (X1)

The proxy used is exchange rate sensitivity which is the level of influence of exchange rate changes on companies at the end of each month in each research year. This variable is expressed by the regression slope coefficient (c1) in equation (1) of the stock price at the end of the month which is a function of the stock price index and the exchange rate (Yoseph, 2008). The variable measurement scale used is the ratio scale. This proxy follows the research of Mufidah (2012), Suselo (2015) and Tirapat and Nittayagasetwat (1999).

BI Rate (X2)

The proxy used is the sensitivity of the BI Rate, which is the level of influence of exchange rate changes on companies at the end of each month in each year of the study. This variable is expressed by the regression slope coefficient (c2) in equation (2) of the stock price at the end of the month which is a function of the stock price index and SBI (Yoseph, 2008). The measurement scale used is a ratio scale. This proxy follows the research of Mufidah (2012), Suselo (2015) and Tirapat and Nittayagasetwat (1999).

Inflation (X3)

The proxy used is inflation sensitivity, which is the level of influence of exchange rate changes on companies at the end of each month in each research year. This variable is expressed by the

regression slope coefficient (c3) in equation (3) of the stock price at the end of the month which is a function of the stock price index and inflation (Yoseph, 2008). The measurement scale used is the ratio scale. This proxy follows the research of Mufidah (2012), Suselo (2015) and Tirapat and Nittayagasetwat (1999).

Stock return (Y)

The level of profit enjoyed by investors on a stock investment that they do (Ang, 2010:40). The company distributes cash dividends periodically to its shareholders, then the stock return can be calculated as follows (Jogiyanto, 2010). The measurement scale used is a ratio scale.

Data Collection Procedures

The type of data used in this research is secondary data. Secondary data is a source that does not directly provide data to data collectors, for example through other people or through documents (Sugiyono, 2012: 193). This secondary data is used to determine the differentiating factors for the rate of return of Kompas100 companies listed on the Indonesia Stock Exchange. The source of the data obtained from this research is the financial statements of the Kompas100 company for the 2020 period published by the IDX. Monthly JCI reports, monthly share prices obtained from the Indonesia Stock Exchange and Yahoo Finance, as well as Exchange Rate, BI Rate and Inflation reports obtained from Bank Indonesia.

This study also conducted a literature study which is a data collection technique in research conducted with the aim of obtaining secondary data that will be used as a theoretical basis related to the problem under study by studying several books and journals.

Data Analysis

Data Normality Test

The purpose of the data normality test is to find out whether the regression, endogenous variables, exogenous variables or both have normal or close to abnormal data distributions (Santoso, 2004: 212). Normality test was performed using the Kolmogorov-Smirnov test by setting the degree of confidence (α) 1%, 5%, or 10%. This test is carried out on each variable provided that if individually each of these variables can also be stated to meet the assumption of normality. The trick is to determine in advance the test hypothesis, namely:
H_0 : data is normally distributed.
H_a : data is not normally distributed.

Next, determine the criteria for this test by looking at the Kolmogorov-Smirnov drops line as follows:
a. if *p-value* $\geq$ (α) then the data is normally distributed or H_0 is rejected;
b. if the *p-value* $\leq$ (α) then the data is not normally distributed or H_0 is accepted.

Classical Assumption Test

Classical assumption test is conducted to find out deviations that occur in the research data so that the path model is BLUE (Best Linear Unbiased Estimated). The classical assumptions used in this research are: model normality test, multicollinearity test, autocorrelation, and heteroscedasticity which are described in detail as follows:

Multicollinearity Test

Multicollinearity is the existence of a linear relationship between some or all of the independent variables in the research model. This test determines whether the research model finds a linear relationship between the independent variables or not. How to find out whether there is multicollinearity in the model is detected first, then if multicollinearity occurs, then action is taken to eliminate the effects of multicollinearity (Gujarati, 2004:342-363).

The way to measure the presence or absence of multicollinearity can be seen from the Tolerance (TOL) and Variance Inflation Factors (VIF) values of each variable. If the VIF value is > 10 then multicollinearity occurs and vice versa (Gujarati, 2004). If multicollinearity occurs, the way to overcome it is to use variable transformation into the form of Natural Logarithms.

Autocorrelation Test

The autocorrelation test is used to determine whether there are deviations or not classical assumption, autocorrelation is to test the correlation that occurs between the residuals in one other observation to the regression model. Symptoms of autocorrelation can result in inefficient regression results because the variance or standard error of estimate is not minimum and makes the significance test inaccurate. How to find out whether the regression model contains autocorrelation can be used the Durbin Watson Test approach (Gujarati, 2004) with the following criteria:

a. When $d_U \leq$ DW $\leq$ 4- d_U. H_0 is accepted, meaning that there is no autocorrelation in the model.
b. If DW < d_L. H_0 is rejected, meaning that there is an autocorrelation in the model.
c. If ($d_L \leq$ DW $\leq d_U$) or (4- $d_L \leq$DW $\leq$ 4- d_U). The test results are conclusive, so it cannot be determined whether there is autocorrelation or not.

If there is an autocorrelation, it can be corrected by entering the lag variable from the dependent variable into one of the independent variables, so that the observation data is reduced by 1.

Heteroscedasticity Test

Heteroscedasticity testing is to test whether in a regression model there is a confounding error that has the same variance or not. This test uses Glejser with the following steps (Gujarati, 2004:438):

1) Perform regression of the dependent variable (Y) on the independent variable (X) and obtain the absolute value of the residual.
2) Perform variable regression from the absolute residual value (lel) to the independent variable (X) with the following regression form:

$$(lel)Y = a_0 + a_0X_1 + a_2X_2 + a_3X_3$$

Determining the presence or absence of heteroscedasticity in statistical tests to test hypotheses: $H_a: \mu = 0 \; dan \; H_i : \mu \# 0$

Decision making criteria:

If the *p-value* $\geq (\alpha)$, then there is no heteroscedasticity in the model.

If the *p-value* $\leq (\alpha)$, then in the model there is heteroscedasticity.

If heteroscedasticity occurs, it can be corrected by transforming the variable affected by heteroscedasticity into logarithmic form (Log10).

Hypothesis Test

This test was conducted to determine the effect of the independent variable on the dependent variable partially. The steps in conducting the t test are:

a. Hypothesis Formulation

The null hypothesis (Ho) which is neutral or can also be defined as a statement about the parameters that contradicts the researcher's beliefs or the opposite of Ha. The hypothesis reads as follows:
H_{o1} = There is no effect of exchange rate on stock returns
H_{o2} = There is no effect of the BI Rate on stock returns
H_{o3} = There is no effect of inflation on stock returns
The alternative hypothesis is the researcher's basic assumption that the problem being studied is not neutral. So the hypothesis reads:
H_{a1} = there is an effect of exchange rate on stock returns
H_{a2} = there is an effect of the BI Rate on stock returns
H_{a3} = there is an effect of inflation on stock returns

b. Determining the Risk of Error (Significance Level)
This stage is the stage to determine how big the opportunity is to make the risk of making a mistake in making a decision to reject the correct hypothesis. The levels of significance used in this study were = 1%, 5% and 10%. The selection of the level of significance is based on the level of significance that is in accordance with the interests and objectives of the study.
3) Withdrawal of hypothesis decision
The conditions for rejection or acceptance of H0 are as follows
a) *p-value* $\geq (\alpha)$, then H_0 is accepted
b) *p-value* $\leq (\alpha)$, then H_0 is rejected and Ha is accepted.

Results and Discussion

Research Overview

An index that measures the price performance of 100 stocks that have good liquidity and large market capitalization. The KOMPAS100 index was launched and managed in collaboration with the media company Kompas Gramedia Group (the publisher of the Kompas daily newspaper). In this study, using data on inflation, exchange rate, BI Rate, and monthly stock returns. So that the data used there are 600 items of data on inflation, exchange rates, BI Rate, and stock returns. If the total is 3000 items of company data. The following is a list of companies that are included in the KOMPAS100 category:

Table 1. KOMPAS100 Company for the period February to July 2020

No.	Kode	Nama Saham
1	AALI	Astra Agro Lestari Tbk.
2	ACES	Ace Hardware Indonesia Tbk.
3	ADHI	Adhi Karya (Persero) Tbk.
4	ADRO	Adaro Energy Tbk.
5	AKRA	AKR Corporindo Tbk.
6	ANTM	Aneka Tambang Tbk.
7	APLN	Agung Podomoro Land Tbk.
8	ASII	Astra International Tbk.
9	ASSA	Adi Sarana Armada Tbk.
10	BBCA	Bank Central Asia Tbk.
11	BBNI	Bank Negara Indonesia (Persero) Tbk.
12	BBRI	Bank Rakyat Indonesia (Persero) Tbk.

No.	Kode	Nama Saham
13	BBTN	Bank Tabungan Negara (Persero) Tbk.
14	BEST	Bekasi Fajar Industrial Estate Tbk.
15	BJBR	Bank Pembangunan Daerah Jawa Barat dan Banten Tbk.
16	BJTM	Bank Pembangunan Daerah Jawa Timur Tbk.
17	BKSL	Sentul City Tbk.
18	BMRI	Bank Mandiri (Persero) Tbk.
19	BMTR	Global Mediacom Tbk.
20	BNGA	Bank CIMB Niaga Tbk.
21	BNLI	Bank Permata Tbk.
22	BOGA	Bintang Oto Global Tbk.
23	BRPT	Barito Pacific Tbk.
24	BSDE	Bumi Serpong Damai Tbk.
25	BTPS	Bank Tabungan Pensiunan Nasional Syariah Tbk.
26	CLEO	Sariguna Primatirta Tbk.
27	CPIN	Charoen Pokphand Indonesia Tbk
28	CTRA	Ciputra Development Tbk.
29	DMAS	Puradelta Lestari Tbk.
30	ELSA	Elnusa Tbk.
31	ERAA	Erajaya Swasembada Tbk.
32	ESSA	Surya Esa Perkasa Tbk.
33	EXCL	XL Axiata Tbk.
34	GGRM	Gudang Garam Tbk.
35	GIAA	Garuda Indonesia (Persero) Tbk.
36	HMSP	H.M. Sampoerna Tbk.
37	HOKI	Buyung Poetra Sembada Tbk.
38	HRUM	Harum Energy Tbk.
39	ICBP	Indofood CBP Sukses Makmur Tbk.
40	INCO	Vale Indonesia Tbk.
41	INDF	Indofood Sukses Makmur Tbk.
42	INDY	Indika Energy Tbk.
43	INKP	Indah Kiat Pulp & Paper Tbk.
44	INTP	Indocement Tunggal Prakarsa Tbk.
45	ISAT	Indosat Tbk.
46	ITMG	Indo Tambangraya Megah Tbk.
47	JPFA	Japfa Comfeed Indonesia Tbk.
48	JRPT	Jaya Real Property Tbk.
49	JSMR	Jasa Marga (Persero) Tbk.
50	KBLI	KMI Wire & Cable Tbk.
51	KLBF	Kalbe Farma Tbk.
52	LPKR	Lippo Karawaci Tbk.
53	LPPF	Matahari Department Store Tbk.
54	LSIP	PP London Sumatra Indonesia Tbk.
55	MAIN	Malindo Feedmill Tbk.

No.	Kode	Nama Saham
56	MAPI	Mitra Adiperkasa Tbk.
57	MDKA	Merdeka Copper Gold Tbk.
58	MEDC	Medco Energi Internasional Tbk.
59	MGRO	Mahkota Group Tbk.
60	MIKA	Mitra Keluarga Karyasehat Tbk.
61	MNCN	Media Nusantara Citra Tbk.
62	MTDL	Metrodata Electronics Tbk.
63	MYOR	Mayora Indah Tbk.
64	PGAS	Perusahaan Gas Negara Tbk.
65	PNBN	Bank Pan Indonesia Tbk
66	PNLF	Panin Financial Tbk.
67	PPRO	PP Properti Tbk.
68	PTBA	Bukit Asam Tbk.
69	PTPP	PP (Persero) Tbk.
70	PWON	Pakuwon Jati Tbk.
71	RALS	Ramayana Lestari Sentosa Tbk.
72	SCMA	Surya Citra Media Tbk.
73	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.
74	SILO	Siloam International Hospitals Tbk.
75	SMBR	Semen Baturaja (Persero) Tbk.
76	SMCB	Solusi Bangun Indonesia Tbk.
77	SMGR	Semen Indonesia (Persero) Tbk.
78	SMRA	Summarecon Agung Tbk.
79	SMSM	Selamat Sempurna Tbk.
80	SPTO	Surya Pertiwi Tbk.
81	SRIL	Sri Rejeki Isman Tbk.
82	SSIA	Surya Semesta Internusa Tbk.
83	SSMS	Sawit Sumbermas Sarana Tbk.
84	TBIG	Tower Bersama Infrastructure Tbk.
85	TDPM	Tridomain Performance Materials Tbk.
86	TELE	Tiphone Mobile Indonesia Tbk.
87	TINS	Timah Tbk.
88	TKIM	Pabrik Kertas Tjiwi Kimia Tbk.
89	TLKM	Telekomunikasi Indonesia (Persero) Tbk.
90	TOPS	Totalindo Eka Persada Tbk.
91	TOWR	Sarana Menara Nusantara Tbk.
92	TPIA	Chandra Asri Petrochemical Tbk.
93	UNTR	United Tractors Tbk.
94	UNVR	Unilever Indonesia Tbk.
95	WEGE	Wijaya Karya Bangunan Gedung Tbk.
96	WIKA	Wijaya Karya (Persero) Tbk.
97	WOOD	Integra Indocabinet Tbk.
98	WSBP	Waskita Beton Precast Tbk.

No.	Kode	Nama Saham
99	WSKT	Waskita Karya (Persero) Tbk.
100	WTON	Wijaya Karya Beton Tbk.

Analysis of Research Results

Descriptive Statistical Results

Descriptive statistics aim to describe research data based on maximum and minimum values, average values, and standard deviations. This study uses 3 independent variables, namely the exchange rate, SBI interest rate, and inflation. The independent variable 1 is stock returns. The descriptive statistics are shown in the following table:

Table 2. Descriptive Statistics (n=96)

Variable	Minimum	Maximum	Average	Dev Std
Exc. rate	-1.313	1.073	-0.084	0.593
BI Rate	-0.951	0.932	-0.049	0.515
Inflation	-0.837	0.889	-0.046	0.482
Stock re.	-203.0	0.984	-4.374	21.23

In Table 2, it can be seen that the minimum exchange rate sensitivity value is -1.313 while the maximum exchange rate sensitivity is 1.073 during the study period. That is, during the observation period of PT. Bank Permata, Tbk (BNLI)obtained the lowest exchange rate sensitivity at its company, namely in 2020, while the highest level of exchange sensitivity was also obtained at the company PT. Tridomain Performance Materials, Tbk (TDPM) in 2020. The average value of exchange rate sensitivity is -0.084 while the standard deviation value is 0.593. This identifies a data spread that is not good because the mean value is lower than the standard deviation.

The BI Rate is assessed based on the equation Pt = a2 +b3 IHSGt + c3 BI Rate or the company's sensitivity using monthly data in the first evaluation period of Kompas100, which is 6 months in 2020. This means that during the research period, PT. Mayora Indah, Tbk (MYOR) obtained the lowest BI Rate sensitivity of -0.951 in 2020, while the highest sensitivity value was obtained by PT. KMI Wire & Cable, Tbk (KBLI), Tbk in the range of 0.932 in 2020. The average value of the BI Rate sensitivity is -0.049 and the standard deviation is 0.515, meaning that the data spread is not good because the average value is smaller than the standard deviation.

Inflation sensitivity has the lowest value of -0.837 while the highest value is 0.889. That is, the company that has the lowest inflation sensitivity is PT. Semen Baturaja (Persero), Tbk (SMBR)in 2020 of -0.837. while the company with the highest sensitivity is PT. Siloam International Hospitals, Tbk (SILO)of 0.889 in 2020. The average inflation sensitivity is -0.046 and the standard deviation is 0.482. This means that the spread of the data is not good because the average value is smaller than the standard deviation.

The minimum stock return value is -203.0 while the maximum stock return is 0.984 during the study period. That is, during the observation period of PT. Garuda Indonesia (Persero) Tbk. (GIAA) obtained the lowest stock return on the company, while the highest level of share return

was obtained in the company perusahaan PT. Bank Central Asia, Tbk (BBCA), which is in 2020. The average stock return value is -4,374 while the standard deviation value is 21.23. This identifies a data spread that is not good because the mean value is lower than the standard deviation.

Data Normality Test

The purpose of the data normality test is to find out whether the regression, endogenous variables, exogenous variables or both have normal or close to abnormal data distributions (Santoso, 2004: 212). Normality test was performed using the Kolmogorov-Smirnov test by setting the degree of confidence (α) 1%, 5%, or 10%. This test is carried out on each variable provided that if individually each of these variables can also be stated to meet the assumption of normality. The results of the data normality test are presented in Table 3:

Table 3. Data Normality Test Results

Variable	Sig.	Information
Exchange	0.200	Normal
rate	0.200	Normal
BI Rate	0.200	Normal
Inflation	0.001	Normal
Stock returns		

In Table 3, Exchange Rate Sensitivity Variables, BI Rate, Inflation, and Stock Returns show that all variable values are higher than =0.05 and =0.001, so it can be said that all variable data are normally distributed.

Classical Assumption Test

Classical assumption test is conducted to find out deviations that occur in the research data so that the path model is BLUE (Best Linear Unbiased Estimated). The classical assumptions used in this research are: model normality test, multicollinearity test, autocorrelation, and heteroscedasticity which are described in detail as follows:

a. Multicollinearity Test

Multicollinearity is the existence of a linear relationship between some or all of the independent variables in the research model. This test determines whether the research model finds a linear relationship between the independent variables or not. How to find out whether there is multicollinearity in the model is detected first, then if multicollinearity occurs, then action is taken to eliminate the effects of multicollinearity (Gujarati, 2004:342-363).

The way to measure the presence or absence of multicollinearity can be seen from the Tolerance (TOL) and Variance Inflation Factors (VIF) values of each variable. If the VIF value is > 10 then multicollinearity occurs and vice versa (Gujarati, 2004). If multicollinearity occurs, the way to overcome it is to use variable transformation into the form of Natural Logarithms. The results of the Multicollinearity Test are presented in the following table:

Table 4. Multicollinearity Test Results

Independent Variable	Y = *Stock Return*	
	VIF	**Conclution**
Exchange rate	1.554	Multicollinearity does not occur
BI Rate	1.039	Multicollinearity does not occur
Inflation	1.590	Multicollinearity does not occur

In Table 4, it can be seen that the Variant Inflation Factor (VIF) values of all variables (Exchange Sensitivity, BI Rate, and Inflation) do not experience multicollinearity with a VIF value of < 10 in the two models above, so this variable is not identified as multicollinearity.

b. Autocorrelation Test

The autocorrelation test is used to determine whether there are deviations or not classical assumption, autocorrelation is to test the correlation that occurs between the residuals in one other observation to the regression model. Symptoms of autocorrelation can result in inefficient regression results because the variance or standard error of estimate is not minimum and makes the significance test inaccurate. How to find out whether the regression model contains autocorrelation can be used the Durbin Watson Test approach (Gujarati, 2004) with the following criteria:

a. When $d_U \leq DW \leq$ 4- d_U. H_0 is accepted, meaning that there is no autocorrelation in the model.
b. If $DW < d_L$. H_0 is rejected, meaning that there is an autocorrelation in the model.
c. If ($d_L \leq DW \leq d_U$) or (4- $d_L \leq DW \leq$ 4- d_U). The test results are conclusive, so it cannot be determined whether there is autocorrelation or not.

If there is an autocorrelation, it can be corrected by entering the lag variable from the dependent variable into one of the independent variables, so that the observation data is reduced by 1. The following table presents the values of dL and dU according to the number of research observations:

Table 5. Upper Limit (d_U) and Lower Limit (d_L) Values

Number of Observations	Independent Variables	Description	
n = 95	k = 3	d_U = 1.468	4-d_U = 2.404
		d_L = 1.596	4-d_L = 2.532

Based on Table 5, the number of research observations of 95 out of 100 companies is due to one outlier data so that the data must be removed and 4 companies that have the same stock price in a row so that sensitivity cannot be tested, finally the data must also be removed. The number of independent variables is 3 so that the upper limit value (d_U) is 1,468 and the lower limit value (d_L) is 1,596. Furthermore, the autocorrelation test between variables is shown in Table 6. below:

Table 6. Autocorrelation Test Results

Research Model	Durbin-Watson	Conclusion
Independent Variables = Exchange Rate, BI Rate, and Inflation. Dependent Variable = Stock Return	2.528	Conclusive

In Table 6, it can be concluded that model 1 has a Durbin Watson value of 2,528. This value is higher than the lower limit value (d_L)but higher than the upper limit value (d_U) which is 1.666<1.978>2.334 so that it can be concluded that the data is conclusive / it cannot be concluded whether there is autocorrelation or not according to the 4-dU DW method 4-dL. So it is necessary to run a test. Here are the Run Test results:

Tabel 7. Runs Test

	Unstandardized Residual
Test Value[a]	-.48789
Cases < Test Value	47
Cases >= Test Value	48
Total Cases	95
Number of Runs	61
Z	2.580
Asymp. Sig. (2-tailed)	.010

SPSS output results show that the test value is -0.48789 with a significant probability of 0.010 at 0.01 which means the hypothesis is accepted, so it can be concluded that the residuals are not random or there is no autocorrelation between the residual values.

c. Heteroscedasticity Test

Heteroscedasticity testing is to test whether in a regression model there is a confounding error that has the same variance or not. This test uses Glejser with the following steps (Gujarati, 2004:438):

1) Perform regression of the dependent variable (Y) on the independent variable (X) and obtain the absolute value of the residual.
2) Perform variable regression from the absolute residual value (lel) to the independent variable (X) with the following regression form:

$$(lel)Y = a_0 + a_0X_1 + a_2X_2 + a_3X_3$$

Determining the presence or absence of heteroscedasticity in statistical tests to test hypotheses:
$H_a: \mu = 0\ dan\ H_i: \mu \# 0$
Decision making criteria:
If the *p-value* ≥ (α), then there is no heteroscedasticity in the model.
If the *p-value* ≤ (α), then in the model there is heteroscedasticity.
If heteroscedasticity occurs, it can be corrected by transforming the variable affected by heteroscedasticity into logarithmic form (Log10).

The results of the Heteroscedasticity Test are presented in the table below:

Table 8. Hypothesis Test Results (α=5%)

Variable	Model	
	P-value	**Conclusion**
Exchange rate	0.181	Not experiencing heteroscedasticity
BI Rate	0.640	Not experiencing heteroscedasticity
Inflation	0.628	Not experiencing heteroscedasticity

In Table 8, the significance value of all exogenous variables is greater than 0.05 (5%), it can be concluded that H_0 is accepted, which means there is no heteroscedasticity. This shows that the residual does not contain heteroscedasticity in the model used.

Hypothesis Test
Based on the calculation results, the analysis results will be obtained as shown in Table 9.:

Table 9. Hypothesis Test Results (α=5%)

Variable	Prediction	Coefficient	Sig.	Conclusion
(Dependent Variable = Stock Return) Exchange rate	-	-0.050	0,923	Not significant
BI rate	+	0.100	0,866	Not significant
Inflation	-	-0.084	0,768	Not significant

The significance of all exogenous variables is greater than 0.05 (5%), it can be concluded that H_0 is accepted, which means there is no heteroscedasticity. This shows that the residual does not contain heteroscedasticity in the model used.

The three independent variables were included in the regression model. All variables are not significant, it can be seen from the probability that the significance of all variables is far from 0.05. it can be concluded that stock returns are not influenced by the exchange rate, BI rate, and inflation with the following mathematical equation:

Stock Return = 1.502 - 0.050 Exchange Rate + 0.100 BI Rate - 0.084 Inflation

Based on the test results in Table 9, the following can be explained:

a. The first hypothesis (H_1) states that the exchange rate has no effect on stock returns. Table 9. shows that the regression coefficient value of -0.050 has a greater significance than = 5% (0.923 > 0.05). A significance value greater than 0.05 indicates an insignificant effect. This can be interpreted that there is a significant influence between the exchange rate on Stock Return. Based on the information above, hypothesis 1 which states that the exchange rate affects stock returns is not proven true or H01 is rejected.
b. The second hypothesis (H_2) states that the BI Rate has no significant positive effect on Stock Return. Table 9. proves that the regression coefficient value of 0.100 has a

significance of 0.866. The significance value is greater than = 5% (0.866 > 0.05) so it can be said that the effect is not significant, in other words there is an insignificant effect between the BI Rate on Stock Return. The second hypothesis (H_2) which states that the BI Rate has a significant effect on Stock Return is not proven true or H_{02} is rejected.

c. The third hypothesis (H3) states that inflation has no effect on stock returns. Table 9. shows that the inflation variable coefficient is -0.084 and the significance value is greater than = 5% (0.768 > 0.05), this proves that inflation has no The third hypothesis (H3) which states that inflation affects Stock Return is not proven true or H_{03} is rejected.

Discussion

Effect of Exchange Rate on Stock Return

The results showed that the exchange rate had a negative and insignificant effect on the stock returns of the Kompas100 company. This means that the exchange rate has no effect on stock returns in Kompas100 companies listed on the IDX. The insignificance of the exchange rate could be due to the large number of companies that prioritize the national or local market to increase income and company value so that stock returns are still obtained by investors. Moreover, during the Covid-19 pandemic like this, people prioritize local products and rarely use foreign products.

The results of this study indicate that the exchange rate has no significant effect on stocks. A sharp increase in the US$ exchange rate against the rupiah will have a negative impact on issuers who have debts in dollars while the issuer's products are sold locally. The absence of the effect of the exchange rate on stock returns is due to the fact that very few companies export but sell more goods domestically or domestically. The results of hypothesis testing showed no significant effect. This means that empirical research data does not show that the exchange rate has a significant effect on stock returns.

Effect of BI Rate on Stock Return

The results showed that the BI Rate had no significant effect on stock returns in the Kompas100 company on the Indonesia Stock Exchange. This means that the high and low BI Rate will not affect the company's stock returns. The high BI rate set by BI will not make the company Kompas100 lower its stock return. This is due to the company's ability to manage strategies during the COVID-19 pandemic to take advantage of the domestic market so that the company's value survives and is able to pay off debts and interest on their obligations. So that the stock price still persists and even increases and in the end the stock return is still there.

Effect of Inflation on Stock Return

The results of the study indicate that the inflation variable has a negative and insignificant effect on the stock return of the Kompas100 company on the IDX. It was identified that the increase and decrease in the inflation rate did not have an impact on the increase and decrease in the stock return of Kompas100 on the IDX. Inflation is an event that describes situations and conditions where prices have increased. The increase in the price of goods will not affect the company's profits because the demand has increased since the pandemic due to panic buying during the covid-19 pandemic, making the Kompas100 company continue to innovate to issue products that are relevant or appropriate during the pandemic, at very efficient and consistent prices. making the company Kompas100 still exist despite the fluctuating inflation rate.

Product innovations that are in demand by consumers make the company earn a fairly stable profit and can still provide stock returns to shareholders.

The results of this study support the research of Floros (2004), Sangkyun (1997), and Mok (2004) who found that inflation had no effect on stock returns.

Conclusion

The variable of this research have not any correlation to the stock return that use KOMPAS100 Company to analysed. It means, the existent of exchange rate, BI rate, and inflation may not disturb company to give any stock return.

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