ANALYSIS OF THE EFFECT OF EXCHANGE RATE, INTEREST RATE AND FOREIGN INVESTMENT ON ECONOMIC GROWTH IN INDONESIA

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Article history:		Abstract:
Received:	7th August 2023	This study aims to determine the effect of exchange rates, interest rates and foreign investment on economic growth and discuss it. The data used in this study are secondary data for 1992-2021 sourced from the National Statistics Agency and the World Bank. The analysis model in this study uses Multiple Linear Regression with the Error Correction Model (ECM) analysis model. The analysis shows that in the long run interest rates and foreign investment have a positive and significant effect on economic growth except the exchange rate. It is concluded that the variables of exchange rate, interest rate and foreign investment are the main variables that affect economic growth in the long and short term.
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1. INTRODUCTION

The process of the economy continuously getting better over a certain period can be interpreted as the production capacity of the economy in the form of national income. The continuous increase in economic growth is an achievement desired by a country so that development goals can be achieved. The growth of goods and services shows economic growth in a country, the higher the level of economic growth, the faster the process of output growth (Indriyani, 2016) (1).

Economic growth is a long-term problem that a benchmark in measuring the progress and stability of a country's economy. Almost all countries, both developed and developing countries face the problem of maintaining stability and economic growth in their country, with various factors that affecting economic growth, including Capital, Labor, Technology and the (Labor), Technology and Social System. The increase of economic growth signifies the success of a country in developing their economy. This is why every country will try to spur economic growth, because economic growth is a picture of the state of the country's economy.

GDP is a tool used to measure income and expenditure in the economy over a certain period. The GDP value used is GDP based on constant prices (real GDP) so that the resulting growth is growth that occurs due to additional production.

Indonesia is currently a developing country, indicating that the economy is still a major problem in Indonesia. The economic problems that occur are so diverse that they are interrelated with one another. Various policies were issued by the government in an effort to the problem. However, the government has not been able to overcome the problem. This is in line with Indonesia's economic conditions which fluctuates from year to year. Here is the percentage of Indonesia's economic growth rate in the last thirty years:

Table 1.1 Indonesia's Economic Growth Rate 1992 – 2021 By Expenditure at Constant Prices (percent)

Years	EG %	Years	EG %	Years	EG %
1992	6.46	2002	4.5	2012	6.03
1993	6.5	2003	4.8	2013	6.03
1994	7.54	2004	5	2014	5.01
1995	8.22	2005	5.7	2015	4.88
1996	7.82	2006	5.5	2016	5.03
1997	4.7	2007	6.3	2017	5.07
1998	-13.13	2008	6	2018	5.17
1999	0.79	2009	4.6	2019	5.02
2000	4.92	2010	6.2	2020	-2.07
2001	3.6	2011	6.17	2021	3.69

Source: Central Bureau of Statistics, 2022

Based on this data, the highest economic growth in the last thirty years was in 1995 at 8.22 percent and the lowest was in 1998 at minus 13.13 percent. In 1995 Indonesia's economic growth reached 8.22 percent. This figure is even higher today. According to the publication of the Central Bureau of Statistics, the high percentage was due to the increase in all types of sectors, especially in the agricultural sector. This It can support economic growth which makes government spending rise. Government capital formation experienced the highest increase of 15.6 percent and exports of goods and services rose by 8.1 percent from the previous year. However, this positive trend could not be maintained by the government, as the Indonesian economy in the following year continued to decline.

The monetary crisis that hit the Southeast Asian region from 1996 also affected the Indonesian economy, causing the rupiah exchange rate to plummet. The rate of economic growth in 1998 was very concerning, as a result of the protracted monetary crisis, making it the worst year for the Indonesian economy. Even lower than the previous year, almost all sectors experienced a decline except for the agricultural sector, although only by 0.2 percent. But in the following year the Indonesian economy began to improve although there were still ups and downs.

From 2010 to 2015 the Indonesian economy experienced a decline. This condition was caused by the lack of consumption from government and limited investment. The weak economic growth was also the impact of the uncertainty of the world economy and financial problems such as the trade balance deficit and the rupiah exchange rate that led to high inflation. Not yet recovered from the economic crisis in 2019, Indonesia's economic conditions in 2020 received a severe blow due to the Covid-19 pandemic outbreak that hit the world. This year, the Indonesian economy contracted by minus 2.07 percent. In fact, Indonesia experienced its first recession and negative numbers since the 1998 economic crisis.

The government must rack its brains to stabilize the economy as well as tactical steps taken by the government to improve the national economy and make it go in a positive direction, namely through macroeconomic policies. Macroeconomic policies that can used to analyze the best way to influence policy targets such as price stability is through macroeconomic policy. targets such as price stability is through monetary policy. The stability of a country's economy can support economic growth in that country. One indicator to improve economic stability is by looking at macroeconomic performance, including exchange rates, interest rates and foreign direct investment (FDI) (Warjiyo & Solikin, 2020) (5).

Here is the exchange rate of the rupiah against the US dollar over three decades:

Table 1.2 Rupiah to US Dollar Exchange Rate (thousands) Year 1992 - 2021

Years	Exchange Rate	Years	Exchange Rate	Years	Exchange Rate
1992	2,029.92	2002	9,311.19	2012	9,386.63
1993	2,087.10	2003	8,577.13	2013	10,461.24
1994	2,160.75	2004	8,938.85	2014	11,865.21
1995	2,248.61	2005	9,704.74	2015	13,389.41
1996	2,342.30	2006	9,159.32	2016	13,308.33
1997	2,909.38	2007	9,141.00	2017	13,380.83
1998	10,013.62	2008	9,698.96	2018	14,236.94
1999	7,855.15	2009	10,389.94	2019	14,147.67

| 2000 | 8,421.77 | 2010 | 9,090.43 | 2020 | 14,582.02 |
| 2001 | 10,260.85 | 2011 | 8,770.43 | 2021 | 14,308.14 |

Source: The World Bank 2021

When viewed from the data above, the weakening of the rupiah exchange rate against the American dollar in 2020 reached IDR 14,582.02, the highest figure for the last three decades. This is the opposite of 1992 which was the lowest in the last three decades, because it only reached Rp. 2,029.92. The weakening the exchange rate of the rupiah against the US dollar first occurred in 1998 which was Rp. 10,013.62. Meanwhile, in the last five years the rupiah exchange rate has never been below Rp. 10,000. meaning that the rupiah exchange rate has always weakened from year to year.

In addition to the rupiah exchange rate, other monetary variables that can affect economic growth are interest rates. Interest rates are a benchmark of a country's economic activities that have an impact on the activities of banking financial flows, inflation, investment and currency movements in a country. The interest rates set by Bank BI over the last three decades can be seen in table.3 below:

Table 1.3 Indonesia Interest Rate 1992 - 2021

Years	Interest Rate	Years	Interest Rate	Years	Interest Rate
1992	15.6	2002	12.3	2012	7.8
1993	1.2	2003	10.9	2013	6.4
1994	9.3	2004	5.1	2014	6.8
1995	8.2	2005	-0.2	2015	8.3
1996	9.7	2006	1.7	2016	9.2
1997	8.2	2007	2.3	2017	6.5
1998	-24.6	2008	-3.9	2018	6.5
1999	11.8	2009	5.7	2019	8.6
2000	-1.7	2010	-1.7	2020	10
2001	3.7	2011	4.6	2021	2.7

Source: The World Bank 2021

Based on table.3, the lowest interest rate occurred in 1998 at minus 24.6 percent. This happened because the government had to suppress the inflation rate as a result of the monetary crisis. While the highest interest rate set by the government occurred in 1992, which reached 15.6 percent. In the last five years Indonesia's interest rate has never been below five percent. Of course, this can impact on economic growth in Indonesia.

Interest rates are also instrumental in lowering the inflation rate. According to Wahyudi (2014) (4), interest rates are an important factor for a country's economy because they influence consumers to spend and save their money.

The monetary sector, real sector, employment and international sector can also be affected by interest rates. When the value of a country's currency is weak compared to other countries, the biggest impact is the price of goods and services. Because stable domestic prices and good economic growth will affect the interest of foreign and domestic investors.

Economic growth can also be affected by foreign investment because it increases capital, increases production costs, national income, and creates new jobs. Foreign direct investment plays an important role in domestic investment needs as it is well connected to financial markets and can mobilize domestic savings (Salebu, 2014) (2). For this reason, Indonesia must pay attention to the issue of foreign investment because foreign investment is a long-term investment for developing countries.

The following is the contribution of foreign investment to economic growth in Indonesia over three decades:

Table 1.4 Foreign Direct Investment, Net Inflows (% of GDP) in Indonesia 1992-2021

Years	FDI	Years	FDI	Years	FDI
1992	1.4	2002	0.1	2012	2.3
1993	1.3	2003	-0.3	2013	2.6
1994	1.2	2004	0.7	2014	2.8
1995	2.2	2005	2.9	2015	2.3
1996	2.7	2006	1.3	2016	0.5

1997	2.2	2007	1.6	2017	2
1998	-0.3	2008	1.8	2018	1.8
1999	-1.3	2009	0.9	2019	2.2
2000	-2.8	2010	2	2020	1.8
2001	-1.9	2011	2.3	2021	1.7

Source: The World Bank 2021

Based on the data figure above, for three decades foreign investment has always contributed to economic growth in Indonesia. Although in 1998-2001, foreign investment in Indonesia decreased to a minus. This is because there was an economic crisis. Then the amount of outgoing investment was greater than incoming investment. In 2002, the contribution of investment again reached a positive number. The condition of foreign investment in Indonesia began to change towards a positive direction, coupled with the existence of a law on investment in 2007. Although it often fluctuates, until 2020 has always been in positive numbers.

Foreign investment has greatly assisted Indonesia in its economic development. Economic growth should be influenced by the exchange rate, interest rates and foreign investment simultaneously. The role of monetary policy in maintaining the price stability of the rupiah exchange rate by controlling interest rates to suppress the rate of inflation, thus making economic growth in Indonesia continue to increase and attracting foreign investment. foreign investors is one of the supports in the improvement and growth of the domestic economy.

2. METHOD
2.1 Type and Data Source

The type of data used in this research is quantitative data. This is because quantitative data is a type of data in the form of numbers that are measured or calculated directly. According to (Sugiyono, 2013) (3), Quantitative research can be interpreted as a positive philosophical research approach, which is used to examine certain populations or samples. Quantitative studies to collect data using research tools, data analysis is quantitative / statistical which aims to test the hypothesis set.

In this research, the data source used is secondary data. Secondary data is data collected by researchers or published by data collection agencies/institutions/organizations. This secondary data source comes from data obtained from the Central Statistics Agency (BPS), World Bank and Indonesian Publications. This study requires data on the rupiah exchange rate, interest rates, FDI contribution and Indonesia's economic growth from 1992-2021.

2.2 Analysis Method

This research was conducted using multiple linear regression methods with time series data types. Data analysis is quantitative and data processing uses the Eviews 10 application. In the data analysis technique, several tests will be carried out.

Error Correction Model (ECM) is a form of model used to determine the long-term and short-term effects of independent variables on the dependent variable. In addition, testing this ECM model aims to solve the problem of non-stationary data in the Time Series (Abdullah, 2020). Below is the long-term ECM model equation as follows:

$$PE = \beta_0 + \beta_1 NT + \beta_2 SB + \beta_3 PMA + e_t$$

Description:

PE	: Economic growth (percent)
β_0	: Constant or fixed number
β_1, β_2	: Regression coefficient
NT	: Exchange Rate (rupiah)
SB	: Interest Rate (percent)
PMA	: FDI (percent)
e_t	: Error term period t (residual)
t	: Time series

While the short-term model or called error correction model (ECM):

$$\Delta PE = \beta_0 + \beta_1 \Delta NT + \beta_2 \Delta SB + \beta_3 \Delta PMA + \varepsilon_t$$

Where:

PE	: Economic Growth Parameter
β_0	: Constant
β_1 NT	: Exchange Rate Parameter
β_2 SB	: Interest Rate Parameter
β_3 PMA	: Foreign Investment Parameter
ε	: Error Term Period t

Using the ECM model, the data used must be stationary if it is not. stationary causes the estimation results to be pseudo, data that are not stationary at the level then proceed at the First different level and if it is not stationary then proceed at the Second different level. stationary continues at the Second different level is a requirement for ECM

testing. In the ECM model, several assumptions are used, namely statitioner data test, degree of integration test, cointegrity test and ECM test.

Statistical tests are used to obtain a value from the sample so as to provide sufficient evidence to reject or accept (statistically) a null hypothesis (H0). Statistical tests can also be used to determine whether the independent variable has a statistically significant relationship with the dependent variable through the coefficient of determination test, f test and t test.

Classical assumption testing is an analysis carried out to assess whether the OLS (Ordinary Least Square) linear regression model has classical assumption problems, it aims to determine whether the regression model is good or not for interpretation, namely the model fulfills classical assumptions. A model is said to be good if it is BLUE (Best Linear Unbiased Estimator). In order for a model to fulfill these properties, classical assumption testing is carried out which includes: normality test, autocorrelation test, multicollinearity test and heteroscedasticity test.

3. RESULT AND DISCUSSION
3.1 ECM Testing Scheme

Table 3.1 Unit root test

Variable	Level		Decision
	ADF T-Statistik	Prob	
PE	**-3.988662**	**0.0005*****	**Stationary**
NT	-1.421597	0.1666[NS]	Non-stationary
SB	**-6.278461**	**0.0000*****	**Stationary**
PMA	**-2.115059**	**0.0438****	**Stationary**

Notes   : Significant Level (a) = ***)1%, ***)5%, ***10% and NS) Not Significant.
Source : Eviews, 2022

Based on the table above, it is known that one variable is not stationary at the unit root test level. Only the variables PE (Economic Growth), SB (Interest Rate) and PMA (Foreign Investment). Therefore, for the needs of ECM needs to be differentiated to the next level.

Table 3.2 Degree of integration test

Variable	First Different		Decision
	ADF T-Statistik	Prob	
PE	**-6.771754**	**0.0000*****	**Stationary**
NT	**-4.645277**	**0.0001*****	**Stationary**
SB	**-10.46615**	**0.0000*****	**Stationary**
PMA	**-5.140427**	**0.0000*****	**Stationary**

Notes   : Significant Level (a) = ***)1%, ***)5%, ***10% and NS) Not Significant.
Source : Eviews, 2022

The results of the degree of integration test at the first difference level show that all variables are stationary. Because, if the absolute value of the ADF statistic is greater than its critical value at the first difference, it can be said to be stationary at degree one. However, on the contrary, if the value is smaller, the degree of integration will continue at a higher difference. After achieving stationary of each variable, the next step is to conduct a cointegration test or joint test.

Table 3.3 Cointegration Test

		t-Statistic	Prob.
Augmented Dickey-Fuller test statistic		-4.128654	0.0033***
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

Notes   : Significant Level (a) = ***)1%, ***)5%, ***10% and NS) Not Significant.
Source : Eviews, 2022

The above results show that the cointegrated ECM estimate is indicated by the prob value being below the level of a = 0.05. So that the ECT variables are cointegrated and the initial equation estimation can be corrected in the short term. Then proceed to the next stage, namely estimating the initial model and the first descending model.

Table 3.4 ECM Estimation Results

Long Term			Short Term		
Variables	Coefficient	Prob.	Variables	Coefficient	Prob.
C	**4.273616**	**0.0083*****	C	-0.698810	0.2837[NS]
NT	-0.000229	0.1066[NS]	**D(NT)**	**-0.002124**	**0.0000*****
SB	**0.289233**	**0.0009*****	D(SB)	0.053690	0.3297[NS]
PMA	**0.698529**	**0.0851***	D(PMA)	0.294295	0.5167[NS]
R-Squared		0.490347	**ECT (-1)**	**0.800975**	**0.0021*****
Adjusted R-Squared		0.431541	R-Squared		0.800816
F-statistic		8.338362	Adjusted R-Squared		0.767618
Prob(F-statistic)		0.000475	F-statistic		24.12285
			Prob(F-statistic)		0.000000

*Notes   : Significant Level (a) = ***)1%, ***)5%, ***10% and NS) Not Significant.*
Source : Eviews, 2022

The interpretation of the regression results of the long-term ECM model can be described in the form of sentences, among others:
1) The Economic Growth Variable (PE) without being influenced by any independent variables in the research model (NT, SB and FDI) will be 4.273616 percent.
2) The Exchange Rate Variable (NT) has a negative effect on economic growth. That is, if the rupiah exchange rate weakens 1 USD / $ will reduce economic growth by 0.000229 percent.
3) Interest Rate Variable (SB) has a positive effect on economic growth. This means that any increase in interest rates by one percent will increase economic growth by 0.289233 percent.
4) The Foreign Direct Investment (FDI) variable contributes positively to economic growth. This means that any increase in the percentage of FDI contribution by 1 percent will increase economic growth by 0.698529 percent.

The interpretation of the regression results of the short-term ECM model can be described in the form of sentences, among others:
1) Changes in the correction of the Economic Growth variable without being influenced by changes in the correction between the NT, SB and FDI variables, the change in the correction of the PE variable is constant at -0.698810 percent.
2) The correction change of Exchange Rate variable (D*NT) negatively affects the correction change of PE variable. That is, if the correction of the NT variable weakens by 1 USD/$, it will reduce the correction of the PE variable by -0.002124 percent.
3) Changes in the correction of the Interest Rate variable (D*SB) have a positive effect on changes in the correction of the PE variable. This means that if the correction of the D*SB variable increases by 1 percent, it will increase the correction of changes in the PE variable by 0.053690 percent.
4) The correction change of FDI variable (D*PMA) negatively affects the correction change of PE variable. This means that if the correction of the D*PMA variable increases the percentage of PMA contribution by 1 percent, it will reduce the correction of changes in the PE variable by 0.294295 percent.
5) ECT (-1) has a positive coefficient on the correction of changes in economic growth (PE). This means that the correction of changes in economic growth variables will be increased within 1 year by 0.800975 percent.

3.2 Statistical Hypothesis Testing

Table 3.5 Long-Term and Short-Term R^2 Test Results

Long-Term		Short-Term	
R-squared	0.490347	R-Squared	0.800816
Adjusted R-squared	0.431541	Adjusted R-squared	0.767618

Source : Eviews, 2022

It is known that the value of Adj R^2 in the long term is 0.431541. If this value is represented to be 43.15 percent. This means that the independent variables in the model can explain the variation in the dependent variable by 43.15 percent. While the remaining 56.85 percent is explained by other variables outside the observation.

For the short term, the Adj R^2 value is 0.767618. If this value is percented to 76.76 percent. This means that the independent variables in the model can explain the variation in the dependent variable by 76.76 percent and the remaining 23.24 percent can be explained by other variables outside the observation model.

Table 3.6 Long-Term and Short-Term F Test Results

Long-Term		Short-Term	
F-statistic	8.338362	F-statistic	24.12285
Prob(F-statistic)	0.000475***	Prob(F-statistic)	0.000000***

Source : Eviews, 2022

Based on the table above, the estimation results show that the value of the probability of the F statistical value in the long-term model is 0.000475 and the short-term is 0.0000. This value when compared to the value of α, the decision can be taken that all dependent variables simultaneously affect the independent variable (economic growth) both in the long and short term.

Table 3.7 Long-Term and Short-Term T test results

Long-Term		Short-Term	
Probabilitas		Probabilitas	
C	**0.0083*****	C	0.2837[NS]
NT	0.1066[NS]	**D(NT)**	**0.0000*****
SB	**0.0009*****	D(SB)	0.3297[NS]
PMA	**0.0851***	D(PMA)	0.5167[NS]
		EC(-1)	**0.0021*****

Source : Eviews, 2022

Exchange Rate and Economic Growth Variables

From the results of the long-term analysis, it is known that the p-value of the NT variable is 0.1066. When the probability value is compared with the significant value, the resulting probability value is more than α. This means that the decision taken is that H_0 is accepted or NT does not have a significant impact on PE in the 1992-2021 time period.

From the results of the short-term analysis, it is known that the p-value of the correction for changes in the NT variable is 0.0000. When the probability value is compared with the significant value, the resulting probability value is less than α. This means that the decision taken is that H_0 is rejected or the correction of changes in the NT variable has a significant impact on the correction of changes in PE in the 1992-2021 time period.

Interest Rate and Economic Growth Variables

From the results of the long-term analysis, it is known that the p-value of the SB variable is 0.0009. When the probability value is compared with the significant value, the resulting probability value is more than α. This means that the decision taken is that H0 is rejected or SB has a significant impact on PE in the 1992-2021 time period.

From the results of the short-term analysis, it is known that the p-value of the correction for changes in the SB variable is 0.3297. When the probability value is compared with the significant value, the resulting probability value is less than α. This means that the decision taken is that H0 is rejected or the correction of changes in the SB variable has a significant impact on the correction of changes in PE in the 1992-2021 time period.

Foreign Direct Investment and Economic Growth Variables

From the results of the long-term analysis, it is known that the p-value of the PMA variable is 0.0851. When the probability value is compared with the significant value, the resulting probability value is less than α. This means that the decision taken is that H0 is rejected or PMA has a significant impact on PE in the 1992-2021 time period.

From the results of the short-term analysis, it is known that the p-value of the correction for changes in the PMA variable is 0.5167. When the probability value is compared with a significant value of 0.05 percent, the resulting probability value is more than α. This means that the decision taken is that H0 is accepted or the correction of changes in the PMA variable does not have a significant impact on the correction of changes in PE in the 1992-2021 time period.

3.3 Classical Assumption Test

Table 3.8 Long-Term and Short-Term Normality Test Results

Long-Term	Short-Term
Probabilitas JB: **0.003925**	Probabilitas JB: **0.795091**
Decision: **Data is not normally distributed**	Decision: **Data is normally distributed**

Source : Eviews, 2022

Based on the table above, the long-term prob.JB value is 0.003925 which is less than 1%. So that the data is not normally distributed. Meanwhile, for the short-term prob.JB value of 0.795091 which is more than α. This means that the data is normally distributed.

Based on the Central Limit Theorem that for samples that have a size mainly n more than 30 (n> 30), the data is considered normal. The conclusion is that although the results of the normality test show that the data is not normally distributed, because the sample in this study is more than 30 years.

Table 3.9 Long-Term and Short-Term Autocorrelation Test Results

Long-Term

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.632315	Prob. F(2,24)	0.2164
Obs*R-squared	3.592159	**Prob. Chi-Square(2)**	**0.1659[NS]**

Short-Term

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.638002	Prob. F(2,24)	0.0940
Obs*R-squared	5.609477	**Prob. Chi-Square(2)**	**0.0605[NS]**

Source : Eviews, 2022

Based on the results of the analysis that has been carried out, the Obs * R-Squared value in the long term is 3.592159 with a probability value Prob. Chi-Square (2) of 0.1659. This value when compared to the significant level, the probability value obtained is greater than 10%. This means that H_0 is rejected or there is no autocorrelation problem.

Table 3.10 Long-Term and Short-Term Multicollinearity Test Results

Long-Term		**Short-Term**	
Variance Inflation Factors		Variance Inflation Factors	
Included observation: 30		Included observation: 29	
Variable	Centered VIF	Variable	Centered VIF
C	NA	C	NA
NT	1.018233	D(NT)	1.935235
SB	1.049540	D(SB)	1.848055
PMA	1.032713	D(PMA)	1.251233
		ECT(-1)	1.178537

Source : Eviews, 2022

Based on the test results above, in the long run, it can be seen that all variables are below 10. In the short-term model, all variables are also below 10. Therefore, it can be concluded that the analyzed data can ignore this assumption.

Table 3.11 Long-Term and Short-Term Heteroscedasticity Test Results

Long-Term
Heteroskedasticity Test: Glejser

F-statistic	5.363727	Prob. F(3,26)	0.0052
Obs*R-squared	**11.46880**	**Prob. Chi-Square(3)**	**0.0094[S]**
Scaled explained SS	14.41421	Prob. Chi-Square(3)	0.0024

Short-Term
Heteroskedasticity Test: Glejser

F-statistic	0.709598	Prob. F(4,24)	0.5934
Obs*R-squared	**3.067002**	**Prob. Chi-Square(4)**	**0.5467[NS]**
Scaled explained SS	2.583398	Prob. Chi-Square(4)	0.6298

Source : Eviews, 2022

Based on the results of the analysis that has been carried out, the Obs*R-Squared value in the long term is 11.067002 with a probability value of Prob. Chi-Square (3) of 0.0094. This value when compared to the significant level is < 1%. This means that in the long run there is heteroscedasticity. However, in the short term the Obs*R-Squared value is 3.067002 with a Prob. Chi-Square (4) of 0.5467 > 5%. This means that there is no heteroscedasticity problem in the short term.

4. CONLUSION

Based on the results of the analysis and discussion of the Analysis of the Effect of Exchange Rates, Interest Rates and Foreign Direct Investment in Indonesia for the period 1992-2021, it can be concluded as follows:

1. The exchange rate has a negative effect both in the short and long term on economic growth in Indonesia. However, in the long term the exchange rate is not able to explain significantly, while in the short term the exchange rate explains significantly that there is a significant influence between the exchange rate and economic growth in Indonesia for the period 1992-2021.

The above shows that when there is a depreciation of the exchange rate, it will have an impact on the price of goods, especially imported goods and imported raw materials for domestic products, which ultimately affect the increase in the price of goods.

2. Interest rates have a positive effect in the short and long term on economic growth in Indonesia. However, in the long term, interest rates are able to clearly explain that there is a significant effect, while in the short-term interest rates are unable to clearly explain their effect on economic growth in Indonesia for the period 1992-2021.

The above shows that when interest rates are raised, it can directly affect the attractiveness of the community. When interest rates are high, people will choose to save their money or invest their money. Investors are encouraged to carry out new expansions and consumers will increase their spending which makes economic growth increase.

3. Foreign investment has a positive short-term and long-term effect on economic growth in Indonesia. However, in the long term, foreign investment is able to explain that there is a significant effect, while in the short-term foreign investment is unable to explain its real effect on economic growth in Indonesia for the 1992-2021 period.

The above occurs because investment activities carried out by foreign investors can multiply capital, increase production costs, increase national income and create new jobs. In addition, foreign investment has a fairly good channel for financial markets and can mobilize domestic savings.

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