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Rupiah Exchange Rate Reaction to Macroeconomic News Using Daily Data For 2015-2022

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Abstract

This study aims to analyze the influence of domestic good news variables, domestic bad news, foreign good news, and foreign bad news on the rupiah exchange rate. The analysis used was using the Ordinary Least Squares method. This study added the use of lag elements and also added autoregressiveness. In the overall sample period, partial domestic bad news, foreign bad news, and changes in exchange rates had a significant positive effect on changes in the rupiah exchange rate. Meanwhile, domestic good news and foreign good news do not have a significant negative effect on changes in the rupiah exchange rate. In the period before Covid-19, partial domestic bad news and changes in the exchange rate had a significant positive effect on changes in the rupiah exchange rate. Meanwhile, bad news abroad does not have a significant positive effect on changes in the rupiah exchange rate. Domestic good news and foreign good news do not have a significant negative effect on changes in the rupiah exchange rate. In the period during Covid-19, partial domestic bad news, foreign bad news, and changes in exchange rates had a significant positive impact on changes in the rupiah exchange rate. Meanwhile, domestic good news and foreign good news do not have a significant negative effect on changes in the rupiah exchange rate. Taken together, independent variables have a significant effect on changes in the rupiah exchange rate throughout the observation period.

Keywords Exchange Rates, Good News, Bad News, Before Covid-19, During Covid-19

INTRODUCTION

Bank Indonesia as the central bank has a single objective, namely to achieve and maintain rupiah stability. The stability of the rupiah value contains two aspects, namely the stability of the value of the currency against goods and services, and stability against the currencies of other countries (Bank Indonesia, 2011). The stability of the rupiah against the currencies of other countries is also referred to as the stability of the exchange rate or exchange rate. If a country's exchange rate is stable, then the country can be said to be in a good economy, but if an exchange rate in the country is unstable then the economy is in a bad state (Qarina, 2019).

Indonesia itself has experienced several changes in the exchange rate system (exchange rate) along with the change of the period of state leadership of the Republic of Indonesia. As in 1970 - 1978, Indonesia used a fixed exchange rate system, where the rupiah value was directly linked to the USD value (Sitorus, 2012). Changes in the exchange rate system in Indonesia set by the government are carried out because they adjust to Indonesia's macroeconomic conditions or conditions (Arifin & Mayasya, 2018). On August 14, 1997, the government released the limits of the intervention rate by leaving the rupiah exchange rate system that floats under control into pure floating exchange rate system so that the rupiah exchange rate is fully determined by market forces. With the implementation of the latter system, the rupiah exchange rate is fully determined by the market so that the prevailing



exchange rate is truly a reflection of the balance between the forces of demand and supply as an effort to stabilize the rupiah exchange rate (Mahendra, 2020).

Based on existing data, the rupiah exchange rate always fluctuates. Moreover, the existence of covid-19 caused changes in exchange rates that occurred in that period to experience such strong volatility compared to before the existence of covid-19. The following is a picture that presents changes in the rupiah exchange rate in the period before covid-19 and during covid-19.



Figure 1. Changes in the Rupiah Exchange Rate in the Pre-Covid-19 Period and During Covid-19

The turmoil that occurs in the exchange rate is a sign of the accumulation of pent-up economic problems so far, both in the banking sector, monetary sector and real sector (Awaluddin, 2004). Frequent rupiah exchange rate instability shows that rupiah exchange rate movements are very vulnerable and weak. One of the fundamental macroeconomic factors is a factor that affects the exchange rate where these factors such as inflation, interest rates, balance of payments, and others. Apart from macroeconomic fundamentals, market conditions that are where forex transactions occur also need to be considered. This market condition is often referred to as the microstructure of the foreign exchange market in the form of market behavior or psychological aspects in exchange rate analysis. The microstructure approach of the forex market is very relevant in investigating or explaining exchange rate movements due to anomalies in the fundamental relationship of macroeconomics with exchange rates (Shofi et al., 2019).

The exchange rate problem is a complex issue with many dimensions. So when macroeconomic fundamentals are no longer able to explain exchange rates, alternatives are needed to explain exchange rate movements through forex market conditions. What Blanchard & Johnson (2017) think, that news regarding current accounts, domestic interest rates, and foreign interest rates both current and future is likely to affect the exchange rate. Basically, news activity occurs in the daily period of time and is repeated, so that in the

Source: Bank Indonesia

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foreign exchange market macroeconomic news effects have a rapid influence in explaining exchange rate movements (Cheung et al., 2019).

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Market participants show mixed reactions to various macroeconomic news published depending on whether the source of the macroeconomic news comes from abroad or from within the country. Based on research conducted by Galati & Ho (2011), that macroeconomic news can change the assumptions of agents in conducting transactions in the foreign exchange market. The market will react if there is a surprise arising from the discrepancy between the actual data and macroeconomic news announced by the relevant agency. Market reactions can lead to a strengthening or weakening of the exchange rate depending on the type of macroeconomic news announced/published, i.e. whether it is good news or bad news.

Empirically, the effects of macroeconomic news are still relevant to be examined in explaining exchange rate movements. Likewise, the problem of the Covid-19 outbreak that spread in Indonesia also caused exchange rate fluctuations and showed differences in rupiah exchange rate movements before the Covid-19 outbreak. Thus, this study aims to investigate the impact of good and bad macroeconomic news from within the country and abroad on the rupiah exchange rate in the period before covid-19 and during covid-19. On the other hand, this study aims to examine the relationship of macroeconomic news with the rupiah exchange rate against the dollar in the period before covid-19 and during covid-19. This will provide new literature on the development of exchange rate determinants in Indonesia based on foreign exchange market conditions and macroeconomic news.

METHOD

Type, Period and Data Source

The data used in this study is secondary data for exchange rates. While qualitative primary data for good news and bad news. Research data in the form of time series from January 2, 2015 - December 30, 2022. The data used is daily, where exchange rates are obtained from Bank Indonesia and good news or bad news data are obtained from Kontan, CNBC Indonesia, and Bisnis.com.

Variable Operational Definition

The exchange rate in this study is the rupiah exchange rate against the dollar or referred to as the selling exchange rate (exchange rate). The exchange rate used in this study estimation is the change in the exchange rate obtained from the difference or subtraction between today's selling rate data and the previous day in rupiah per dollar. Selling rate data is obtained from the publication of the official website of Bank Indonesia (BI) from 2 January 2015 - 30 December 2022.

The news used in the study is good and bad news from within the country and abroad that affects the exchange rate. The news used is daily news, where Monday-Friday news is the main data, while Saturday, Sunday, or national holiday news is included in the working day after the holiday. News is obtained through the daily news index from January 2, 2015



- December 30, 2022, using three trusted official news websites, namely Kontan, Bisnis.com, and CNBC Indonesia.

Data Analysis Techniques

The analysis used is using the Ordinary Least Squares (OLS) method to answer the problem of whether there is a long-term balance between variables. With this research, the linear regression equation is obtained as follows:

 $DKurs_t = \beta_0 + \beta_1 GN_t^{DN} + \beta_2 BN_t^{DN} + \beta_3 GN_t^{LN} + \beta_4 BN_t^{LN} + e_t$ Where:

 $Dkurs_t = Changes in the exchange rate of the rupiah against the dollar.$

 GN_t^{DN} = Domestic good news (Dummy); where 1 means there is news and zero (0) means there is no news.

 BN_t^{DN} = Domestic bad news (Dummy); where 1 means there is news and zero (0) means no news.

 GN_t^{LN} = Foreign good news (Dummy); where 1 means there is news and zero (0) means no news.

 BN_t^{LN} = Foreign bad news abroad (Dummy); where 1 means there is news and zero (0) means no news.

 β_0 = Intercept; e_t = error term.

 β_1, \ldots, β_4 = The coefficients of the independent variable.

This study adds the use of lag elements as an effort to accommodate the inaction of independent variables in the past. In addition, this study also adds autoregressive, which makes changes in exchange rates as independent variables. The form of the equation is as follows:

$$DKurs_{t} = \alpha + \beta_{1}GN_{t}^{DN} + \dots + \beta_{k}GN_{t-k}^{DN} + \pi_{1}BN_{t}^{DN} + \dots + \pi_{k}BN_{t-k}^{DN} + \rho_{1}GN_{t}^{LN} + \dots + \rho_{k}GN_{t-k}^{LN} + \omega_{1}BN_{t}^{LN} + \dots + \omega_{k}BN_{t-k}^{LN} + \gamma_{1}DKurs_{t} + \dots + \gamma_{k}DKurs_{t-k} + e_{t}$$

Where:

 $Dkurs_t = Changes in the exchange rate of the rupiah against the dollar.$

 GN_t^{DN} = Domestic good news (Dummy); where 1 means there is news and zero (0) means no news.

 BN_t^{DN} = Domestic bad news (Dummy); where 1 means there is news and zero (0) means no news.

 GN_t^{LN} = Foreign good news (Dummy); where 1 means there is news and zero (0) means no news.

 BN_t^{LN} = Foreign bad news (Dummy); where 1 means there is news and zero (0) means no news.

 α = Intercept; e_t = error term

t - k = The use of lag starts from lag 1, 2, 3, ..., and so on.

 $\beta_1, \pi_1, \rho_1, \omega_1, \gamma_1$ = The coefficients of the independent variable.

 β_k , π_k , ρ_k , ω_k , γ_k = The coefficients of the independent variable using the specified lag.

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RESULTS AND DISCUSSION

Model Estimation Results

In anticipation of lags in this study, lag was added and included the dependent variable as an independent variable in the estimate. The following are the estimated results:

e dependent variab	le is DKURS				
Period	Variable	Coefficient	Std. Error	t-Stat	Prob⁺
	С	0,524087	1,570715	0,333661	0,3694
	GNDN(-1)	-1,939160	4,016344	-0,48282	0,3147
	BNDN(-1)	9,766189	4,711344	2,072909	0,0192**
	GNLN	-8,378964	7,087813	-1,18217	0,1187
Overall Sample	BNLN	12,91736	7,726037	1,671926	0,0474**
	DKURS(-1)	0,134019	0,022497	5,957209	0,0000***
	DKURS(-2)	0,062565	0,022458	2,785845	0,0027***
	R-squared	0,029389		F-statistic	9,9064
	Observasi	1973		F-Prob	0.0000
	С	0,947906	1,827924	0,518570	0,3021
	GNDN(-1)	-5,077449	5,045735	-1,00629	0,1573
	BNDN(-4)	12,93998	6,383555	2,027080	0,0215**
Before Covid-19	GNLN	-7,603960	9,383546	-0,81035	0,2090
	BNLN(-1)	4,529872	9,800387	0,462214	0,3220
	DKURS(-1)	0,052091	0,029229	1,782188	0,0375**
	R-squared	0,008192		F-statistic	1,9196
	Observasi	1172		F-Prob	0,0000
	С	-0,736664	3,075889	-0,23949	0,4054
	GNDN	-5,082143	6,921675	-0,73424	0,2316
	BNDN(-1)	17,05825	7,558828	2,256732	0,0122**
	GNLN	-8,130628	11,62400	-0,69947	0,2423
During Covid-19	BNLN	42,31635	14,24172	2,971295	0,0016***
	DKURS(-1)	0,215795	0,037400	5,769973	0,0000***
	DKURS(-2)	0,074959	0,037419	2,003248	0,0228**
	R-squared	0,084914		F-statistic	10,795
	Observasi	708		F-Prob	0,0000

Table 1. Results of Estimation of Three Observation Periods The dependent variable is DKURS

Source: Eviews 12, Summary of Appendix 3

Information: *** significant in a 99 percent confidence level.

** significant in 95 percent confidence level.

⁺ The probability is halved, because the t-test is done with one side.



Then, the estimation results in Table 4.3 will be tested for classical assumptions. The testing steps are as follows:

Classical Assumption Test Residual Normality Test

	Table 2. Residual Normanty Test Results						
	Observation Period	Chi-Square	Jarque-Bera Value	Probability			
	Overall Sample	10,6446	5183,019	0,000			
	Before Covid-19	9,2364	862,3597	0,000			
	During Covid-19	10,6446	2238,406	0,000			
~	D : 10.0	C A 11 4					

Table ? Desidual Normality Test Desults

Source: Eviews 12, Summary of Appendix 4

From the normality testing above that of the three periods shows residual testing is not normally distributed. However, based on the concept of Central Limit Theorem (CLT), that if the sample is large enough even though the normality assumption is not met, then the estimator will approach (approximate) the normal distribution as well (Widarjono, 2018). So, the regression can still be used considering that the sample in this study is large and large in scope.

Table 3. Multicollinearity Detection Results					
Period	Variable	Coeff. Variance	VIF	Conclusion	
	GNDN(-1)	16,13102	1,0162	Low Multicollinearity	
	BNDN(-1)	22,19676	1,0166	Low Multicollinearity	
Overall Semple	GNLN	50,23710	1,0020	Low Multicollinearity	
Overan Sample	BNLN	59,69164	1,0038	Low Multicollinearity	
	DKURS(-1)	0,000506	1,0241	Low Multicollinearity	
	DKURS(-2)	0,000504	1,0221	Low Multicollinearity	
	GNDN(-1)	25,45944	1,0048	Low Multicollinearity	
	BNDN(-4)	40,74977	1,0025	Low Multicollinearity	
Before Covid-19	GNLN	88,05094	1,0026	Low Multicollinearity	
	BNLN(-1)	96,04760	1,0052	Low Multicollinearity	
	DKURS(-1)	0,000854	1,0021	Low Multicollinearity	
	GNDN	47,90958	1,0246	Low Multicollinearity	
During Covid-19	BNDN(-1)	57,13588	1,0110	Low Multicollinearity	
	GNLN	135,1175	1,0130	Low Multicollinearity	

Multicollinearity Detection

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	_			
	BNLN	202,8267	1,0171	Low Multicollinearity
	DKURS(-1)	0,001399	1,0667	Low Multicollinearity
	DKURS(-2)	0,001400	1,0681	Low Multicollinearity
auroa Errianua 12 Suma	nome of Annandia 1			

Source: Eviews 12, Summary of Appendix 4

From the table above, it can be seen that all the variables from the overall sample period, the period before covid-19, and the period during covid-19 have VIF values <10, so it is decided that all independent variables do not have multicollinearity problems.

Heteroscedasticity Test

Table 4. Heteroscedasticity Test Results					
Observation Period	Chi-Square	Obs* R-square	Probability (chi-square)		
Overall Sample	10,6446	599,516	0,000		
Before Covid-19	9,2364	239,731	0,000		
During Covid-19	10,6446	217,182	0,000		
G E : 10 G	C A 1' 4				

Source: Eviews 12, Summary of Appendix 4

Throughout the observation period there was a problem of heteroscedasticity. Then the next step is to cure the heteroscedasticity problem using the White method. Using White's method in curing heteroscedasticity is not much different from the estimation results of Table 1. It's just that the changes that occur are the standard value of error, t-statistic, and the probability is enlarged and the independent variable is significantly reduced. Thus, researchers still decide to use the estimation results in Table 1.

Autocorrelation Test

Table 5. Autocorrelation Test Results					
Observation Period	Chi-Square	Obs* R-square	Probability (chi-square)		
Overall Sample	10,6446	1,83001	0,4005		
Before Covid-19	9,2364	2,68415	0,2613		
During Covid-19	10,6446	2,29444	0,3175		

Source: Eviews 12, Summary of Appendix 4

In all three observation periods, the calculated chi-square value is smaller than the chisquare critical value so there is no autocorrelation problem.

Test the hypothesis t-Statistical Test

Table 6. T-Statistics Test Results					
Period	Variable	t-Stat	t-Table	Prob⁺	
Overall Sampel	С	0,3336	0,804	0,3694	



	GNDN(-1)	-0,4828	0,804	0,3147
	BNDN(-1)	2,0729	0,804	0,0192**
	GNLN	-1,1821	0,804	0,1187
	BNLN	1,6719	0,804	0,0474**
	DKURS(-1)	5,9572	0,804	0,0000***
	DKURS(-2)	2,7858	0,804	0,0027***
	С	0,5185	0,794	0,3021
	GNDN(-1)	-1,0062	0,794	0,1573
	BNDN(-4)	2,0270	0,794	0,0215**
Before Covid-19	GNLN	-0,8103	0,794	0,2090
	BNLN(-1)	0,4622	0,794	0,3220
	DKURS(-1)	1,7821	0,794	0,0375**
	С	-0,2394	0,783	0,4054
	GNDN	-0,7342	0,783	0,2316
	BNDN(-1)	2,2567	0,783	0,0122**
During Covid-19	GNLN	-0,6994	0,783	0,2423
÷	BNLN	2,9712	0,783	0,0016***
	DKURS(-1)	5,7699	0,783	0,0000***
	DKURS(-2)	2,0032	0,783	0,0228**

Source : Processed Eviews 12, Summary of Appendix 3

Information: *** significant in 99 percent confidence level.

** significant in 95 percent confidence level.

* The probability is halved, because the t-test is done with one side.

In the observation period of the overall sample, domestic bad news in lag 1, foreign bad news and exchange rate changes in lag 1 and 2 partially had a significant positive effect. In the observation period before covid-19, domestic bad news in lag 4 and changes in exchange rates in lag 1 had a significant positive effect. In the observation period during covid-19, domestic bad news in lag 1, foreign bad news and exchange rate changes in lag 1 and 2 partially had a significant positive effect.

Table 7. F-Statistical Test Results						
Observation Period	F-table	F-Statistic	Prob	Decision		
Overall Sample	0,3997	9.906368	0,000000	H ₀ rejected		
Before Covid-19	0,3849	1.919597	0.088348	H ₀ rejected		
During Covid-19	0,3680	10.79497	0,000000	H ₀ rejected		

Source: Eviews 12, Summary of Appendix 3

F-Statistical Test

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In the entire sample observation period, before covid-19 and during covid-19 H0 is rejected, which means that all independent variables together have a significant effect on changes in the rupiah exchange rate with a confidence level of 90%.

Overall Sample Period Analysis

In the overall sample period, domestic bad news had a significant positive effect on changes in the rupiah exchange rate with a regression coefficient value of 9.766 in lag 1. This means that if there is domestic bad news (BNDN), then the change in the rupiah exchange rate (DKURS) increases by 9,766 rupiah in the next day, compared to if there is no domestic bad news (ceteris paribus). This finding is in line with research conducted by Cheung et al. (2019) which explains that domestic macroeconomic news has an influence on domestic exchange rate movements. In a study conducted by Shofi et al. (2019), the results showed that negative domestic macroeconomic news illustrates the poor condition of the domestic macroeconomy and causes the rupiah exchange rate to depreciate.

Foreign bad news has a significant positive effect on changes in the rupiah exchange rate with a regression coefficient of 12.9173. This means that if there is foreign bad news (BNLN), then the change in the rupiah exchange rate (DKURS) increases by 12.9173 rupiah, compared to if there is no bad news (ceteris paribus). The results of this study are in line with the research findings of Shofi et al. (2019) which explain that negative Chinese news affects the movement of the rupiah exchange rate. Thus, negative news about foreign macroeconomics that reflects the poor condition of macroeconomic fundamentals will change the assumptions of foreign exchange market players that the condition of the rupiah exchange rate is very vulnerable to shocks from abroad.

Changes in the rupiah exchange rate have a significant positive effect on changes in the rupiah exchange rate itself with a regression coefficient value of 0.196 in lag 1 and 2. This means that if there is a change in the exchange rate (DKURS), it will cause the change in the rupiah exchange rate (DKURS) to increase by 0.196 rupiah in the next one to two days (ceteris paribus). So, changes in the exchange rate can increase changes in the rupiah exchange rate itself or in other words the depreciation of the rupiah increases.

Analysis of the Period Before Covid-19

In the period before Covid-19, domestic bad news had a significant positive effect on changes in the rupiah exchange rate with a regression coefficient value of 12.939 at lag 4. This means that if there is domestic bad news (BNDN), then the change in the rupiah exchange rate (DKURS) increases by 12,939 rupiah in the next four days, compared to if there is no domestic bad news (ceteris paribus). Domestic macroeconomic news is a reflection of macroeconomic fundamental conditions in maintaining exchange rate stability.

The bad domestic news in the pre-Covid-19 period was that on September 22, 2017, BI cut the benchmark interest rate to 4.25%. From the news, it can be interpreted that the cut in the benchmark interest rate has a negative effect on the rupiah exchange rate, this is based on an explanation by Mishkin (2017) that interest rates are positively related to exchange rates. Differences in domestic and foreign interest rates can slow down capital inflows and



outflows, for example domestic interest rates are lower than foreign interest rates, so capital holders will move their capital so that pressure occurs in the value of the domestic currency tends to depreciate (Andrian, 2013).

Changes in the rupiah exchange rate have a significant positive effect on changes in the rupiah exchange rate itself with a regression coefficient value of 0.052 in lag 1. This means that if there is a change in the exchange rate (DKURS), it will cause the change in the rupiah exchange rate (DKURS) to increase by 0.052 rupiah one day later (ceteris paribus). That way, changes in the exchange rate that occur in Indonesia can cause an increase in changes in the rupiah exchange rate itself or make the depreciation of the rupiah exchange rate increase.

Analysis of the period during Covid-19

In the period during Covid-19, domestic bad news had a significant positive effect on changes in the rupiah exchange rate with a regression coefficient value of 17.0582 in lag 1. This means that if there is domestic bad news (BNDN), then the change in the rupiah exchange rate (DKURS) increases by 17.0582 rupiah the next day, compared to if there is no bad news in the country (ceteris paribus). Domestic macroeconomic news is a reflection of macroeconomic fundamental conditions in maintaining exchange rate stability.

Foreign bad news has a significant positive effect on changes in the rupiah exchange rate with a regression coefficient of 42.3163. This means that if there is foreign bad news (BNLN), then the change in the rupiah exchange rate (DKURS) increases by 42.3163 rupiah, compared to if there is no bad news in the country (ceteris paribus).

Changes in the rupiah exchange rate have a significant positive effect on changes in the rupiah exchange rate itself with a regression coefficient value of 0.290 in lag 1 and 2. This means that if there is a change in the exchange rate (DKURS), it will cause the change in the rupiah exchange rate (DKURS) to depreciate by 0.290 rupiah in the next one to two days (ceteris paribus). So, the results obtained show that changes in the exchange rate that occur in Indonesia can weaken changes in the rupiah exchange rate itself.

Analysis of Negotiations Before and During Covid-19

Table 8. Comparison of Estimation Coefficients between the Period Before Covid-19 and During Covid-19

Period	Variable	Coefficient	
	С	0,947906	
	GNDN(-1)	-5,077449	
Pofora Covid 10	BNDN(-4)	12,93998**	
Delote Covid-19	GNLN	-7,603960	
	BNLN(-1)	4,529872	
	DKURS(-1)	0,052091**	

The dependent variable is DKURS

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	С	-0,736664
	GNDN	-5,082143
	BNDN(-1)	17,05825**
During Covid-19	GNLN	-8,130628
	BNLN	42,31635***
	DKURS(-1)	0,215795***
	DKURS(-2)	0,074959**

Source: Eviews 12, Summary of Appendix 3

Information: *** significant in 99 percent confidence level.

** significant in 95 percent confidence level.

Based on the table above, there are similarities and differences in estimation results between the two observation periods. When compared with the estimated period before covid-19 with during covid-19, there are similarities in the coefficient signs for the variables domestic good news (GNDN), foreign bad news (BNDN), foreign good news (GNLN), foreign bad news (BNLN), and exchange rate changes (DKURS)_(t-1). Another similarity between the two periods lies in constant variables, domestic good news (GNDN), and foreign good news (GNLN) which are both insignificant to exchange rate changes (DKURS).

On the other hand, there are also differences between the period before covid-19 and during covid-19. The difference between the two observation periods is that in the period before covid-19 the DKURS variable was significant only up to lag 1, which is for one day (because it uses daily data), while in the period during covid-19 the variable was significant up to lag 2 or for two days. This shows that changes in exchange rates are more influenced by changes in the exchange rate itself at previous times in the period during covid-19 than in the period before covid-19. This is because Indonesia's exchange rate adheres to a free-floating exchange rate system, where the exchange rate is entirely determined by market forces. In addition, because this exchange value data is daily, so it is so fast in responding to changes in the exchange rate itself.

Another difference from the estimation results between the period before covid-19 and during covid-19 is that in the period before covid-19 the domestic good news variable (BNDN) is significant at lag 4, namely for four days, while in the period during covid-19 the variable is significant at lag 1 or for 1 day. This shows that foreign bad news is much faster to affect exchange rate changes in the period during covid-19 than in the period before covid-19. Of course, this can be seen in the events that occurred in the period during covid-19, where in that period there were various global events that had a negative impact on the global economy such as the spread of the corona virus during 2020 and 2021. In addition, the Russian invasion of Ukraine on February 24, 2022 (Arbar, 2023), caused instability in the world economy such as changes in food and energy prices.

There is another difference, namely in the period before covid-19 the variable of foreign bad news (BNLN) was not significant at lag 1, which was for one day, while in the period during covid-19 the variable was significant without lag. This shows that foreign bad



news has much more quickly and strongly affected exchange rate changes in the period during covid-19, compared to the period before covid-19 which had no effect on exchange rate changes at all.

CONCLUSION

In the overall sample period, partially domestic bad news, foreign bad news, and exchange rate changes have a significant positive effect on changes in the rupiah exchange rate. While domestic good news and foreign good news have no significant negative effect on changes in the rupiah exchange rate. In the period before covid-19, partially domestic bad news and exchange rate changes have a significant positive effect on changes in the rupiah exchange rate. While foreign bad news has no significant positive effect on changes in the rupiah exchange rate. Domestic good news and foreign good news have no significant negative effect on changes in the rupiah exchange rate. Domestic good news and foreign good news have no significant negative effect on changes in the rupiah exchange rate. In the period during covid-19, partially domestic bad news, foreign bad news, and exchange rate changes have a significant positive effect on changes in the rupiah exchange rate. In the period during covid-19, partially domestic bad news, foreign bad news, and exchange rate changes have a significant positive effect on changes in the rupiah exchange rate. While domestic good news and foreign good news have no significant negative effect on changes in the rupiah exchange rate. While domestic good news and foreign good news have no significant negative effect on changes in the rupiah exchange rate. While domestic good news and foreign good news have no significant negative effect on changes in the rupiah exchange rate. Significant negative effect on changes in the rupiah exchange rate. While domestic good news and foreign good news have no significant negative effect on changes in the rupiah exchange rate. Jointly, the independent variables have a significant effect on changes in the rupiah exchange rate throughout the observation period.

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