

EXCHANGE RATE STABILITY IN ASEAN COUNTRIES DURING THE COVID-19 PANDEMIC

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Abstract

This study aims to analyze the effect of macroeconomic variables on exchange rate stability in five developing countries in Southeast Asia that are members of the Association of Southeast Nations (ASEAN) geopolitical and economic organization to see the short-term and long-term relationships during the COVID-19 pandemic. The data used is secondary data, from International Financial Statistics (IFS) for the period January 2020 to June 2022 using the Vector Error Correction Model (VECM). The results show that in the long run the variables that have a positive influence on exchange rate stability are lending rates, exports and the money supply. While the variables that have a negative influence are deposit rates, imports and the current account. In the short term, variables that have a positive influence on exchange rate stability are deposit rates, imports and the current account. However, the variable lending rates, exports and the money supply have a negative effect.

JEL: C33, E52, E58, F02, F32

Keywords: Exchange Rate Stability, ASEAN Countries, Covid-19 Pandemic.

1. INTRODUCTION

The occurrence of the Covid-19 pandemic has had an impact on changes in all aspects of life, including the economic conditions of a country. Changes in weakening economic conditions were reflected in the country's currency exchange rates, including countries in the Southeast Asian region which experienced shocks to make transactions. Chant (2003) when the market is unstable it will harm the economy and threaten economic performance, causing the flow of funds to be limited. To create stability in the economy, good macroeconomic conditions are needed. Forms of changes in economic conditions include monetary economics such as changes in the balance of payments, interest rates and the money supply. Changes in the macro economy can affect changes in currency exchange rates, exchange rates are divided into nominal exchange rates and real exchange rates. The nominal exchange rate is the relative price of two different country currencies, while the real exchange rate is the price level of goods that can be traded between countries. A strengthening exchange rate is called appreciation and vice versa if the exchange rate weakens it is called depreciation (Mankiw, 2006).

During a pandemic, the pressure for appreciation of the exchange rate by monetary policy is to mitigate the appreciation of the exchange rate and reduce the risk of increasing the current account deficit which could lead to a balance of payments crisis in the future. One of the macroeconomic indicators that is sensitive to external economic turmoil is the currency exchange rate (Mukhlis, 2011). In the short term, debt flows are very volatile so that exports are closely related to exchange rate movements. The problem of exchange rate stability is a problem for developing countries in ASEAN, economic shocks cause price fluctuations in the domestic market and recession. Price stability alone does not guarantee exchange rate stability, the new paradigm emphasizes the inclusion of the exchange rate system as an additional macroeconomic objective and monetary policy being used as a tool to achieve stability. The importance of exchange rate policy in an open economy and its role in long-term growth in developing countries (Ocampo, Rada, & Taylor, 2009; Rodrik, 2013; Stiglitz & Greenwald, 2014). The real exchange rate is very important in determining the competitiveness of a country's trade. The country's exchange rate system depends on the policies set, and is influenced by the position and general goals of its economic politics (Basyariah & Hafsa, 2016). Fluctuating exchange rates are caused by external influences on the domestic sector, so policies that affect exchange rate stability are important to consider. Syarifuddin (2016) exchange rates can affect the economy through the prices of a country's export and import goods, changes in exchange rates that move quickly and are unstable result in disruption of the stability of trade activities between countries so that monetary authorities are needed to financial market players to maintain stability. In addition, coupled with the fluctuation of the reference interest rate by the central bank, the amount of money circulated widely in society.

In reflecting the state of the economy, a good financial system is needed to achieve exchange rate stability in each country, the post-pandemic economic recovery in ASEAN countries focuses on developing countries. The exchange rate is macro stability in determining economic development, macroeconomic variables that often experience shocks indicate the need to use instruments such as the balance of payments, trade balance, interest rates and the money supply to increase exchange rate stability (Guzman et al., 2018). The Covid-19 case is a threat to the world economy due to the global crisis. Counder (2020) mentions the financial crisis during Covid-19 which caused fluctuations in exchange rates. Covid-19 has had a negative impact on the financial sector and has resulted in global uncertainty (Zhang & Zheng, 2020). Governments in ASEAN countries are implementing economic restrictions to reduce the spread of Covid-19 which causes the country to experience a recession. Exchange rates play a role in facilitating international trade and transfers of funds between countries. Many countries carry out economic transactions with other countries so that it requires the currency used to do business. When a company will conduct international trade, the company must exchange domestic currency into a foreign currency that can be accepted by the destination country. Countries tend to choose a more stable exchange rate to reduce the risk of losses in the economy (Martin, 2016; Gervais et al., 2016).

In 2020, the US Dollar is the most traded currency in 87% of foreign exchange transactions in the world with an average volume of over \$2.2 trillion (fxssi.com). This situation makes the value of currencies in developing countries unstable and there are fluctuations. Exchange rate fluctuations are the distance between fluctuations or exchange rate differences between countries. Global issues that affect world or country economic conditions will panic market players (Selmi & Bouoiyour, 2020). This panic depends on the credibility of a country's government in taking monetary and fiscal policies so that the exchange rate is stable. Gong (2020) said that the Covid-19 pandemic affected exchange rate fluctuations. Vieira & Ronald (2020) explained another variable that is considered important as a determinant of the dynamics of the current account is the volatility of the term of trade. The World Bank projects that the pandemic will cause an estimated 5.2% shock to global GDP in 2020. Countries in the Southeast Asian region have not chosen lockdown as an option to suppress the spread of Covid-19. As an alternative, the government implements a social restriction policy in each region. Financial markets experience sharp declines in financial asset prices, liquidity and peaks in volatility (Gopinath, 2020). The long-term relationship shows that monetary stability is an important prerequisite for financial conditions and interest rates for inflation targeting are conducive to achieving exchange rate stability, as well as reducing the amount of money circulating in the community. An unstable financial system will be vulnerable to various problems that disrupt the rotation of the economy and other economic problems.

In Basyariah & Hafsa's research (2016) ASEAN-10 currencies are unstable against the USD and Gold Dinar because their exchange rates tend to fluctuate. Malahayati et al. (2021) the government introduced fiscal incentives to support the economy during a pandemic, economic conditions will improve although not fully and are expected to help increase GDP by around 1-3%. Dreger (2022) the economic costs of the covid-19 virus affect future shocks. Meanwhile, Minford et al. (2022) economic stability in the eurozone depends on macroeconomic stability, substantial gains in stability and prosperity are possible if each region is given the freedom to adopt its own economic policies through restoring monetary independence so that GDP remains stable and continues to grow. Therefore, monetary policy must significantly balance the macroeconomic and financial implications of a global pandemic. So researchers are interested in researching this matter with the aim of analyzing the effect of macroeconomic variables on exchange rate stability in five developing ASEAN countries during the Covid-19 pandemic, as well as looking at the relationships that occur in the short and long term.

Based on the problems above, the theory used in this study is based on the indicators that have been determined as follows. First, the balance of payments indicator uses a monetarist approach with the Monetary Approach Balance of Payment to prove changes in a country's foreign currency reserves. Then, using the Keynesian Balance of Payment Theory with an elastic approach and an absorption power approach to prove the analysis of the devaluation of the exchange rate and price level and elasticity based on a country's national income and expenditure. Second, the reference interest rate indicator is guided by the Interest Rate Parity Theory and the Mundell-Fleming Theory which explain that the relationship between the foreign exchange market and the international money market determines an exchange rate and the difference in interest rates is due to country risk. And finally, the money supply indicator uses a Quantity Theory of Money with the concept of Velocity of Money, as well as the Theory of Demand and Supply of Money. The theory is used to explain the rate at which money circulates in the economy and the factors that influence individual traits in balance preferences.

2. RESEARCH METHOD

The method used is descriptive quantitative with the Vector Error Correction Model (VECM) model and processed in panels using E-views 8. The data used is secondary data from International Financial Statistics (IFS) during the COVID-19 pandemic in January 2020 to June 2022. This research was conducted in five developing Southeast Asian countries that are members of the ASEAN geopolitical and economic organization, namely Cambodia or Cambodia, Indonesia, Malaysia, the Philippines or the Philippines and Thailand. While the data analysis method used is :

1. Data Stationarity Test

This test is used to find out whether the time series data is stationary or not through the unit root test or unit root test with Augmented Dickey-Fuller at the level or first difference or second difference, where the ADF t-statistic value is smaller than the MacKinnon critical value.

2. Optimal Lag Test

Determination of the optimal lag is carried out by testing the lag order selection criteria or determination of lag which aims to find out which lag to choose and estimate the actual situation.

3. Cointegration Test

This test aims to determine whether the non-stationary variables are cointegrated or not using the Johansen method. In this method, the Eigenvalue test and Trace test are used. If there is a relationship in the long run, then it is called the Vector Error Correction Model (VECM) with the condition that cointegration between variables or rank cointegration is greater than zero.

4. VECM Test

VECM according to Luetkepohl (2011) is a Vector Autoregression (VAR) model that explicitly includes the cointegration structure of the estimated variables. VECM is also a VAR model that has stationary and cointegrated conditions. The use of this model is useful in conducting short-term and long-term analysis. The following are the indicators and sub-indicators of the variables used in this study and their symbols. First, the Balance of Payments (BPm) with sub-indicators of Exports (X), Imports (M) and Current Accounts or Current Account (Ca). Second, the Reference Interest Rate (INr) with the sub-variable Deposit rate (Dr) and Lending rate (Lr). And the last is the amount of money in circulation (MC). The following are the specifications of the VECM model:

$$\Delta y_t = \mu_0 x + \mu_1 x_t + \Pi x_{t-1} + \sum_{ik} \Delta y_{t-1} + \varepsilon_t$$

Information:

y_t = Vectors that contain variables to be analyzed in research

$\mu_0 x$ = Intercept vector

$\mu_1 x$ = Regression coefficient vector

t = Time trend

Πx = $\alpha x \beta'$, β' contains long-run cointegration equations

y_{t-1} = Variabel in level

$\sum_{ik}$ = Regression coefficient matrix

$k-1$ = VECM from VAR

ε_t = Error term

The VECM modeling based on the variables used is as follows.

$$\Delta ER = \alpha + \sum_{i=1}^n \beta_i \Delta Dr_{t-1} + \sum_{i=1}^n \beta_i \Delta Lr_{t-1} + \sum_{i=1}^n \beta_i \Delta X_{t-1} + \sum_{i=1}^n \beta_i \Delta M_{t-1} + \sum_{i=1}^n \beta_i \Delta Ca_{t-1} + \sum_{i=1}^n \beta_i \Delta MC_{t-1} + \lambda EC_{t-1} + \varepsilon_t$$

Keterangan:

ΔER = Exchange rate stability in five ASEAN developing countries

$\sum_{i=1}^n \beta_i \Delta Dr_{t-1}$ = Deposit rate in five ASEAN developing countries

$\sum_{i=1}^n \beta_i \Delta Lr_{t-1}$ = Lending rate in five ASEAN developing countries

$\sum_{i=1}^n \beta_i \Delta X_{t-1}$ = Exports in five ASEAN developing countries

$\sum_{i=1}^n \beta_i \Delta M_{t-1}$ = Imports in five ASEAN developing countries

$\sum_{i=1}^n \beta_i \Delta Ca_{t-1}$ = Current account in five ASEAN developing countries

$\sum_{i=1}^n \beta_i \Delta MC_{t-1}$ = Money circulation in five ASEAN developing countries

λEC_{t-1} = Error correction at a certain time period

ε_t = Error term

5. Impuls Response Function

The Impulse Response function is used to identify a shock to an endogenous variable, so that it can determine how an unexpected change in a variable affects other variables and see the contemporary effect of a dependent variable if there is a shock from the independent variable of one at the standard deviation.

6. Variance Decomposition

This test aims to predict the contribution of each variable under study to shocks or changes in certain variables.

3. RESULTS AND DISCUSSION

1. Stationarity Test

Table 1. Data Stationarity Test Results with ADF

Variable	Level		First Difference	
	t-statistik	prob*	t-statistik	prob*.
ER	-1.57	0.05	-6.99	0.00
Dr	-4.46	0.00	-3.34	0.00
Lr	-4.14	0.00	-2.55	0.00
X	-0.46	0.31	-8.04	0.00
M	1.44	0.92	-7.95	0.00
Ca	-1.52	0.06	-3.74	0.00
MC	-1.25	0.10	-7.73	0.00

Source: Processed data with E-Views 8

The results of the stationarity test on Augmented Dickey Fuller (ADF) table 1 above show that there are three stationary variables at the Level level and four at the First Difference level. For variables that are stationary at the Level level are Exchange Rate Stability (ER) with a coefficient value of 0.0571, Deposit rate (Dr) and Loan Lending rate (Lr) with a coefficient value of 0.0000. While the variables that are stationary at the First Difference level are Exports (X), Imports (M), Current account (Ca), and the Money in Circulation (MC) with a coefficient value of 0.0000.

2. Optimal LagTest

Table 2. Optimal Lag Test

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-5950.21	NA	5.86E+32	95.31543	95.47381*	95.37977
1	-5849.42	188.6805	2.56E+32	94.48677	95.75386	95.00152
2	-5765.17	148.2790	1.47E+32	93.92278	96.29857	94.88794
3	-5680.55	139.4671	8.44E+31	93.35273	96.83722	94.76829*
4	-5624.12	86.66348*	7.76e+31*	93.23399*	97.82717	95.09996

Source: Processed data with E-Views 8

The results showed that most of the selection criteria such as the LR test, FPE and AIC chose lag 4 at a significance level of 5% because it had the most asterisks. Therefore, the length of lag 4 will be used in the VECM test and the Johansen co-integration test.

3. Johansen Cointegration Test

Table 3. Johansen Cointegration Test

Variabel	Eigenvalue	T-Statistik	Critical Value	Prob.**
ER	0.737293	587.1316	125.6154	0.0001
Dr	0.608435	413.3587	95.75366	0.0001
Lr	0.523205	291.4701	69.81889	0.0001
X	0.441538	195.1831	47.85613	0.0000
M	0.383844	119.4491	29.79707	0.0000
Ca	0.264569	56.4960	15.49471	0.0000
MC	0.119518	16.5471	3.841466	0.0000

Source: Processed data with E-Views 8

Cointegration test results for lag 4 can be seen that the t-statistic and eigenvalue at $r = 1$ is greater than the critical value with a significance level of 5%. This shows that the null hypothesis and the alternative hypothesis which states that there is no cointegration are rejected. Therefore, the VAR model can be combined with the Error Correction Model (ECM) to become VECM.

4. VECM Estimation Results

Table 4. VECM Estimation Results

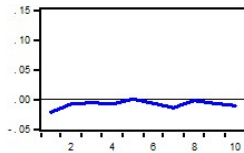
Response	Dr	Lr	X	M	Ca	MC
Short-term	95.350	-38.165	-0.013	0.031	0.040	-1.00
Long-term	-1.274	58.20	0.182	-0.504	-0.675	1.95

Source: Processed data with E-Views 8

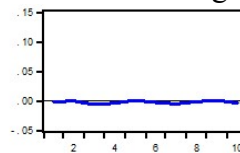
The results of the VECM test on short-term conditions of exchange rate stability in five ASEAN developing countries during the COVID-19 pandemic for the Deposit rate (Dr) have a coefficient of 95,350, which means that if there is a 1% increase in Deposit rates in the previous month it will increase the currency exchange rate was 95,350% in the following month and had a significant positive effect. In contrast to the Lending rate (Lr) which has a significant negative effect with a coefficient value of -38,165 and the Export variable (X) which has a non-significant negative effect with a coefficient value of -0.013. Meanwhile, the Import variable (M) has no significant positive effect with a coefficient value of 0.031 and the Current account variable (Ca) with a value of 0.04. However, the variable Money in Circulation (MC) has no significant negative effect with a coefficient value of -1.00. In the long run, when the Deposit rate (Dr) increases by 1%, it will increase the currency exchange rate by 1,274%. Lending rate variable (Lr) has a significant positive effect with a coefficient value of 58.20 and the Export variable (X) which has an insignificant positive effect with a coefficient of 0.182. The Import variable (M) has an insignificant negative effect with a coefficient value of -0.504 and the Current account variable (Ca) with a coefficient value of -0.675. Meanwhile, the variable Amount of Money in Circulation (MC) has a positive effect and has a coefficient value of 1.95.

5. Impuls Response Function

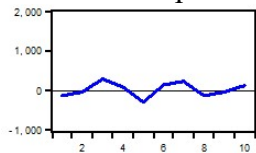
The IRF test was carried out to see the response of deposit rates (Dr), lending rate (Lr), exports (X), imports (M), current account (Ca) and total money in circulation (MC) to the stability of currency exchange rates during the pandemic covid-19. The IRF test results for each variable are explained in the following figure.



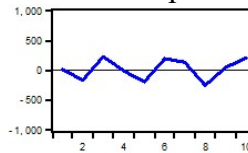
Picture 1. Response Dr to ER



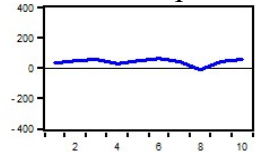
Picture. Response Lr to ER



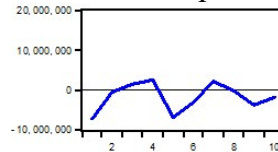
Picture 3. Response X to ER



Picture. Response M to ER



Picture. Response Ca to ER



Picture. Response MC to ER

Source: Processed data with E-Views 8

6. Variance Decomposition

The results of the VD analysis explain the role of each variable in relation to other variables to find out which variables play a greater role in explaining changes in certain variables in the stability of currency exchange rates in the five ASEAN developing countries during the covid-19 pandemic.

Table 5. Variance Decomposition

Variance Decomposition Deposit rate								
Period	S.E.	ER	Dr	Lr	X	M	Ca	MC
1	0.124890	2.818337	97.18166	0.000000	0.000000	0.000000	0.000000	0.000000
5	0.163769	2.203879	82.31110	3.564209	0.585981	1.405263	9.275240	0.654330
10	0.198289	2.460137	80.84524	4.779525	0.738025	1.299383	9.020148	0.857544
Variance Decomposition Lending rate								
Period	S.E.	ER	Dr	Lr	X	M	Ca	MC
1	0.130570	0.024589	5.075010	94.90040	0.000000	0.000000	0.000000	0.000000
5	0.158123	0.274397	6.886799	90.19085	0.505958	0.840760	0.412445	0.888790
10	0.197634	0.329107	6.154650	90.54228	0.698137	0.751321	0.498190	1.026316
Variance Decomposition Export								
Period	S.E.	ER	Dr	Lr	X	M	Ca	MC
1	1494.892	0.803273	2.033720	0.138273	97.02473	0.000000	0.000000	0.000000
5	2105.025	4.477221	2.801358	2.003970	64.60932	17.51596	2.904615	5.687554
10	2433.526	5.260101	3.056506	2.584500	57.14026	20.17361	3.625734	8.159295
Variance Decomposition Import								
Period	S.E.	ER	Dr	Lr	X	M	Ca	MC
1	1129.131	0.023733	3.208115	0.573929	39.87160	56.32262	0.000000	0.000000
5	1636.087	4.647129	5.695351	3.708597	33.07869	39.91978	7.409403	5.541044
10	1925.855	7.821220	7.975808	3.464930	32.78446	31.12025	9.941732	6.891600
Variance Decomposition Current account								
Period	S.E.	ER	Dr	Lr	X	M	Ca	MC
1	300.3264	1.150447	0.278801	0.947087	0.004492	11.15073	86.46844	0.000000
5	571.7573	3.129539	1.866705	1.536622	19.58260	31.36688	40.84852	1.669131
10	713.7722	4.214452	1.759433	1.352804	19.41078	32.69844	38.03095	2.533139
Variance Decomposition Money in Circulation								
Period	S.E.	ER	Dr	Lr	X	M	Ca	MC
1	20028331	13.34139	0.126905	0.180349	0.009226	4.82585	2.631795	78.88448
5	28025673	14.14955	1.434854	1.947901	0.430159	12.16671	3.987317	65.88351
10	31834545	14.23107	1.667885	1.956404	1.414702	15.56856	7.665027	57.49635

Source: Processed data with E-Views 8

In the first period, the Deposit rate variable (Dr) contributed 97.18% and decreased until the tenth period to 80.84% of exchange rate stability. At the beginning of the period, the Lending rate variable (Lr) contributed 94.90% and decreased until the end of the period to 90.54%. In the first period, the Export variable (X) contributed 97.02% and decreased until the end of the period to 57.14%. At the beginning of the period, the Import variable (M) contributed 56.32% and continued to decline until the end of the period to 31.12%. In the first period, the Current account variable (Ca) contributed 86.46% and continued to decline until the end of the period to 38.03%. At the beginning of the period, the variable Money in Circulation (CM) contributed 78.88% and continued to decline until the end to 57.49% of exchange rate stability.

The results of the study showed that there was a long-term negative effect on deposit interest rates on exchange rate stability in five ASEAN developing countries during the Covid-19 pandemic. This is because the Federal Reserve System or The Fed, issued a policy of cutting the Federal Funds Rate (FFR) interest rate to maintain economic stability up to 0-0.25% which made the value of the dollar increase so that the value of many other countries' currencies depreciated. This resulted in the value of The Fed's balance sheet increasing and the FFR being used as a guide in economic recovery during the pandemic. Therefore, the central banks in five countries took the first steps to increase interest rates on deposits at banks in their countries so that people's interest in saving increases amidst the uncertain economic conditions. This proves that the Theory of Interest Rate Parity (IRP) is related to the foreign exchange market and the international money market, which means that the difference in interest rates can be determined by changes in exchange rates so that capital inflow can increase the demand for domestic currency and strengthen if interest rates increase. foreign interest rate is higher than the domestic interest rate.

In the short term, interest rates on deposits show a positive long-term influence on the stability of currency exchange rates in the five ASEAN developing countries during the COVID-19 pandemic. There was an increase in deposit rates in five developing ASEAN countries below five percent, but at the beginning of implementation or the first month the policy was implemented it showed high public interest in saving to avoid inflation and in the end deposit rates tended to fluctuate according to economic conditions and the political situation in country. These conditions are in accordance with the research of Brodeur, et al., (2020) that the macroeconomic and financial impacts during the Covid-19 pandemic as well as the public's response to the policies taken by the central bank and the government.

Based on the results of data processing, it shows that there is a long-term positive influence on loan interest rates on exchange rate stability in five ASEAN developing countries during the Covid-19 pandemic. The increase in interest rates on deposits during the pandemic made business actors sluggish in loan interest rates because of the large number of bad loans that occurred. However, in the long term it keeps the economy running because it can increase the currency exchange rate. This statement is in line with the Mundell-Fleming Theory, namely the interest rates of each country have differences due to country risk and exchange rate expectations. Then, the compensation due to the policy decision is differentiated by the risk premium. Meanwhile, in the short term, it shows that there is a short-term negative effect on loan interest rates on exchange rate stability in five ASEAN developing countries during the Covid-19 pandemic and is in accordance with the results of Kouam's research (2020) that the effect on changes in capital flows during the Covid-19 pandemic occurred may increase the negative impact of high credit margins on the domestic exchange rate.

In the balance of payments, the first sub-variable is exports which shows a long-term positive effect on exchange rate stability in the five ASEAN developing countries during the Covid-19 pandemic. Based on the theory of the trade balance from Keynes or the Keynesian Balance of Payment Theory, an elastic approach is used to determine the difference between exports and imports. Where price changes that occur as a result of the impact of Covid-19 when fixed income are influential on currency exchange rates, so that export activities carried out in five developing countries in ASEAN experience bottlenecks due to the implementation of lockdowns by destination countries in order to prevent and minimize the impact. However, when a lockdown occurs and the country cannot meet its national needs, exports become a strategic focus on the international trade sector which creates a surplus balance because the value of exports is greater than the value of imports with the value of the currency continuing to increase due to the high purchasing power of the people. However, in the short term, it shows that there is a short-term negative effect of exports on exchange rate stability in the five ASEAN developing countries during the Covid-19 pandemic. This is in line with research conducted by Fernandes (2020) which explains that Covid-19 has had a major effect on decreasing production from the industry.

Second, the import variable shows that there is a long-term negative effect on exchange rate stability during the Covid-19 pandemic. Based on the results of research data processing, in accordance with the theory of trade balance, the Keynesian Balance of Payment Theory which uses an absorption approach, that the trade balance deficit is not due to low elasticity and domestic inflation, but national spending increases compared to income received by the state. In contrast to the short-term effect that shows a positive effect on exchange rate stability and proves that in accordance with previous research conducted by Kusuma, et al., (2013) the nominal currency exchange rate deviation in five ASEAN countries is used to determine the optimal currency area grouped according to

the criteria of exchange rate stability. Third, the current account variable shows that there is a long-term negative effect on the balance of payments on exchange rate stability in the five ASEAN developing countries during the Covid-19 pandemic which is in accordance with the Monetary Approach Balance of Payment theory that the international balance of payments in the current account is a change from foreign currency reserves. a country and give priority to monetary posts both running traffic and capital traffic. And in line with the monetarist approach according to Chacholiades (2009) that the balance of payments is a monetary phenomenon, where there is a relationship between a country's balance of payments and the supply of money in it. However, in the short term it states that there is a positive effect of the current account on exchange rate stability and is in accordance with the research of Malahayati, et al. (2021) which states that the government will use fiscal incentives to support the economy during the pandemic.

The money supply variable shows that there is a long-term positive effect on exchange rate stability in the five ASEAN developing countries during the Covid-19 pandemic which is in accordance with the quantity of money theory, the concept of velocity of money, namely the velocity of money circulation and the quantity of money with the total goods or services produced. spent, so during a pandemic it can be used to measure the level of money circulating in the economy. Not only in cash, the amount of non-cash money in circulation is also known to have increased during the pandemic. This aims to avoid direct contact between individuals to prevent transmission of the Covid-19 virus and break the chain of transmission. Meanwhile, in the short term, it states that there is a negative effect of the money supply on exchange rate stability because individual characteristics affect the choice of storing wealth and there will be interactions between demand and supply in the market and in accordance with the theory of demand and supply of money. In line with this, Minford., et al., (2022) explains that a substantial gain in stability is possible if the fiscal authorities in each region are given the freedom to respond to their own situation, so that monetary independence can be restored.

4. CONCLUSION

In the long run the variables that have a positive influence on the stability of currency exchange rates in the five ASEAN developing countries are interest rates on loans, exports and the money supply. While the variables that have a negative influence are deposit rates, imports and the current account. In the short term, variables that have a positive influence on exchange rate stability are deposit rates, imports and the current account. However, the variable interest rates on loans, exports and the money supply have a negative effect. Instead, the government and the central bank should support international trade and strengthen cooperation in facing global economic challenges and the impact of the recession that will be 2023.

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