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Analysis Of Monetary Policy on Financial System Stability in Indonesia, Thailand, Malaysia, Brunei Darussalam and Singapore

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Abstract. *This study aims to analyze the variable contribution of the interaction of monetary policy variables (COURSE, GDP, INFLATION, CONSUMPTION and INTEREST). This study uses secondary data or time series from the first quarter of 2014 to the first quarter of 2024. The data analysis model in this study is the Structural Vector Autoregression (SVAR) model and sharpened with Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD) analysis. The results of the SVAR analysis show that the past variable (t-1) contributes to the current variable both to itself and other variables and from the estimation results it turns out that there is a reciprocal relationship between variables where all variables, namely monetary policy variables (GDP, INFLATION, CURRENCY, CONSUMPTION and INTEREST) contribute to each other.*

Keywords *GDP, Inflation, Exchange Rate, Consumption, Interest Rate*

1. INTRODUCTION

ASEAN (Association of South East Asia Nations) is a regional organization in Southeast Asia that has established its role in realizing Asian economic integration. It is characterized by many economic and political cooperation that not only involves ASEAN member countries, but has expanded cooperation with major countries in East Asia such as China, Japan, and South Korea. In addition, the second East Asia Summit (EAS) held on January 15, 2007 in Cebu with the participation of ASEAN countries, including China, Japan, Korea, Australia, India, and New Zealand, has agreed to strengthen the economic cooperation formed in ASEAN+6 (Kawai, 2007). The EAS meeting also endorsed ASEAN as the driver of economic integration in the region and decided to initiate the study of Comprehensive Economic Partnership in East Asia (CEPEA).

ASEAN is a region in Southeast Asia that currently consists of 11 countries, namely Brunei Darussalam, Philippines, Indonesia, Cambodia, Laos, Malaysia, Myanmar, Singapore, Thailand and Vietnam.

Efforts to avoid or reduce the risk of possible financial system instability are needed, especially to avoid huge losses. Some factors that affect financial system stability in theory are capital flow, exchange rate, BI Rate, inflation, credit ratio and others. Capital flow is the basis of fundamental analysis in the forex (foreign exchange) market. It is called so because capital flow shows the entry of capital into a country or the exit of capital from a country. The phenomenon of capital flow in a country is always interesting to discuss. (Sera and Syofriza, 2017).

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An exchange rate is the price of one country's currency expressed or measured in another currency. Exchange rates play an important role in spending decisions, as they allow us to translate prices from different countries into other currencies (Krugman and Obstfeld, 2004 in Bukit, 2013).

Inflation is a process of increasing prices in general and continuously related to market mechanisms that can be caused by various factors, among others, increased public consumption, excess liquidity in the market that triggers consumption or even speculation, to include also due to the uninterrupted distribution of goods. as a symptom, inflation affects several things. Among them is the lowering of people's prosperity because of the slow wage increases that follow inflation. Economic prospects worsen so that economic growth also declines (Boediono, 2011).

The phenomenon of inflation is controlled one of them by increasing the amount of interest rates. The BI interest rate is the interest rate set by BI as a benchmark for interest rates on loans and deposits for banks and or financial institutions throughout Indonesia. Interest rates are one of the variables that can affect stock prices. Changes in interest rates will then affect a person's desire to make an investment, because in general changes in SBI interest rates can affect deposit rates and lending rates in the community. If deposit interest rates increase, investors tend to invest their capital in the form of deposits because they can generate large returns with less risk and vice versa. In this study, the SBI interest rate uses monthly SBI interest rate data published by Bank Indonesia.

2. LITERATURE REVIEW

Monetary Policy

In general, monetary policy is the process of managing a country's money supply in order to achieve certain goals, such as controlling inflation, increasing employment opportunities or improving public welfare. In Indonesia itself, the definition of monetary policy has been formulated in Law No. 3 of 2004 which reads, monetary policy is a policy determined and implemented by Bank Indonesia to achieve and maintain the stability of the rupiah value which is carried out among others through controlling the money supply (JUB) and interest rates (BI Rate/Repo Rate).

According to Nopirin (1987: 51) monetary policy is one of the factors that can affect economic activity. There are many other factors that can affect economic activity but these factors are beyond the control of the government. Monetary policy is a factor that can be controlled by the government so that it can be used to achieve economic development goals.

Monetary policy is conducted by the central bank to influence the amount of money in circulation and credit which in turn will affect the economic activities of the community. The regulation of the amount of money in circulation in society is regulated by increasing or decreasing the amount of money in circulation.

Monetary Policy Instruments

The main objective of monetary policy is to stabilize the economy, which can be measured by employment opportunities, price stability and a balanced international balance of payments. If stability in monetary activities is disturbed, monetary policy can be used to restore (stabilization action).

According to Kasman (1992), Morton and Wood (1993), Borio (1997, 2001) and Ho (2008), now all central banks in industrialized countries implement monetary policy using appropriate market-oriented instruments to influence more closely the short-term interest rate as the operating target.

Ho (2008) reveals, in developing countries there are a number of broad themes across central banks with respect to the main features of policy implementation: focus on short-term money market interest rates as the operating target, favorable average reserve requirement, using interest rate linkages with penalty rates and seeking alternative instruments.

Monetary Policy Objectives

The ultimate short-term goal of monetary policy and fiscal policy is to maintain the macro balance of the economy, namely to achieve a low inflation rate, a high level of economic activity and a balanced balance of payments. In achieving this ultimate goal, there is a long lag between monetary policy actions and their effects on the above three aspects. Therefore, an intermediate target is needed to accelerate the observation as an early indicator of the effect of a policy.

How Monetary Policy Works

The mechanism by which changes in the BI Rate affect inflation is often referred to as the monetary policy transmission mechanism. This mechanism describes the actions of Bank Indonesia through changes in monetary instruments and operational targets affecting various economic and financial variables before finally affecting the ultimate goal of inflation. The mechanism occurs through interactions between the Central Bank, the banking and financial sector, and the real sector. Changes in the BI Rate affect inflation through various channels, including the interest rate channel, credit channel, exchange rate channel, asset price channel, and expectation channel.

Interest Rates in Monetary Theory

According to Classical Theory, the interest rate theory is a supply-demand theory of savings. This theory discusses the interest rate as a balancing factor between the demand and supply of investable funds sourced from savings. The prominent function of money in classical economic theory is as a means of measuring value in conducting transactions, as a means of exchange to facilitate transactions in goods and services, as well as a means of settling debt-debt relations concerning the future.

Economic Growth

Gross Domestic Product (GDP) is the total production of a country only calculates the total production of a country without taking into account whether the production is carried out using domestic production factors or not. GDP is the point of balance of a country's economy between aggregate demand and aggregate supply better than before.

Financial System Stability

Financial System Stability is a condition that enables the national financial system to function effectively and efficiently and to withstand internal and external vulnerabilities so that the allocation of funding or financing sources can contribute to the growth and stability of the national economy (PBI 16/11/PBI/2014 on Macroprudential Regulation and Supervision). Meanwhile, the financial system itself is a system consisting of financial institutions, financial markets, financial infrastructure, as well as non-financial companies and households, which interact with each other in funding and/or providing financing for economic growth.

3. METHODS

This research approach is associative / quantitative research. According to Rusiadi (2013: 14): Associative / quantitative research is research that aims to determine the degree of relationship and pattern / form of influence between two or more variables, where with this research a theory will be built that serves to explain, predict and control a symptom. To support quantitative analysis, the SVAR model is used where this model is able to explain the reciprocal relationship in the long term of economic variables as endogenous variables.

The data collection technique used in the research is by means of documentation studies, namely collecting data and processing data from previous information related to the problem to be studied. The data used in this study are secondary data taken and processed from the World Bank and Bank Indonesia from 2016 - 2024.

The analysis model in this study uses the following data analysis model:

SVAR Model (Structural Vector Auto Regression)

Based on the relationship between variables as formulated in the hypothesis in the previous chapter, the influence and relationship analysis will then be carried out based on empirical data referring to the Structural VAR (SVAR) model. The use of this methodology is very good in analyzing how a variable responds and calculating the percentage amount of variation of endogenous variables to changes (shocks) of other variables in the model, can provide a limitation or restriction that aims to separate the movement of endogenous variables into parts with reference to the underlying shock and is relatively easier to use for estimation. The analytical procedure presented will start from the identification of research variables, data description, stationarity test, lag length determination, SVAR model formation, model stability test and innovation accounting (impulse response function) to determine the simultaneous and dynamic response of macroeconomic variables to shocks from other variables and forecast error variance decomposition to determine the sources of fluctuations in certain variables.

a. Data Stationarity Test

   Time series data usually has problems, especially in stationary or non-stationary. When analyzed on data that is not stationary, it will produce spurious regression results and the conclusions drawn will be less meaningful. Therefore, the first step is to test and make the data stationary.

b. Cointegration Test (Johansen Cointegration)

   After it is known that all data to be analyzed are stationary, it will then be tested whether there is a long-term equilibrium relationship between all these variables. According to Natsir (2014: 217) granger causality explains that if two variables integrate at degree one, I (1) and cointegrate then there must be at least one direction of Granger causality.

c. Lag Structure Stability Test

   According to Arsana (2004), the stability of SVAR system will be seen from the inverse roots of AR polynomial characteristics. It can be seen from the modulus value in the AR-nomial table, if all AR-roots values are below 1, then the VAR system is stable. The VAR stability test is done by calculating the roots of the polynomial function or known as the roots of characteristic polynomial. If all the roots of the polynomial function are within the unit circel or if the absolute value is < 1 then the SVAR model is considered stable so that the resulting IRF and FEVD will be considered valid.

d. Granger Causality (Variable Relationship Test)

A variable X, is said to have Granger causality with another variable Y, if by entering the lag value of X can be used to predict variable Y whose results are better than if using the lag value of variable Y.

e. Impulse Response Function (IRF) Model

Impulse Response Function (IRF) is conducted to determine the dynamic response of each variable to one standard deviation of innovation. According to Ariefianto (2012), IRF traces the impact of a shock to a variable on the system (all variables) over a certain time.

f. Forecast Error Variance Decomposition (FEVD) Model

Forecast Error Variance Decomposition (FEVD) is done to determine the relative importance of various shocks to the variable itself and other variables. According to Natsir (2014: 208), FEVD analysis aims to decompose or separate the diversity in endogenous variables into shock components in the SVAR (VAR) system to determine the influence or contribution between transmit variables.

4. RESULTS

Development of Financial Stability

Financial stability is an important pillar in supporting a country's economic growth. In Indonesia, financial stability includes the ability of the financial system to deal with external and internal shocks, so that it can continue to support economic activity optimally. To measure financial stability, various indicators are used, such as consistent economic growth, controlled inflation rate, and balance of payments. Banking system stability is shown through the capital adequacy ratio (CAR), non-performing loan ratio (NPL), and maintained banking liquidity. In addition, financial market and fiscal stability are also key components that influence Indonesia's economic resilience.

The development of Indonesia's financial stability shows diverse dynamics. Prior to the 2008 global crisis, Indonesia's economy was relatively stable, although dependence on foreign capital flows was one of its weaknesses. The global financial crisis put pressure on the Rupiah exchange rate and financial markets, but quick and appropriate policy responses managed to mitigate the impact. Post-crisis, Indonesia continued to strengthen macroprudential policies, ensuring banks' CAR ratios remained healthy, and keeping NPLs below the prescribed threshold.

Development of Research Variables

a. GDP Development

Table 1. Gross Domestic Product of Five Countries of ASEAN (Billion US$)

No	Year	Countries				
		Indonesia	Malaysia	Thailand	Singapore	Brunei Darussalam
1	2016	932.252	345.02	407.75	307.08	13.30
2	2017	949.186	364.83	424.16	318.44	13.47
3	2018	988.120	382.12	441.67	328.44	13.48
4	2019	976.974	365.18	543.98	376.9	13.47
5	2020	987.097	337.46	500.46	349.49	12.01
6	2021	1.144.605	373.83	506.26	434.12	14.01
7	2022	1.198.851	407.03	495.65	498.47	16.68
8	2023	1.190.816	399.65	514.95	501.43	15.13
9	2024	1.230.971	408.24	522.67	507.95	15.28

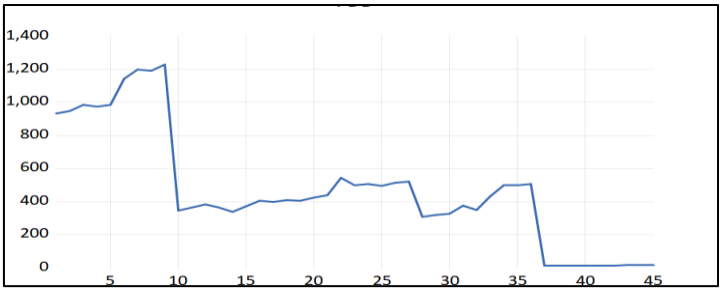

Figure 1. GDP Development (2016 - 2024)

b. Inflation Development

Table 2. Five Countries of ASEAN Inflation 2016 to 2024 (%)

No	Year	Countries				
		Indonesia	Malaysia	Thailand	Singapore	Brunei Darussalam
1	2016	2,4	1,6	2,4	0,7	4,1
2	2017	4,2	3,7	2	2,5	4,9
3	2018	3,8	0,7	1,4	1,9	3,2
4	2019	2,7	1,0	0,8	0,8	3
5	2020	1,7	-1,4	-0,2	0	2
6	2021	1,9	3,2	2,1	4	2,2
7	2022	5,5	3,8	5,8	6,5	3,3
8	2023	2,6	1,5	-0,8	3,7	0,7
9	2024	1,6	1,8	1,2	1,6	0,5

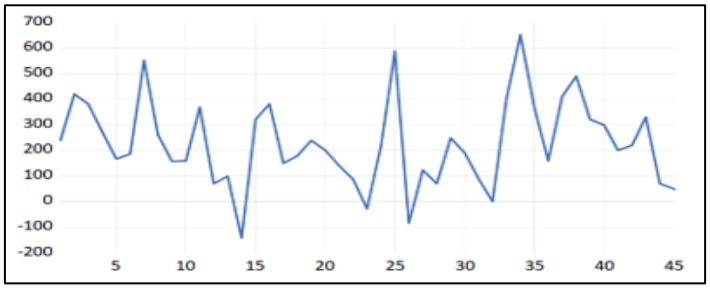

Figure 2. Inflation Development (2016-2024)

c. Consumption Progress

Table 3. Consumption at constant prices in the Five Countries of ASEAN from 2016 to 2024 (US$ billion)

No	Year	Countriea				
		Indonesia	Malaysia	Thailand	Singapore	Brunei Darussalam
1	2016	660.692	411.209	272.590	137.169	5.505
2	2017	749.190	433.218	278.893	142.124	5.832
3	2018	826.350	378.925	290.038	146.438	5.956
4	2019	954.390	284.364	297.168	151.329	6.093
5	2020	1.078.390	289.161	298.024	152.989	6.179
6	2021	1.174.190	302.751	300.892	159.332	6.375
7	2022	1.195.850	311.420	308.979	165.206	6.532
8	2023	1.214.580	328.136	313.146	182.162	6.829
9	2024	1.217.210	354.104	317.591	197.067	6.901

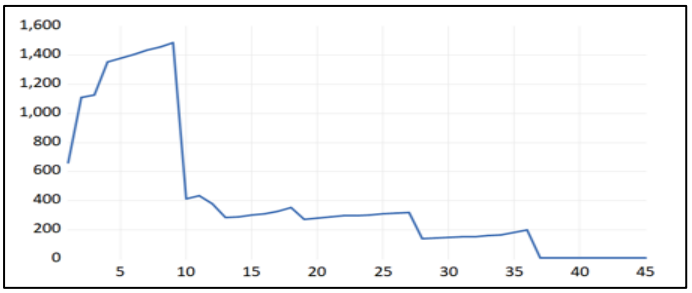

Figure 3. Consumption Development (2016-2024)

d. Exchange Rate Development

Table 4. Exchange Rate based on Average price in Five Countries of ASEAN from 2016 to 2024 (US$ Billion)

No	Year	Countries				
		Indonesia	Malaysia	Thailand	Singapore	Brunei Darussalam
1	2016	9,21	3,02	1,3	0,19	0,33
2	2017	6,52	2,95	1,29	0,14	0,32
3	2018	6,12	3,14	1,28	0,15	0,31
4	2019	13,8	4,1	3,08	1,3	0,76
5	2020	14	4,1	3,13	1,3	0,74
6	2021	14,2	4	3,36	1,3	0,74
7	2022	15,6	4,2	3,49	1,4	0,75
8	2023	15,3	4,3	3,31	1,3	0,76
9	2024	16	4,6	3,41	1,3	0,74

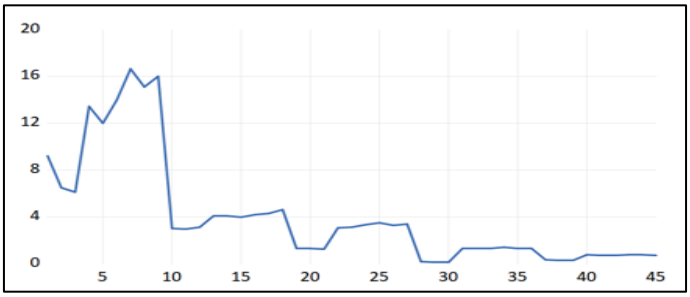

Figure 4. Exchange Rate Based on Average Price in Five Countries of ASEAN from 2016 to 2024 (US$ Billion)

e. Interest Rate Developments

Table 5. Interest Rates in the Five Countries of ASEAN from 2016 to 2024 (US$ Billion)

No	Year	Countries				
		Indonesia	Malaysia	Thailand	Singapura	Brunei Darussalam
1	2016	6,5	3	1,3	0,19	5,5
2	2017	6,5	2,95	1,29	0,14	5,5
3	2018	6,12	3,14	1,28	0,15	5,5
4	2019	5	3	1,25	1,35	5,5
5	2020	3,7	1,75	0,5	0,21	5,5
6	2021	3,5	1,75	1,25	0,3	5,5
7	2022	5,5	2,7	1,25	2,5	5,5
8	2023	6	3	2,5	3,26	5,5
9	2024	6	3,5	2,5	2,31	5,5

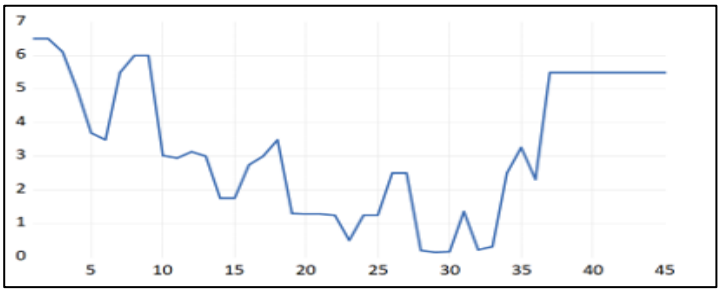

Figure 5. Interest Rate Development (2016-2024)

VAR Assumption Test Results

a. Stationary Test Results

Table 6. Stationary Test Results With Unit Roots at 1st difference

Variebel	Augmented Dickey Fuller Value	Mc Kinnon's Critical Value at the Significance Level 1%	Prob	Description
INF	-8.181.244	-3.639.407	0.0000	Stationarity
KON	-7.156.025	-3.639.407	0.0000	Stationarity
KURS	-3.814.635	-3.639.407	0.0004	Stationarity
PDB	-6.777.098	-3.639.407	0.0000	Stationarity
SB	-6.657.906	-3.639.407	0.0000	Stationarity

b. Cointegration Test Result

Table 7. Johansen's Cointegration Test

Sample (adjusted): 3 45
Included observations: 43 after adjustments
Trend assumption: Linear deterministic trend
Series: PDB INFLASI KURS KONSUMSI SUKUBUNGA
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.738932	144.1223	69.81889	0.0000
At most 1 *	0.677526	86.37436	47.85613	0.0000
At most 2 *	0.514173	37.70981	29.79707	0.0050
At most 3	0.122894	6.668015	15.49471	0.6165
At most 4	0.023659	1.029553	3.841465	0.3103

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

c. VAR Structure Lag Stability Test Result

Table 8. Lag Stability Table of Structure

Roots of Characteristic Polynomial
Endogenous variables: INFLASI KONSUMSI KURS PDB SUKUBUNGA
Exogenous variables: C
Lag specification: 1 2
Date: 01/23/25 Time: 20:33

Root	Modulus
0.931174	0.931174
0.842430	0.842430
0.060742 - 0.687695i	0.690373
0.060742 + 0.687695i	0.690373
0.568427 - 0.377096i	0.682137
0.568427 + 0.377096i	0.682137
-0.216796 - 0.494859i	0.540264
-0.216796 + 0.494859i	0.540264
-0.160618 - 0.083100i	0.180842
-0.160618 + 0.083100i	0.180842

No root lies outside the unit circle.
VAR satisfies the stability condition.

d. Optimal Lag Length Test Results

Table 9. Optimal Lag Length Test Results

VAR Lag Order Selection Criteria
Endogenous variables: INF KON KURS PDB SB
Exogenous variables: C
Date: 01/21/25 Time: 20:12
Sample: 2016Q1 2024Q4
Included observations: 31

Lag	LogL	LR	FPE	AIC	SC	HQ
1	-287.3387	178.5355	1.94E+12	43.84516	45.06166	65.75500
2	-278.1361	180.7429*	1.53E+11*	42.50097*	44.75367*	62.88359*

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

5. DISCUSSION

Discussion of VAR and SVAR

a. Analysis of the Impact of Monetary Policy on Financial System Stability in Five ASEAN Countries (Indonesia, Malaysia, Thailand, Singapore, and Brunei Darussalam)

Based on the results of the Impulse Response Function (IRF) analysis of the one standard deviation response of the CURS, it is concluded that there is a change in the effect of each standard deviation of each variable from positive to negative and vice versa, in the medium term and in the long term. These results indicate a different response from monetary policy, both a positive response and a negative response.

The monetary policy transmission mechanism basically describes how the monetary policy pursued by the central bank affects various economic and financial activities so that it can ultimately achieve the ultimate goal set. Specifically, Taylor (2000) states that the monetary policy transmission mechanism is “the process through which monetary policy decisions are transmitted into changes in real GDP and inflation”.

b. Interaction Analysis of Monetary Policy Variables on Financial System Stability in 5 ASEAN Countries (Indonesia, Malaysia, Thailand, Singapore, and Brunei Darussalam) in the Short, Medium, and Long Term.

Based on the analysis of interactions that occur between monetary policy analysis variables on financial system stability, in the short, medium, and long term against KURS, it is known that monetary policy is able to maintain financial system stability through the GDP variable. In international trade, the role of the import-export sector is vital because it affects the size of national income. In macroeconomic theory, the relationship between exports and national income (GDP) is an identity equation because the above mentioned exports are part of the national income component. Aliman and A. Budi Purnomo (2001) argued that in the relationship between exports and economic growth (GDP) there are four hypotheses that are equally reasonable and acceptable, namely exports as a driving force of economic growth, export hypothesis as an engine for economic growth, domestic economic growth hypothesis

is a driving force for exports, economic growth hypothesis causes a decrease in exports.

According to Soekarwati, 1991 the factors that affect exports are:

First, international prices the greater the difference between international market prices and domestic prices will cause the number of commodities exported to increase.

Second, the exchange rate of a country's currency (appreciation), the price of the country's exports in the international market becomes expensive. Conversely, the lower the exchange rate of a country's currency (depreciation) the price of the exported goods in the international market will be cheap.

Panel Regression Discussion

1) GDP Regression Coefficient

The GDP regression coefficient value is 0.083, this means that if there is a change in GDP by 1%, there will be an increase in Inflation by 0.083% in the same direction. However, the prob t statistic value is 0.0810>0.05 at the 95% confidence level (α = 5%) so that it is stated that the effect of GDP is not significant on the CURR. The conclusion of this result can also be seen that the effect of GDP on the KURS of ASEAN countries is in-elastic. This means that the impact of changes in GDP on the LESS is not too large. With the not too large influence of GDP on the LESS of ASEAN countries, the positive effect that occurs will not have a major effect on the development of the LESS of ASEAN countries.

2) Inflation Regression Coefficient

The value of the Inflation regression coefficient is -0.690, this means that if there is a change in Export by 1%, there will be an increase in Inflation of -0.690% in the same direction. However, the prob t statistic value is 0.0000 <0.05 at the 95% confidence level (α = 5%) so that it is stated that the effect of Inflation is significant on KURS. The conclusion of this result can also be seen that the effect of Inflation on the KURS of ASEAN countries is elastic. This means that the impact of changes in Inflation on the LESS is not too large. With not too much influence of Inflation on the LESS of ASEAN countries, the positive effect that occurs will have a big effect on the development of the LESS of ASEAN countries.

3) Consumption Regression Coefficient

The KON regression coefficient value is 0.493, this means that if there is a change in KURS by 1%, there will be an increase in KURS by 0.493% in the same direction. However, the prob t statistic value is 0.0000 <0.05 at the 95% confidence level (α = 5%) so that it is stated that the KON effect is significant on the COURSE.

4) Interest Rate Regression Coefficient

The regression coefficient value of SB is -0.447, this means that if there is a change in

LESS by 1%, there will be an increase in LESS by -0.447% in the same direction. However, the prob t statistic value is 0.0000 <0.05 at the 95% confidence level (α = 5%) so that it is stated that the effect of SB is significant on KURS. The conclusion of this result can also be seen that the effect of SB on the KURS of ASEAN countries is elastic. This means that the impact of changes in the SB on the LESS is not too large. With not too much influence of SB on the LESS of ASEAN countries, the positive effect that occurs will have a big effect on the development of the LESS of ASEAN countries.

6. CONCLUSION

Monetary policy significantly affects financial system stability in five ASEAN countries in the short, medium and long term. There are several impacts that occur due to monetary policy on financial system stability in five ASEAN countries.

REFERENCES

Agus Widarjono, P. . (2018). Ekonometrika : pengantar dan aplikasinya disertai panduan eviews.

Ahmadi, K. A., Amiin, M., & Madi, R. A. (2019). Pengaruh Makro Ekonomi Dan Fundamental Bank Terhadap Non

Buletin Ekonomi Moneter Dan Perbankan, 18(4), 409–430. https://doi.org/10.21098/bemp.v18i4.574

Dewi Mahrani Rangkuty, Bakhtiar Efendi, and Antonius Gulo. 2022. “MONETARY INDICATORS OF THE STABILITY OF PRICES”. Proceeding of The International Conference on Economics and Business 1 (1):92-102. https://doi.org/10.55606/iceb.v1i1.187.

Efendi, Bakhtiar. "Efektivitas Kebijakan Makroprudensial Terhadap Stabilitas Sistem Keuangan Di Indonesia." JEpa 4.2 (2019): 72-78.

Hardiyanto, Y. P., & Arianti, F. (2019). Pengaruh Inklusi Keuangan Terhadap Stabilitas Sistem Keuangan (Studi

IMF. (2018). Laporan Tahunan IMF 2018 Tinjauan Umum Membangun Masa Depan Bersama.

Muhri, A., Habbe, A. H., & Rura, Y. (2022). Analisis Perbandingan Stabilitas Bank Syariah dan Bank Konvensional.

Mukherjee, P., Roy Chowdhury, S., & Bhattacharya, P. (2021). Does financial liberalization lead to financial development? Evidence from emerging economies. The Journal of International Trade & Economic Development, 30(8), 1263–1287.

Nasution, L. N., Rangkuty, D. M., & Putra, S. M. (2024). The Digital Payment System: How Does It Impact Indonesia's Poverty?. *ABAC Journal*, *44*(3), 228-242.

Nurhidayat, D., Adhiguna, E. T., Pasha, S. D. N., & Sihombing, P. (2023). Pengaruh Profitabilitas, Efisiensi & Covid-19 Terhadap Kredit Bermasalah Pada Ukuran Perusahaan Pada Tahun 2018-2021 Sebagai Variabel

Pemerintah Daerah di Indonesia. Reslaj : Religion Education Social Laa Roiba Journal, 5(1), 168–184.https://doi.org/10.47476/reslaj.v6i3.5530

Permata, Y. R., & Zoraya, I. (2023). Analisis Faktor-faktor yang Mempengaruhi Non Performing Loan pada Bank

Rahayu, K. N. S. M. (2018). PENGARUH GDP, INFLASI, BI RATE, NILAI TUKAR TERHADAP NON PERFORMING LOAN

Rahmadani, D. (2016). Analisis Terhadap Tingkat Kredit Macet (Non Performing Loans) Studi Pada Bank Umum.

Rangkuty, D. M., & Hidayat, M. (2021). Does Foreign Debt Have an Impact on Indonesia's Foreign Exchange Reserves?. *Ekuilibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi*, *16*(1), 85-93.

Rangkuty, Dewi Mahrani, Bakhtiar Efendi, and Noni Ardian. "Trend Ekspor Indonesia Ke 3 Negara Asean Singapura, Filipina Dan Laos (SFL)." Jurnal Akuntansi dan Ekonomika 9.2 (2019): 243-252.

Rusiadi, R., Hidayat, M., Rangkuty, D. M., Ferine, K. F., & Saputra, J. (2024). The Influence of Natural Resources, Energy Consumption, and Renewable Energy on Economic Growth in ASEAN Region Countries. *International Journal of Energy Economics and Policy*, *14*(3), 332-338.

Salsabillah, R. P., & Agustin, G. (2022). Analisis faktor-faktor yang mempengaruhi kredit bermasalah pada bank

Sholiha, A., & Mukhlis, I. (2023). ANALYSIS OF THE INFLUENCE OF BANK INTERNAL FACTORS

Swasta nasional kelompok buku 3 tahun 2018-2020. Jurnal Ekonomi, Bisnis Dan Pendidikan (JEBP), 2(4).