International Journal of Social Science and Business
Volume 7, Number 2, 2023, pp. 353-360
P-ISSN: 2614-6533 E-ISSN: 2549-6409
Open Access: https://doi.org/10.23887/ijssb.v7i2.54440

Exploring The Global Slack Hypothesis On Inflation Dynamics: A Study In ASEAN-5

I Made Suidarma[1*], I Nyoman Arta Yasa[2], Ni Putu Nina Eka Lestari[3], I Dewa Ketut Gede Prabawa[4], Ni Wayan Lasmi[5], I Nyoman Sunarta[6]

[1,2,3,4,5,6]Faculty of Economics and Business, Universitas Pendidikan Nasional, Bali, Indonesia

ARTICLE INFO

Article history:
Received November 25, 2022
Revised November 28, 2022
Accepted March 29, 2023
Available online May 25, 2023

Kata Kunci:
Global Slack, Infaltion, Augmented Phillips Curve, panel VECM.

Keywords:
Global Slack, Infaltion, Augmented Phillips Curve, VECM panels.

ABSTRAK

Inflasi merupakan salah satu masalah ekonomi yang sering terjadi di negara-negara ASEAN-5. Faktor eksternal yang mempengaruhi inflasi seperti perubahan harga energi dan harga komoditas (pertanian, logam, dan mineral) dapat mempengaruhi inflasi di negara-negara ASEAN-5 melalui pengaruh slack global. Oleh karena itu, penelitian ini dilakukan untuk menguji pengaruh slack global terhadap dinamika inflasi domestik di negara-negara ASEAN-5 dengan mempertimbangkan pengaruh indeks harga energi dan indeks harga komoditas (pertanian, logam, dan mineral) terhadap inflasi domestik. Metode analisis data yang digunakan adalah Panel of Vector Error Correction Model (VECM-Panel) dengan mempertimbangkan pengaruh indeks harga energi dan indeks harga komoditas (pertanian, logam, dan mineral) terhadap inflasi domestik di ASEAN-5. Hasil penelitian menunjukkan bahwa terdapat pengaruh slack global pada inflasi domestik di negara-negara ASEAN-5, khususnya melalui indeks harga energi dan indeks harga komoditas. Harga energi mempengaruhi inflasi baik dalam jangka pendek maupun jangka panjang, sedangkan harga komoditas hanya mempengaruhi inflasi jangka panjang. Implikasi dari hasil penelitian ini adalah pentingnya peran kebijakan stabilitas harga komoditas global dalam menjaga stabilitas harga domestik di ASEAN-5.

ABSTRACT

Inflation is one of the economic problems that often occur in ASEAN-5 countries. External factors affecting inflation such as changes in energy prices and commodity prices (agriculture, metals, and minerals) can affect inflation in ASEAN-5 countries through the influence of global slack. Therefore, this study was conducted to examine the effect of global slack on domestic inflation dynamics in ASEAN-5 countries by considering the effect of energy price index and commodity price index (agriculture, metals, and minerals) on domestic inflation. The data analysis method used is the Panel of Vector Error Correction Model (VECM-Panel) by considering the effect of energy price index and commodity price index (agriculture, metals, and minerals) on domestic inflation in ASEAN-5. The results show that there is an influence of global slack on domestic inflation in ASEAN-5 countries, especially through the energy price index and commodity price index. Energy prices affect inflation in both the short and long run, whereas commodity prices only affect long-term inflation. The implication of the results of this study is the importance of the role of global commodity price stability policy in maintaining domestic price stability in ASEAN-5.

1. INTRODUCTION

Inflation as a reflection of price stability has an important role that can affect the policies of both monetary and fiscal authorities. In addition to domestic factors, inflation can arise due to global slack in line with the accelerated flow of globalization. The rapidly growing dynamics of the global economy has important implications in changing the macroeconomic constellation of countries in the world. Several empirical studies related to the impact of global slack on inflation dynamics have been widely carried out, such as where the results of the analysis conclude that global slack through global commodity prices (global oil and energy prices) has a significant impact on the dynamics of domestic inflation (Auer et al., 2019; Choi et al., 2018; K. Forbes et al., 2018; K. J. Forbes, 2019; K. J. Forbes et al., 2017). The findings of Choi et al (2018) confirm that both in developed and in developing countries a 10% increase in global oil inflation

*Corresponding author.
E-mail: suidarma@undiknas.ac.id (I Made Suidarma)

results in an increase in domestic inflation of 0.4 points (Carrière-Swallow et al., 2023; Choi et al., 2018). The development of the global price index was contributed by several commodities in the global market; that is, energy and non-energy. Energy prices were contributed by an increase in world oil prices in 2018 by $65 per barrel compared to those in 2017 which were $53 per barrel, driven by strong consumer demand and restraint from oil producers. Meanwhile, metal prices increased 9 percent driven by strong demand and supply. The price of energy commodities consisting of oil, natural gas, and coal experienced a sharp increase of 20% in 2018. The increase in global growth and increasing demand were important factors in increasing global commodity prices. The risk of rising metal prices driven by global demand is stronger than expected. The history of decline in oil prices since the price crash in 2014 led to a drastic drop in revenues and impacted the country's fiscal capacity, causing a slowdown in investment. Similarly, political instability also weakened the capability of some oil-exporting countries. In contrast, oil exporters were in a flexible exchange rate system with greater fiscal support and a more diversified economy since the drop in oil prices. Meanwhile, agricultural commodities consisting of food and raw materials increased by two percent. Prices of grains and oil as well as food also increased throughout 2018 due to slow investment. The La Niña cycle did not have a major impact on global markets for commodities such as bananas. However, the imposition of import duties by China in response to the increase in tariffs by the US could affect the soybean market.

The dialectic of empirical studies related to the role of global slack in influencing domestic inflation appears with a different object of study. Previous research exactly rejects the hypothesis of the influence of global slack on inflation for the cases in China, India, and Pakistan (Abbas, 2018). The impact of globalization does not encourage an increase in the inflation process and has important implications in the formulation of monetary policy. Global resource capacity does not affect the ability of central banks to stabilize inflation, real economic activity, and growth in output volatility. Similar research also found that globalization in the US does not affect inflation so globalization does not change the structure of the Phillips curve or long-run inflation (Bianchi & Civelli, 2015; Carrière-Swallow et al., 2023). Customer market interactions and financial friction are significant to inflation or there is a movement between inflation and output in response to financial shocks (Ahiadorme, 2022; Gilchrist et al., 2017). Similar research also confirm the importance of monetary authorities in paying attention to global slack which will have an impact on domestic price stability (K. J. Forbes, 2019; Zhang & Zhou, 2016). Moreover, the global and domestic output gap can be a driver of domestic inflation both in the pre-and in post-crisis periods using the New Keynesian Phillips Curve framework (Jašová et al., 2020).

Theoretically, previous research introduced a model of the relationship between inflation and unemployment (Mohseni & Jouzaryan, 2016; D. Wulandari et al., 2019). Furthermore, Mankiw's study (2000) mentions the occurrence of a short-term relationship between inflation and unemployment. However, the stability of the relationship between inflation and unemployment is still being questioned and debated. In his study, although the tradeoff between inflation and unemployment in the short run is very important in building blocks of business cycle theory, it is also debatable. A monetary contraction will increase unemployment and cause inflation to be delayed and gradually decline. In the traditional Phillips curve approach, global slack has an indirect effect on domestic inflation. The global cycle affects the domestic output gap indirectly when global demand is very large. Similarly, global value chains enhance global competitiveness with respect to labor and market factors (Auer et al., 2019). The existence of the Global Value Chain (GVC) with increasing competition between countries causes domestic inflation to be more sensitive to the global output gap. This will affect the trade-off for the central bank in managing inflation. Our research focuses on the importance of the influence of global factors in inflation dynamics which is not only determined by domestic slack but also global slack as an important concern in influencing inflation dynamics in ASEAN-5 countries. The open economic system in ASEAN-5 countries has great sensitivity to global shocks so that global activities will have a major impact on inflation dynamics. Compared to previous empirical studies, this study offers a simulation of standard inflation model, which covers only domestic slack, global slack, augmented Phillips Curve as well as the effects of structural changes in the trade war between China and the US that directly and indirectly affect the global macro economy including domestic inflation.

2. METHODS

The data used were secondary data in the form of panel data with monthly time series from January 2013 to September 2018 in five ASEAN-5 countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand). Some of the endogenous variables used were the Consumer Price Index (CPI), Energy Price Index, Agricultural Price Index, Metals and Minerals Price Index, US Base Interest Rate (IIR_libor) in %, United States Gross Domestic Product (GDP) (%), Domestic GDP (%), domestic interest rate (policy

reference) in%, end-of-period exchange rate (ER). A study by previous research found an inverse relationship between the unemployment rate and changes in the wage rate in England (Rumate, V. A. & Engka, 2019). The Phillip curve shows the response of nominal wages to labor market imbalances (unemployment rate). Under conditions where there is no imbalance, nominal wages will increase due to an increase in labor productivity and to offset the effect of rising prices on the rate of change in real wages. The adjustment pattern is formulated in the following equation: $\omega = v + \alpha\ (N^d - N^s)$. Where, ω is the change in nominal wages, v is a parameter that reflects the implications of the asymmetric response of changes in wages to excess supply or demand in the labor market and is a parameter with a positive value. If there is a proportionally distributed excess supply, then the excess supply or demand is the same in all markets, namely v = 0. Meanwhile, Nd and Ns are the demand and supply of labor where $N^d = N^s$ are a condition of equilibrium. Thus, equation (2.1) can be formulated as follows: $\omega = v + g\ (u)$

Where g (u) function u describes the condition of excess demand in the labor market and can be represented by the difference between unemployment in full employment and actual unemployment (uf-u). Thus, it can be formulated as follows: $\omega = v + \beta\ (u_f - u)$ To achieve wage stability, by determining = 0, u can be calculated as follows: $u* = u_f + v/\beta$

u* is the unemployment rate that does not drive inflation. Hence, the Phillip curve can be formulated as: $\pi = \omega - \rho$ where, ρ is the level of labor productivity. If it is assumed = 0 then the Phillip curve is obtained as follows: $\pi = \beta\ (u^* - u)$ In its development, according to the characteristics of the business cycle, which identifies a close relationship between the unemployment pattern and real output growth, known as Okun's law, the Phillip curve can be derived from the pattern of the relationship between the inflation rate and real output growth. The trend of the existing relationship pattern is increasing where the increase in inflation is in line with that in real output. This pattern of relationships is known as the short-run supply curve. The general specification of the Phillips curve based on this relationship pattern is: $\pi = \delta(y - y*)$, Where, y and y * are respectively the actual and potential real output growth and are parameters with positive values. Considering the time period of the influence of a variable and an enlarged version of the equation, the structural equation of the Phillip curve is formulated as follows:

$$\pi_t = \sum_i \theta_i \pi_{ti} + \delta y_{ti} + e_t$$

Where, π_t and π_{ti} are respectively inflation of the current and previous periods; ti is the growth of real output or the deviation of real output to its potential level in the past period, and t is a random disturbance. This study synthesizes previous empirical studies with a focus on examining global slack through proxies for meat export commodities and the price volatility of other commodities and domestic slack with real effective exchange rate movements and nominal, interest rates, GDP growth (Bayramoglu & Allen, 2017; Martínez-Ferrero & García-Meca, 2020; Nakov & Pescatori, 2010; Siregar & Ritonga, 2020; S. Wulandari & Bowo, 2019). The findings concluded that monetary authority policies that are able to identify global shocks, especially related to global commodity price volatility, can be a signal to minimize risks such as anticipating rising domestic inflation. The findings emphasize the need to push the integration of the Phillips curve theory during the period of globalization because the vulnerability of global conditions will be very sensitive to influence the dynamics of inflation of a country that has high external economic dominance in ASEAN 5 (James, 2023; Kabukçuoğlu & Martínez-García, 2018).

The Panel of Vector Error Correction Model (Panel-VECM) method was used to analyze the dependence pattern of the inflation effect, foreign interest rates, foreign GDP, domestic GDP, domestic interest rates, exchange rates, energy price index, agriculture price index, metal price index and minerals, and dummy variable of the trade war between the US and China from July to September 2018. The VECM Panel model shows the effect of correction of economic actors' errors in the long-term and short-term adjustment patterns. The following is the basic model of VECM (Harris, R & Sollis, 2003): $\Delta Z_{it} = I_i \Delta Z_{it-1} + \cdots + I_{k-1} \Delta Z_{it-k+1} + II\ Z_{it-k} + u_{it}$

Where, $I_i = -(I - A_1 - \cdots - A_i); i = I, \ldots k - I$ dan $II = -(I - A_1 - \cdots - A_k$

Is a system specification that contains information on short-term and long-term adjustments to z. Z is the set of endogenous variables (Z_t) used in the model. Meanwhile, II = $\alpha\beta$ is the speed of imbalance adjustment and is the long-term coefficient. The VECM panels describe short-term interactions between individuals or cross-sections and the transient effects of errors on an individual's long-term balance on other individuals in the panel, changes in cointegration rank between individuals. Several tests on the VECM Panel model include panel data stationary test, Levin, Lin and Chu unit root tests, optimal lag determination, and Johansen cointegration test.

3. RESULTS AND DISCUSSIONS

Results

The unit root or data stationarity test aims to observe whether certain coefficients from the estimated autoregressive model have a value of one or not. The use of the VECM panel unit root test using Levin, Lin and Chu, Im, Pesaran and Shin, ADF Fisher, and Phillips Perron Fisher.

Table 1. Variable Stationarity Test Results in ASEAN-5 Countries

Variable	Levin, Lin & Chu	Im, Pesaran & Shin	ADF Fisher	Phillips Perron Fisher
Consumer Price Index (IHK)	0.0001 *	0.0000 **	0.0000 **	0.0000 **
Energy Price Index (PEN)	0.0000 **	0.0000 **	0.0000 **	0.0000 **
Agricultural Price Index (PAG)	0.0000 **	0.0000 **	0.0000 **	0.0000 **
Metals and Minerals Price Index (PMET)	0.0000 **	0.0000 **	0.0000 **	0.0000 **
Exchange Rate (S)	0.0000 **	0.0000 **	0.0000 **	0.0000 **
Foreign GDP (YF)	0.0000 **	0.0488*	0.0000 **	0.0000 **
Domestic GDP (Y)	0.0918 *	0.0047 *	0.0139 *	0.0000 **
Foreign Interest Rate (JIKA)	1.0000 ***	0.0000 **	0.0000 **	0.0000 **
Domestic Interest Rate (I)	0.0468 *	0.0000 **	0.0000 * *	0.00040 *

Note: Probability Significance Value (*) level (**) first difference (***) second difference

Table 1 shows that the data on each variable have different stationarity for all tests either LLC, IPS, ADF Fisher and PP as well as at the first and second levels. Based on these results, estimation testing can be performed using the VECM method which provides freedom in the use of variables that have stationarity at any level. Next, the optimal lag is determined through the Schwarz Information Criterion (SC) test which shows the optimal lag in lag 2. Determining the length of lag is important because a lag that is too long reduces the degree of freedom which leads to loss of required information and a lag that is too short will result in the wrong model (Greene, 2012). The next step is to identify the long-term relationship or cointegration using the Johansen Cointegration Test. The results of cointegration test show that there is a confirmed cointegration between variables with trace statistical values greater than the critical value. Johansen Cointegration Test is presented in Table 2.

Table 2. Johansen Cointegration Test

Data Trend: Test Type	None No Intercept No Trend	None Intercept No Trend	Linear Intercept No Trend	Linear Intercept Trend	Quadratic Intercept Trend
Trace	6	7	6	5	4
Maximum Eigenvalue	6	7	6	4	4

Testing the global slack hypothesis on inflation dynamics can be seen from the effect of long-term and short-term indicators such as domestic interest rates, international interest rates, foreign GDP, domestic GDP, exchange rates, energy price index, agricultural price index and metal and mineral price index. The following are the results of the long-term estimation of the VECM panel. Based on Table 3, the cointegration equation model 1 includes the US and China trade war dummy from June 2018 as an exogenous variable and model 2 by excluding the US and China trade war dummy variable. The results of the long-term estimation of the VECM panel show that the variables that have a significant effect on the dynamics of inflation on the degree of error are the energy price index, agricultural price index, metal and mineral price index, foreign GDP and foreign interest rates. Meanwhile, the global variable that has no significant effect is the exchange rate, and domestic variables have no significant effect on inflation. These results indicate that global slack is the main variable driving the dynamics of domestic inflation in ASEAN-5 countries, while domestic slack does not affect the dynamics of domestic inflation in ASEAN-5 countries.

Table 3. Long Term Estimation Results of Vector Error Correction Model (VECM) Panel

Dependent Variabel: Consumer Price Index (CPI)		
Independent Variable	**Model 1**	**Model 2**
Energy Price Index (PEN) (-1)	-14.949*	9.135*
Agriculture Price Index (PAG) (-1)	114.926*	-49.424*

Dependent Variabel: Consumer Price Index (CPI)		
Independent Variable	**Model 1**	**Model 2**
Metals and Minerals Price Index (PMET)	-42.458*	8.533*
Exchange Rate (S)	0.0111	-0.006
Foreign GDP (YF)	-420.865*	92.028
Domestic GDP (Y)	52.612	-550.137*
Foreign Interest Rate (IF)	1695.809*	-30.501
Domestic Interest Rate (I)	-83.742	26.045
Intercept	-11931.28	4943.562
Exogenous Variable: Dummy Trade War US-China	0.284	-
R-squared	0.203	0.192

Note: * significance at α =5%

Discussion

The exchange rate does not affect the movement of inflation since the exchange rate is an implication of the movement of capital flows, especially portfolio investment in ASEAN-5 countries and does not have a direct impact on domestic inflation (Arisandhi & Robiyanto, 2022; Basnet et al., 2015; Wardhono et al., 2018). On the other hand, the strengthening of the monetary and macroprudential policy mix is significant in maintaining inflationary stability. Meanwhile, in the short term, only energy prices have an effect on domestic inflation. The existence of a trade war between the US and China has no impact on the dynamics of inflation. In the short term, the trade war between the US and China only affects the metal and mineral price index (Firdaus et al., 2019; Xia et al., 2019). Meanwhile, Figure 2 which does not include the trade war dummy USA and China as an exogenous variable, shows several variables that affect the dynamics of inflation, namely the energy price index, agricultural price index, metal and mineral price index and domestic GDP. Different results in model 2 show that global slack and domestic slack affect domestic inflation in ASEAN-5 countries by excluding the effect of trade war.

The test results show that the global slack hypothesis has an effect on the dynamics of inflation in ASEAN-5, especially energy and commodity prices, with the agricultural price index having the largest influence among other price indices. This is related to the characteristics of the ASEAN-5 countries which have the basis of the agricultural sector as the leading sector of economic growth (Azam et al., 2015; Setyanti & Wahyudi, 2021). In this modeling domestic slack, domestic GDP affects inflation. The implications of the research results strengthen the augmented Phillips curve model which includes global slack and domestic slack as inflation determinants (Albuquerque & Baumann, 2017; Eser et al., 2020).

The response of the consumer price index (CPI) variable to the shock that occurs in each research variable is shown in Figure 7. The results show that the consumer price index is very responsive at the end of the research period to the shock that occurs in other variables, except the metal and mineral price index variable indicated by a stable response until the end of the study period. Almost all variables showed a stable response at the beginning of the study period. Meanwhile, the CPI response to the shock occurred in the energy price index was strongly expressed with a positive number until the end of the period where the largest response occurred in the 4th period of the study with a number close to 2. Then, the response decreased until the end of the study period but still showed a fairly high response compared to other variables. In contrast to the shock response that occurred in the energy price index, the shock that occurred in the agricultural price index is responded negatively by the CPI. This is reinforced by a negative response below the steady state point with the largest response reaching -0.05 at the end of the period. Meanwhile, the exchange rate shock is responded positively by the CPI with the largest response reaching 0.6 in the 4th period which is later responded fairly stable until the end of the period although it does not reach the steady state point. The different results from the other variables are actually shown by the response of the CPI to the shock occurred in the metal and mineral price index. The results show that the CPI response is quite stable from period 3 to the end of the study, although it is high enough to respond at the beginning of the research period right in the second period with a positive number of 0.02.

On the other hand, the CPI shows a high response to the shock occurred in US GDP (Yf) which is confirmed by a higher movement until the end of the period with the highest response estimated at 0.19 in period 10. Then, a high CPI response is also shown to the shock occurred in domestic GDP. This result is indicated by the number 0.06 in period 10 and the low response is indicated in the periods 1 to 2 with the number 0.00. Meanwhile, the CPI shows a different response to the shock of the US interest rate (IF) with a negative response. This result is reinforced by the negative response value starting from the 2nd period, and the largest response occurred at the end of the period with the largest number of 0.06. Furthermore, the domestic interest rate shock responded positively to the CPI as indicated by the highest response in

periods 3 and 10, reaching 0.075. Meanwhile, the lowest CPI response to the shock that occurred in domestic interest rates in period 1 is 0.00. The CPI response to each variable is also confirmed by Figure 1 where the shock that occurs in each variable is responded differently by the CPI. First, the CPI responds positively with a substantial response to the shock occurred in the energy price index, which is indicated by the highest response in the 4th period reaching 0.175 and until the end of the CPI period it still shows a high response at 0.15. Meanwhile, the shock to the agricultural price index is responded negatively by the CPI, confirmed with the highest response rate in the 4th period of -0.045; then, until the end of the research period, the CPI shows a stable response until it reaches a steady state point. Different things are shown by the response of the CPI to the shock that occurs in the metal and mineral price index, which shows a stable response at the beginning of the period to the second period. However, the CPI shows a negative response to the shock that occurs in the metal and mineral price index until the largest response that reaches -0.07 in the 5th period until the end of the study. Then, the exchange rate shock is responded positively by the CPI where at the beginning of the period it still shows a stable response until later in the 2nd to 4th period, it shows a moderately increasing response of 0.07 until the end of the period.

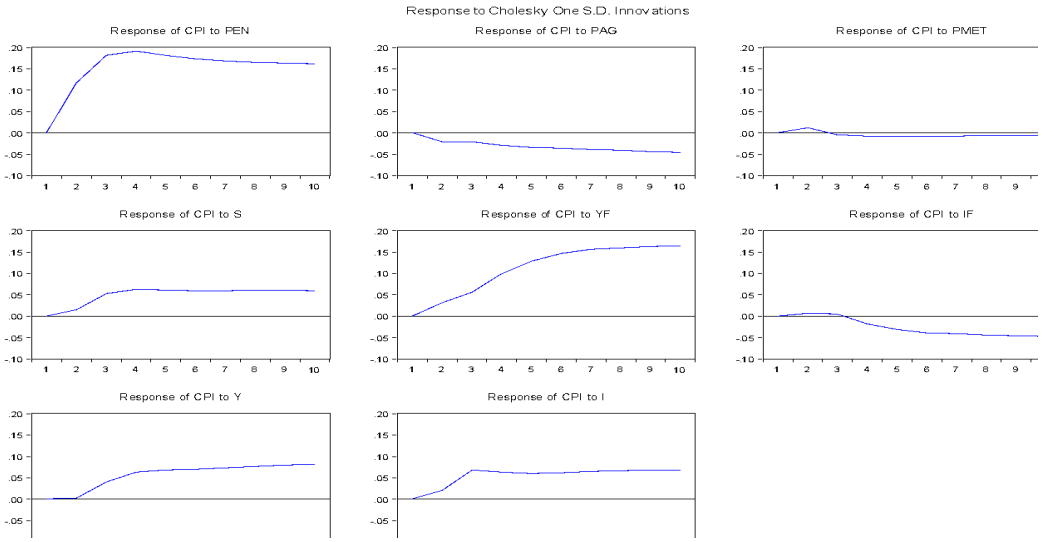

Figure 1. Impulse Response Function Consumer Price Index (CPI) Model 1

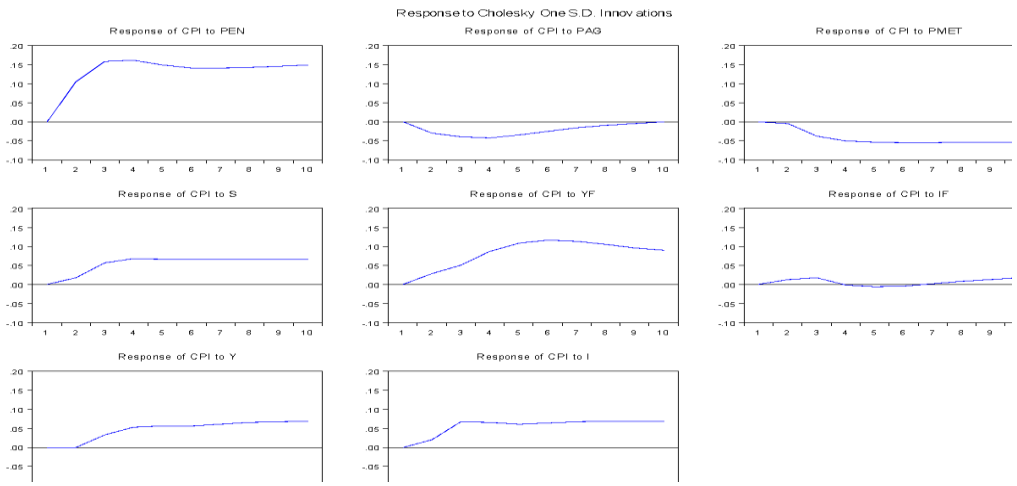

Figure 2. Impulse Response of Consumer Price Index Model 2

The CPI also shows a positive response to the shock experienced by US GDP where at the beginning of the 6th period the response tends to increase by 0.12 which is the largest response. Then, the response slowly decreases until the end of the period reaching 0.08. In contrast to the CPI's response to other variable shocks, the CPI responds more to fluctuations in the US variable exchange rate (IF) confirmed by movement in the initial period, which actually shows a volatile response reaching the largest response of

0.02. In the second period, the response decreases until the negative response reaches -0.01 in the 4th period to the 5th period. Furthermore, the CPI response increases back to a positive number in the 7th period until the end of the period where the largest response is in the 10th period, reaching 0.2. In addition, the CPI response to shocks in domestic GDP tends to be stable at the beginning of the period from periods 1 to 2. The response shows an increase in the 3rd period until the end of the study period where the largest response rate occurs in the final period by 0.06. Furthermore, the CPI reflects an increasing response to the shock that occurs in the domestic interest rate variable with the largest response in the third period reaching 0.075. Then, it is stable but never reaches the steady state point until the end of the period.

4. CONCLUSION

Based on the results of the analysis, it can be concluded as follows: The hypothesis of the influence of global slack on the dynamics of domestic inflation is proven in the case of countries in ASEAN-5, accompanied by the effect of domestic slack on long-term inflation. Several global slack variables that have an effect are the energy price index and the commodity price index, namely agriculture and metals and minerals with the largest influence being the agricultural price index. Meanwhile, the influencing domestic factor is domestic GDP. In short term, only the energy price index variable affects inflation. This shows that energy prices play an important role in influencing the movement of domestic inflation in both short and long term. An important implication of the results of this study is to prove the global slack hypothesis or that related to the Phillips Curve development model has different indicators in forming long-term and short-term relationships. The implication of strengthening the fiscal, monetary, and macroprudential policy mix becomes very important in maintaining domestic price stability in response to the dynamics of global shocks. Monetary and fiscal authorities should strengthen coordination in identifying global shocks that affect domestic price stability, which affects the short-term and long-term relationships.

5. REFERENCES

Abbas, S. K. (2018). Global slack hypothesis: evidence from China, India and Pakistan. *Empirical Economics*, *54*, 593–627. https://doi.org/10.1007/s00181-016-1207-0.

Ahiadorme, J. W. (2022). On the aggregate effects of global uncertainty: Evidence from an emerging economy. *South African Journal of Economics*, *90*(3), 390–407. https://doi.org/10.1111/saje.12309.

Albuquerque, B., & Baumann, U. (2017). Will US inflation awake from the dead? The role of slack and non-linearities in the Phillips curve. *Journal of Policy Modeling*, *39*(2), 247–271. https://doi.org/10.1016/j.jpolmod.2017.01.004.

Arisandhi, V. D., & Robiyanto, R. (2022). Exchange Rate, Gold Price, And Stock Price Correlation in Asean-5: Evidence From COVID-19 Era. *Jurnal Manajemen Dan Kewirausahaan*, *24*(1), 22–32. https://doi.org/10.9744/jmk.24.1.22-32.

Auer, R. A., Levchenko, A. A., & Sauré, P. (2019). International inflation spillovers through input linkages. *Review of Economics and Statistics*, *101*(3), 507–521. https://doi.org/10.1162/rest_a_00781.

Azam, M., Khan, A. Q., Bakhtyar, B., & Emirullah, C. (2015). The causal relationship between energy consumption and economic growth in the ASEAN-5 countries. *Renewable and Sustainable Energy Reviews*, *47*, 732–745. https://doi.org/10.1016/j.rser.2015.03.023.

Basnet, H. C., Sharma, S. C., & Vatsa, P. (2015). Monetary policy synchronization in the ASEAN-5 region: an exchange rate perspective. *Applied Economics*, *47*(1), 100–112. https://doi.org/10.1080/00036846.2014.962228.

Bayramoglu, A. T., & Allen, L. (2017). Inflation dynamics and monetary c in Turkey in the inflation targeting regime. *Journal of Reviews on Global Economics*, *6*(2009), 1–14. https://doi.org/10.6000/1929-7092.2017.06.01.

Bianchi, F., & Civelli, A. (2015). Globalization and inflation: Evidence from a time-varying VAR. *Review of Economic Dynamics*, *18*(2), 406–433. https://doi.org/10.1016/j.red.2014.07.004.

Carrière-Swallow, Y., Deb, P., Furceri, D., Jimenez, D., & Ostry, J. D. (2023). Shipping costs and inflation. *Journal of International Money and Finance*, *130*, 102771. https://doi.org/10.1016/j.jimonfin.2022.102771.

Choi, S., Furceri, D., Loungani, P., Mishra, S., & Poplawski-Ribeiro, M. (2018). Oil prices and inflation dynamics: Evidence from advanced and developing economies. *Journal of International Money and Finance*, *82*, 71–96. https://doi.org/https://doi.org/10.1016/j.jimonfin.2017.12.004.

Eser, F., Karadi, P., Lane, P. R., Moretti, L., & Osbat, C. (2020). The Phillips curve at the ECB. *The Manchester School*, *88*, 50–85. https://doi.org/10.1111/manc.12339.

Firdaus, M., Satriani, R., Amaliah, S., Salam, F. A., & Fazri, M. (2019). Defisit Neraca Perdagangan: J-Curve, Perang Dagang dan Model Salter Corden. *Jurnal Ekonomi Indonesia*, *8*(2), 245–265. https://doi.org/10.52813/jei.v8i2.34.

Forbes, K., Hjortsoe, I., & Nenova, T. (2018). The shocks matter: Improving our estimates of exchange rate pass-through. *Journal of International Economics*, *114*, 255–275. https://doi.org/10.1016/j.jinteco.2018.07.005.

Forbes, K. J. (2019). Has Globalization Changed the Inflation Process? *BIS Working Papers*, *791*, 1–56. https://doi.org/http://mitsloan.mit.edu/shared/ods/documents/?DocumentID=4918.

Forbes, K. J., Hjortsoe, I., & Nenova, T. (2017). Shocks versus Structure: Explaining Differences in Exchange Rate Pass-Through across Countries and Time. *SSRN Electronic Journal*, *50*. https://doi.org/10.2139/ssrn.2999637.

Gilchrist, S., Schoenle, R., Sim, J., & Zakrajšek, E. (2017). Inflation Dynamics during the Financial Crisis. *American Economic Review*, *107*(3), 785–823. https://doi.org/10.1257/aer.20150248.

James, H. (2023). Inflation and globalisation: the Tawney Lecture 2022. *The Economic History Review*, *76*(2), 391–412. https://doi.org/10.1111/ehr.13174.

Jašová, M., Moessner, R., & Takáts, E. (2020). Domestic and global output gaps as inflation drivers: What does the Phillips curve tell? *Economic Modelling*, *87*, 238–253. https://doi.org/10.1016/j.econmod.2019.07.025.

Kabukçuoğlu, A., & Martínez-García, E. (2018). Inflation as a global phenomenon—Some implications for inflation modeling and forecasting. *Journal of Economic Dynamics and Control*, *87*, 46–73. https://doi.org/10.1016/j.jedc.2017.11.006.

Martínez-Ferrero, J., & García-Meca, E. (2020). Internal corporate governance strength as a mechanism for achieving sustainable development goals. *Sustainable Development*, *28*(5), 1189–1198. https://doi.org/10.1002/sd.2068.

Mohseni, M., & Jouzaryan, F. (2016). Examining the effects of inflation and unemployment on economic growth in Iran (1996-2012). *Procedia Economics and Finance*, *36*, 381–389. https://doi.org/10.1111/j.1468-0335.1958.tb00003.x.

Nakov, A., & Pescatori, A. (2010). Oil and the great moderation. *Economic Journal*, *120*(543), 131–156. https://doi.org/10.1111/j.1468-0297.2009.02302.x.

Rumate, V. A., & Engka, D. S. (2019). Pengaruh Tingkat Inflasi, Investasi, Pertumbuhan Ekonomi dan Tingkat Pengangguran Terhdap Tingkat Kemiskinan di Provinsi Sulawesi Utara. *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*, *18*(6). https://doi.org/10.35794/jpekd.16456.19.3.2017.

Setyanti, A. M., & Wahyudi, S. T. (2021). Foreign Direct Investment and Youth Employment Causality: Evidence From ASEAN-5 Countries. *Jurnal Economia*, *17*(2), 208–219. https://doi.org/10.21831/economia.v17i2.36447.

Siregar, S., & Ritonga, S. H. (2020). Hubungan Pemberian Asi Eksklusif Dengan Pertumbuhan Berat Badan Bayi 0-6 Bulan Di Wilayah Kerja Puskesmas Padangmatinggi Kota Padangsidimpuan Tahun 2018. *Jurnal Kesehatan Ilmiah Indonesia (Indonesian Health Scientific Journal)*, *5*(1), 35–43. https://doi.org/10.51933/health.v5i1.230.

Wardhono, A., Arisandi, D., & Nasir, M. A. (2018). Empirical study of scapegoat theory paradigm in the exchange rate variable in the ASEAN 5. *International Economic Journal*, *32*(1), 102–119. https://doi.org/10.1080/10168737.2018.1446998.

Wulandari, D., Utomo, S. H., Narmaditya, B. S., & Kamaludin, M. (2019). Nexus between inflation and unemployment: Evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, *6*(2), 269–275. https://doi.org/10.13106/jafeb.2019.vol6.no2.269.

Wulandari, S., & Bowo, P. A. (2019). Pengaruh Produksi, Konsumsi dan Harga Susu Sapi Nasional Terhadap Impor Susu Sapi. *Economic Education Analysis Journal*, *8*(3), 1130–1146. https://doi.org/10.15294/eeaj.v8i3.35717.

Xia, Y., Kong, Y., Ji, Q., & Zhang, D. (2019). Impacts of China-US trade conflicts on the energy sector. *China Economic Review*, *58*, 101360. https://doi.org/10.1016/j.chieco.2019.101360.

Zhang, C., & Zhou, Y. (2016). The Global Slack Hypothesis: New Evidence from China. *International Review of Economics and Finance*, *42*, 339–348. https://doi.org/10.1016/j.iref.2015.10.007.