THE INFLUENCE OF FISCAL POLICY ON ECONOMIC GROWTH IN THE ASEAN ECONOMIC COMMUNITY

Kosal Song

CamEd Business School, Phnom Penh, Cambodia

Siphat Lim ✉

CamEd Business School, Phnom Penh, Cambodia

lsiphat@cam-ed.com

Abstract

The evaluation of the impact of fiscal policy on economic growth within the ASEAN economic community was conducted through the utilization of a panel VAR model. This model integrated three macroeconomic indicators, namely gross domestic product, consumer price index, and government spending. The government controlled the policy variable of government spending. The estimated method of the model was the Generalized Method of Moments (GMM) with the mean-differencing method or Helmert procedure. The empirical results of this research indicated that both fiscal expansionary measures and an increase in the general price level would aid in promoting economic growth. Furthermore, this research has discovered that the price level was sticky. Over the forecasted period of ten years into the future, it was estimated that 7.60% of the variation in economic growth was caused by changes in the inflation rate, while 3.39% was attributed to variations in the growth rate of government spending.

Keywords: AEC, Fiscal policy, Economic growth, Panel VAR model, GMM

INTRODUCTION

Domestic output is one of several economic indicators utilized to gauge the standard of living of a given nation's populace. Governments worldwide have endeavored to implement various policies aimed at augmenting domestic income and enhancing the overall social welfare of their respective nations. Fiscal policy is widely regarded as a leading policy instrument that has consistently been employed to achieve sustainable economic growth and development. The Association of Southeast Asian Nations (ASEAN) is a political and economic union comprising ten member states in Southeast Asia, namely Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam. Established on August 8, 1967, the total land area of the ASEAN is 4,533,518 km2, with an estimated total population of 667,393,019. According to the International Monetary Fund (IMF) Report of 2022, the projected gross domestic product using purchasing power parity (GDP (PPP)) and GDP per capita are 9.731 trillion US Dollars and 14,441 US Dollars, respectively. The Asian Development Bank (ADB) Report of 2022 predicts a 5.1% economic growth rate for Southeast Asia in 2022. The ASEAN economies were integrated directly following the launch of the ASEAN Economic Community (AEC) in 2015, under three community pillars: the Political-Security Community, the Economic Community, and the Socio-Cultural Community (AEC, 2022).

The assessment of the effectiveness of fiscal policy on economic growth has been examined in individual countries within Southeast Asia. However, there is a lack of evaluation regarding the performance of this policy for the entire community. The primary objective of this research is to investigate the impact of fiscal policy on economic growth within the ASEAN economic community. In order to achieve this goal, a panel Vector Autoregressive (VAR) model is utilized, incorporating three macroeconomic indicators: real gross domestic product, consumer price index, and government spending. This model, known as Panel VAR, is employed to analyze panel data, which encompasses data across countries and time periods. The estimation of sample parameters for the model is conducted using the Generalized Method of Moment (GMM), while the analysis of the data is based on Forecast Error Variance Decomposition (FEVD) and Impulse Response Function (IRF).

LITERATURE REVIEW

A study was conducted in Vietnam using a macro-econometric model to examine the potential effectiveness of monetary and fiscal policy in preventing external shocks in a demand-determined economy in the short run. The research focused on the impact of increased prices of Vietnamese exported products on domestic output, considering Vietnam's status as an import-based economy. The findings revealed a negative effect on domestic output in such

cases. Additionally, the study demonstrated that fiscal policy outperformed monetary policy in promoting economic growth in Vietnam. It was also observed that the expansionary monetary policy or the devaluation of the Vietnamese Dong policy had a detrimental impact on the trade balance (Minh, 2008). A structural macroeconomic simulation model was utilized to assess the effectiveness of fiscal policy in Bangladesh, People's Republic of China, Indonesia, and the Philippines. Two types of simulation shocks were applied: impulse shocks, representing one-time shocks, and step shocks, representing shocks occurring over multiple periods during the simulation. The evaluation of fiscal policy performance in these four countries was based on the observed variations in output under two scenarios: with activated and deactivated automatic stabilizers. The results showed that fiscal policy effectively influenced the expenditure-side automatic stabilizer in China and the Philippines, but had limited impact in Bangladesh and Indonesia. On the tax-side automatic stabilizer, the policy worked effectively only in Indonesia (Ducanes et al., 2006).

According to the estimated results of the Structural Vector Autoregressive (SVAR) model, it is recommended that the Asian government consider implementing two types of policies, namely deficit-financed tax and deficit spending, to stimulate economic activity (Jha et al., 2010). In order to mitigate the impact of external shocks caused by the crisis on Thailand's economy, the implementation of monetary and fiscal policies was studied. The study examined two fiscal policy variables, namely fiscal spending and tax revenue, and two monetary policy variables, namely policy interest rate and the real effective exchange rate. The target variable used to assess the performance of each policy was output. All variables were incorporated into a reduced-form VAR model developed by Sim (1972 & 1980), and the estimated results of the model were controlled by the business sentiment index to capture the behavior of investor decision-making on consumption and investment.

The findings of the research indicate that during the Global Financial Crisis in 2008, monetary policy was more effective than fiscal policy in mitigating external shocks in Thailand (Bhanupong, 2010). The study utilized quarterly time series data, including GDP, government expenditures, monetary aggregate, the consumer price index, and the real effective exchange rate, and employed a VAR model to assess the efficacy of macroeconomic policies in Cambodia. The results revealed that fiscal policy demonstrated superior performance in explaining the fluctuations in economic activity within the country, as compared to monetary policy (Luyna and Ravin, 2011).

In order to examine the impact of the fiscal multiplier on the state of the economy in the G7 economies, excluding Italy, a threshold vector autoregression (VAR) analysis was conducted. The estimated results of the model revealed that fiscal stimulus had an effect on

output throughout the business cycle (Baum et al., 2012). To investigate how the four main economic indicators - GDP, money supply, interest rate, exchange rate, and inflation rate - explain aggregate output in Pakistan, a multiple regression model was employed using the least square method with monthly data from February 1995 to August 2010. The estimated results from the least square analysis indicated that all explanatory variables collectively accounted for domestic output (Mughal & Rahim, 2012). In the five ASEAN member states - Indonesia, Malaysia, the Philippines, Singapore, and Thailand - fiscal expansion had an insignificant impact on economic activity, as suggested by the SVAR model. Furthermore, the research findings revealed that government spending was the most effective means of implementing countercyclical policy (Tang et al., 2013). To assess the transmission mechanism of monetary policy in Sri Lanka, an empirical investigation was conducted using variance decomposition and impulse response function analysis of a SVAR model with two groups of variables: exogenous and endogenous variables. The study utilized monthly time series data from January 1978 to December 2011. The results highlighted the significant role of interest rates in explaining economic activity in the country (Vinayagathasan, 2013).

In Kenya, the analysis of a recursive VAR model revealed that fiscal stimulus has a significant positive impact on real economic growth, while monetary expansionary or contractionary measures had an insignificant influence on domestic output (Mutuku & Koech, 2014). Similarly, in Croatia, the effectiveness of macroeconomic policies on economic growth was evaluated using an SVAR model over the period between 2004 and 2012. It was found that an increase in government expenditure had a positive effect on economic growth, but it also led to an appreciation of the exchange rate. Monetary expansionary measures either stimulated real domestic output or caused a depreciation of the nominal exchange rate (Ćorić et al., 2015). A study conducted in Malaysia aimed to investigate the effect of government expenditure by sector on economic growth using the Ordinary Least Square (OLS) estimation method over a period of 45 years, from 1970 to 2014. The empirical analysis of this research showed that government expenditure on education, defense, healthcare, and operating expenditure had a limited influence on economic growth, while the expenditure on the housing sector and development played a more significant role (Hasnul, 2015). In Pakistan, an analysis was conducted to assess the short-run and long-run relationship between monetary aggregates, inflation rate, interest rate, and economic growth. The study used the ARDL approach to co-integration, as established by Pesaran and Shin (1999), over the period between 1973 and 2014. The results indicated that monetary contraction or expansion should be implemented carefully, as it had a significant effect on the exchange rate. Furthermore, the research findings

suggested that maintaining stability in the exchange rate could contribute to positive economic growth (Ahmad et al., 2016).

Fiscal expansion in Indonesia, particularly through investments in human resources development and infrastructure, had a positive impact on economic growth. This conclusion was drawn from a research study that utilized two sets of multiple regression analysis. The first set examined the effects of fiscal policy and trade openness on economic growth when government spending was financed by taxes, while the second set focused on the effects when government spending was financed by foreign debt. The study covered the period from 1990 to 2015 (Nursini, 2017). In a separate study, the SVAR model was employed to analyze the response of Brunei Darussalam's economy to oil price shocks. The study period spanned from 2003: Q1 to 2014: Q3. The analysis of the model considered two approaches: block exogeneity and long-run restrictions, with a specific focus on the movement of oil prices. The findings revealed that the variation in Brunei's domestic output was not significantly explained by oil price shocks, but rather by production shocks. As a result, the government could utilize monetary and fiscal policies to manage price levels and real exchange rate volatility, respectively (Koh, 2017). A Vector Error Correction Model (VECM) was utilized to analyze the impact of monetary policy on economic growth in Laos PDR using yearly data from 1989 to 2016. The Johansen co-integration test was employed to determine whether the variables being investigated, including real gross domestic product per capita, broad money, real exchange rate between Laos Kip and US Dollar, and the inflation rate, exhibited a long-term relationship. The test results indicated that all variables were co-integrated. In the long run, the GDP per capita of Laos was found to be negatively influenced by the other three variables in the system. The empirical findings of the short-term dynamic model of the error correction term revealed bidirectional causality relationships between monetary aggregate, real output per capita, and real exchange rate (Srithilat & Sun, 2017).

The present study aimed to assess the influence of monetary policy on economic growth in Nigeria through a multiple regression analysis. The dependent variable used was the natural logarithm of gross domestic product, while the independent variables included monetary policy rate, money supply, real exchange rate, lending interest rate, and investment. The study covered the period from 1986 to 2016. The empirical findings, obtained through ordinary least squares (OLS) estimation, indicated that the growth rate of Nigeria's domestic output was not significantly explained by two crucial macroeconomic variables, namely lending interest rate and monetary policy rate. Conversely, the exchange rate had a significant negative impact on the country's economic activity. Furthermore, the variation in domestic output was largely explained by monetary policy, accounting for 98% of the observed changes (Ufoeze, 2018). In a separate

empirical investigation conducted in Myanmar, the impact of fiscal policy on output growth was examined using annual time data spanning from 1979 to 2016. The data was analyzed through multiple regression analysis, and the model's sample parameters were estimated using the OLS method. The results revealed that Myanmar's output growth was statistically and significantly influenced by fiscal deficit (Oo, 2019).

The Autoregressive Distributed Lag (ARDL) approach was employed to examine the influence of fiscal and monetary policy on output growth in three ASEAN member nations, namely Malaysia, Singapore, and Thailand, using quarterly time series data spanning from the first quarter of 1980 to the first quarter of 2017. The long-term relationship between gross domestic product and two key factors, namely interest rate and government spending, was analyzed. The central bank controlled the interest rate through monetary policy, while the ministry of finance managed government spending through fiscal policy. To ensure the reliability of the estimated parameters, three estimation methods were utilized, namely Canocial Co-integration Regression (CCR), Dynamic Ordinary Least Square (DOLS), and Fully Modified Least Square (FMOLS). All three methods consistently indicated that government expenditure had a positive impact on economic growth in Thailand, but had a negative effect in the cases of Malaysia and Singapore. Furthermore, the empirical findings of this research revealed that interest rate had a negative impact on output growth in all three countries. Fiscal policy was found to be more effective than monetary policy in Thailand, whereas monetary policy outperformed fiscal policy in Malaysia and Singapore (Tan et al., 2020).

A non-linear panel threshold regression model, as developed by Hansen (1999) and utilizing bootstrapping to simulate the asymptotic distribution of threshold estimates, was employed in the analysis of five ASEAN countries, namely Indonesia, Malaysia, Philippines, Singapore, and Thailand, over the period spanning from 1995 to 2015. The research methodology employed in this study was similar to that conducted by Tong (1983). The primary objective of this research was to assess the effectiveness of macroeconomic policies, specifically monetary and fiscal policies, in stimulating economic growth during the Asian financial crisis in 1997. The fiscal policy variable examined was government spending, while the monetary policy variables included broad money and real interest rate. The empirical findings of this study revealed that money supply had a significant impact on inflation both before and after controlling for the crisis when measuring output growth. Consequently, this research concluded that the policies implemented in the five ASEAN countries were ineffective in stimulating economic growth during the crisis period, as evidenced by the substantial decline in growth (Ismail & Sek, 2020).

In order to analyze the perspectives on economic recovery in the five ASEAN member countries, namely Brunei Darussalam, Indonesia, Malaysia, the Philippines, and Singapore, the viewpoints of Smets and the New Triffin Dilemma were examined. The Smets perspective was assessed by analyzing the gross domestic product in relation to key variables such as inflation, exchange rate, non-performing loans, and interest rate. On the other hand, the New Triffin Dilemma's support for economic recovery was evaluated by considering the gross domestic product as a function of the exchange rate and foreign direct investment. The methodology employed in this study was based on the work of Caecilia Wahyu E.R in 2008 and Nugroho, Purnama, and Fauzia in 2018, utilizing the Pooled OLS estimated method. The findings of this research indicate that macroeconomic stability can be achieved according to the Smets perspective (Utami, 2021).

Three macroeconomic indicators, namely unemployment (Y1), investment (Y2), and economic growth (Y3), were designated as dependent variables in three distinct multiple regression functions. Each individual Y1 and Y2 was expressed as a function of tax revenues, government spending, interest rate on loans, and money supply. Furthermore, the analysis also examined the impact of Y1, Y2, and the four key variables on Y3. This model is commonly referred to as a structural equation model (SEM), which can be interpreted using the analysis of moment structures (AMOS). The primary objective of this research was to empirically investigate whether macroeconomic policies could contribute to the promotion of economic growth in Indonesia. The study period spanned from 2000 to 2019. The findings revealed that government expenditure and direct taxes had a positive explanatory effect on economic growth in Indonesia. Conversely, credit interest rates and money supply had a negative explanatory effect. Additionally, the indirect impact of taxes and government spending on economic growth, through unemployment and investment, exhibited a negative effect, while interest rates and the monetary aggregate demonstrated a positive effect (Syakur et al., 2022).

The assessment of fiscal policy efficiency has been conducted in each individual country of the ASEAN member states using the reduced-form VAR and SVAR models with time series data. Some research articles have also utilized panel data to investigate the potential impact of fiscal policy on economic growth in the ASEAN countries. The commonly employed models include the static model under Pooled OLS, Random Effect, and Fixed Effect models. However, these models do not account for the measurement of the variation in economic activity caused by other macroeconomic variables in the system, particularly the study of how aggregate outputs respond to shocks from each economic indicator. Therefore, a dynamic model with a system of equations using panel data, known as Panel VAR, is employed to assess the impact of fiscal policy on economic growth in ASEAN countries.

METHODOLOGY

The traditional VAR approach is a system of equations utilized with a vector of time series variables, wherein all variables in the system are endogenous. The inter-relationship between variables in a system utilizing the traditional VAR approach has been expanded with panel-data, known as the Panel VAR model, which was developed by Love and Zicchino (2006). This technique is being employed in the present research to investigate the effectiveness of fiscal and monetary policies on real economic growth in ASEAN countries. The general model of Panel VAR is presented as follows.

$$y_{it} = \Pi_0 + \Pi_1 y_{it-1} + f_i + d_{c,t} + \varepsilon_t \tag{1}$$

The vector y_t comprises three endogenous variables, namely real gross domestic product (GDP), consumer price index (CPI), and government spending (G). It is noteworthy that Myanmar has been excluded from the study due to data unavailability, despite the presence of ten ASEAN member states. Consequently, the research encompasses nine countries, namely Brunei, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam. As a result, the model incorporates nine cross-sectional data or individual heterogeneity, which is denoted by f_i.

The Forward Mean-Differencing Method, also known as the Helmert Procedure, is employed to eliminate the correlation between the variable f_i and the regressors resulting from lags of the regressand. The estimation method utilized is the Generalized Method of Moments (GMM), which bears numerical similarity to the equation-by-equation Two-Stages Least Square (2SLS) method (Arellano and Bover, 1995). To account for country-specific effects, time dummies are incorporated. The research period spans from 2012 to 2022, with a total of $n \times t$ observations (where n and t represent the number of countries and years, respectively), amounting to 9×11 or 99 observations. The macroeconomic data for each country is sourced from the Asian Development Bank database. The forecast error variance decomposition (FEVD) and impulse response function (IRF) are derived from the estimated GMM parameters. The confidence intervals of the standard error of the IRF are generated through Monte Carlo Simulation.

RESULTS

This section is divided into three parts: descriptive statistics, panel unit root test, and GMM estimated results of the Panel VAR model. The study focuses on the ten ASEAN member states, with the exception of Myanmar, which was excluded due to a lack of available data. The study period spans from 2012 to 2022, encompassing 11 years and 9 countries, resulting in a

balanced panel data approach. The total sample size consists of 99 observations. Table 1 presents the descriptive statistics, including the mean, standard deviation, 25th percentile, 50th percentile, and 75th percentile.

Table 1. Descriptive Statistics

Variable	Mean	Standard Deviation	25th Percentile	50th Percentile	75th Percentile
DLNGDP	4.902	9.123	2.933	4.897	6.669
DLNCPI	1.500	4.770	0.437	2.012	3.268
DLNG	7.117	10.446	1.743	5.845	10.739

In order to ascertain whether the panels demonstrate a unit root or are stationary, the Levin-Lin-Chu (LLC) unit root test is employed. The null hypothesis postulates that the panels possess a unit root, whereas the alternative hypothesis proposes that the panels are stationary. Based on the results presented in Table 2, it is observed that when the model does not incorporate a time trend and when it does incorporate a time trend, both DLNGDP and DLNCPI exhibit a unit root, as their p-values surpass 5 percent. Conversely, the null hypothesis for DLNG is rejected at a significance level of 1 percent.

Table 2. Levin-Lin-Chu Unit-Root Test

	Time trend: Not included			Time trend: Included		
	Unadjusted	Adjusted		Unadjusted	Adjusted	
Variable	*t*-statistic	*t*-statistic	*p*-value	*t*-statistic	*t*-statistic	*p*-value
DLNGDP	-6.0868	10.9409	1.0000	-9.9789	12.5517	1.0000
DLNCPI	-3.9313	2.4175	0.9922	-3.8596	0.6933	0.7559
DLNG	-11.3630	-8.9700	0.0000	-10.3278	-6.2680	0.0000

The forward-mean differencing or Helmert procedure has been utilized to eliminate the correlation between the country-specific effect and dependent variables caused by the lags of dependent variables. The estimated outcomes, which demonstrate the interdependence among all variables in the system using the GMM method, are presented in Table 3.

In order to preserve the degree of freedom, the model has been estimated using only one lag length. The total number of observations remains at 98. The system of equations consists of three endogenous variables, with the variables ordered as DLNGDP, DLNCPI, and DLNG. The Ministry of Finance controls one policy variable, DLNG. The estimated method used

for the model is the Generalized Method of Moment (GMM), which is similar to the equation-by-equation Two-Stages Least Square (2SLS) method developed by Arellano and Bover. To prevent correlation between each country-specific effect and the regressors caused by lags of the regressand, the forward mean-differencing method, also known as the Helmer procedure, has been employed. The estimated results of the model can be found in Table 3.

Table 3. GMM VAR Estimated Result

Dependent variable: $DLNGDP_t$

Variable	Coefficient	Standard Error	t-statistic
$DLNGDP_{t-1}$	0.0745	0.0500	1.4885
$DLNCPI_{t-1}$	0.1976**	0.0925	2.1377
$DLNG_{t-1}$	0.0685**	0.0311	2.2022

N observation	98
N Countries	9

Three variable VAR model is estimated by GMM, country-time and fixed effects are removed prior to estimation. Heteroskedasticity adjusted t-statistics are also presented. ** indicates significance at 5% level.

The lack of statistical significance in the economic growth rate of ASEAN cannot be accounted for by its own lag at a 5% level, as demonstrated by the t-value of 1.4885, which is lower than the critical t-value of 1.98. Conversely, the inflation rate, DLNCPI, in the previous period displays a statistically significant positive correlation with economic growth at a 5% level, as evidenced by its t-value of 2.1377, which surpasses the critical t-value of 1.98. It is noteworthy that the growth rate of government spending is anticipated to stimulate economic growth, given that the estimated parameter is positive and significant at a 5% level, also at a t-value of 2.1377.
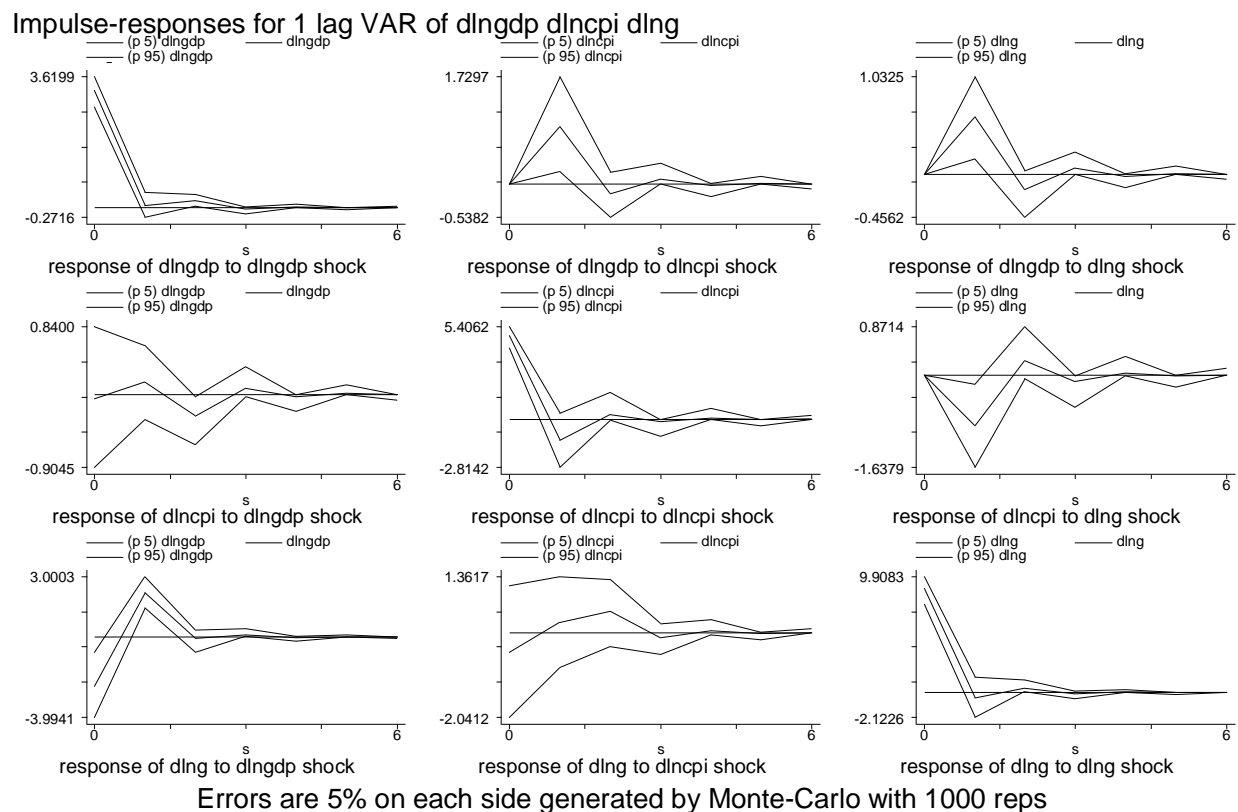
Table 4. Forecast Error Variance Decomposition

Variable	Period	DLNGDP	DLNCPI	DLNG
DLNGDP	10	0.88999319	0.07601749	0.03398932
DLNCPI	10	0.00397456	0.96249273	0.03353271
DLNG	10	0.12016019	0.00627977	0.87356004

The determination of the fluctuation of a singular variable due to the fluctuation of other variables within the VAR model system can be ascertained through the estimation of the

forecast error variance decomposition, commonly known as FEVD. The present study has generated the projected future fluctuation of a particular variable for the ensuing 10 periods, as illustrated in Table 4. In the forthcoming period, the gross domestic product experiences a variation of 7.60%, while the consumer price index and government spending exhibit variations of 3.39% and 88.99% respectively. The latter can be primarily attributed to its own variation. The inflation rate, on the other hand, is influenced by its own variation to a significant extent, accounting for 96.24% of the changes observed. This can be attributed to the sticky nature of prices in the ASEAN countries. Furthermore, economic growth contributes to a variation of 0.3974% and the growth rate of government spending contributes to a variation of 3.35% in the inflation rate. Additionally, the growth rate of government spending is primarily influenced by its own variation, accounting for 87.35% of the changes observed. This variation is further influenced by a 12.01% variation in economic growth and a 0.62% variation in the inflation rate.

Figure 1. Impulse Response Function (IRF) for 1 Lag VAR

Impulse-responses for 1 lag VAR of dlngdp dlncpi dlng

Errors are 5% on each side generated by Monte-Carlo with 1000 reps

During the initial two periods, the impact of the consumer price index shock on gross domestic product is observed to be positive, albeit with a slight decrease at the onset of the third period. These responses remain within the 95 percent confidence interval, encompassing both

Page 47

the lower and upper bounds. The effect of government spending shocks on GDP displays a positive trend in the first two periods, followed by a decline from the third period onwards, eventually stabilizing around the mean in the fourth quarter. Furthermore, the relationship between the inflation rate and the growth rate of the economy and government spending exhibits cyclical patterns. The response of government spending to a GDP shock is positive in the initial two periods, but gradually diminishes from the third to the fourth period, eventually ceasing. Interestingly, the response of government spending to a consumer price index shock is positive from the first to the fourth period, with a decline occurring between the fourth and fifth period, and ultimately ceasing from the fifth period onwards.

CONCLUSION

Fiscal policy plays a pivotal role in facilitating economic growth and enhancing the level of development within a nation or community, such as the association of southeast Asian nations. The Ministry of Finance assumes responsibility for overseeing government expenditure and tax revenue through the implementation of fiscal policy. The government spending indicator is regarded as a policy variable. The aim of this research is to evaluate the efficacy of fiscal policy in relation to economic growth. To comprehensively examine the interplay between the three primary macroeconomic variables, namely gross domestic product, consumer price index, and government spending, they are integrated into the panel VAR model.

The empirical findings indicate that, within the dynamic model of Panel VAR, the one-lag of government spending and consumer price index exhibit statistically significant positive effects on the explanation of gross domestic product at a 5% level of significance. This outcome suggests that fiscal expansionary measures could potentially stimulate economic growth in the ASEAN member states. Furthermore, the results suggest that higher general price levels are associated with greater economic growth. Over the next ten periods, it is estimated that 7.60% of the variation in economic growth will be caused by changes in the inflation rate, while 3.39% will be attributed to variations in the growth rate of government spending.

The VAR model possesses the advantage of being applicable in the analysis of the interrelationship among all endogenous variables within the system, utilizing the impulse response function and forecast error variance decomposition. However, it is important to note that when considering the response of a variable to the shock of another variable within the system, the model only accounts for the shock from the previous period, rather than accounting for the shock occurring simultaneously.

REFERENCES

Ahmad, D., Afzal, M., & Ghani, U. (2016). Impact of monetary policy on economic growth empirical evidence of Pakistan. International Journal of Applied, 4(6), 1–9.

Arellano, M. , and Bover, O. 1995. Another look at the instrumental variable estimation of error-components models. Journal of Econometrics 68: 29–51.

Baum, M. A., Poplawski-Ribeiro, M. M., & Weber, A. (2012). Fiscal multipliers and the state of the economy (No. 12–286). Washington, DC: International Monetary Fund.

Bhanupong, N. (2010). Effectiveness of Thailand's Macroeconomic Policy Response to the Global Financial Crisis. ASEAN Economic Bulletin, 121-135.

Ćorić, T., Šimović, H., & Deskar-Škrbić, M. (2015). Monetary and fiscal policy mix in a small open economy: The case of Croatia. Economic Research [Ekonomska istraživanja], 28(1), 407–421.

C. W. ER, "Ordinary Least Square vs Fixed Effect Regression Model: Studi Empirik Determinan Kebijakan Dividen pada Perusahaan-Perusahaan yang Terdaftar di Bursa Efek Indonesia (BEI)," Sinergi., vol. 10, no. 2, pp 157–169, 2008, https://doi.org/10.20885/sinergi.vol10.iss2.art6.

Ducanes, G., Cagas, M. A., Quising, P., & Razzaque, M. A. (2006). Macroeconomic effects of fiscal policies: empirical eveidence from Bangladesh, People's Republic of China, Indonesia, and Philippines. ERD Economics and Research Department .

Gul, H., Mughal, K., & Rahim, S. (2012). Linkage between monetary instruments and economic growth. Universal Journal of Management and Social Sciences, 2(5), 69–76.

Hasnul, A. G. (2015). The effects of government expenditure on economic growth: The case of Malaysia (Munich Personal RePEc Archive Paper 71254). Munich, Germany: University Library of Munich.

Jha, S., Mallick, S., Park, D., & Quising, P. (2010). Effectiveness of countercyclical fiscal policy: Time-series evidence from developing Asia (Asian Development Bank Economics Working Paper Series, 211). Retrieved from https://www.adb.org/sites/default/files/publication/28268/economics-wp 211.pdf

Koh, W. C. 2016. "Sources of macroeconomic fluctuations in Brunei Darussalam." The Singapore Economic Review. doi: 10.1142/S0217590816500065

Love, I., and Zicchino, L. 2006. Financial development and dynamic investment behavior: Evidence from panel VAR. Quarterly Review of Economics and Finance 46: 190–210.

Luyna, U. and Ravin, C. (2011). "The effectiveness of macroeconomic policies in Cambodia: An empirical investigation", Faculty of Economics, Thammasat University.

Minh, L. A. (2008). Macroeconomic Policy Analysis of Vietnam: A Macro-Econometric Model Approach. International Development Studies.

M.H. Pesaran and Y. Shin, An Autoregressive Distributed Lag Modeling Approach to Cointegration Analysis, In: Strom, S., Holly, A., Diamond, P. (Eds.), Centennial Volume of Rangar Frisch, Cambridge University Press, Cambridge, (1999).

Mutuku, C., & Koech, E. (2014). Monetary and fiscal policy shocks and economic growth in Kenya: VAR econometric approach. Journal of World Economic Research, 3(6), 95–108.

Nugroho, A.A., Purnama, M. Y. I. and Fauzia, L. R., (2018). "Monetary Policy and the Housing Market in Indonesia: Evidence from Selected Regions," Jurnal Keuangan dan Perbankan., vol. 22, no. 4, 2018, https://doi.org/10.26905/jkdp.v22i4.2515.

Nursini, N. (2017). Effect of fiscal policy and trade openness on economic growth in Indonesia: 1990–2015. International Journal of Economics and Financial Issues, 7(1), 358–364.

Oo, T. L. (2019). The Effect of Fiscal Policy on Economic Growth in Myanmar. East Asian Community Review.

Sims, C. A. (1972), Money, Income, and Causality, American Economic Review 62 (4), 540–552.

Sims, C. A. (1980), Macroeconomics and Reality, Econometrica 48, 1–48.

Srithilat, K., & Sun, G. (2017). The Impact of Monetary Policy on Economic Development: Evidence from Lao PDR. Global Journal of Human Social Science.

Syakur, R. M., Reviane, I. T., & Paddu, A. H. (2022). The Influence of Fiscal and Monetary Policy on Indonesia's Economic Growth. Economics & Working Capital, 208-219.

Tan, C.-T., Mohamed, A., Habibullah, M. S., & Chin, L. (2020). The Impacts of Monetary and Fiscal Policies on Economic Growth in Malaysia, Singapore and Thailand. South Asian Journal of Macroeconomics and Public Finance, 114-130.

Tang, H. C., Liu, P., & Cheung, E. C. (2013). Changing impact of fiscal policy on selected ASEAN countries. Journal of Asian Economics, 24, 103–116.

Tong, H 1983, 'Threshold models in non-linear time series analysis', 1st edition, Springer Publisher, New York.

Ufoeze, L. O. (2018). Effect of monetary policy on economic growth in Nigeria: An empirical investigation. Annals of Spiru Haret University, Economic Series, 9(1), 123–140.

Vinayagathasan, T. (2013). Monetary policy and the real economy: A Structural VAR Approach for Sri Lanka. National Graduate Institute for Policy Studies, 13(13), 1–31.

Utami, E. F. (2021). The Role of Monetary and Macroprudential Policy Instruments on Macroeconomic Stability in Southeast Asian Countries. *Advances in Economics, Business and Management Research*.