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The Role of Fiscal Policy on Economic Resilience: The ASEAN – 5 Countries Cases

Muhammad Zakir Abdullah, Sallahuddin Hassan
School of Economics, Finance and Banking, Northern University of Malaysia, Sintok, Kedah

***Corresponding author**
Sallahuddin Hassan

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Abstract: The objective of this paper is to investigate the role of fiscal policy on economic resilience in the ASEAN – 5 countries. Fiscal policy plays important role as shock - absorber to promote economic resilience by bringing back aggregate output to potential output in the business cycle during economic shock. In addition, this study examines the effect of fiscal policy in the long – run perspective. This is because the persistent external shocks are likely to prolong economic downturn. Thus, fiscal stabilizing should be taking place in the long run. By using panel data 1981 – 2015, this study utilizes Fully Modified Ordinary Least Square (FMOLS) and reveals that automatic stabilizers and fiscal discretionary tend to decrease output fluctuation in the business cycle to potential output. The result renders evidences that fiscal tools play as shock absorber that promote the resiliency of economy in the ASEAN – 5 countries.
Keywords: Economic Resilience, Automatic Stabilizers, Discretionary Fiscal.

INTRODUCTION

The ASEAN – 5 countries namely Malaysia, Indonesia, Singapore, Thailand and the Philippines underwent several economic shocks since last three decades. Such shocks are the 19971-73 World Oil Crisis, Commodity Crisis in early of 1980s, Asian Economic Crisis (AFC) in 1997 and Global Financial Crisis (GFC) in 2008. These shocks have caused economic growth in the ASEAN – 5 countries to be sharply declined and these countries took a particular duration to recover from the crisis.

Actually, these shocks could deviate the ASEAN -5 economies from the equilibrium path. To be resilient, the economy must return to equilibrium or steady state and eventually, leads to achieve economic stability. According to Debrun and Kapoor [1] and Fatàs and Mihov [2], the economic deviation from equilibrium due to shock can be manifested by output fluctuation from potential output in the business cycle. In this regard, Figure 1 exhibits output fluctuation trend of the ASEAN – 5 countries. Output fluctuation is commonly measured by output gap to potential output (%) where potential output is represented by the zero value at y – axis. Negative output gap to potential output indicates that aggregate output is below from potential output in the business cycle where the country experiences economic recession.

As shown in Figure 1, AFC (1998 – 1999) has caused aggregate output in the ASEAN – 5 countries to be deviated below than potential output as these countries recorded negative output gap to potential output during the crisis. These countries did not quickly return to potential output after AFC (2000 – 2006). It was caused by global uncertainty factors such as terrorist attack on 11th September 2001, respiratory syndrome (SARS), war in Afghanistan and Iraq that weakened investment climate, discouraged private investment to the countries and prolonged aggregate output below the potential output [3, 4].

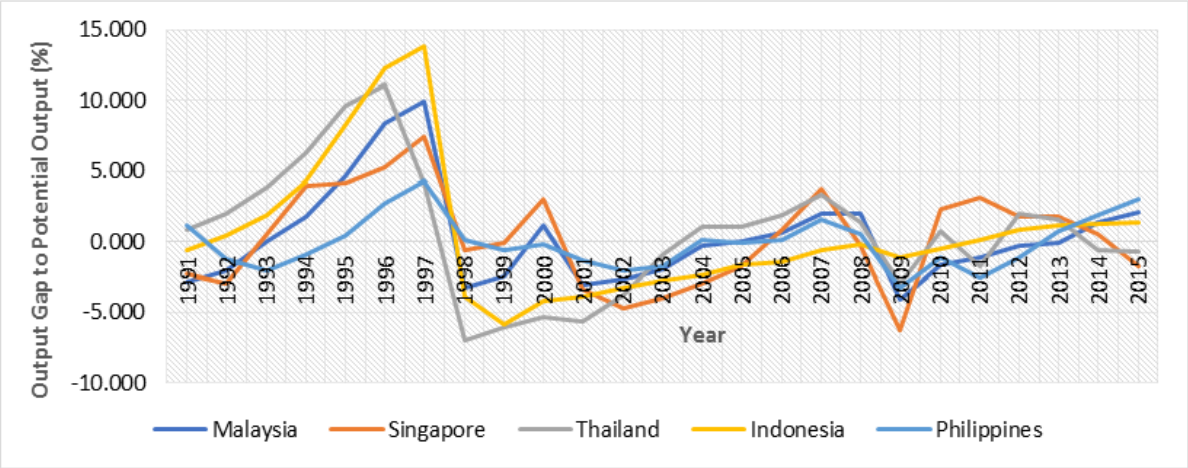

Fig-1: ***Output Gap to Potential Output (%) in the ASEAN – 5 countries, 1991-2015***
Note: The cyclical trends are estimated by Hodrick-Prescott (HP) filter procedure.

During GFC (2008 – 2009), the ASEAN – 5 countries underwent a negative output gap to potential output. The countries managed to recover from adverse shock by immediately return to potential output. Hence, they became resilient. In the post – GFC period (2011 – 2015), the increasingly global economy risks such as the economic slowdown in major industrial countries and the falling of commodity price have contributed to the sluggishness of export growth and investment level, decreased aggregate below than potential output and undermined the resiliency of ASEAN – 5 countries [5].

Fiscal policy plays an important role as shock – absorber that causes an economy to be resilient at potential output. From Keynesian view of point, a government utilizes its expenditure or taxation to absorb adverse shocks by influencing AD components such as consumption, investment and net export during shock and brings aggregate output to potential output (pre – existing economic path). Thus, fiscal policy leads the economy become resilient [6, 7].

It is important for a country to a have surplus or balance in fiscal position. This healthy fiscal position would ease the adjustment of government expenditure and taxation easily in facing economy shock. In this regard, fiscal balance to GDP ratio reflects the ability of policymaker to deliver pro – active government spending and taxation to absorb economic shock [6,8,9]. Figure 2 exhibits the fiscal balance of the ASEAN – 5 countries for last the two decades.

After GFC (2010 – 2014), Figure 2 shows that the trend of fiscal deficit to GDP ratios in the ASEAN – 5 countries have been increased and became persistent, except in Singapore. These fiscal deficits to GDP ratios would reduce the ability of the ASEAN – 5 countries in delivering fiscal expansionary to absorb persistent external shocks after GFC which in turn, prevent the countries to be resilient. Therefore, this scenario can undermine the role of fiscal policy as shock absorber. In this regard, the role of fiscal policy as shock – absorber in developing countries (also reflected ASEAN – 5 countries) is inconclusive. It found that fiscal policy can play shock – absorber role where it dampens output fluctuation to potential output in developing countries by Calderón and Schmidt – Hebbel [10], Bogdanov [11], Debrun and Kapoor [1] and International Monetary Fund (IMF) [12]. In contrast, Hakura [13], Andersen and Hobøll [14] and Frankel, Vegh and Vuletin [15] found that fiscal policy plays shock – inducer role that exacerbates output fluctuation from potential output.

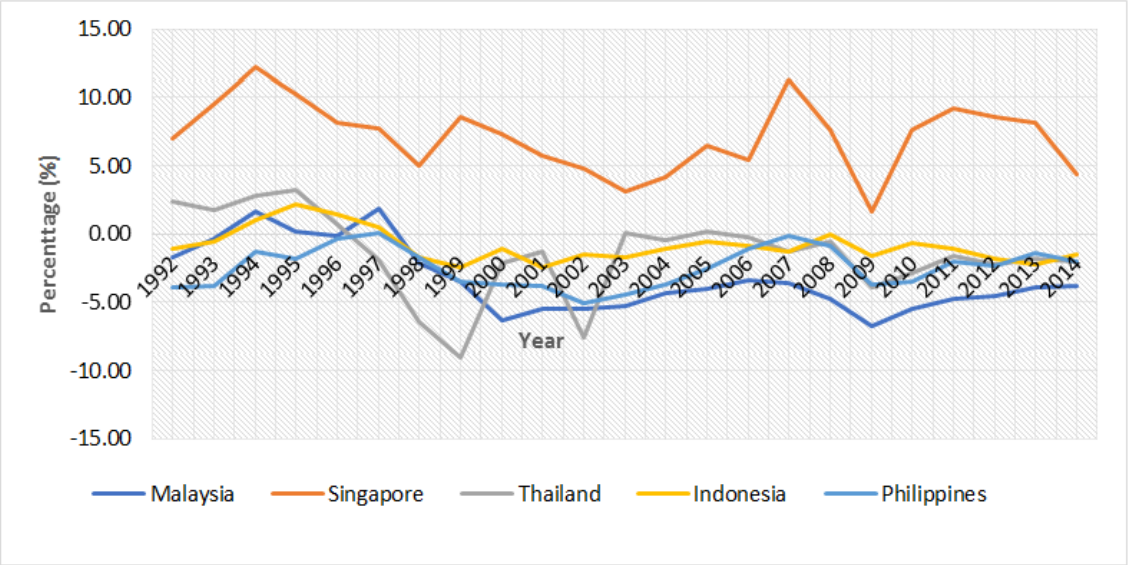

Fig-2: ***Fiscal Balance to GDP in ASEAN-5 Countries, 1992-2014***
Source: ADB, 2015

LITERATURES REVIEW

In economic field, engineering economic resilience (EER) is defined as the stability of an economy to be around equilibrium and steady state. In this regard, shocks may deviate an economy from its trajectory. However, the economy will be adjusted back to its underlying trajectory via policy setting formulated by local institutions [16, 17]. Based on EER definition, economic resilience can be viewed into economic stability perspective in the business cycle theory. The phenomena of economic instability or economic deviation from equilibrium due to shock can be explained by output fluctuation around potential output in business cycle. Output fluctuations in business cycle are typically caused by aggregate demand (AD) shocks that temporarily move an economy away from potential output level. To this point, shocks in the components of AD might deviate and amplify aggregate output from potential output.

Fiscal policy plays important role to absorb output fluctuation in business cycle during economic shock which lead to achieve economic resilience. In other words, fiscal policy is utilized to dampen output fluctuation which denotes the economy is returning back to potential output hence, becomes resilient from shocks [18, 19]. To dampen output fluctuation during economic recession, government will increase its spending and cut tax rates to stimulate private investment and consumption and aggregate output which in turn, bring back aggregate output to potential output. Meanwhile, during economic booming, government will decrease its spending and rise tax rates to reduce private investment and consumption which in turn, drive aggregate output back to potential output. The fiscal response to output is known as shock absorber or countercycle response [20]. In contrast, procycle response is considered as shock – inducer. It refers to fiscal policy behaviour that amplifies output fluctuation in business cycle [1, 11, 21].

There are two types fiscal tools that dampen output fluctuation, which are discretionary fiscal policy and automatic stabilizer [2]. Discretionary fiscal policy is formulated based on government's decision that subjected to lags of information, decision and implementation [22]. Fiscal stimulus is an example of fiscal discretionary fiscal tool [23, 24, 25]. On other hand, automatic stabilizer is a fiscal tool that mitigate aggregate output fluctuations without any explicit government action. Automatic stabilizers tool includes transfer and social security spending (sickness and invalidity pension, maternity allowances, unemployment benefits, children's and family allowance, unemployment benefit, retirement and survivor's pension and, death benefits). For instances, the increasing of transfer and social security provides additional disposable income of household and firms that makes consumption and investment more stable and smooths their income during economic recession [26]. At macroeconomic level, automatic stabilizer is measured by the size of government. This is because the size of government plays same role as income tax, transfers and social security which aims to reduce the risks of adverse shocks. A risky economy condition would impose a larger government size in order to provide enough insurance against the shock by increasing government expenditure or reducing tax rate in economy thereby, smoothing AD and aggregate output in the business cycle [27].

The effect of fiscal policy on output fluctuation has been vastly explored by previous studies where most the studies tend to focus on OECD and developed countries. For instances, Galí [28] was the earliest study that examine the impact of automatic

stabilizer on output fluctuation in OECD countries. The finding of this study found that automatic stabilizer is countercycle response that can dampen output fluctuation in business cycle. Subsequently, the studies have been extended in many directions. For instances, Fatás and Mihov [29] and Andrés, Doménech and Fatás [30] have addressed the endogeneity problem in examining the impact of fiscal policy on economic resilience found automatic stabilizer is countercycle response in OECD countries. Meanwhile, Debrun Pisani-Ferry and Sapir [31] and McKay and Ries [26] extended the scope of the study by employing various automatic stabilizer measurement such government expenditure to GDP ratio, government expenditure on social security and transfers, direct tax and indirect tax in OECD countries and found that automatic stabilizers are countercycle response.

For discretionary fiscal tool, Fatás and Mihov [2] incorporated the optimal macroeconomic policy model to investigate cyclical behaviour between automatic stabilizer and discretionary fiscal in OECD. Their finding revealed that the countercycle response of automatic stabilizer tool larger than discretionary tool. Similarly, Debrun and Kapoor [1] revisited the link between fiscal tools and output fluctuation by including advanced and developing countries. This study found that discretionary fiscal is procycle in developing countries and acycle (neither procycle or countercycle) in advanced countries. Automatic stabilizer, on other hand, is found to be countercycle for advanced and developing countries. In the study of Bogdanov [11], discretionary policy was found to be insignificant to reduce output fluctuation for advanced and developing countries but, automatic stabilizers tool is countercycle response. In addition, Badinger [32] found that the potential stabilizing of discretionary fiscal on output fluctuation in OECD countries which can be translated as countercycle response of discretionary fiscal.

In this review, most of the studies tend to rely on the Keynesian assumption where the impact of fiscal impact on output fluctuation is only exist in the short run. This assumption arising from the fact the rigidity of price and wage delay the adjustment output fluctuation (due to fiscal policy and monetary policy settings) toward potential output in the short run. In the long run, the economy has sufficient time to adjust price and wage levels which causes aggregate output to stay at potential output in long – run. However, Easterly, Islam and Stiglitz [33], Dutt and Ros [34], Park [35] and Hall [36, 37] argued that prolonged output fluctuation from potential output is likely to persist in the long run due to the inadequate of AD in economy. Thus, the impact of fiscal policy on output fluctuation should be also examined in the long run perspective. Yet, there is still a lack of the empirical studies that explores the impact of fiscal stabilization on output fluctuation in the long run perspective.

METHODOLOGY

This study utilizes secondary panel analysis in order to examine the effect of fiscal policy on economic resilience. The sample of the study includes the ASEAN – 5 countries namely, Malaysia, Singapore, Thailand, the Philippines and Indonesia and the panel data covers for 1981 – 2014 period. In this study, output gap that reflects output fluctuation in the business cycle serves as economic resilience measurement. This is because output gap implies that to which extent aggregate output deviates from its long run equilibrium path. In other word, output gap reflects output fluctuation in business cycle. GDP gap can be calculated by using Equation [1]:

$$GAP_{it} = GDP_{it} - GDP_{it}^{*} \quad \ldots\ldots\ldots\ldots \quad [1]$$

Where;

GDP_{it} = gross domestic product
GDP_{it}^{*} = potential gross domestic product.

Based on Equation [1], potential output is unobserved. Hodrick – Prescott (HP) Filter method is used to estimate potential output. In this study, potential GDP ratio is obtained by using HP filter with smoothing parameter is 100. The output gap has been used to measure output fluctuation by Kaminsky *et al*. [20], Alesina and Tabelline [38], Staehr [39], Aghion and Marinescu [40], Andersen and Hobøll [14] and Tagkalakis [41].

Automatic stabilizers tool is measured by the size of government. This measurement has been proposed by Galí [28] that reflects to which extent government opt to increase its spending on economy in order to insure the economy from adverse shock. In this respect, government size is commonly measured by government expenditure to GDP ratio. This paper hypothesized that government expenditure to GDP is negatively associates with output gap. It denotes that government size can dampen output fluctuation.

Cyclical Adjusted balance (CAB) serves as discretionary fiscal tool measurement. CAB indicates the fiscal budget position when aggregate output at output potential. This measurement reflects the part of fiscal policy that is not determined by cyclical changes (at least in short-run) due its lags in implementation which is corresponding with the definition of discretionary fiscal. This measurement of CAB in this paper is based on Debrun and Kapoor [1]. This study hypothesizes that CAB is negatively associated with output gap. It denotes that CAB can dampen output fluctuation which lead the economy to achieve economic resilience.

In order to examine the effect of fiscal policy on economic resilience, the model of study is constructed by based on Galí [28], Debrun *et al*. [31], Debrun and Kapoor [1], Fatima and Uma [42], Fatàs and Mihov [2] and Eller, Fidrmuc and Fungáčová [43]. The model of automatic stabilizer and discretionary fiscal tools are written as Equation [2] and Equation [3], respectively.

$$LGAP_{it} = \gamma_i + \emptyset_i t + \beta_1 LGSZ_{it} + \beta_2 LINT_{it} + \beta_3 LCRDT_{it} + \beta_4 LOPN_{it} + \varepsilon_{it} \quad \ldots\ldots\ldots\ldots [2]$$

$$LGAP_{it} = \gamma_i + \emptyset_i t + \beta_1 CAB_{it} + \beta_2 LINT_{it} + \beta_3 LCRDT_{it} + \beta_4 LOPN_{it} + \varepsilon_{it} \quad \ldots\ldots\ldots\ldots [3]$$

where $i = 1, 2 \ldots N$ and $t = 1, 2 \ldots T$ are country and time suffixes, respectively. Meanwhile, γ_i is individual country intercept, $LGAP_{it}$ is the log of (Gross Domestic Product) GDP gap to potential GDP ratio, t is time trend, $LGSZ_{it}$ is the log of government expenditure to GDP ratio, CAB_{it} is cyclical adjusted balance (%), $LOPN_{it}$ is economic openness, $LINT_{it}$ is the log of lending rate (%) and $LCRDT_{it}$ is the log of total domestic credit to GDP ratio.

THE DISCUSSION OF RESULTS

Panel unit root tests are executed as preliminary test to estimate FMOLS. The results of unit root tests are shown in Table-1.

Table-1: The Result of LLC and IPS Panel Unit Root Test

Test	Variable	Level		First Difference	
		Constant	Constant + intercept	Constant	Constant + intercept
LLC	*LGAP*	-0.216[2]	0.754[2]	-8.079[1]*	-6.801[1]*
	LGSZ	1.426[4]	0.057[4]	-11.103[1]*	-9.987[1]*
	LCAB	0.792[4]	1.631[4]	-6.509[1]*	-3.582[1]*
	LOPN	-0.378[2]	-0.209[2]	-3.016[1]*	-2.689[2]*
	LCRDT	-1.069[3]	-0.403[7]	-5.030[2]*	-4.778[2]*
	LINT	-0.092[2]	-1.160[3]	-9.004[1]*	-5.716[4]*
IPS	*LGAP*	-0.941[10]	-0.3599[10]	-9.025[1]*	-7.828[1]*
	LGSZ	-1.219[1]	-0.977[1]	-10.976[1]*	-10.294[1]*
	LCAB	-0.977[11]	-1.149[6]	-12.255[1]*	-7.385[1]*
	LOPN	0.7915[1]	0.243[7]	-9.381[1]*	-7.018[1]*
	LCRDT	-0.750[3]	-2.692[7]	-5.698[2]*	-4.399[1]*
	LINT	1.570[4]	-0.762[4]	-8.259[1]*	-6.597[4]*

Note: a) * indicates rejection of the null hypothesis at 5 percent significant level
b) number in bracket represents the number of lag included

Based on Table-1, the result of LLC and IPS unit root tests show that all series are non – stationary at level for both constant with no time trend and constant with time trend. These results verify that all variables in automatic stabilizers model and discretionary fiscal model are integrated of order one, I(1) where all series might be cointegrated in the long run. Subsequently, the unit tests are followed by cointegration test based on Pedroni [44] and Kao [45] which are aim for verifying the long run cointegration. The result of panel cointegration for automatic stabilizer model and model of discretionary fiscal model are shown in Table-2.

The result of Pedroni cointegration in Table 2 reveales that four out of seven Pedroni cointegration statistics are statistically significant at five percent and 10 percent in both automatic stabilizers model and fiscal discretionary model as the null hypothesis of no cointegration is rejected. Thus, these results conclude that all or most variables in automatic stabilizer model and discretionary fiscal model are cointegrated. Similarly, Kao cointegration test implies that all variables in automatic stabilizer model and discretionary fiscal model are cointegrated as the null hypothesis is rejected. The existence of cointegration among the variables allow the estimation of automatic stabilizer and discretionary models which are presented in Table-3.

Table 2: The Result of Pedroni and Kao Cointegration Test

Pedroni Cointegration Test	**Automatic Stabilizer**		**Discretionary Fiscal**	
	Statistic	**Prob.**	**Statistic**	**Prob.**
Panel υ - statistics	-0.298	0.61	0.014	0.49
Panel ρ – statistics	0.324	0.62	-0.250	0.40
Panel *t* – statistics	-2.923	0.00*	-2.497	0.00*
Panel ADF – statistics	-2.364	0.00*	-1.186	0.00*
Group ρ – statistics	1.110	0.86	0.877	0.80
Group *t* – statistics	-3.177	0.00*	-1.964	0.02*
Group ADF – statistics	-3.833	0.00*	-1.383	0.08**
Kao Cointegration Test	**Automatic Stabilizer**		**Discretionary Fiscal**	
	Statistic	**Prob.**	**Statistic**	**Prob.**
ADF	-2.945	0.00*	-3.884	0.00*

Note: * and ** indicate rejection of the null hypothesis at 5 and 10 percent significant level

Panel group result of automatic stabilizer model in Table 3 reveals that the estimated coefficient of *LGSZ* is -0.53 and significant at 10 percent significance level. This result can be interpreted as one percent increases in government expenditure to GDP ratio causes the decreasing of *LGAP* by 0.53 percent in long run. This result supports the evidence of countercycle response of automatic stabilizers which this response can dampen output fluctuation to potential output. The countercycle response is consistent with the findings of Calderón and Schmidt – Hebbel [10], Debrun and Kapoor [1], Bogdanov [11] and IMF [12] in developing countries and Fatás and Mihov [29], Debrun *et al*., [31] and, McKay and Ries [26] in OECD countries. For individual country perspective, Table 3 reveals that the estimated automatic stabilizer coefficients of Malaysia, Singapore, Thailand, Philippines and Indonesia are negative and statistically significance at five and ten percent. These results suggest that automatic stabilizers are countercycle response in the long run for all individual countries. Among the ASEAN – 5 countries, Malaysia has the largest automatic countercycle response. Malaysia typically imposed a large size of government in order to insure its economy against international vulnerable factors as the economy is highly depend on external market. With the large size of government, this country would have a great stabilizing effect on output fluctuation.

In the model of discretionary fiscal, the result of FMOLS for panel group shows the estimated coefficient of *LCAB* is -0.28, meaning that one percent increase in *CAB* causes the decreasing of *LGAP* by 0.28 percent in the long run. Therefore, discretionary fiscal plays role as countercycle response that can dampen output fluctuation to potential output. This result seems to be consistent with the finding of Badinger [32] and Fatás and Mihov [2] in OECD countries. Although discretionary fiscal is determined by lags in decision, information and implementation, but this tool still has stabilizing effect on output fluctuations. The possible explanation for this result is because of time that involves for gathering enough information on economic shock allows government to formulate appropriate plans to stabilize output fluctuation.

Meanwhile, the estimated coefficient of *LCAB* for all the ASEAN – 5 countries are negative and significance at five percent. These results suggested that discretionary fiscal in these countries are countercycle response. In this respect, the countercycle responses of discretionary in ASEAN – 5 countries are determined by institutional factors. A low countercycle response of discretionary fiscal is attributed to a weak institutional quality such as high bureaucratic and corruption level and, low accountability and transparency would cause great errors on decision making and misallocates of discretionary fiscal [14, 46-49]. In Indonesia and the Philippines for instance, high corruption level causes a weak countercycle response of discretionary fiscal in these countries [50]. Similarly, the low countercycle of discretionary in Thailand is subjected to a high political instability such military coup which disturbs decision making and implementation of discretionary fiscal. In contrast, the countercycle of discretionary fiscal in Malaysia is higher than Indonesia, the Philippines and Thailand. Although Singapore has a strong institutional (due to a low corruption and bureaucratic levels and high transparency level) but the countercycle of fiscal discretionary is low. This is because the rising of precautionary behaviour of household during economic shock causes household to increase saving and reduce private consumption. Thus, a discretionary fiscal only creates a small increasing in aggregate demand and aggregate output as household hold back their consumption [51].

Table-3: The Result of FMOLS for ASEAN – 5 Countries Dependent Variable: *LGAP*

Country	Variable	Automatic Stabilizer		Discretionary Fiscal	
		Coefficient	t – statistics	Coefficient	t – statistics
Malaysia	*LGSZ*	-3.758	-2.019**	-	-
	LCAB	-	-	-0.592	-5.378*
	LOPN	2.876	2.362*	2.464	2.391*
	LCRDT	0.402	0.632	0.582	1.350
	LINT	0.109	2.808*	0.479	2.143*
Singapore	*LGSZ*	-1.025	-2.002*	-	-
	LCAB	-	-	-0.355	-2.131*
	LOPN	3.504	2.941*	3.639	2.526*
	LCRDT	-0.610	-2.049*	-0.355	-1.983**
	LINT	1.726	3.424*	0.134	1.271
Thailand	*LGSZ*	-1.549	-3.132*	-	-
	LCAB	-	-	-0.364	-1.869**
	LOPN	2.017	2.293*	1.749	3.229*
	LCRDT	-0.285	-2.210*	-0.219	-2.192*
	LINT	2.224	0.751	1.666	0.893
Philippines	*LGSZ*	-1.361	-1.868**	-	-
	LCAB	-	-	-0.051	-2.325*
	LOPN	1.624	4.263*	1.114	3.285*
	LCRDT	-0.339	7.551*	-0.424	6.475*
	LINT	0.387	2.392*	0.402	2.217*
Indonesia	*LGSZ*	-0.780	-3.513*	-	-
	LCAB	-	-	-0.054	-5.737*
	LOPN	0.602	1.349	0.523	0.268
	LCRDT	-0.096	-5.108*	-0.022	-5.303*
	LINT	0.709	2.741*	0.758	3.078*
Panel Group	*LGSZ*	-0.530	-1.713**	-	-
	LCAB	-	-	-0.283	-6.334*
	LOPN	0.677	2.169*	0.589	1.811**
	LCRDT	-0.206	-4.030*	-0.224	-4.285*
	LINT	0.703	3.433*	0.130	0.599

Note: * and ** indicate rejection of the null hypothesis at 5 and 10 percent significant level

Policy Implication and Conclusion

To sum up, fiscal tools are useful to absorb economic shocks in the business cycle which promote the resiliency of the ASEAN – 5 countries. Automatic stabilizers tool could give a quick effect in absorbing economic resilience because this tool is already programmed to automatically react to economic shocks without government discretion action. On other hand, discretionary fiscal can play important role to reduce shock persistent. This is because government have times to gather information on economic shock and forecast economic condition which in turn, allows the government to formulate and deliver an appropriate program of discretionary fiscal stimulus to absorb the persistent of external shocks. Based on the finding, there are several policy implications should be highlighted by the ASEAN – 5 countries.

First, the role of fiscal tools as shock absorber can be viewed as promoting economic resilience in the short run and long run. In the short run, economic resilience can be achieved through government spending on transfers payment, unemployment benefits, subsidies and social safety net which increases AD and brings aggregate output to potential output. For the long run strategy, fiscal tools should tackle two important aspects that can strengthening long run potential output in the business cycle. This first aspect is to increase public infrastructure particularly on transportation and telecommunication and, enhancing the quality of public infrastructure services through public private partnership (PPP). In this respect, PPP will encourage more private sectors to develop project under agreement with public sector which in turn, attracts more private investment on physical capital and capital accumulation in the long run. The second aspect is to improve human capital development such as government spending on education and health that will result in higher human capital investment. The both aspects can increase the long run potential output in the business cycle.

Secondly, as developing countries, the ASEAN – 5 need a continuous government spending to support their economic and social development during good time. It means that fiscal tools in the countries

can be a procycle response during good time. In this respect, a well – managed in government spending countries during good time is a critical aspect to improve the ability of government in delivering sizeable fiscal tools during economic shock. A well – managed fiscal tools should aim for avoiding excessive discretionary spending during good time and enhancing efficiency in public spending. For instance, subsidies that benefit a broad populace including higher and middle classes would illustrate inefficiency of income in economy. By replacing the subsidies with benefits targeted to the poor will improve the efficiency in public spending. This well – managed fiscal tools would buffer against excessive government spending and continuous fiscal deficit which improve the ability to deliver fiscal tools during economic shock.

Thirdly, a sound fiscal institution serves a vital role for the effectiveness of fiscal tool on economic resilience. The sound fiscal institution can promote the flexibility of fiscal tools to response to response to aggregate output shocks. In this regard, independent fiscal institution (IFI) that is a good medium to establish a sound fiscal institution. IFI have been practice by OECD countries over years. It pertains independent public institutions that critically assess fiscal policy performance. The core functions of IFI functions is providing macroeconomic and fiscal forecast and monitoring fiscal plans and outcomes. By mean of IFI, it can help to address biases toward spending and deficit and foster greater transparency in public spending which in turn, promote a well – designed of fiscal tools against economic shock.

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