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IMPACT OF GOVERNMENT SPENDING ON FDI INFLOWS: THE CASE OF ASEAN-5, CHINA AND INDIA

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ABSTRACT

This study investigates the impact of government spending towards Foreign Direct Investment (FDI) inflows in the host country using a panel data set of 7 countries spanning from 1982 until 2016. The countries of Malaysia, Indonesia, Singapore, Thailand and Philippine (ASEAN-5), India and China are utilised for the study. We examine the impact of government spending towards FDI by conducting the Pooled Mean Group (PMG) estimation developed by Pesaran et al. (1999) using market size, capital, macroeconomic stability and infrastructure as control variables. The results of this study shows that the government spending contributes positively towards FDI inflows in the long run.

Keywords: FDI inflows, Government spending, Pooled Mean Group, ASEAN-5, China, India

1. INTRODUCTION

Government spending is one of the government's intervention strategies to offset the failed market and ensure continued economic growth. The adjustment in government spending not only secure the economic stability, but also generates and accelerates economic growth by promoting job opportunities and hence reducing poverty (Ahuja, 2013). Keynesian has suggested that government spending can be used as tools to increase the aggregate demand by a multiplier effect and leading to a higher increase in the national income. Government spending (such as roads, health, education, agriculture, transport, electricity, etc.) can promotes economic growth, good economic performance, higher productivity and also attracting the Foreign Direct Investment (FDI). However, excessive government spending can also cause high deficit and debt problems.

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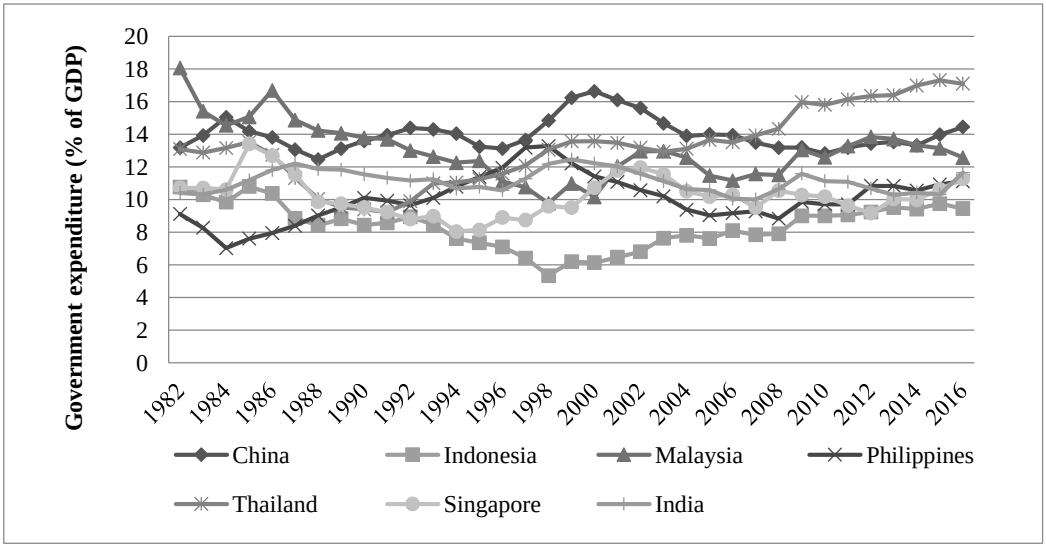
It has been a norm that Foreign Direct Investment (FDI) role is to assist the objectives of economies growth and it is usually seen as a principal tools for enhancing the economic growth and development especially the emerging developing countries (Li and Liu, 2005). Previous studies focus only on the effect of government spending towards private investment via crowding out/in investment hypothesis (Dar and Amir, 2002). Nevertheless, FDI inflows may also be affected by the size of government spending instead of private investment. Since government spending is a very important element in any government, understanding the impact of government spending towards FDI inflow is crucial for economic growth. It thus becomes imperative to study government spending in order to increased FDI inflow in the country since it has a large potential to be included as one of FDI determinant.

Figure 1 depicts the trend of government expenditure between 1982 until 2016 and the trend seems to be almost the same in all selected countries. The government expenditure for all selected countries is around 6% to 12% of their total GDP whereas Malaysia recorded government expenditure above 15% of GDP. After 1990, Thailand government expenditure show sharp increment from 9% of GDP to 17% of GDP while other countries government expenditure shows fluctuating trend.

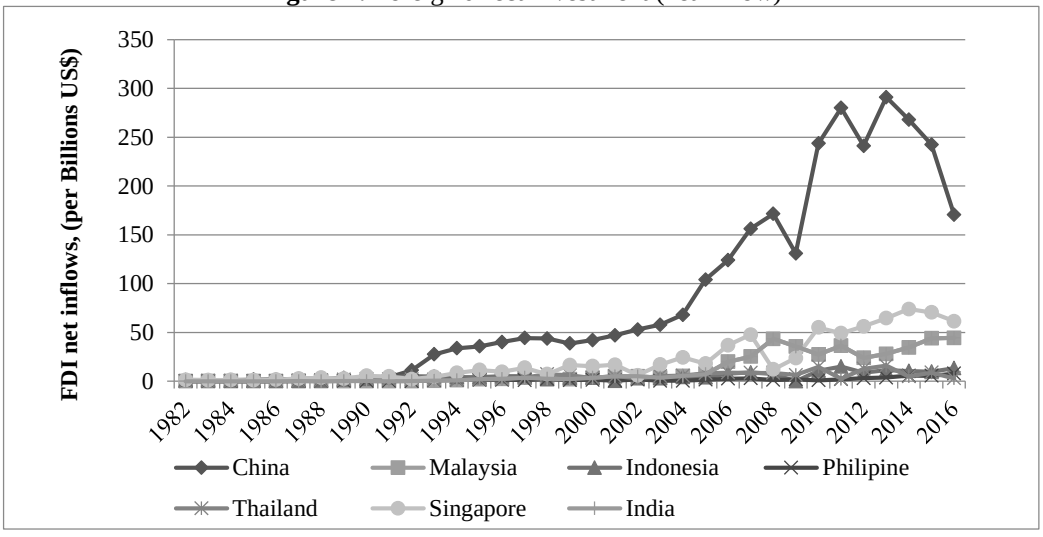
Figure 1: Government expenditure (% of GDP)



***Source**: World Bank Database (2017)*

Figure 2 shows increasing net inflow of Foreign Direct Investment into China followed by Singapore. China has not only shown high economic growth rate of over 10% after 1992 but has also been successful in attracting highest amount of FDI inflows amongst the developing countries, especially after joining the World Trade Organization (WTO) in 2001 (Tuan. et al, 2009).Other ASEAN-5 countries and India share the same trend which is increasing but not stable.

Figure 2: Foreign direct Investment (net inflow)



***Source**: World Bank Database (2017)*

Graphical analysis does not show that rising government expenditures as percentage of GDP are responsible for high inflows of FDI. This is because China's government expenditures/GDP is not significantly higher than other economies whereas its FDI inflows are much higher. Theoretically, higher government spending in rapidly growing and emerging economies comprise of development expenditures such as infrastructure, enabling friendly business environment and ensuring strong institutions, where it is supposed to attract more FDI. This is proved by Panigrahi and Panda (2012) and He and Sun (2014). However, if higher expenditures are financed by higher taxes, and if the burden of higher taxes falls upon foreign investors, it can act as a deterrent in increasing FDI inflows as well.

Recently few studies have attempted to examine the government expenditure as determinant of inward FDI such as Shah and Iqbal (2016) for Pakistan using Ordinary Least Square (OLS) method. Their findings indicate that government health, education and development expenditure have a positive and significant long run relationship with the FDI. On the other hand, study done by Anwar (2017) in Middle East and North Africa using generalized least squares (GLS) and his found negative sign for public expenditure toward inward FDI at the 0.05 level of significance. Thus, in spite of mixed evidence, the empirical literature on public spending as one of the determinants of inward FDI are clearly lacking.

The paper aims to investigate the effect of government spending on the inflow of Foreign Direct Investment (FDI) in ASEAN-5 (Malaysia, Indonesia, Singapore, Thailand and Philippine) plus China and India which are known as new emerging economies. We focused on these countries for two main reasons. First, ASEAN-5 along with India and China emerge as very attractive investment destinations. Second, factors that encourage FDI into ASEAN-5, China and India also include large and growing domestic markets, improved infrastructure, ease of doing business, and availability of low-cost labour. By monitoring government spending and FDI of these two giants

with ASEAN-5, we can provide good information on FDI determinant for this group. This study will apply Pooled Mean Group (PMG) estimation proposed by Pesaran et al. (1999).

The study contributes in complementing the existing studies on the determinants of inward FDI. First, the study provides empirical evidence to confirm the impact of government spending on FDI inflows. Secondly, the study employs PMG analysis as suggested by Pesaran et al. (1999) which can allow the short-run dynamic specification to differ from country to country while the long run coefficients are constrained to be the same. This method used to structure the impact of government spending towards FDI inflows. To the best of our knowledge, this study is among the first to investigate the role of government spending towards FDI inflows for ASEAN countries plus China and India. It is important to find out the role of government spending as determinants of inward FDI as this could eventually assist host countries with the right policy formulation.

2. LITERATURE REVIEW

2.1. Theoretical Background on the Impact of Government Spending on FDI

In the theory of international production, the Investment Development Path (IDP) (Narula and Dunning, 2010) holds a lot of relevance. IDP is divided into five stages. In stages one and two, the FDI flows are low as the economy is in initial stages of development. Government spending is critical at this point. Productive expenditures on infrastructure such as transport network, information and communication technology, energy infrastructure, education, health and building up of human capital can enable economic progress (Groh and Wich, 2012). As domestic economy becomes more productive and competitive due to facilitation provided by the government, it attracts cross-border investments in the form of market-seeking and asset-seeking FDI. Higher FDI pushes the economy from stage two to stages three and four whereby FDI outflows to other economies increase. In stage five of IDP, the economy's national income further increases and firms become self-sufficient to the extent that they are able to increase FDI even with less government intervention. Hence, when the economies are rapidly developing in the first three stages, productive government expenditures can attract significant FDI inflows. Furthermore, in Dunning's eclectic paradigm (Dunning, 1981), firms in home economy engage in FDI outflows due to 'location' advantages in the host economy. This indicates that location advantages act as pull factors in attracting FDI inflows. One of the location advantages could be better institutional environment in terms of improved monitoring of the business transaction and ease of doing business. Therefore, higher government expenditures on strengthening institutional quality can also act as pull factor behind FDI inflows. Taking 'location advantages' in eclectic paradigm and IDP as our theoretical basis, we hypothesize that government expenditure leads to significantly higher FDI, especially in rapidly developing economies.

2.2. Theoretical Background on Determinant of FDI

Attracting FDI has received much attention due to its role in accelerating growth (Herzer, 2008). Numerous theoretical models have been applied to classify the elements of FDI. According to the framework of "OLI" (Ownership, Location, and Internalization) introduced by Dunning 1979, FDI determinants should comprise of three components which includes the advantages of ownership, location and integration. Dunning (1993) indicates that intentions allied with FDI inflows are

market seeking, resources seeking and also efficiency seeking. While from the trade prespective, Krugman, (1983) and Helpman, (1984) have introduced the FDI model known as horizontal and vertical which are used to determine whether FDI and trade are complements or substitutes to each other. Markusen (1997) then incorporates vertical and horizontal FDI models to create a knowledge-capital model. Grossman and Helpman (2000) then presented the model of FDI factor based on risk diversification where the foreign investors are likely to be sensitive to market risk, which includes inflationary. According to this model, price instability which is characterized by high inflation will increase production costs, thereby preventing FDI flows. From the various of different theories and studies, we can see that even each model varies from its approach, they generally explain the same phenomenon. FDI can not be determined by a single factor and there is no one theory than can completely explain the FDI determinants.

2.3. Empirical Evidence on Determinants of FDI

The literature seems to have a consensus that healthy macroeconomic indicators contribute to the greater FDI inflows. Roles of the government in improving the governance, strengthening institutions and formulating reforms on liberalizing economy also play a vital part for attracting FDI in developing countries. However, the picture is not as black and white as in some countries, the size of government spending may also attract the attention of foreign investor. The early international economics literature proposes that FDI is an important source of innovation and technology transfer (Findlay, 1978). According to model of neoclassical growth, FDI will increase the capital stock and thus growth in the host economy by financing capital formation. FDI complements domestic private investment and it is usually associated with creating job opportunities (Chowdhury and Mavrotas, 2006), enhances technology transfer and boosts overall economic growth in host countries.

Good governance and conducive infrastructure are also important for FDI inflows (Groh and Wich, 2012; Ismail, 2009). Buchanan et al. (2012) in their study, involving 164 developing economies found that institutional quality also plays role in bringing in FDI. This study also confirmed by Ahmad and Ahmed (2014) for Pakistan and Busse and Hefeker (2007) for group of developing countries. Based on Cuyvers et. al. (2011), better quality of infrastructure, strong political system and higher GDP per capita are among the main factors that bring more FDI inflows. Study by Gondor and Nistor (2012) stated that conducive fiscal policy affects positively FDI flows into emerging European economies. Radulescu and Druica (2014) also stated that Eastern and European region such as Romania need to improve the investment environment through appropriate fiscal and budgetary policies in order to continue attracting FDI. Same observations were made by Yinusa (2013) for FDI attraction in Southern African Development Community (SADC). Empirical study by Yuan et al. (2010) showed that enlargement of government spending affected positively FDI inflows especially among the developing countries.

Most of the past studies, focus on the traditional macroeconomics determinant of FDI without incorporating the impact of government spending on FDI. Therefore, this particular study will investigate the impact of government spending towards FDI inflows in ASEAN-5, India and China.

3. METHODOLOGY

3.1. Model Specification and Data

Consistent with the literature discussion, the FDI inflows model may be specified as the following:

$$FDI_{it} = \alpha_0 + \alpha_1 GS + \beta \sum CV_{it} \quad (1)$$

Where FDI is Foreign Direct Investment, GS is Government Spending and $\sum CV_{it}$ is a vector of control variables which are comprised of market size, economic stability, capital and infrastructure for the representative countries. FDI proxy by Foreign Direct Investment net inflows (BoP, current US$); GS proxy by general government final consumption expenditure (constant 2010 US$); GDP per capita growth (annual %) as a proxy for market size; gross fixed capital formation as a proxy for capital and inflation rate as a proxy for economic stability. The final equation may be written as below.

Model 1: $$LFDI_{it} = \alpha_0 + \alpha_1 LGS_{it} + \alpha_2 GDPG_{it} + \alpha_3 LGFCF_{it} + \alpha_4 INF_{it} + \varepsilon_{it} \quad (2)$$

$LFDI_{it}$ = Log of Foreign Direct Investment, net inflows (BoP, current US$) for country i at time t
LGS_{it} = Log of General government final consumption expenditure (constant 2010 US$) for country i at time t
$GDPG_{it}$ = GDP per capita growth (annual %) for country i at time t
$LGFCF_{it}$= Log of gross fixed capital formation (constant 2010 US$) for country i at time t
INF_{it} = Inflation, consumer prices (annual %) for country i at time t
ε_{it} = Error term.

Now, replacing inflation (INF) with fixed telephone subscriptions (per 100 people) as a proxy of infrastructure, we may write equation 3 as the following:

Model 2: $$LFDI_{it} = \alpha_0 + \alpha_1 LGS_{it} + \alpha_2 GDPG_{it} + \alpha_3 LGFCF_{it} + \alpha_4 LTEL_{it} + \varepsilon_{it} \quad (3)$$

Where, $LTEL_{it}$ = Log of fixed telephone subscriptions (per 100 people) for country i at time t

The models are estimated via panel data analysis on the unrestricted specification. Subscript 't' stands for 35 years from 1982 to 2016 and 'i' stands for 7 countries. For ease of interpretation of our result, we transform the variable of LFDI, LGS, LGFCF and LTEL to their natural logarithm, thus having elasticity coefficients as opposed to instantaneous rates of change.

For the purpose of this study, we used annual times series data spanning from 1982 to 2016 (35 observation) for 7 selected countries i.e. Malaysia, Singapore, Indonesia, Thailand, the Philippines, India and China. The selection of countries and length of study period are determined by the availability of data for all required variables. All variables are obtained from the World Development Indicator (WDI) via World Bank Online Database (2017). These countries have more

similarity in their rapid growth on FDI receiver. That is why we pool their seven cross-sectional data into a panel data set and then use panel data regression to examine the impact of government spending towards FDI inflows in these countries as a group.

FDI is represented by net FDI inflows measured in current US$. Government Spending is proxies by general government final consumption expenditure (% of GDP) (Landau, 1983 and Altunc and Aydin, 2013). Market size, on the other hand is approximated by growth rate of per capita GDP (Demirhan and Masca, 2008). Higher market size leads to higher inflows of investment. It is expected to have a positive and significant influence on inflows of FDI (Mohamed & Sidiropoulos, 2010).

Voluminous empirical literature in cross-country studies found that the relation of private capital formation and FDI inflows to the host country's seems generally positive. Studies by Chakraborty and Basu (2002) for India and De Mello (1997) for Brazil have found that the causality runs from private capital formation growth to FDI which is in line with the market-seeking FDI hypothesis of Dunning (1988) and Mortimore (2003). Neoclassical Growth Model postulates that capital is the main driver for economic growth and is expected to attract inward FDI.

Macroeconomic stability is crucial for foreign direct investor. The insecure economic environment, characterized by high inflation in fluctuating growth would increase the cost of investment and decrease the return on FDI (De Mello, 1997). For this study, inflation rate is used as a proxy for macroeconomic stability and is expected to have a negative sign (Aseidu, 2006 and Ismail, 2006).

Infrastructure has been widely recognized as one of the major factors that can affect the flow of FDI to host countries. Countries with good infrastructure such as roads, telephones, and internet could reduce the cost of doing business and enable them to maximize their return on investment. Therefore, countries equipped with adequate infrastructure would probably receive higher FDI. For the purpose of this study, the number of fixed telephone subscriptions per 100 people is used as a proxy for infrastructure and is expected to have positive sign (Asiedu, 2002; Onyeiwu and Shrestha, 2004). Table 1 summarize the variables used for both models specified in equation 2 and 3.

Table 1: Summary of the variables description and their expected sign

	Variable and their Description	**Model 1**	**Model 2**	**Expected sign**	
				positive	Negative
LFDI	Log of foreign direct investment, net inflows in current US$	✓	✓		
LGS	Log of general government final consumption expenditure (% of GDP)	✓	✓	✓	
GDPG	GDP per capita growth (annual %)	✓	✓	✓	
LGFCF	Log of gross fixed capital formation in constant 2010 US$	✓	✓	✓	
INF	Inflation, consumer prices (annual %)	✓	X		✓
LTEL	Log of fixed telephone subscriptions per 100 people	X	✓	✓	

4. RESULTS

The summary statistics of the variables used in the model and the correlation matrix are presented in Table 2 and Table 3 respectively. Table 2 shows that there are 245 observations for each variable. The mean value for the variable of interest, LGS, is 23.86 and minimum and maximum value are 21.26 and 28.11 respectively. INF result shows a large is disparity between the maximum (58.37) and minimum (-1.40) value due to differences in the economy of the various countries in the sample. For GDPG, the mean value is 4.22 with a standard deviation of 3.98. LGFCF has an average value of 3.31 with a standard deviation of 0.24 and LTEL has a mean value of 1.60 with a standard deviation of 1.44.

Table 2: Summary of variables descriptive statistics

Variable	Obs	Mean	Std. Deviation	Min	Max
LFDI	245	22.012	2.125	15.545	26.396
LGS	245	23.864	1.392	21.268	28.112
GDPG	245	4.226	3.983	-14.346	13.638
LGFCF	245	3.316	0.240	2.775	3.833
INF	245	5.478	6.186	-1.40	58.387
LTEL	245	1.609	1.44	-1.463	3.9053

Table 3 shows the correlation matrix for all variables used in the model. The existence of high correlation between certain variables may lead to the issue of multicollinearity. The result indicates that the correlations among explanatory variables are moderate and weak except for LFDI which is highly correlated with LTEL. Diagnostic test of measuring variance inflation factor (VIF) was performed to ensure that the results do not suffer from any multicollinearity. Since the variables have the VIF lower than the admissible level (Table 4), the extent of multicollinearity is low and may not affect the regression results adversely. Therefore, we can include all variables in our empirical model.

Table 3: Correlation matrix

Variable	LFDI	LGS	GDPG	INF	LGFCF	LTEL
LFDI	1					
LGS	0.074	1				
GDPG	0.239	0.061	1			
INF	-0.344	-0.499	-0.471	1		
LGFCF	0.444	-0.264	0.119	0.078	1	
LTEL	0.754	0.217	0.125	-0.430	0.002	1

Table 4: Multicollinearity test

Variable	VIF	1/VIF
LGS	1.23	0.813
GDPG	1.61	0.621
LGFCF	1.55	0.644
INF	1.44	0.694
LTEL	1.50	0.665
Mean VIF	1.47	

4.1. Panel unit root test

Panel unit root test is necessary to know the order of integration of the variables before we proceed to macro panel data analysis. We use unit root test proposed by Im, Pesaran and Shin (2003), also known as IPS. The IPS panel unit root test statistics as shown in Table 5 suggest that only GDPG and INF are stationary at level at one per cent significance level. LFDI, LGS, LGFCF and LTEL are stationary at first-difference at one per cent level of significance. Therefore, we can conclude that the panel variables in our study are integrated of level zero, I(0), and order one, I(1).

Table 5: Panel Unit Root Test

Series	LFDI	LGS	GDPG	INF	LGFCF	LTEL
			Level			
IPS	-1.396*	-2.036	-6.427***	-4.871***	1.889	-1.636**
	(0.0813)	(0.0209)	(0.0000)	(0.0000)	(0.9706)	(0.0509)
ADF-Fisher	18.798	25.515	69.112***	50.198***	6.688	21.541*
	(0.1728)	(0.0298)	(0.0000)	(0.0000)	(0.9460)	(0.0885)
PP-ADF	21.197	17.659	78.249***	71.980***	13.944	23.291*
	(0.0967)	(0.2227)	(0.0000)	(0.0000)	(0.4539)	(0.0557)
			First Different			
IPS	-11.4948***	-6.160***	-	-	-7.164***	0.589
	(0.0000)	(0.0000)			(0.0000)	(0.7221)
ADF-Fisher	131.669***	64.780***	-	-	75.871***	10.268
	(0.0000)	(0.0000)			(0.0000)	(0.7423)
PP-ADF	183.404***	96.064***	-	-	68.282***	19.320
	(0.0000)	(0.0000)			(0.0000)	(0.1531)

Notes: ***, **& * represent the rejection of the null of non-stationary at 1 , 5 and 10 per cent of significance level respectively. Figures in parentheses are P-values.

4.2. Panel Cointegration Test

Panel cointergation test is mainly used to conclude whether there exists a long-run equilibrium relationship between variables used in the model. We adopted the panel cointegration test developed by Pedroni (1999). Among the seven Pedroni tests presented in the Table 6, four out of seven test statistics reject the null hypothesis of no cointegration without trend whereas for Pedroni cointegration with trend, four out of seven test statistics reject the null hypothesis of no

cointegration at one per cent level. Overall, if the null hypothesis of no cointegration is rejected, it means that cointegration exists and the series are expected to move together in the long-run. Therefore, it is possible to proceed with the estimation of long run equation.

Table 6 : Pedroni Panel cointegration

Pedroni Coingration	Without trend	With trend
Panel v-Statistic	-1.023034	-0.197519
Panel rho-Statistic	0.528665	-1.009756
Panel PP-Statistic	-1.334208*	-4.441423***
Panel ADF-Statistic	-1.338042*	-4.568322***
Group rho-Statistic	0.427053	-0.360354
Group PP-Statistic	-2.648068***	-7.833949***
Group ADF-Statistic	-2.426411***	-5.040672***

Notes: *, ** and *** denote significance level at 10, 5 and 1 percent levels,respectively. Number of countries (N) = 7 and periods (T) = 35. Automatic lag length selection based on SIC with lags from 4 to 7

4.3. Estimation of the Panel Data

Table 7 shows the regression results obtained from the Pooled Mean Group (PMG) method. The result obtained using the Mean Group estimator (MG) is also reported for comparison purposes. We use the Hausman test to check with the hypothesis of slope homogeneity. It does not reject the long-run homogeneity restriction hypothesis if the p-values associated with the Hausman test is greater than 0.05. In other word, PMG is more appropriate compared to MG. The significant of the model is showed by negative value of speed of adjustment with P-value less than 0.05.

Based on model 1, the coefficient of LGS shows positives and significant result at one per cent level and the rest of explanatory variables under PMG estimation show the predicted signs and statistical significance at one per cent level except for INF, whose coefficient is statistically significant at five per cent. MG estimation in model 1 shows similar result for LGS. However, all coefficients for controlled variables are not statistically significant. The Hausman test fail to reject the null hypothesis and therefore, PMG estimation is more appropriate compared to MG estimation. Therefore, one per cent increase in government spending increases FDI by 1.07 per cent. The result indicates that higher government spending in these countries is productive enough to attract FDI from various economies. The outcome is also in line with the theory proposed in the eclectic paradigm's 'location' advantages whereby higher productive government expenditures acts as pull factor behind higher FDI. The existence of a long-run relationship between the LGS and FDI is also confirmed by a significantly negative error correction term. The coefficient of 0.41 suggests that the estimated speed of adjustment to the long-term relationship is about 41 per cent annually, and the system is reversed to achieve equilibrium in about 2.5 years.

Table 7: Mean Group Estimation (MGE), Pooled Mean Group Estimation (PMGE)

Dependent variable (LFDI)	**Model 1**		**Model 2**	
	MG	PMG	MG	PMG
LGS	1.824***	1.070***	0.902***	0.988***
	(0.695)	(0.324)	(0.297)	(0.126)
GDPG	0.065	0.079***	0.133**	0.145***
	(0.065)	(0.030)	(0.073)	(0.032)
LGFCF	0.623	1.072***	0.872	1.175**
	(0.668)	(0.343)	(1.543)	(0.520)
INF	0.057	-0.069**		
	(0.071)	(0.026)		
LTEL			0.542**	0.284***
			(0.245)	(0.104)
Error Correction Term (Speed of adjustment)	-0.67	-0.41	-0.73	-0.47
	[0.000]	[0.001]	[0.000]	[0.001]
Number of observation	230		238	
Hausman test	5.62		0.88	
	[0.229]		[0.928]	

Notes: Standard errors in brackets; P-values are in square brackets. *, ** and *** denote significance level at 10, 5 and 1 per cent levels, respectively. Hausman test for pool ability is a test for the equivalence of PMGE and MGE. The null hypothesis of Hausman test indicates that the PMG is more prior to MG and we fail to reject the null hypothesis if P-value greater than 0.05.

To test for robustness, we used model 2 which include the control variables of the number of telephone lines subscriptions per 100 people (LTEL) as proxy for infrastructure to replace the variable of inflation (INF). The inclusion of these alternative measures give the similar results. With regard to all specifications, the results lead to long-term coefficients which are statistically significant with expected signs. The Hausman test was conducted to compare which estimation between PMG and MG are more appropriate. The Hausman test results shows that the probability statistic equals to 0.229 for model 1 and 0.928 for model 2, which denotes that the null hypothesis cannot be rejected and PMG is more appropriate. The constraint of common long-run coefficients from MG is higher speed of adjustment which indicate -0.67 for model 1 and -0.73 for model 2. This outcome is expected since the MG procedure is less restrictive and thus potentially inefficient.

Other than revised the model by replacing the controlled variable of inflation and infrastructure, we also remove two outliers (China and India) to test for robustness as this two countries considered as large developing economies with very different economic characteristics compared to ASEAN-5. Based on both MG and PMG estimation for model 1, coefficients for the government spending (LGS) variables show positive sign and statistically significant at one percent level and this long-run relationship is confirmed by the significant of negative error correction term (as shown in Table 8). The Hausman test for the robustness also show that the probability statistic equals to 0.655 which denotes that the null hypothesis cannot be rejected which means that the PMG estimation is more appropriate compared to MG.

Table 8: Estimation Results based on MG and PMG (remove 2 countries)

Dependent variable (LFDI)	MGE (1)	PMGE(1)
LGS	2.11***	1.107***
	(0.712)	(0 .328)
GDPG	0.134***	0.081***
	(0.041)	(0.031)
LGFCF	0.392	1.023***
	(0.937)	(0.348)
INF	0.090	-0.067**
	(0.097)	(0.026)
Speed of adjustment	-0.742	-0.540
	[0.000]	[0.000]
Number of observation	170	
Hausman test	2.44	
	[0.655]	

Notes: Standard errors in brackets; *,**, and *** indicates significant at 10%; 5%; and 1% level respectively. P-values are in square brackets.

From the findings, we can conclude that the government spending contributes positively to FDI inflows in the long run. This finding supports the results of previous empirical evidence on the positive effects for market size (Mohamed & Sidiropoulos, 2010), capital (Chakraborty and Basu, 2002; De Mello, 1997), infrastructure (Onyeiwu and Shrestha, 2004; Asiedu, 2002) and negative effects of high inflation on FDI inflows (De Mello, 1997).

5. CONCLUSION

This study attempted to expand the boundary of the current literature as it investigated the inclusion of government spending as one of the determinant of FDI inflows. The study pooled seven countries as group (ASEAN-5 countries namely Indonesia, Malaysia, Thailand, Singapore and the Philippines) plus two new emerging economics which are China and India spanning from period 1982 until 2016. This study employs PMG estimation and finds statistical significance relationship for the government spending variables, which are captured by government final consumption expenditure (constant 2010 US$) towards FDI inflows. The long-run coefficient of government spending (LGS) is significant at one per cent level and contribute positively to inflow of FDI. The findings from this paper show the role of government spending is crucial to attract more FDI inflows in the long run. This paper also suggests that the spending pattern of government should direct mainly to productive economic activities because higher economic growth will stimulate economic activities in the country in the long run and contribute to large FDI inflows to the country. Theoretically, higher government expenditures in emerging economies comprise of development expenditures such as infrastructure, enabling friendly business environment, ensuring strong institutions are supposed to attract more FDI (Panigrahi and Panda, 2012; Noorbakhsh et al.2001; He and Sun, 2014). Further studies should focus on the alternative determinants for measuring the public expenditure by disaggregate the spending into types of expenditure such as health expenditure, military expenditure, education expenditure, as well as R&D expenditure.

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