

## Tourism and Foreign Direct Investment: An Analysis for Asean Countries

Norazean Binti Rasit<sup>1</sup>, Felorisca Singkong<sup>1</sup> and Sarma Imran Aralas<sup>1</sup>

<sup>1</sup>Faculty of Business, Economics, and Accountancy, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia

\*Corresponding author's email:  
norazeanrasit16@gmail.com

Received: 15 May 2019

Accepted: 15 June 2019

**Keywords:** *tourism, foreign direct investment, panel data, tourism-led-growth hypothesis, ASEAN*

### ABSTRACT

*Tourism and foreign direct investment (FDI) plays a role in triggers country economy performance. According to Elma and Adnan (2017), there was a positive relationship between FDI and tourism arrival. Furthermore, this study will investigate both relationship unidirectional and bidirectional yet study will focus on ten ASEAN countries between the year 2004 to 2017 by adopting and beautifying the tourism-led growth hypothesis. Tourism-led growth hypothesis state that economic activities will influence by tourism in the short run and the long run. Besides, panel data will be used with the Random-Effects model and the fixed effects model. The result found that there has a positive relationship between foreign direct investment and tourism, and for the causality also found a positive relationship between tourism and foreign direct investment. As a summary, increasing tourism arrivals will lead to an increase in foreign direct investment and vice versa. The results show that both FDI and tourism arrivals play a role in enhancing economic activity. These relationships as an important tool for policy implication to achieve sustainable growth in the tourism sector and for the economy as well and in the same time would give a definite improvement for government policy on foreign direct investment. Besides, the marketers would also benefit by focusing on specific issues mainly in the marketing campaign and learning from their market trends. Recommendation for future research, we would like to include some variables such as*

*environmental regulation as it is an important deciding factor on how consideration has to be made and mainly conserve the environment from being a polluted and beneficial impact on ASEAN tourism performance.*

## INTRODUCTION

Nowadays tourism has become one of the sectors that significant to economic growth in many developing countries. People around the world will travel around the to visit each of the beautiful place, great history, beautiful or colourful of the festival and social and this activities directly increase the foreign exchange rate to that country. Added, tourism become among the most significant create employment opportunity to the local citizen and also stimulates the growth of the services sector especially tourism industry and will trigger overall economic growth of the country (Samimi et al., 2007). The importance of this sector can be demonstrated from the fact that it increases the income of the country, create employment opportunities, and encourage the private sector and developers' infrastructure (Habibi, 2016). According to Oxford English Dictionary, tourism referring to travel or business and also business attracting, practice and theory of touring, the business of operating tours and accommodating.

During the past two decades, foreign direct investment (FDI) has become increasingly important, with increased volumes of direct investment flowing into the developing countries recently (Habibi, 2016) and added that the foreign direct investment has the potential to either direct or indirect benefits to the economic growth of the country. Habibi (2016) also mention that foreign direct investment directly results in the injection of capital, new technologies, markets techniques, and management skills into the domestic the economy thus, it will raise the competitiveness and stimulate the economic growth. Satrovic and Muslija (2018). There is a positive relationship between foreign direct investment and tourism.

According to the previous researcher and publication, there are issues arises whether foreign direct investment strongly influences tourism growth or, vice versa tourism growth attracting the foreign direct investment instead? (Samimi et al., 2007). Despite an event, many studies have investigated the causality relationship between foreign direct investments but there are still limited studies related to the ASEAN countries. Moreover, most studies have to deal with samples of the importance of tourism sector to the developing countries and mostly the paper analyses the role of foreign direct investment on tourism growth and focus on a limited of cross-sectional but apply panel data analysis for developing countries is still scarce.

Hence, this paper is to investigate a positive relationship for both relationships unidirectional and bidirectional between foreign direct investment (inflow) and tourism arrival by using panel data for ten ASEAN countries between the years 2004 until 2017 with applying a random effect model. The analysis of the model is adopted and beautifying from the Solow model to prove the tourism-led growth hypothesis. Hence, the importance of this study is contributed to the literature and policymakers. The table of statistics tourism arrival for the ASEAN countries as shown in table 1 which is show the number of tourist arrival ASEAN countries and it indicates continuously increasing.

This paper consists of five sections. Section 1 discusses the introduction of tourist arrival and foreign direct investment. Meanwhile, Section 2 elaborates a review of empirical and theoretical literature on the relationship between foreign direct investment and tourism. Furthermore, the description of data, variables, and methodology will be explained in Section 3. While in section 4 is a discussion of results and in the last Section 5, will provide a conclusion of the paper.

**Table 1** Tourist arrivals in ASEAN as of 31 January 2017 in thousand persons

Country	2011			2012			2013			2014			2015		
	Intra-ASEAN	Extra-ASEAN	Total	Intra-ASEAN	Extra-ASEAN	Total	Intra-ASEAN	Extra-ASEAN	Total	Intra-ASEAN	Extra-ASEAN	Total	Intra-ASEAN	Extra-ASEAN	Total
Brunei Darussalam <sup>1/</sup>	124	118	242	116	93	209	3,054	226	3,279	3,662	223	3,886	119	99	218
Cambodia	1,101	1,781	2,882	1,514	2,070	3,584	1,832	2,379	4,210	1,992	2,511	4,503	2,098	2,677	4,775
Indonesia	3,258	4,391	7,650	2,608	5,437	8,044	3,516	5,286	8,802	3,684	5,752	9,435	3,861	6,546	10,407
Lao PDR	2,191	532	2,724	2,712	618	3,330	3,041	738	3,779	3,224	935	4,159	3,589	1,096	4,684
Malaysia	18,885	5,829	24,714	18,810	6,223	25,033	19,106	6,610	25,716	20,373	7,064	27,437	19,147	6,575	25,721
Myanmar	100	716	816	151	908	1,059	219	1,826	2,044	1,598	1,483	3,081	1,763	2,918	4,681
The Philippines	332	3,586	3,917	375	3,898	4,273	422	4,259	4,681	461	4,372	4,833	482	4,879	5,361
Singapore	5,372	7,799	13,171	5,733	8,758	14,491	6,115	9,453	15,568	6,113	8,982	15,095	5,748	9,483	15,231
Thailand	5,530	13,568	19,098	6,463	15,891	22,354	7,410	19,136	26,547	6,620	18,160	24,780	7,886	21,995	29,881
Viet Nam	838	5,176	6,014	1,364	5,484	6,848	1,440	6,132	7,572	1,495	6,379	7,874	1,301	6,643	7,944
<b>ASEAN</b>	<b>37,733</b>	<b>43,496</b>	<b>81,229</b>	<b>39,845</b>	<b>49,380</b>	<b>89,225</b>	<b>46,154</b>	<b>56,045</b>	<b>102,199</b>	<b>49,223</b>	<b>55,861</b>	<b>105,084</b>	<b>45,992</b>	<b>62,912</b>	<b>108,904</b>

Source: ASEAN Secretariat

Note: Details may not add up to totals due to rounding off errors.

1/ Except 2013 and 2014, Brunei Darussalam data only covers visitor arrivals by air transport

## LITERATURE REVIEW

The literature section summaries and pull together the relevant literature related to the relationship between tourism and foreign direct investment. There are a lot of studies investigate the empirical relationship between tourism and foreign direct investment. Summaries from previous literature and publication research result still unclear and this pursuing the further researcher conduct studies related to these variables. Based on the result of previous findings, there is a positive and negative relationship between foreign direct investment and tourism. Samimi et.al (2007) has conduct research on whether or not the Granger causal relationship exists between tourism and foreign direct investment.

### **Uni-directional Relationship between Tourism to Foreign Direct Investment or from Foreign Direct Investment to Tourism**

According to Satrovic & Muslija (2018) in their study of investigating the relationship between foreign direct investment and tourism in 113

countries with the period starting from 1995 until 2015 and applying panel regression model found that there is unidirectional causal relationship running from tourism to foreign direct investment while using consumption, trade openness and human capital as a controlling variable.

Rajapakse (2016) has the same result to the (Satrovic & Muslija., 2018) which is there are the unidirectional relationship between foreign direct investment to tourism and also unidirectional from tourism to foreign direct investment. Perić & Radić (2017) also supported which is there is one-way short-run causal relationship running from foreign direct investment in tourism to international tourism arrivals. Their studies are to explore the causal relationship between foreign direct investment stock in tourism and the number of international tourist arrival to the Republic of Croatia with the period from 2000 to 2012, and used quarterly time series. In the research, they apply Augmented Dicker Fuller (ADF) test, Johansen Cointegration test and granger and Toda Yamamoto test.

The papers conducted on the causal relationship between international tourism arrivals and foreign direct investment in Turkey conducted by (Minh et al., 2015) and use annual data from the year 1980 to 2012, and applied Granger's causality test model. These group of researchers found that there is a strong causal relationship between these two variables used in the study. According to Selvanathan et al. (2012), there is one-directional causality found running from foreign direct investment to tourism in India by applied Granger's causality test under the VAR framework. The research conducted by Habibi (2016) also agrees that there is the relationship between the foreign direct investment and tourism which is stated in their study of to examine the long-run relationship and the direction of causality among tourism, foreign direct investment (FDI) and economic growth using Toda-Yamamoto Granger no Causality test for annual data from 1975 to 2013 in Malaysia.

Therefore we can summaries that the relationship between the foreign direct investment and tourism in unidirectional exists but there are still less finding relates for both findings unidirectional and bidirectional between both relationship tourism to foreign direct investment and from foreign direct investment to tourism.

### ***Bidirectional Relationship between Foreign Direct Investment and Tourism***

According to Satrovic and Muslija (2017), in their paper to examine the nature of the causal relationship, if any, between tourism (TOUR) and foreign direct investments (FDI) using the case of Turkey found that there a Granger's causality test positive relationship running from tourism to foreign direct investment and indicates that there are the bidirectional relationship between the variables in the short run. Personal et al. (2007) agree with Satrovic and Muslija (2017) finding which exists a bidirectional causal relationship between foreign direct investment and tourism for only a small set of countries.

The study that conducted by Salleh et al. (2011) found that Hong Kong has a bidirectional relationship between the development of the tourism industry (ARR) and the foreign direct investment (FDI), while for Malaysia and Thailand were found a unidirectional relationship but conversely, for Singapore and China, the result show that there is no relationship between these two variables in their study in selected Asian countries namely Malaysia, Singapore, Thailand, China, and Hong Kong and applied autoregressive distributed lag approach (ARDL).

Also, according to Samimi et al. (2007), there are bilateral long-run causality between tourism-related foreign direct investment (FDI) and tourism development and were found that there is no short-run causality between variables in their study of the existence of Granger causality and cointegrated relationships between tourism-related Foreign Direct Investment (FDI) and tourism development in developing countries.

**Table 2** Key empirical literature on foreign direct investment and tourism

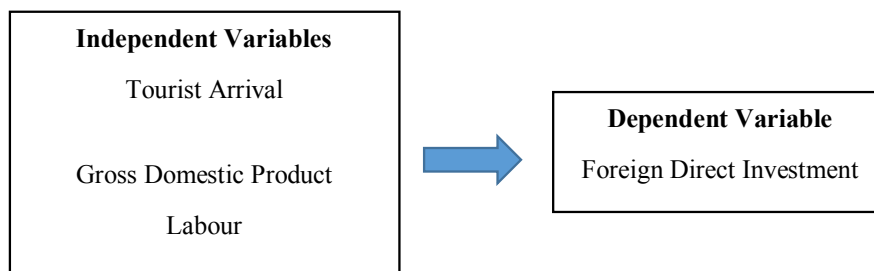
Author	Context	Methodology used	Brief view findings
Satrovic & Muslija (2018)	113 countries	Westerlund ECM panel cointegration approach to Dumitrescu and Hurlin (DH) Granger non-causality test	Found that there is a positive impact of tourism on FDI. Added there are unidirectional causal relationship running from tourism to FDI is reported, implying that tourism allows these countries to expand their FDI.
Rajapakse (2016)	Sri Lanka	Time series VAR systems in first differences	Found uni-directional relationship from foreign direct investment in tourism (FDIT) to tourism and foreign direct investment in tourism (FDIT) to Foreign Exchange Earnings from Tourism
Minh et al. (2015)	Turkey	Granger's causality test	The results indicate strongly causality relationship between foreign direct investment and tourism
Selvanathan et al. (2012)	India	Granger causality test under a VAR framework	A one-way causality link is found from foreign direct investment to tourism in India
Habibi (2016)	Malaysia	Toda-Yamamoto Granger no Causality test	Granger's causality test implies that FDI caused economic growth and international tourist receipts.
Satrovic & Muslija (2017)	Turkey	Granger causality procedure in a vector autoregression (VAR) model	Found out that the Granger causality test indicates a bidirectional relationship between FDI and TOUR in Turkey in the short run.
Personal et al. (2007)	Small Island Developing States (SIDS)	Panel causality methods	The findings found that exists a bi-directional causal relationship for only a small set of countries.
Salleh et al. (2011)	Asian countries namely Malaysia, Singapore, Thailand, China and Hong Kong	Autoregressive distributed lag approach (ARDL.)	Found that Hong Kong has a bidirectional relationship between the ARR and FDI. As for Malaysia and Thailand, there is a unidirectional relationship between ARR and FDI; while for Singapore and China, there is no relationship between these two variables.
Samimi et al. (2007)	Developing countries	panel VECM techniques	Bilateral long-run causality between tourism-related FDI and tourism development, while there is no short-run causality between variables. Key
Perić & Radić (2017)	Republic of Croatia	Time series data	The result found there are one-way short-run causality relationship running from FDI in tourism to international tourism arrivals

**DATA AND METHOD**

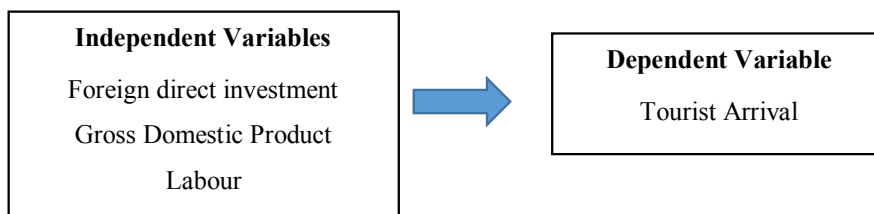
The study is using panel data with a sample of the period within 2004 to 2017 which is involving 10 ASEAN countries. The countries are Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. The data of the study were taken from the World Development Indicator Database, World Bank for tourist arrival (measured in thousand people), an inflow of foreign direct investment (measured in US dollars), gross domestic product (measured in US dollars) and employment in service (measured in percentage) and each of the variables is in logarithmic form.

To understand both relationships: unidirectional and bidirectional for tourism arrival and foreign direct investment, thus data analysis techniques are used namely the pooled least square, Hausman test: Fixed effects regression and random effect regression, and Lagrange-Multiplier (LM) test. Finally, the study was chosen the random effect regression for the relationship between tourist arrival and foreign direct investment for unidirectional and fixed effect regression for bidirectional relationships.

Thus, to elaborate for both relationships: unidirectional and bidirectional the structure of the model for the relationship between tourism arrival and foreign direct investment illustrates as follows:



**Figure 1** The unidirectional relationship between foreign direct investment and tourist arrival



**Figure 2** The bidirectional relationship between foreign direct investment and tourism arrival  
(Source: Adopted and beautifying based on Solow Growth Model)

Meanwhile, the empirical equation for the unidirectional (Eq. A1) and bidirectional (Eq. A2) relationship between foreign direct investment and tourism are explained as follows:

$$FDI_{it} = \beta_{0it} + \beta_{1it} T_{it} + \beta_{2it} GDP_{2it} + \beta_{3it} L_{3it} + \epsilon_{it} \quad \text{Eq. (A1)}$$

$$T_{it} = \beta_{0it} + \beta_{1it} FDI_{it} + \beta_{2it} GDP_{2it} + \beta_{3it} L_{3it} + \epsilon_{it} \quad \text{Eq. (A2)}$$

Indicator:

$FDI_{it}$  = foreign direct investment (inflow),  $T_{it}$  = Tourist arrival,  $GDP_{2it}$  = Gross Domestic Product, and  $L_{4it}$  = employment in services.

**RESULTS**

**Pooled Least Square (Common Effect)**

The result of the analysis techniques of the study for the pooled OLS, the Hausman test: Random Effects and Fixed Effects, and LM-Test elaborates as follows:

According to pooled least square (common effect) result, it shows that foreign direct investment (inflow) and tourism arrival for a relationship as in Eq. A1 was to have a positive relationship. For the unidirectional relationship, the coefficient for tourism arrival is statistically significant at one per cent level of significance and it means increasing one per cent in tourism will lead to increase foreign direct investment by 1.925711 per cent (see Table 3).

**Unidirectional Relationship between Foreign Direct Investment and Tourist Arrival**

**Table 3** Unidirectional relationship between foreign direct investment and tourist arrival

Source	ss	df	Ms
Model	359.462064	3	119.820688
Residual	373.992007	136	2.74994123
Total	733.454071	139	5.27664799

Number of obs = 140  
 F(3, 136) = 43.57  
 Prob > F = 0.0000  
 R-squared = 0.4788  
 Adj R-squared = 0.4788  
 Root MSE = 1.6583

Logfdi	coef	Std. err.	t	P>t	[95% Conf. Interval]	
logtourist	1.925711	0.2349131	8.20***	0.000	1.461156	2.390266
loggdp	0.3367069	0.2909983	1.16	0.249	-0.2387599	0.912174
loglabour	5.660516	0.9105559	6.22	0.000	3.859836	7.461196
Cons	-13.85459	1.986117	-6.98	0.000	-17.78226	-9.92692

\*\*\* Significant at one per cent level of significance where the critical value is 2.617  
 \*\* Significant at five per cent level of significance where the critical value is 1.980  
 \* Significant at ten per cent level of significance where the critical value is 1.658

**Hausman Test: Unidirectional Relationship between Tourism and Foreign Direct Investment**

After the regression of PLS, next Hausman test is tested to make the differentiation between the fixed effects and the random effects (see Gujarati, 2003). The reason to choose the Hausman Test is to choose an appropriate

regression for a unidirectional relationship. The results indicate that the chi-squares statistic is 6.99 for the unidirectional relationship with p-value 0.0723 (see Table 4). Thus the relationship indicates that the null hypothesis ( $H_0$ ) is rejected and it means that the random effects are to be preferred for the existing of panel data set in for the unidirectional model.

**Table 4 Hausman Test for the unidirectional relationship between foreign direct investment and tourism arrival**

	Coefficients	
	b	B
	fe	re
logtourism	0.5578718	1.774603
loggdp	0.407917	0.2330653
loglabour	2.822453	5.171101

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(3) &= (b-B)'[(V_b-V_B)^{-1}](b-B) \\ &= 6.99 \end{aligned}$$

$$\text{Prob}>\text{chi2} = 0.0723$$

**LM-Test: Unidirectional Relationship between Foreign Direct Investment and Tourism Arrival**

Since the results for the relationship of unidirectional goes to the random-effects model, thus Lagrange-Multiplier Test or also known as LM-Test is tested to choose an appropriate selection either the random effects is more appropriate than PLS or vice versa. After the regression, the result shows that the random effects are more appropriate for the unidirectional to show the relationship between foreign direct investment and tourism arrival as shown in Table 5. It shows that a one per cent increase in tourism will leads to an increase in foreign direct investment by 5.276648 per cent.

**Table 5 Breush and Pagan Lagrangian Multiplier Test for random effects**

Estimated results:							
	Var	sd = sqrt(Var)					
logfdi	5.276648	2.297096					
e	2.511858	1.584884					
u	0.228282	0.4777881					
Test: Var(u) = 0							
chibar2(01) = 1.01							
Prob > chibar2 = 0.1573							

From the LM-test, the results show that there have positive relationships between foreign direct investment and tourism arrival for a unidirectional relationship of the variables. The evidence indicates that tourism-led economic growth which is a foreign direct investment and tourism arrival are influencing each other.

**Foreign Direct Investment and Random Effects with Robust**

The result for tourism arrival and Random Effects with robust (see Table 6) shows the results of the estimation of the random-effects model for foreign direct investment using the robust. We find evidence to suggest that tourism arrival affect foreign direct investment



at one per cent level of significance. It means that a one per cent increase in tourist arrival will lead to 1.925711 per cent increase in foreign direct investment.

On the other hand, the results show that the coefficient of the variable tourist arrival that measures for tourism is statistically significant. This indicates that there is evidence to suggest that tourist arrival affect the inflow of foreign direct investment.

**Table 6 Foreign direct investment and random effects with robust**

			Number of obs	= 140		
			F( 3, 156)	= 37.03		
			Prob > F	= 0.0000		
			R-squared	= 0.4901		
			Root MSE	= 1.6583		
<b>Logfdi</b>	<b>coef.</b>	<b>Robust std. err.</b>	<b>t</b>	<b>P&gt;t</b>	<b>[95% Conf. Interval]</b>	
logtourism	1.925711	.307171	6.27***	0.000	1.318261	2.53316
loggdp	.3367069	.1891025	1.78	1.78	-.0372548	0.7106686
loglabour	5.660516	1.16348	4.87	0.000	3.359663	7.961369
cons	-13.85459	2.363722	-5.86	-5.86	-18.52899	-9.180185

\*\*\* Significant at one per cent level of significance where the critical value is 2.617  
 \*\* Significant at five per cent level of significance where the critical value is 1.980  
 \* Significant at ten per cent level of significance where the critical value is 1.658

**Bidirectional Relationship between Foreign Direct Investment and Tourist Arrival**

**Pooled Least Square (Common Effect)**

Meanwhile, according to pooled least square (common effect) result, it shows that foreign direct investment (inflow) and tourism arrival

for the relationship as in Eq. A2 was to have a positive relationship (see Table 7). The results show that the coefficient for foreign direct investment is statistically significant at one level of significance and increase in one per cent in foreign direct investment will lead to increase 0.1717328 for tourist arrival.

**Table 7 Bidirectional relationship between foreign direct investment and tourism arrival**

Source	ss	df	Ms		Number of obs = 140	
Model	19.6279013	3	6.54263378		F( 3, 136) = 26.68	
Residual	33.3522057	136	0.245236897		Prob > F = 0.0000	
Total	52.980107	139	0.38115185		R-squared = 0.3705	
					Adj R-squared = 0.3566	
					Root MSE = 0.49521	
logtourism	coef	Std. err.	t	P>t	[95% Conf. Interval]	
logfdi	0.1717328	0.0209493	8.20***	0.000	0.1303043	0.213161
loggdp	0.137271	0.0865301	1.59	0.115	-0.0338475	0.30839
loglabour	-0.4932011	0.3052232	-1.62	0.108	-1.096798	0.110396
cons	5.900726	0.4707743	12.53	0.000	4.969741	6.831711

\*\*\* Significant at one per cent level of significance where the critical value is 2.617  
 \*\* Significant at five per cent level of significance where the critical value is 1.980  
 \* Significant at ten per cent level of significance where the critical value is 1.658

### Hausman Test: Bidirectional Relationship between Tourism and Foreign Direct Investment

The results indicate that the chi-squares statistic is 9.25 for a bidirectional relationship (see Table 8) with  $p$ -value 0.0023. Thus, the relationship indicates that the null hypothesis ( $H_0$ ) is not rejected and it means that the fixed effects are to be preferred for the existing panel data set in the relation between tourist arrival and foreign direct investment.

**Table 8** Hausman Test for bidirectional relationship between tourism arrival and foreign direct investment

	Coefficients	
	b	B
	fe	Re
logfdi	0.0027563	-0.0032108
loggdp	-0.05936	-0.0081354
loglabour	4.169888	0.8994044

b = consistent under  $H_0$  and  $H_a$ ; obtained from xtreg

B = inconsistent under  $H_a$ , efficient under  $H_0$ ; obtained from xtreg

Test:  $H_0$ : difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(3) &= (\mathbf{b}-\mathbf{B})'[(\mathbf{V}_b-\mathbf{V}_B)^{-1}](\mathbf{b}-\mathbf{B}) \\ &= 9.25 \end{aligned}$$

$$\text{Prob}>\text{chi2} = 0.0023$$

### DISCUSSION

The tourism-led growth hypothesis state that economic growth influences economic activities whereas the key components of economic growth are saving and investment. In the first regression expectation and

supported by the previous studies of findings (see Satrovic & Muslija., 2018). In the second regression for a bidirectional relationship in the regression analysis of tourism arrival and foreign direct investment, the evidence shows a positive relationship as our expectation and also supported by findings in the previous studies (see Satrovic & Muslija, 2017). The hypothesis of tourism-led growth predicts a positive relationship between tourism arrival and foreign direct investment and the hypothesis supported our findings with shows a positive relationship between tourism arrival and foreign direct investment for both relationships: unidirectional and bidirectional relationship as illustrates in Figure 1 and Figure 2. Analysis of foreign direct investment, evidence for unidirectional relationship shows a positive relationship between tourism arrival and foreign direct investment which is appropriate with our

### CONCLUSION

The results of the empirical study show a positive relationship for Eq. A1 and Eq. A2. Also, we find positive evidence of both relationships: unidirectional and bidirectional. This finding indicates that befitting with our expectation based on the tourism-led economic growth hypothesis. However, in future research, we would like to add some variables that influence tourism arrival and one of them is environmental regulation. As we know environmental regulation plays a role in increasing and decreasing tourism arrival in ASEAN countries. Also, the environmental issues need to be considered to avoiding the decreasing of tourism arrival and protect the environmental form being polluted. Hence, tourism as one of the factors that contributed to economic performance for ASEAN countries especially.

## REFERENCES

- ASEANstats. (2017). Tourist arrivals in ASEAN. (January), Table 28. Retrieved from <http://www.aseansec.org/stat/Table28.pdf>.
- Gujarati, D. N. (2003). *Basic econometrics* (4th ed.). New York: McGraw-Hill.
- Habibi, F. (2016). Foreign direct investment, tourism and economic growth in Malaysia. (June).
- Minh, T., Pham, L., Phi, T., & Tran, P. (2015). The granger causality relationship between international tourist arrivals and foreign direct investment: Empirical evidence from Thi Minh Ly Pham – Thi Phi Phung Tran. (2007), 1291–1300.
- Perić, J., & Radić, M. N. (2017). FDI-led tourism growth hypothesis: Empirical evidence from Croatian tourism. *European Journal of Tourism, Hospitality and Recreation*, 7 (3), 168 – 175. DOI: [doi.org/10.1515/ejthr-2016-0019](https://doi.org/10.1515/ejthr-2016-0019)
- Personal, M., Archive, R., Henk, L. M., Kyvik, H., & Analysis, E. P. (2007). [WIP] M p r a. Economic Policy, (2116). DOI: [doi.org/10.1227/01.NEU.0000349921.14519.2A](https://doi.org/10.1227/01.NEU.0000349921.14519.2A).
- Rajapakse, R. P. C. R. (2016). The relationship between foreign direct investment and tourism development: An analysis of Granger Causality.
- Salleh, N. H. M., Othman, R., & Sarmidi, T. (2011). An analysis of the relationships between tourism development and foreign direct investment: An empirical study in selected major Asian countries. *International Journal of Business and Social Science*, 2 (17), 250 – 258.
- Samimi, A. J. (2007). The relationship between foreign direct investment and tourism development: Evidence from developing countries. 5(July 2013), 59 – 68.
- Satrovic, E., & Muslija, A. (2017). Foreign direct investments and tourism: Empirical evidence from Turkey, 9 – 11.
- Satrovic, E., & Muslija, A. (2018). Causality relationship between foreign direct investment and tourism. *Uluslararası İktisadi ve İdari İncelemeler Dergisi*, (22), 65 – 76. DOI: [doi.org/10.18092/ulikidince.418132](https://doi.org/10.18092/ulikidince.418132)
- Selvanathan, S., Selvanathan, E. A., & Viswanathan, B. (2012). Causality between foreign direct investment and tourism: Empirical evidence from India. *Tourism Analysis*, 17 (1), 91 – 98. DOI: [doi.org/10.3727/108354212x13330406124296](https://doi.org/10.3727/108354212x13330406124296).
- Tourism. (2005). *Oxford English Dictionary* (3rd Edition). Oxford University Press. September 2005.

