

Tourism as a significant contributor to economic development: Evidence from South Asian Economies

Iram Kamal, Syed Asif Ali Naqvi

Department of Economics, Government College University Faisalabad (38040), Pakistan

*Email: asifalinaqvi@gcuf.edu.pk

Tel: +92-300-4691512

Received for publication: 22 October 2017.

Accepted for publication: 21 January 2018.

Abstract

Tourism has become the world vibrant sector with its multidimensional impacts on the economies especially for developing nations. Study in hand was conducted by taking data of four South Asian economies i.e. Pakistan, India, Nepal and Sri Lanka, which have good potential for the tourism due to their diverse geography, culture and traditions. Time series data set for the years 1985 to 2015 were employed for analysis. It was observed that all selected variables were stationary on the first difference. The study findings revealed that the number of international tourist arrival in India is greater compared to other three selected countries. The results of long run co integration indicated that variable, number of tourist arrival has significant effect on the GDP of all countries. Overall results of the study validate the hypothesis that tourism has positive impact on the economic development of a country.

Keywords: Tourism, economic development, GDP, gross capital formation, South Asian countries

Introduction

Tourism basically includes the activities of persons travelling to the outside places which are different to their environment and this travelling is not more than one continuous year. This travelling is for business, leisure and for other activities like domestic tourism and foreign tourism or International tourism. When the people travel from one city to another city or travel within the country is known as domestic tourism. And, when people travel across the country is known as international tourism. Now, world has become a global village due to the information technology. The present age is the age of computer technology (Gokovali, 2010; Kim *et al.*, 2006). People easily know about different places in the world due to the internet and they are travelling toward these places to see the nature. The people of developed countries travel more toward the developing countries as compare to the people of developing countries travel toward the developed countries (Demiroz and Ongan, 2005; Mishra *et al.*, 2011).

Tourism has become the source of therapy to release out the stress which is the requirement of today's life style. The people now want variations in the usual life style and they want to spend some memorable time. This is the major cause that enhances the number of tourists very rapidly and promotes the tourism industry. For the last two decades, this sector becomes essential part of world economy. This sector has significant influence on the world's economy. Tourism sector is growing very fast in both developed and the developing countries (Clancy, 1999; Chou, 2013). Tourism sector directly contributed US\$2.2 trillion to the world GDP and it grew by 3.1 percent in 2015. The total contribution (direct and indirect) of tourism industry to the world GDP was 9.8% in 2015.

Tourism industry contributes a big part in GDP of many countries. In 2015, 127 countries out of 184 countries GDP grew due to tourism (WTTC, 2016).

Tourism sector has positive impact on the other sector of the economy like hostelling, manufacturing and transportation sector, and it provides job opportunities to the host country. When the number of tourist arrival increases and eventually employment opportunities also increases (Mishra *et al.*, 2011; Khalil *et al.*, 2008). Tourism contribution to employment in the world economy increase 2.6 percent and provided 284 million jobs in 2015. Traditionally, the economic growth has been connected with the development of manufacturing and agriculture sector. Tourism has been considered as non-growth oriented industry. So, it has been considered non-attracting from both policymakers and economists (Papatheodorou, 1999; Sreekumar and Parayil, 2002).

Tourism sector creates new investment and generate more revenue from the payments of goods and services. The capital investment from tourism was 4.3% of total world investment. Tourism is the second form of export as it contributes 6.1% of total export in the form of visitors export in 2015 (WTTC, 2016). So, the tourism sector is become very important sector in the world.

The selected countries have a great attraction for the tourists because of their climate, traditions, culture, mountains, lakes, ocean, and especially for their hospitality that attract tourist to visit these countries. In the year 2015, 1.5 million tourists were arrived in Sri Lanka, 7.7 million tourists were arrived in India, 0.966 million tourists were arrived in Pakistan and 0.88 million tourists were arrived in Nepal. Pakistan was on 6th position among the south Asian countries in the field of tourism arrival, Sri Lanka was on 4st Position, India was on 1th Position and Nepal was on 9th position.

This study investigated the causal relation among tourism and economic growth and provide policy implication on the basis of the results. And a comparative analysis is done using the results of selected four countries, provided by the time series analysis of these countries. The proposed was aimed at finding the association between tourism and economic development for selecting South Asian countries. Causality between tourism and economic development was quantified and a comparative analysis among selected South Asian countries was made.

Materials and Methods

To quantify the long run (LR) association between economic development and tourism, the annual data regarding important macro-economic variables for the period of 1985 to 2015 was used. The data was collected from the World Development Indicators (WDI). The assertion is that tourism has positively co related to the economic development. Number of tourist arrival (ARVL), tourism receipts (RCPT), tourism expenditures (EXP), gross capital formation (GCF), exchange rate (ER) and GDP were the variables for analysis. The functional form of the selected variables for the study can be written as follows:

$$GDP = f (ARVL, RCPT, EXP, GCF, ER) \quad (1)$$

GDP is used as the proxy of economic development ARVL, RCPT and EXP are used as the proxy of the tourism. To analyze the long run equilibrium among the variables co integration is applied. The procedure of co integration analysis comprises two stages.

First step is to found the stationary property of the series. To check the stationary of the variables it is very necessary to avoid the problem of unit root. Stationary tests are very important and useful in selecting the appropriate methods of estimation for empirical analysis that explore the LR relation among the selected variables. A series is said to be stationary if its distribution is normal and its mean and variance are constant. Stationary is measured by the Unit Root procedure as it is

the most appropriate way to do this. The study employed Augmented Dickey Fuller (ADF) test to check stationarity.

If the series is stationary on level then OLS procedure is applied (Ghali, 1976) but if the series is stationary on first difference then Johansen and Juselius (JJ) co integration is applied which is the second step of this procedure. The trace value test is used to examine the co integrated vectors among all series. The simple co integration results are used to show the significance of the variables. There exist many techniques in literature that characterized the short and long run relations between the variables. Many studies are following this technique to check co integration among variables (Khalil *et al.*, 2007; Vanegas and Croes, 2007; Brida *et al.*, 2008).

In the last step, the short run procedure is done. To attain the short run result, the Vector Error Correction Model (VECM) is used which used the differenced variables to give the estimated values of coefficients. The VECM is restricted vector autoregressive (VAR) that is used in non-stationary series that are co integrated. This test gives the value which called the ECM term that basically shows the speed of adjustment toward the equilibrium. The value of error correction model (ECM) must be negative and significant. This test was used by many researchers like Mishra *et al.*, (2011), Malik *et al.*, (2010) Tang (2015) etc.

Engel and Granger (1987) and Granger (1988) developed a test to check the direction of causality among two variables that were co integrated. Granger test was established to quantify the causal relationships among the selected indicator of tourism and economic development. The main equation that will be estimated for long run relationship as follows:

$$GDP_t = \beta_0 + \beta_1 ARVL_t + \beta_2 RCPT_t + \beta_3 EXP_t + \beta_4 GCF_t + \beta_5 ER_t + \mu_t \quad (2)$$

The same equation will be estimated for each country (Pakistan, Nepal, Sri Lanka and India) separately.

The equation that will be used for showing the short run relationship as follows:

$$\Delta GDP_t = \alpha_0 + \alpha_1 \Delta ARVL_t + \alpha_2 \Delta RCPT_t + \alpha_3 \Delta EXP_t + \alpha_4 \Delta GCF_t + \alpha_5 \Delta ER_t + \alpha_5 \mu_{t-1} + \varepsilon_t \quad (3)$$

Where Δ denotes the first difference operator, ε_t is a random error term. The same equation will be used to show the short run relationship among variables for all four countries.

Results and Discussions

Unit root results

The findings of the ADF test are given below in the appendix (Table 1 to 4). It was applied to check the stationarity property of all the selected series. The results of ADF test are showing that all series are stationary on 1st level difference i.e. I (1) at 5% and 1% significance levels, respectively. These results provided a proof to adopt the Johansen and Juselius technique of co integration for attaining the long run results. The error correction model (ECM) is employed to check the short run (SR) association among the selected variables.

Table 1: JJ Cointegration Results for Pakistan (1985-2015)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.90	163.82	95.75	0.000
At most 1 *	0.82	97.02	69.81	0.000
At most 2 *	0.55	46.41	47.85	0.04
At most 3	0.43	22.94	29.79	0.24
At most 4	0.20	6.61	15.49	0.62
At most 5	0.000	0.01	3.84	0.89

Co-integration Results

After completing the unit root procedure, JJ co integration technique was applied as it was the more appropriate techniques for long run analysis because the findings of ADF test showed that all the series are stationary on 1st difference i.e. I (1).

Above Table comprises of JJ co integration test results for Pakistan. The values of Trace test indicates that there are 3 co integrating equations at 5% level of significance. The null hypothesis is rejected till, *at most 1* co integration equations. It means that there are two co integrated vector in the long run.

Table 2: JJ Cointegration Results for India (1985-2015)

Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.85	149.19	95.75	0.000
At most 1 *	0.74	93.18	69.81	0.000
At most 2 *	0.53	54.06	47.85	0.01
At most 3 *	0.43	31.98	29.79	0.02
At most 4	0.34	15.39	15.49	0.05
At most 5	0.10	3.23	3.84	0.07

In the above Table 2 values of Trace test for India indicated that there are 4 co integrating equations at 5% level of significance. It means that there are four co integrated vector in the long run. It means that there are high association among the independent and dependent variables in this study. The null hypothesis is rejected till At most 3 co integration equations.

Table 3: JJ Cointegration Results for Sri Lanka (1985-2015)

Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.92	246.03	95.75	0.000
At most 1 *	0.89	171.98	69.81	0.000
At most 2 *	0.86	106.49	47.85	0.000
At most 3 *	0.69	47.62	29.79	0.000
At most 4	0.36	12.98	15.49	0.1
At most 5	0.000	0.00	3.84	0.9

Table 4: JJ Cointegration Results for Nepal (1985-2015)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.95	194.44	95.75	0.000
At most 1 *	0.85	104.30	69.81	0.000
At most 2	0.64	47.83	47.85	0.05
At most 3	0.29	17.79	29.79	0.5
At most 4	0.17	7.61	15.49	0.5
At most 5	0.06	1.92	3.84	0.1

For the case of Sri Lanka (Table 3), values of Trace test indicated that there are 4 co integrating equations at 5% level of significance. The results showed that the null hypothesis is rejected *At most 3* co integration equations which showed that there exist four co integrated vector. It shows high association among variable.

Table 4 shows the JJ co integration test results for Nepal that consists value of trace. It indicates that there are 3 co integrating equations at 5% level of significance. It means that there are two co integrated vector in the long run. The null hypothesis is rejected at most 1 co integration equations, which shows that there exists two co integrated vector.

Long run Co integration results

The long run co integration test was used to quantify the relationship among the selected variables for long run and findings are depicted in the following (from Table 5 to 8). These results are used to show the significance of variables.

Table 5: Results of long run co integration for Pakistan

Variables	B	S.E	t-statistics	P-Values
ARVL	47678.3	21951.3	2.17	0.04**
EXP	4.08	11.4	0.35	0.7
RCPT	135.3	33.04	4.09	0.000***
ER	1.25E+09	2.40E+08	5.19	0.000***
GCF	-3.08E+09	2.37E+09	-1.3	0.2
Constant	-3.77E+10	4.86E+10	-0.77	0.44

(*** Significant at $p \leq 0.01$, ** Significant at $p \leq 0.05$)

Table 6: Results of long run co integration for India

Variables	B	S.E	t-statistics	P-Values
ARVL	-133110.3	59021.95	-2.25	0.03**
EXP	-17.12	14.66	-1.16	0.25
RCPT	125.36	18.11	6.92	0.000***
ER	1.01E+10	9.07E+08	11.13	0.00**
GCF	1.24E+10	3.05E+09	4.07	0.000***
Constant	-3.20E+11	8.99E+10	-3.55	0.00**

(*** Significant at $p \leq 0.01$, ** Significant at $p \leq 0.05$)

Table 7: Results of long run co integration for Sri Lanka

Variables	B	S.E	t-statistics	P-Values
ARVL	-73706.16	32595.57	-2.26	0.03**
EXP	-0.27	21.71	-0.01	0.9
RCPT	46.48	16.57	2.80	0.00**
ER	1.91E+08	49135595	3.88	0.000***
GCF	2.01E+09	4.50E+08	4.47	0.000***
Constant	-3.75E+10	9.40E+09	-3.98	0.000***

(*** Significant at $p \leq 0.01$, ** Significant at $p \leq 0.05$)

Table 8: Results of long run co integration for Nepal

Variables	B	S.E	t-statistics	P-Values
ARVL	15818.07	4339.2	3.64	0.00**
EXP	21.81	5.60	3.89	0.000***
RCPT	-11.04	7.55	-1.46	0.1
ER	73926076	17024186	4.34	0.000***
GCF	1.06E+08	1.27E+08	0.83	0.4
Constant	-7.95E+09	1.83E+09	-4.34	0.000***

(*** Significant at $p \leq 0.01$, ** Significant at $p \leq 0.05$)

The above tables showed the long run results of co integration of four South Asian nations. In case of Pakistan only GCF is negatively co related with economic development. All the other variables are positively co related to the proxy of economic development which is collaborating to the literature review. In the case of India ARVL and EXP are negatively co related to the GDP. All other variables are positively co related to the GDP. In the case of Sri Lanka, ARVL is negatively co related to the GDP. All other variables are positively co related to the GDP. In the case of Nepal, RCPT is negatively co related to the GDP. All the other variables are positively co related to the GDP.

The results of long run co integration are shows that ARVL has positive and significant impact on the GDP of Pakistan, Nepal and India, and negative impact for the case of Sri Lanka. RCPT has positive and significant impact on the GDP or economic development of Pakistan, Sri Lanka and India. EXP has positive and significant impact on economic development in the case of Nepal. ER has significant impact on GDP in all four countries. GCF has significant impact on the economic development in the case of India and Sri Lanka.

Short run Results of selected Countries

This section has shown the short run results (Table 9 to 12) as well as the speed of adjustment towards the equilibrium.

Table 9: Short run results for Pakistan

Variables	Coefficients	P-Values	t-statistics
Ecm	-0.041191	(0.00755)	[5.45425]
D(GDP(-1))	-0.694667	(0.26421)	[-2.62922]
D(GDP(-2))	-1.092772	(0.43810)	[-2.49433]
D(ARVL(-1))	19051.94	(25608.8)	[0.74396]
D(ARVL(-2))	55442.08	(23388.9)	[2.37045]
D(RCPT(-1))	-4.911074	(31.0724)	[-0.15805]
D(RCPT(-2))	48.18468	(35.4722)	[1.35838]
D(EXP(-1))	4.251628	(6.89710)	[0.61644]
D(EXP(-2))	13.55067	(7.58784)	[1.78584]
D(ER(-1))	1.26E+08	(5.2E+08)	[0.24231]
D(ER(-2))	2.98E+09	(6.3E+08)	[4.71978]
D(GCF(-1))	-2.07E+09	(1.1E+09)	[-1.84905]
D(GCF(-2))	-2.38E+09	(1.2E+09)	[-1.99005]
C	6.75E+09	(2.5E+09)	[2.69687]

Table 10: Short run results for India

Variables	Coefficients	P-Values	t-statistics
Ecm	-0.757341	(0.06948)	[1.09067]
D(GDP(-1))	0.278368	(0.66325)	[0.41971]
D(GDP(-2))	-0.211488	(0.70176)	[-0.30137]
D(ARVL(-1))	187433.4	(208582.)	[0.89861]
D(ARVL(-2))	40977.91	(220823.)	[0.18557]
D(RCPT(-1))	-10.43914	(118.638)	[-0.08799]
D(RCPT(-2))	51.46357	(91.7442)	[0.56095]
D(EXP(-1))	-75.41019	(57.2712)	[-1.31672]
D(EXP(-2))	-41.75953	(60.7593)	[-0.68729]
D(ER(-1))	2.21E+09	(1.7E+10)	[0.13204]
D(ER(-2))	-8.02E+09	(1.6E+10)	[-0.51465]
D(GCF(-1))	-8.08E+09	(1.3E+10)	[-0.61951]
D(GCF(-2))	5.40E+09	(1.4E+10)	[0.39915]
C	6.05E+10	(5.0E+10)	[1.20051]

Table 11: Short run results for Sri Lanka

Variables	Coefficients	P-Values	t-statistics
Ecm	-0.127972	(0.04521)	[-2.83045]
D(GDP(-1))	0.076020	(0.24112)	[0.31528]
D(GDP(-2))	0.555593	(0.36398)	[1.52646]
D(ARVL(-1))	109011.9	(26132.3)	[4.17154]
D(ARVL(-2))	54789.90	(25245.3)	[2.17030]
D(RCPT(-1))	-63.74778	(14.6590)	[-4.34870]
D(RCPT(-2))	-40.92898	(15.8353)	[-2.58466]
D(EXP(-1))	11.72863	(15.8544)	[0.73977]
D(EXP(-2))	28.58244	(15.8251)	[1.80614]
D(ER(-1))	3.77E+08	(1.7E+08)	[2.19840]
D(ER(-2))	2.48E+08	(2.5E+08)	[0.97877]
D(GCF(-1))	86153662	(2.8E+08)	[0.31029]
D(GCF(-2))	1.39E+08	(5.4E+08)	[0.25573]
C	8.51E+08	(1.8E+09)	[0.46995]

The results of the ECM show that all the four countries have negative as well as significant value of ecm which shows that all the countries converge to the equilibrium towards the LR. In the case of Pakistan the results shows that economy will converge to the LR equilibrium after having 4% adjustments in the short run. In the case of India the results shows that economy will converge to the long run equilibrium after having 75% adjustments in the SR. In the case of Sri Lanka the results shows that economy will converge to the LR equilibrium after having 12% adjustments in the short run. In the case of Nepal the results shows that economy will converge to the LR equilibrium after having 5% adjustments in the SR.

Table 12: Short run results for Nepal

Variables	Coefficients	P-Values	t-statistics
Ecm	-0.058275	(0.04018)	[-1.45037]
D(GDP(-1))	-0.023233	(0.26008)	[-0.08933]
D(GDP(-2))	0.269675	(0.21624)	[1.24714]
D(ARVL(-1))	5567.137	(3696.00)	[1.50626]
D(ARVL(-2))	-5812.863	(3624.80)	[-1.60364]
D(RCPT(-1))	2.837937	(4.90538)	[0.57854]
D(RCPT(-2))	7.558114	(3.50683)	[2.15526]
D(EXP(-1))	-6.318199	(8.65743)	[-0.72980]
D(EXP(-2))	0.840383	(6.69006)	[0.12562]
D(ER(-1))	-33079660	(5.4E+07)	[-0.61270]
D(ER(-2))	19561494	(3.5E+07)	[0.55159]
D(GCF(-1))	27335900	(5.1E+07)	[0.53975]
D(GCF(-2))	-90260809	(5.1E+07)	[-1.75446]
C	5.75E+08	(3.5E+08)	[1.66276]

Granger Causality Test

To check the causal relationship among variables Granger causality test is used. The results of this test are discussed in the following.

The results of the granger test for the case of Pakistan showed that there were unidirectional relationship among ARVL and GDP, RCPT and GDP, GFC and GDP, ARVL and RCPT, ARVL and ER, ER and EXP, GCF and RCPT and GCF and ER at 1%, 5% and 10% level of significance. And bidirectional relationship among ER and GDP, EXP and ARVL at 1%, 5% and 10% level of significance.

The results of Granger test for the case of India showed that GDP and GCF, GCF and RCPT, GDP and ER, GCF and EXP, ER and RCPT have unidirectional causal relationship at 1%, 5% and 10% level of significance. And ARVL and GDP, RCPT and GDP, EXP and ARVL, GCF and ARVL, RCPT and EXP, ER and EXP have bidirectional relationship at 1%, 5% and 10% level of significance.

The results of the Granger test for Sri Lanka showed that EXP and GDP, ER and GDP, GCF and GDP, ER and ARVL, ER and EXP, GCF and EXP, ER and RCPT, RCPT and GCF, GCF and ER have unidirectional causal relationship 1 %, 5%, 10% level of significance. And ARVL and GDP, RCPT and GDP, ARVL and EXP, ARVL and GCF, RCPT and EXP have bidirectional relationship at 1 %, 5%, 10% level of significance.

The results of Granger test for Nepal showed that RCPT and GDP, EXP and GDP, ER and GDP, EXP and ARVL, ER and ARVL, GCF and ARVL, GCF and EXP, GCF and RCPT, ER and GCF have unidirectional causal relationship at 1%, and 5% level of significance. And ARVL and GDP, GCF and GDP, RCPT and ARVL, RCPT and EXP have bidirectional association at 1%, and 5% level of significance.

Comparison among Long run results of Co integration

The analysis of every country was made separately by using the time series data of each individual country. Parameters are taken to make comparative analysis of these countries. The table that is given below showing the long run results of all countries.

Table 13: Comparison among Long Run Results of Co Integration for South Asian Countries

Variables	Pakistan	India	Sri Lanka	Nepal
ARVL	47678.3	-133110.3	-73706.16	15818.07
EXP	4.08	-17.12	-0.27	21.81
RCPT	135.3	125.36	46.48	-11.04
ER	1.25E+09	1.01E+10	1.91E+08	73926076
GCF	-3.08E+09	1.24E+10	2.01E+09	1.06E+08

The above Table shows the long run results of JJ co integration for all Selected South Asian Countries. ARVL is significant at 5 % level of significance for all four countries. In the case of Pakistan, India and Sri Lanka, EXP is not significant. In the case of Nepal it is significant at 1% level of significance. In the case of Nepal RCPT is not significant. In the case of Pakistan and India it is significant in 1% level of significance and in Sri Lanka it is significant on 5 % level of significance. In Pakistan, Sri Lanka and Nepal, ER is significant at 1% level of significance and in India it is significant on 5% level of significance. According to the results of Pakistan and Nepal GCF is not significant in the long run. But in the case of Sri Lanka and India it is significant at 1 % level of significance.

Comparison among Short run results of selected countries

The short run results are obtained by using the error correction Model for each country separately. And now these results are comparing with each other to do the comparative analysis.

Table 14: Short Run Estimated values

Country	Pakistan	India	Sri Lanka	Nepal
ECM value	-0.041	-0.757	-0.127	-0.058

The results of ECM are given in Table 14 which showed that Pakistan has need to 4% annual adjustments in short run to converge towards the long run equilibrium. India has need 75% adjustments in short run to converge to the long run. Sri Lanka has need to 12% annual adjustments in short run to converge towards the long run equilibrium. Nepal has need to 5% annual adjustments in short run to converge towards the long run equilibrium.

Conclusion

The results of the study showed that the number of tourist arrival in Pakistan is very low as compare to India. Tourism sector in India has become very important and provide big part to GDP. The results showed that all four countries are converging to their equilibrium in the the long run. Speed of adjustment for the Pakistan was 4%, for India it was 75%, for Sri Lanka it was 12% and for the case of Nepal it was 5% on annual basis, from short run to move into the long run equilibrium. The results of the study showed that in the long run variable regarding tourism has significant impact on the economic development of the selected economies.

Policy Recommendations

The selected countries have a number of religious sites that will help to promote the tourism in these countries. Pakistan has many religious places that are related to the Sikhism and it has great chance of development the tourism sector if proper and necessary efforts are made.

The public and private sector should collaborate to promote this sector as this it needs significant investment which is could be beyond the capacity of public sector alone. This can be possible when the private and foreign investment is enforced.

Government should provide the incentives to the hotels and other industries that are related to the tourism sector to promote the tourism. The tourism Ministry of Pakistan should arrange a conference on the developments in the hotel sector in world.

Governments should facilitate the tourist by providing better means of communication, transportation and power to increase the number of tourist arrival. And the security issues should be tackled to attract the international tourists. Further, media is considered the fourth pillar of the state. This sector could play important role to promote the tourism sector in any economy. So, this sector should play their part to commercialize the tourism sector. For promoting the tourism at a high level awareness campaign is needed at the national level.

References

- Chou, M. C. (2013). Does tourism development promote economic growth in transition countries? A panel data analysis. *Econ Model.*, 33, 226-232.
- Clancy, M. J. (1999). Tourism and DEVELOPMENT Evidence from Mexico. *Annals of Tourism Research*, 26(1), 1-20.
- Demiröz, D. M., & Ongan, S. (2005). The contribution of tourism to the long-run Turkish economic growth. *Ekonomický časopis*, 53(09), 880-894.
- Ghali, M. A. (1976). Tourism and economic growth: an empirical study. *Economic Development and Cultural Change*, 24(3), 527-538.
- Gokovali, U. (2010). Contribution of tourism to economic growth in Turkey. *Anatolia*, 21(1), 139-153.
- Granger, C. W. (1988). Some recent development in a concept of causality. *Journal of econometrics*, 39(1-2), 199-211.
- Johansen, S., & Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration—with applications to the demand for money. *Oxford Bulletin of Economics and statistics*, 52(2), 169-210.
- Khalil, S., Kakar, M. K., & Malik, A. (2007). Role of Tourism in Economic Growth: Empirical Evidence from Pakistan Economy [with Comments]. *The Pakistan Development Review*, 985-995.
- Kim, H. J., & Chen, M. H. (2006). Tourism expansion and economic development: The case of Taiwan. *Tourism management*, 27(5), 925-933.
- Malik, S., Chaudhry, I. S., Sheikh, M. R., & Farooqi, F. S. (2010). Tourism, economic growth and current account deficit in Pakistan: Evidence from co-integration and causal analysis. *European Journal of Economics, Finance and Administrative Sciences*, 22, 21-31.
- Mishra, P. K., Rout, H. B., & Mohapatra, S. S. (2011). Causality between tourism and economic growth: Empirical evidence from India. *European Journal of Social Sciences*, 18(4), 518-527.
- Papatheodorou, A. (1999). The demand for international tourism in the Mediterranean region. *Applied Economics*, 31(5), 619-630.
- Sanchez Carrera, E. J., Brida, J. G., & Risso, W. A. (2007). Tourism's impact on long-run Mexican economic growth. Online available at: papers.ssrn.com/ last accessed on June, 2017.
- Sreekumar, T. T., & Parayil, G. (2002). Contentions and contradictions of tourism as development option: the case of Kerala, India. *Third World Quarterly*, 23(3), 529-548.

- Tang, C. F., & Tan, E. C. (2015). Does tourism effectively stimulate Malaysia's economic growth?. *Tourism management*, 46, 158-163.
- The World Travel and Tourism Council (WTTC). Various Reports. Online Available at: <https://www.wttc.org/> Accessed on June, 2017.
- Vanegas Sr, M., & Croes, R. (2007). Tourism, economic expansion and poverty in Nicaragua: investigating cointegration and causal relations. *Staff Paper Series-Department of Applied Economics, University of Minnesota*, (P07-10).