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# POLITICAL ECONOMY OF TOURISM IN PAKISTAN: THE ROLE OF TERRORISM AND INFRASTRUCTURE DEVELOPMENT



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## ABSTRACT

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Tourism is one of the world's biggest industries. Pakistan's rich history, culture and geographical diversity make it international tourism appeal. International tourism is a source of revenue, employment, foreign exchange and ultimately economic development. There is no desirable change in international tourism in Pakistan. This study investigated the impact of terrorism and infrastructure on tourism in the perspective of political economy. Error correction model (ECM) has been employed on the annual time series data for the years 1972-2013. Tourism is measured by international tourist arrivals in the country. The results have shown that terrorist attacks have adversely affected the tourism but infrastructure and GDP per-capita have positive impact on tourism. It may be concluded that whatever the efforts are being done by the government to increase the international tourism the desired results cannot be attained until terrorism is eliminated. Political economy of tourism revolves around the terrorism and infrastructure.

**Contribution/ Originality:** The study is an addition in the literature of tourism economics in the perspective of political economy of emerging issue of terrorism as a contributing factor of international tourism in Pakistan. It is pertinent to control terrorism for international tourism development in the economy along with infrastructure development.

## 1. INTRODUCTION

International tourism is one of the major contributors in the growth of various economies. Tourism sector is labor-intensive and in many countries, it acts as an engine of development through tourism revenue and creating jobs in this sector and related other sectors. The belief that tourism can lead to economic growth is known as tourism-led growth hypothesis. It is supported by Balaguer and Cantavella-Jorda (2002) for Spain, Katircioglu (2009) for Turkey and Hye and Khan (2013) for Pakistan. Some of the studies have shown bidirectional relationship between tourism and economic growth, i.e. tourism and economic growth have spiral effects (Shan and Wilson, 2001; Durbarry, 2002).

The role of international tourism is also important in promoting world peace by providing an incentive for peacekeeping and building a bridge between cultures. International tourism also assists at micro level to raise the

level of household income of destination countries in two ways. Firstly, it boosts efficiency through increased competition among firms related with tourism and with other international tourist destinations, and secondly, it facilitates the exploitation of economies of scale in local firms. The growth of tourism enhances household income and employment in both the formal and informal sectors of destination economy. It may be a viable sector to help in the reduction of abject household poverty. Ultimately tourism enhances the economic growth (Oh, 2005; Zortuk, 2009). Martín *et al.* (2004) concluded that tourism development can contribute to economic growth of medium and lower income countries, while such a role is not obvious for developed economies. It starkly shows the significance of tourism for developing countries.

One of the major determinants of tourism development is peace and security in the destination country. Pizam and Fleischer (2002) concluded that international tourism is highly dependent on peace and security. Rule of law and socio-economic justice that is product of political economy in the host country ensures security and attracts foreign tourists which results in expansion of economic activities and further tourism. Pakistan is facing severe problem of terrorism that is adversely affecting international tourism. After the 9/11 incident, Pakistan decided to join the war against terrorism. The country suffered a huge humanitarian and economic loss due to fight against terrorism. One of the sectors affected by terrorism is tourism. Terrorism also devastated the infrastructure. To eliminate terrorism more budgets were allocated for the war on terror rather than spending them on general development projects as well as of tourism related infrastructure. As a result of terrorism and devastated infrastructure Pakistan had to face declination in the tourism activities. Henderson *et al.* (2010) opined that terrorist activities have unfavorable impact on tourism. Foreign people do not choose such countries due to the fear of terrorism. For a number of countries empirical research shows negative relationship between terrorism and tourism activities (Seddighi *et al.*, 2001; Chen and Noriega, 2004).

Another essential part of the demand for tourism is means to access the diverse tourist places with comfort and security. For the purpose infrastructure in the host country needs to be well designed. It would be comprised of good transportation facilities in the form of roads, railway lines, airports, seaports, shipping services, etc. The communication services and lodging facilities are also part of the tourism infrastructure. Due to earthquake in 2005, Pakistan's tourist areas faced havoc loss of infrastructure in tourism areas and even tourist places were destroyed. Government faced many troubles due to scarcity of funds for rehabilitation of the earthquake-stricken areas and development of infrastructure and tourist places. On the other hand war against terrorism was also consuming huge amount of funds. The energy crisis in the form of load shedding of electricity, the insufficient supply of natural gas to households and automobiles, and non-provision of complete set of tourism services have also been assumed as factor keeping tourism infrastructure in a bad shape. The rank of flag carrier airline in Pakistan is not so good. There is political economy of war against terrorism and development of infrastructure in Pakistan.

There is a range of determinants of tourism from developmental stage of an economy to the welfare level of people in the economy. The quality of governance, common borders, common language, educational level in the destination country, population of the destination country, public security, the purchasing power of the currency of origin country of tourists as well as of the destination country, cost of travel and accommodation, trade activities of the destination country, cultural and traditional activities of destination country and political instability in the destination country, etc. also contribute in terrorism development.

As concerns the political economy, government has a key role in tourism development, by planning and regulation (Bramwell, 2011). Hall (2005) discussed seven functions of governments in the tourism development; coordination, planning, legislation and regulation, entrepreneurship, stimulation, social tourism and public interest protection roles. According to Wearing and Neil (2009) only government and public authorities can coordinate to achieve sustainable tourism. Political economy not only casts a glance on government intervention in tourism development, but also stresses on the importance of the state's relationship with society. Tackling the terrorism and

developing the infrastructure for tourism are parts of the political economy. These two sectors not only contribute in tourism development but a number of other macroeconomic targets.

The situation of tourism in Pakistan is not so good. According to the World Travel and Tourism Council tourism has contributed 3.1% in GDP of economy in 2013. In the same year, travel and tourism competitiveness index ranked Pakistan at 122 out of 140 nations. It needs the attention of researchers to estimate the factors responsible for tourism in Pakistan. The core objective of the current study is to see the impact of terrorism and infrastructure on tourism in the perspective of political economy.

## 2. METHODOLOGY

Generally tourism demand is regarded as a measure of visitors' use of a good or service (Frechtling, 2001). It is originated from the classical definition of demand in economics, namely the desire to possess commodity or to make use of a service, combined with the ability to purchase it. Tourism demand is a special form of demand in which a tourism product is a bundle of complementary goods and services (Morley, 1992). Economic theory of tourism demand is utilized in this study for analyzing the tourism in Pakistan in the perspective of political economy of terrorism and infrastructure.

On the basis of theory of demand for tourism, following theoretical model is constructed.

Demand for tourism = f (Terrorism, Infrastructure, GDP per capita, Real exchange rate)

The demand for tourism is operationally defined as the number of international inbound tourists who travelled to Pakistan for a period not exceeding twelve months and whose main purpose in visiting is other than an activity remunerated. When data on number of tourists is not available, the number of visitors, which include tourists, same day visitors, cruise passengers and crew members is shown instead. The data on inbound tourists refer to the number of arrivals, not the number of people travelling. Thus a person who makes several trips to the country during a given period is counted each time as a new arrival.

Terrorism has been defined as the annual number of terrorist incidents in Pakistan. It is hypothesized that terrorism affects the tourism adversely. The infrastructure in the form of means of transportation, communication and accommodation is captured by the number of local and international passengers air transport carried. It is good proxy of infrastructure at national and international level for tourism. It is hypothesized that infrastructure positively affects the tourism. The development stage of the economy is captured by the per-capital income of Pakistan. It is speculated that tourism is positively affected by this variable. Purchasing power of currency is captured by exchange rate of Pakistani rupee with US dollar and it is assumed that purchasing power influences the demand for tourism positively.

The functional form of the model is given as:

$$\text{LnTOUR} = \alpha_0 + \alpha_1 \text{LnTERRA} + \alpha_2 \text{LnINFRA} + \alpha_3 \text{LnGDP} + \alpha_4 \text{LnEXR} \dots\dots\dots (1)$$

Where

LnTOUR = log of tourist arrival (Annual tourist arrivals in Pakistan)

LnTERRA = Log of terrorism (Annual terrorist incidents in Pakistan)

LnINFRA = Log of infrastructure (Annual number of local and international passengers air transport carried)

LnGDP = log of Gross Domestic Product (GDP per-capita)

LnEXR = log of exchange rate (Exchange rate of Pakistani rupee with \$US)

This study has utilized annual time series data to avoid seasonality problems. It covers the years 1972 to 2013 and has been obtained from "Tourism in Pakistan" Year Book published by Ministry of Tourism, Government of Pakistan, IFS (International Financial Statistics), WDI (World Development Indicators), various Pakistan Economic Surveys and GTD (Global Terrorism Database).

Most of the economic variables in the time series exhibit a non-stationary trend. If variables are non-stationary then they inflate R<sup>2</sup> and the t score. In this condition regression known as spurious regression means the results

become meaningless. The augmented Dickey-Fuller (ADF) unit root test (Dickey and Fuller, 1981) is used to examine the stationarity of the data set.

$$\Delta Y_t = \beta_0 + \beta_1.trend + \beta_2 lY_{t-i} + \sum_{i=0}^{\infty} \phi \Delta Y_{t-i} + e$$

In order to check long run relationship among variables Auto Regressive Distributed Lag (ARDL) model has been used. The ARDL method of cointegration is developed by Pesaran and Pesaran (1997) and Pesaran and Shin (1995) and further advanced by Pesaran *et al.* (2001).

It is a combination of both autoregressive models and distributed lag models. ARDL model, a time series is a function of its lagged values and current and lagged values of one or more explanatory variables. This econometric technique is more appropriate for small samples (30-80 values). One of the advantages to use this model is that it avoids endogeneity problem. The benefit to this technique is more attractive as it can be employed even if the order of integration is different in the variables and avoids spurious regression. According to Pesaran *et al.* (2001) the parameter estimates obtained from this approach are unbiased and efficient because they avoid the problems that may occur due to autocorrelation. It also eliminates the problem related to omitted variables and serial correlation.

According to Pesaran and Pesaran (1997) ARDL approach to cointegration needs the following two steps. In the first step, the existence of any long run relationships among the variables of interest is determined by using an F-test. Second step of analysis involves the estimation of the coefficients of the long run relationship and determine their values, followed by the estimation of the short-run elasticity of the variables with the error correction representation of the ARDL model. By applying the ECM version of ARDL model, the speed of adjustment to equilibrium is determined.

Under the ARDL approach equation No.1 can be expressed as:

$$\Delta \ln(TOUR)_t = \alpha_0 + \sum_{i=1}^n \alpha_{1i} \Delta \ln(TOUR)_{t-i} + \sum_{i=0}^n \alpha_{2i} \Delta \ln(TERRA)_{t-i} + \sum_{i=0}^n \alpha_{3i} \Delta \ln(INFRA)_{t-i} + \sum_{i=0}^n \alpha_{4i} \Delta \ln(GDP)_{t-i} + \sum_{i=0}^n \alpha_{5i} \Delta \ln(EXR)_{t-i} + \beta_1 \ln(TOUR)_{t-i} + \beta_2 \ln(TERRA)_{t-i} + \beta_3 \ln(INFRA)_{t-i} + \beta_4 \ln(GDP)_{t-i} + \beta_5 \ln(EXR)_{t-i} + e_t \dots \dots \dots \text{②}$$

The short-and long-run parameters with appropriate asymptotic inferences can be obtained by applying OLS to ARDL with an appropriate lag length. A general specification of this test can be expressed as:

In the above equation  $\alpha_1, \alpha_2, \dots, \alpha_5$  represent the short run dynamics of the model while parameters  $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5$  represent long run relationship. The null hypothesis is

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$$

$$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0$$

The rejection of null hypothesis ( $H_0$ ) will confirm the existence of cointegration.

If cointegration exists then long run relationship will be estimated by the following equation.

$$\ln(TOUR)_t = \alpha_0 + \sum_{i=1}^n \alpha_{1i} \ln(TOUR)_{t-i} + \sum_{i=0}^n \alpha_{2i} \ln(TERRA)_{t-i} + \sum_{i=0}^n \alpha_{3i} \ln(INFRA)_{t-i} + \sum_{i=0}^n \alpha_{4i} \ln(GDP)_{t-i} + \sum_{i=0}^n \alpha_{5i} \ln(EXR)_{t-i} + e_t \dots \dots \dots \text{③}$$

If there is long run relationship between variables then we will move to next step where we estimate Error Correction Model. Error Correction Model (ECM) are a category of multiple time series models that directly estimate the speed at which a dependent variable returns towards equilibrium after a change in explanatory variable. ECM are useful for estimating both long run and short run effects of one time series on another.

ECM are useful models when dealing with integrated data, but can also be used with stationary data. For this objective, we will estimate the following equation.

$$\Delta \ln(TOUR)_t = \alpha_0 + \sum_{i=1}^n \alpha_{1i} \Delta \ln(TOUR)_{t-i} + \sum_{i=0}^n \alpha_{2i} \Delta \ln(TERRA)_{t-i} + \sum_{i=0}^n \alpha_{3i} \Delta \ln(INFRA)_{t-i} + \sum_{i=0}^n \alpha_{4i} \Delta \ln(GDP)_{t-i} + \sum_{i=0}^n \alpha_{5i} \Delta \ln(EXR)_{t-i} + Ect_{-1} + e_t, \dots \dots \dots (4)$$

Where  $\Delta$  is first difference operator and n is lag length and the parameter.

### 3. EMPIRICAL RESULTS

To check the stationary of data ADF test has been applied. The results are shown in table 1.

**Table-1. Results of ADF Test**

Variable	Level	First Difference	Decision
LnTOUR	-2.294911	-6.584529	I(1)
LnTERRA	-0.865723	-7.278393	I(1)
LnINFRA	-5.488904	-4.893924	I(0)
LnGDP	-0.833300	-4.920763	I(1)
LnEXR	-1.450134	-4.533671	I(1)

To empirically analyze the long run and short run relationship and dynamic interaction among the tourist arrival and explanatory variables, the model has been estimated by applying ARDL bound test approach to co-integration. For ARDL it is essential to determine the order of lag and choose the Akaike Information Criteria.

**Table-2. Autoregressive distributed lag estimates based on AIC**

Dependent variable is LnTOUR Estimation from 1972 to 2013 ARDL (2, 3, 4, 4, 2) Selected based on Akaike information criteria ( AIC )			
Regressors	Coefficients	T-Ratio	Prob.
LnTOUR(-1)	0.040130	0.190466	0.8511
LnTOUR(-2)	0.383002	1.903212	0.0731
LnTERRA	-0.005022	-0.184908	0.8554
LnTERRA(-1)	-0.087130	-2.561851	0.0196
LnTERRA(-2)	-0.101374	-2.761424	0.0129
LnTERRA(-3)	-0.043057	-1.141593	0.2686
LnTERRA(-4)	-0.118902	-2.873661	0.0101
LnINFRA	0.935677	3.301850	0.0040
LnINFRA(-1)	0.499852	2.025374	0.0579
LnINFRA(-2)	-0.418506	-2.258913	0.0365
LnGDP	0.228310	0.162168	0.8730
LnGDP(-1)	-3.952627	-2.087115	0.0514
LnGDP(-2)	2.366925	1.395592	0.1798
LnGDP(-3)	3.305758	2.254795	0.0368
LnEXR	0.208694	0.384134	0.7054
LnEXR(-1)	-1.179119	-1.678485	0.1105
LnEXR(-2)	0.078806	0.142037	0.8886
LnEXR(-3)	-0.782168	-1.217967	0.2390
LnEXR(-4)	1.680425	2.966446	0.0083
C	-18.80270	-3.846003	0.0012

In order to check long run relationships among variable we employed bound test. In order to carry out Wald test the long run coefficients of all variables are put equal to zero for acceptance or rejection of null hypothesis.

Null hypothesis:  $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$ : No cointegration exists

Alternative hypothesis:  $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0$ : Cointegration exists

We can reject the null hypothesis if the F-statistics value is greater than upper bound value given in Pesaran's table. So, we can say there is long run association among the variables in ARDL model.

**Table-3. Bound Test Approach under ARDL**

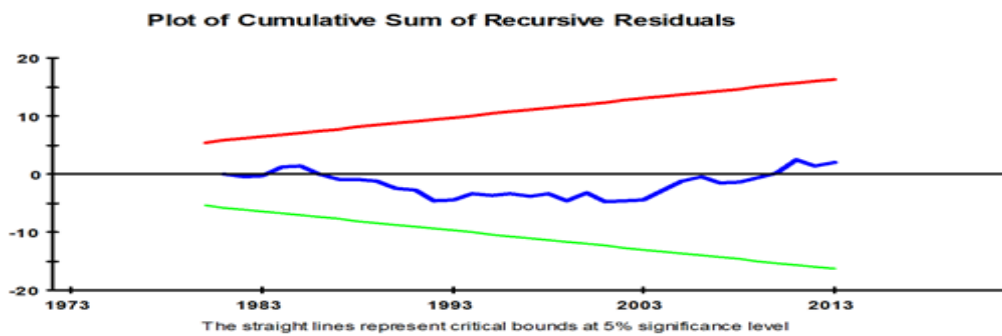
F- statistics	95% lower bound value	95% upper bound value	90% lower bound value	90% upper bound value
4.318063	2.56	3.49	2.2	3.09

In the light of results of bound test in table-3 we can reject the null hypothesis of no cointegration relationship on the basis of significant F- statistics value because the calculated F-statistic 4.318063 is higher than both upper bound values 3.49 at level of significance 95% and other upper values 3.09 at 90% level of significance. As a result we can say that there is long run co-integration relationship among tourist arrival, terrorism, infrastructure, GDP per-capita and real exchange rate. The serial auto correlation is checked by Breusch-Godfrey LM test. The greater than 0.05 percent value of LM test for 95% confidence interval represents the absence of serial autocorrelation. The results are shown in table 4.

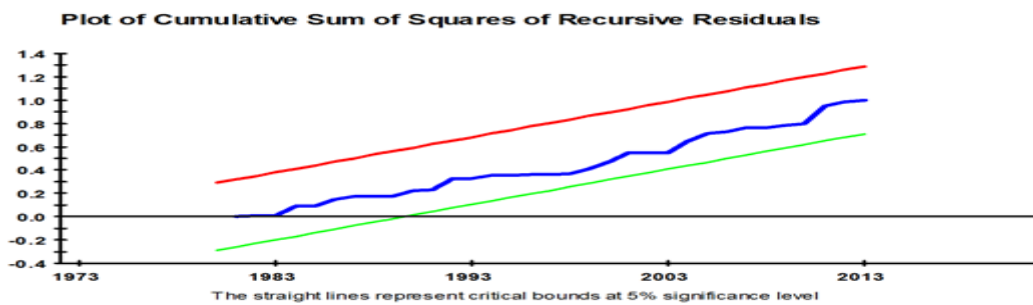
**Table-4. Test for Serial Correlation**

Test	Statistics	Probability
Breusch-Godfrey LM test	1.714173	0.2116

To check the stability of the model, CUSUM and CUSUMSQ tests have been employed. The plots of CUSUM and CUSUMSQ are shown in figure 1 and 2 respectively. The plots represents that regression coefficients are statistically stable over the sample period.



**Figure-1. Plot of Cumulative Sum of Recursive Residuals**



**Figure-2. Plot of Cumulative Sum of Squares of Recursive Residuals**

The long run relationship has been estimated by using cointegration approach of autoregression distributed lag (ARDL) model. The coefficients of long run estimates are shown in table 5.

**Table-5.** Estimated long run coefficients using ARDL approach

<b>Dependent variable is LnLTOUR</b>				
<b>Estimation from 1972 to 2013</b>				
<b>ARDL (2, 3, 4, 4, 2) selected based on Akaike information criteria</b>				
<b>Regressors</b>	<b>Coefficients</b>	<b>Standard error</b>	<b>T- ratio</b>	<b>Prob.</b>
LnTERRO	-0.616232	0.196245	-3.140121	0.0057
LnINFRA	1.763006	0.662691	2.660373	0.0159
LnGDP	3.377489	0.567068	5.956051	0.0000
LnEXR	0.011508	0.424648	0.027099	0.9787
C	-32.594446	10.200350	-3.195424	0.0050

Demand theory hypothesizes that the demand for international tourism is negatively associated with terrorism. The results of the current study express negative relationship of terrorism with tourist arrival. Coefficient value of LnTERRO shows that one percent increase in terrorism brings -0.61 percent decrease in tourist arrivals. It is based on the fact that basic requirement of the tourists is security and safety of their lives. Terrorism enhances the level of fear in the mind of the tourists. Tourists will not visit the country either for recreation or business purposes due to terrorism. Terrorist incidents have other consequences like destroying the transportation means, electricity disruption, lesser hotel security and devastating recreational and historical places. Role of government cannot be neglected in tackling the issue of terrorism in Pakistan. Political participation and loyalties of the political leaders with their country may enable the nation to reduce terrorist attacks. Sound political institutions are needed to tackle the issue of terrorism.

Infrastructure is one of the important demand factors for tourists. The results depicted that tourism is positively related with infrastructure. Coefficient value of LnINFRA represents that one percent increase in infrastructure brings 1.76 percent increase in tourism. Improved infrastructure is one of the attractive factors for tourist to visit diversified places in the destination countries. Easy and comfortable access to different and far-fetched areas raises the confidence of the tourist to visit that country. Infrastructure forms an integral part of the tourism package. For example, road infrastructure increases accessibility of tourists to different parts of the destination country while sound airport infrastructure makes sure that tourists experience a comfortable transition into the borders of the destination country. As far as communication infrastructure is concerned, it allows quick and cheap communication between the origin and destination county. It also provides maximum information about the destinations thereby diminishing uncertainty, fear and asymmetric information. Infrastructure such as energy among others is also believed to outcome as more reliable factor that increases the attractiveness of destination. Due to the political upheavals in Pakistan, infrastructure of the country has been affected badly. Here's the role of the government to restructure and rebuild the tourist areas. It should be priority of the political decision makers to improve the infrastructure of the country and demonstrate the good image of the nation globally.

GDP per-capita is an indicator of economic development of a nation. In the current study, the estimated coefficients of long run relationship show that GDP per-capita positively influenced international tourist arrival in Pakistan. The coefficient value of LnGDP shows that one percent increase in GDP per-capita brings 3.37 percent increase in tourist arrival. In the literature, it is known as growth led-tourism hypothesis which implies that increase in the economic growth improve tourist arrival. The results of current study confirm growth led-tourism hypothesis. If one analyzes it with the lens of political economy, government incurs expenditures in order to raise the level of living standard in the economy. Developed tourism resorts make the tourists curious to visit that place. It is economic expansion of the economy that affects tourism. When government plays its significant role by enhancing the level of output in the country, the more international tourists wish to visit Pakistan.

The error correction model (ECM) estimates the speed of adjustment from short run equilibrium to long run equilibrium. The results of the error correction model are shown in table-6.

**Tabel-6.** Short run Estimates of Error Correction Model

<b>Dependent variable is <math>\Delta \text{LnTOUR}</math></b>				
<b>Estimation from 1972 to 2013</b>				
<b>ARDL (2, 3, 4, 4, 2 selected based on Akaike information criteria)</b>				
<b>Regressor</b>	<b>Coefficients</b>	<b>Standard error</b>	<b>T-ratios</b>	<b>Prob.</b>
D(LnTOUR(-1))	-0.383002	0.131121	-2.920975	0.0091
D(LnTERRO)	-0.005022	0.021808	-0.230274	0.8205
D(LnTERRO(-1))	0.263333	0.057434	4.585003	0.0002
D(LnTERRO(-2))	0.161959	0.042188	3.838936	0.0012
D(LnTERRO(-3))	0.118902	0.035459	3.353198	0.0035
D(LnINFRA)	0.935677	0.181779	5.147334	0.0001
D(LnINFRA(-1))	0.418506	0.126770	3.301292	0.0040
D(LnGDP)	0.228310	0.887377	0.257287	0.7999
D(LnGDP(-1))	-5.672683	1.344055	-4.220574	0.0005
D(LnGDP(-2))	-3.305758	1.254296	-2.635549	0.0168
D(LnEXR)	0.208694	0.366298	0.569739	0.5759
D(LnEXR(-1))	-0.977063	0.367411	-2.659319	0.0160
D(LnEXR(-2))	-0.898257	0.336952	-2.665834	0.0158
D(LnEXR(-3))	-1.680425	0.422750	-3.974982	0.0009
ECM(-1)	-0.576868	0.100260	-5.753707	0.0000

Error correction term is statistically significant with negative sign. It explains existence of stable long run relationship and points a long run co-integration among variables. Coefficient of ECM is -0.576868 which suggests that deviation from long run equilibrium is corrected by 57 percent over the following years. It means that deviation from the long run equilibrium is corrected speedily. The results show that in the short run international tourist arrival is negatively related with terrorism and positively with infrastructure. They also express that short run impact of GDP per-capita on tourist arrival is positive.

#### 4. CONCLUSION AND POLICY RECOMMENDATIONS

The study has attempted to see the impact of terrorism and infrastructure on tourism in Pakistan. The results demonstrate that terrorism has adversely affected the tourism in the economy. Terrorism is basically a politico-economic issue. The directionless government policies and the international political scenario in the last four decades are causation of this issue. It is an evil which not only created fear in the minds of local inhabitants but also in the foreigners and visitors. The terrorist attacks destroy the historical places. In Pakistan the terrorist attacks are concentrated in the areas of tourist attractions like Swat and Northern Areas. The tourism cannot be developed until the issue of terrorism is resolved. In the last two decades it is flourished rapidly not only in Pakistan but in the neighboring economies. The collective efforts by the government of Pakistan and the neighboring economies are needed. The government should strengthen the political institutions.

The infrastructure in the economy has shown positive impact on tourism. The public sector policies need attention for the development of infrastructure particularly related with tourism. The overall economic development of the country also emerged an important determinant of tourism. It is a long run process but needs focus of the policy makers.

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## REFERENCES

- Balaguer, J. and M. Cantavella-Jorda, 2002. Tourism as a long-run economic growth factor: The Spanish case. *Applied Economics*, 34(7): 877-884.
- Bramwell, B., 2011. Governance, the state and sustainable tourism: A political economy approach. *Journal of Sustainable Tourism*, 19(4/5): 459-477.
- Chen, R.J.C. and P. Noriega, 2004. The impacts of terrorism: Perceptions of faculty and students on safety and security in tourism. *Journal of Tourism and Travel Marketing*, 15(2, 3): 81-97.
- Dickey, D.A. and W.A. Fuller, 1981. Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica*, 49(4): 1057-1072.
- Durbarry, R., 2002. The economic contribution of tourism in mauritius. *Annals of Tourism Research*, 29(3): 862-865.
- Frechting, D., 2001. *Forecasting tourism demand: Methods and strategies*. Oxford: Butterworth-Heinemann.
- Hall, C.M., 2005. The role of government in the management of tourism: The public sector and tourism policies. In L. Pender and R. Sharpley (Eds.), *The management of tourism*. Thousand Oaks, CA: Sage Publications. pp: 217-230.
- Henderson, J.C., C. Shufen, L. Huifen and L.L. Xiang, 2010. Tourism and terrorism: A hotel industry perspective. *Journal of Tourism, Hospitality and Culinary Arts*, 2(1): 33-45.
- Hye, Q.M.A. and R.E.A. Khan, 2013. Tourism-led growth hypothesis: A case study of Pakistan. *Asia Pacific Journal of Tourism Research*, 18(4): 303-313.
- Katircioglu, S.T., 2009. Revisiting the tourism-led growth hypothesis for Turkey using bonds test and Johansen approach for co-integration. *Tourism Management*, 30(1): 17-20.
- Martín, J.L.E., N.M. Morales and R. Scarpa, 2004. Tourism and economic growth in Latin American countries: A panel data approach. *Note di Lavoro 26.2004. Note di Lavoro Series*. Italy: The Fondazione Eni Enrico Mattei.
- Morley, C., 1992. A microeconomic theory of international tourism demand. *Annals of Tourism Research*, 19(2): 250-267.
- Oh, C.O., 2005. Contribution of tourism development to economic growth in the Korean economy. *Tourism Management*, 26(1): 39-44.
- Pesaran, M.H. and B. Pesaran, 1997. *Working with microfit 4: Interactive econometric analysis*. Oxford: Oxford University of Press.
- Pesaran, M.H. and Y. Shin, 1995. An autoregressive distributed lag modeling approach to co-integration analysis. In S. Storm, A. Holl, and P. Diamond (Eds.), *Centennial volume of ranger Frisch*. Cambridge: Cambridge University Press. pp: 1-24.
- Pesaran, M.H., Y. Shin and R.J. Smith, 2001. Bounds testing approaches to the analysis of level relationships. *Journal of Applied Economics*, 16(3): 289-326.
- Pizam, A. and A. Fleischer, 2002. Severity, vs. Frequency of acts of terrorism: Which has a larger impact on tourism demand? *Journal of Travel Research*, 40(3): 337-339.
- Seddighi, M.W., A.L. Nuttall and H.R. Theocharous, 2001. Does cultural background of tourists influence the destination choice? An empirical study with special reference to political instability. *Tourism Management*, 22(2): 181-191.
- Shan, J. and K. Wilson, 2001. Causality between trade and tourism: Empirical evidence for China. *Applied Economics Letters*, 8(4): 279-283.
- Wearing, S. and J. Neil, 2009. *Ecotourism: Impacts, potential and possibilities*. Oxford: Butterworth-Heinemann.
- Zortuk, M., 2009. Economic impact of tourism on Turkey's economy: Evidence from co-integration tests. *International Research Journal of Finance and Economics*, 1(25): 231-239.

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