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## **Spatial Spillover Effects of Tourism on Economic Growth in Iranian Provinces: Spatial $\beta$ Convergence**

**Siab Mamipour<sup>1</sup>  
Fahimeh Abdi<sup>2</sup>**

### **Extended Abstract**

Tourism industry is now being considered in most countries as an economic sector playing an important role in development. Tourism is also a potential resource that enables nations to reach substantially social, cultural and economic benefits.

The main purpose of this study is investigating spatial spillover effects of tourism on economic growth of Iran's selected provinces and also the role of tourism in the convergence rate of them. For this purpose, the  $\beta$  convergence of the economic growth of Iran's 18 provinces is estimated with Spatial Durbin Model during the periods 2006 to 2014, and then the role of tourism on speed of convergence has been investigated. The results of Spatial Durbin Model indicate that economic growth of selected provinces has spatial effects and economic growth of each province is influenced by its neighbors is confirmed between provinces. Tourism is also one of the variable effecting on the provinces economic growth and its effects are significant in speed of convergence. The results indicate that the development of tourism in the country can increase the speed of provinces convergence

### **Introduction**

Since the 1950s, the rapid growth has been the main characteristic of the demand for the tourism industry. According to the World Tourism Organization, the total number of tourists in the world increased from 25 million persons in 1950 to 160

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<sup>1</sup> Corresponding Author: Assistant Professor in Economics, Kharazmi University (mamipours@gmail.com)

<sup>2</sup> MSc Student of Economic and Social Systems, Kharazmi University

million persons in 1970, 429 million persons in 1990, 689 million persons in 2001, 919 million persons in and 1.1 billion in 2013, with an average annual rate of increase of 4.34%. Asia and the Pacific Rim had the highest growth rates (UNWTO, 2014).

Due to the fact that Iran has very rich tourism attractions and an ancient civilization it is hoped that one day it reaches its real position in the world tourism industry through attempt towards development and ever-increasing prosperity of this industry and enjoys profits and returns obtained from prosperity and growth of the intended industry.

The main purpose of this study is investigating spatial spillover effects of domestic and foreign tourism on economic growth of Iran's selected provinces and also the role of tourism in the convergence rate of them. For this purpose, the  $\beta$  convergence of the economic growth of Iran's 18 provinces is estimated with Spatial Durbin Model during the periods 2006 to 2014, and then the role of tourism on speed of convergence has been investigated.

### **Methodology**

The economic growth model is open, which means that we could analyze the effect of one variable on economic growth by adding that variable into the model under the premise of the key factors being under control. According to the purpose of the present study, we introduced the initial average GDP and variables representing tourism development and its spatial correlations into the model.

Tobler (1979) summarizes the first theory of geography as, "Everything is related to everything else but near things are more related than distant things." According to this theory, no region is isolated, and every region is always in development according to its correlation with other regions. Elements, products, knowledge and information are in continuous exchange, the cost of which is positively correlated with distance. Thus, interactions between areas with close spatial positions are also relatively significant. Omitting the spatial correlations in an econometric analysis when variables are spatially correlated would lead to bias (Anselin, 1988). The interaction effect inside a country is more significant than across countries due to higher market openness. Thus, we needed to give special attention to the spatial correlations among variables because we considered 18 provinces of Iran between 2006 and 2014 as the sample and using a  $\beta$  convergence model as the frame. The basic model is a  $\beta$  -convergence model with built-in economic growth spatial correlations.

### **Conclusion**

The results of Spatial Durbin Model indicate that economic growth of selected provinces has spatial effects and economic growth of each province is influenced by its neighbors is confirmed between provinces. Tourism is also one of the variable effecting on the provinces economic growth and its effects are

significant in speed of convergence. The results indicate that the development of tourism in the country can increase the speed of provinces convergence.

With respect to the outcome of our analysis, the outcome would be biased without considering the spatial correlation of tourism when analyzing the relationship between tourism development and economic growth. By introducing the spatial correlation, we were able to separate the stimulatory effects into the direct effects of tourism development on local economic growth and the indirect effect resulting from the spatial spillover effect of economic growth.

**Keywords:** Tourism, Economic Growth, Spatial Panel Data, Spatial Spillover, Beta Convergence.

### **References**

1. Fallahi, F. and Rodriguez, G. (2007). Convergence in the Canadian Provinces; Evidence Using Unemployment Rates; 54th Annual North American, **Meetings of the Regional Science Association International, Savannah, USA.**
2. Ma, T., Hong, T. and Zhang, H. (2014); Tourism spatial spillover effects and urban economic growth. **Journal of Business Research**, Vol. 68, Issue 1: 74-80.
3. Merida, A.L., Carmona, M., Congregado, E., Golpe, and Antonio A. (2016). Exploring the regional distribution of tourism and the extent to which there is convergence, **Tourism Management**, Vol. 57: 225-233.
4. Oh, C.O. (2005). The contribution of tourism development to economic growth in the Korean economy, **Tourism Management**, Vol. 26, Issue 1: 39-44.
5. Phillips, P.C.B. and Sul, D. (2007). Transition modeling and econometric convergence tests, **Econometrica**, 75(6): 1771-1855.