

## Assessing the Dynamic Economic Impact of Tourism for OIC Members

*Behzad, Salmani, Hossein, Panahi and Somayeh, Razzaghi*

Department of Economics, University of Tabriz, Iran

---

**Abstract:** The purpose of this study is to investigate the relationship between tourism expansion and economic growth in OIC countries by using a panel data method and GMM model over the period of 1995-2010. The results show that tourism significantly contributes to the economic growth of Islamic countries. Also, the result of GMM method shows that the tourism-growth nexus is a dynamic phenomenon. The Johanson co-integration analysis indicates that there is a long-run relationship between tourism expansion and economic growth in OIC countries. Sensitivity analysis using a sample of developing and developed countries shows that tourism expansion also has a positive effect on economic growth in both groups. Consequently, the results make some policy recommendations of promoting tourism as a growth and development strategy for Islamic countries.

**JEL Classification:** O40: O50: C33

**Key words:** Tourism Expansion • Economic Growth • OIC Countries • GMM model

---

### INTRODUCTION

According to the World Tourism Organization (WTO), tourism has become one of the fastest growing industries in the world in the last decade. In the analysis of tourism, economists emphasize the economic effects of tourism. The development of tourism industries increases household incomes and government revenues through multiplier effects and it also improves balance of payments. In addition, it increases foreign exchange income and creates employment opportunities [1, 2, 3]. Most of the Islamic countries are developing countries that suffer from many economic problems such as low economic growth rates and lack of physical capital, where the tourism industry is not a capital-intensive one and tourism development can be a low-cost solution to escape from low economic growth rates and unemployment. In addition, there are huge opportunities to develop Islamic tourism in these countries. Nowadays, Islamic tourism is a new tourist destination in the world. Tourism linked to religion acts as a powerful motivation for travel. Religious buildings, rituals, festivals and religious events, cultural and archeological heritages, historical civilizations and religious sites are important tourist attractions for those are the followers of the particular system of belief [4, 5]. Various organizations

such as Organization of Islamic Conference (OIC) can play vital role in this regard and tourism development can ensure their economic sustainability [6]. Therefore, study of tourism business development and the investigation of its effects on macroeconomic performances, especially on economic growth, are highly important in Islamic countries.

With one and half billion followers across 57 countries, Islam's role in tourism is important to tourism and hospitality managers in both Muslim and non-Muslim countries. Islamic countries contain 30% of the world population by 2012. Tourism in Muslim countries is a major market with 10% of global tourism revenue going to these markets. Five countries of OIC members-Morocco, Egypt, Turkey, Saudi Arabia and Malaysia-dominate other Muslim countries in tourism arrivals with 85.5 million guests in 2011. Tourism is already a dominate industry in Muslim countries such as Morocco, Tunisia, Egypt, Turkey and Malaysia and a growing industry for the united Arab Emirates, Indonesia and Jordan. The WTO report shows a 706%, 53% and 329% increase in tourist arrivals, respectively in the UAE, Indonesia and Jordan from 2000 to 2010 [7].

The purpose of this study is to investigate the relationship between tourism expansion and economic

growth in OIC countries through a panel data method. Therefore, the question that this study is going to answer is as follows: does tourism development have a positive effect on economic growth in OIC countries? This study consists of six sections. Following the introduction, in the second section, the literature review is presented. A brief picture of international tourism in OIC countries is discussed in section 3. Section 4 is about model specification and econometric method. Finally, the results and conclusions are presented in sections 5 and 6 respectively.

**Literature Review:** The economic impact of tourism expansion is well known and tourism is fastest growing industry in the world. Tourism can cause economic development through its impact on employment, enhancement of infrastructures, generation of income taxes, exports, profits and acceleration of global peace [8, 9]. Theoretical models that consider a causal relationship between non-traded goods, such as tourism and economic growth are recent phenomenon. There are two main hypotheses about the economic effects of tourism: Export Led Growth Hypothesis (ELGH) and Tourism-Led Growth Hypothesis (TLGH) [10]. In accordance to the export led growth hypothesis, tourism can be considered as an export that causes economic growth. But there is a variance between tourism and other goods and services which are being exported. Essentially, tourism is a kind of export that is used by consumers in host countries [11]. Directly derived from the export led growth hypothesis, the tourism led growth hypothesis has recently appeared in literature. It is a special type of export led growth hypothesis focusing on international tourism arrivals. It assumes tourism to be a major factor of long-run economic growth [12, 13]. Tourism-led growth may take place when tourism demonstrates a stimulating influence across the economy in the form of spillovers and other externalities [14].

In addition of these hypotheses, there are some other channels in which tourism can cause economic growth. Some of them have been mentioned below:

- Foreign exchange generation created by tourism activities will have a positive contribution to the balance of payments, so it might create economic growth in the long- run. On the other hand, tourism increases local revenues and budget deficits can also benefit from increased tax revenues [11, 12].
- Tourism expansion also increases the demand of goods and services including lodging, restaurants,

amusements, retail trade and transportation facilities [15]. Apart from this, tourism expenditure by foreign tourists can enhance domestic tourism construction as well as bring about an accumulation of physical and human capital [1].

- The foreign exchange that has been earned through the tourism industry can be used to import intermediate and capital goods to produce goods and services, which in turn leads to economic growth [16].
- International tourism has the potential of enhancing efficiency through increased competition among firms and local crafts for international tourism destinations and it facilitates the exploitation of economies of scale in local firms [17].
- It is often hoped that it will reduce hardships through the promotion of upward labor mobility [18]. In addition, tourism development stops emigration of the population from less developed regions of a country to mega-cities and therefore prevents some economic problems in mega-cities. Furthermore by developing the tourism sector, the other economic sectors such as international trade, transportation, communications, banking and agriculture would also be developed [13].

The related literature hosts some research into the issue, for example; Fayissa [19] indicated that revenues from the tourism industry positively contribute to economic growth of Latin American countries. Kreishan [2] examined the causality relations between tourism earnings and economic growth for Jordan. The findings showed that there is a positive relationship between tourism development and economic development in the long run. Khalil [20] resulted that there is a strong relationship among tourism, receipts and economic growth in Pakistan. They concluded that economic expansion in Pakistan requires tourism development. Schubert [21] found that development of tourism could cause economic growth and increase trade between Antigua and Barbuda. Seetanah [22] explored the potential contribution of tourism to economic growth and development in the economies of 19 islands. The results showed that tourism significantly contributes to the economic growth of these islands' economies. Akkemik [23] and Arsalanturk [24] showed that the GDP elastic of international tourism is relatively low and the impact of foreign tourist expenditures on domestic production, value added and employment in Turkey is modest.

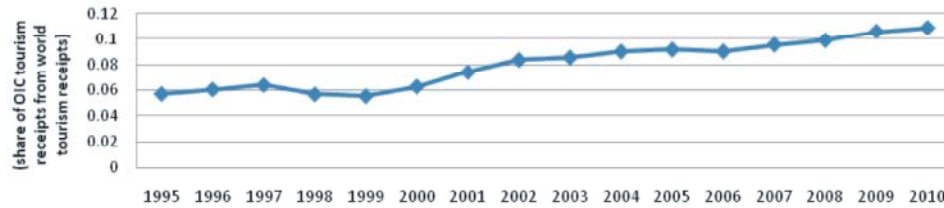


Fig. 1: Share of OIC tourism receipts from world tourism receipts  
Source: World Development Indicator

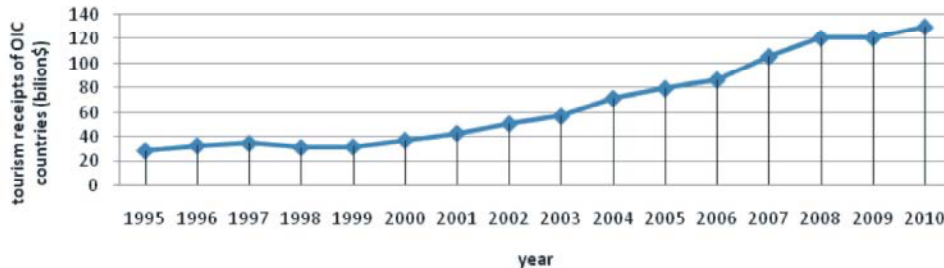


Fig. 2: Tourism receipts of OIC countries (billion\$)  
Source: World Development Indicator

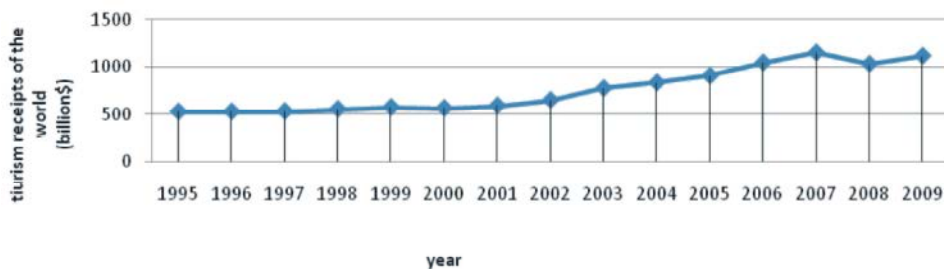


Fig. 3: Tourism receipts of the world (billion\$)  
Source: World Development Indicator

**A Brief Picture of International Tourism in the Oic Countries:** There are considerable potentials for a sustainable development of international tourism sector in OIC countries. Ancient civilizations, historical and religious monuments, spiritual atmospheres, common culture and language between some of OIC countries are factors that can increase tourism activity between these countries. In terms of geographical location, Muslim countries are very diverse and varied. This proper geographical location of OIC countries can ease economic, politic and communication relationships that can lead to the development of tourism in these countries.

This paper is going to assess the performance and economic role of the international tourism sector in OIC countries. The most traditionally used indicators to measure international tourism are international tourism arrivals and international tourism receipts. According to figure 1, the share of OIC countries from world tourism

receipts was 11 percent in 2010. In the year of 1995, the share of tourism receipts of OIC countries from \$498 billion of world tourism receipts were \$28.6 billion (5.8 percent of world tourism receipts). But it reached to \$130 billion in 2010 increasing by 354 percent over the period of 1995-2010. Therefore, the OIC countries' share in the world tourism receipts has been sustainably ascendant in the recent decade.

Figures 2 and 3 outline the trends in world and OIC countries international tourism receipts. The slope comparison of the two figures indicates that the tourism receipts growth rate in OIC countries is more than the world tourism receipts' growth rate.

The number of tourism arrivals in OIC countries in 1995 was 45378 thousand and it increased to 130479 thousand by 2010. So its growth rate in the period of 1995-2010 was 187 percent. Tables 1 show the top ten OIC countries with respect to their number of tourism arrivals and tourism receipts.

Table 1: Top ten OIC countries with respect to their number of tourism arrivals (thousands) and tourism receipts (million\$)

| Country (tourism arrivals) | 2000   | 2010   | Country (tourism receipts) | 2000  | 2010   |
|----------------------------|--------|--------|----------------------------|-------|--------|
| Turkey                     | 9,586  | 27,000 | Turkey                     | 7,636 | 24,784 |
| Malaysia                   | 10,222 | 24,577 | Malaysia                   | 5,873 | 18,315 |
| Egypt                      | 5,116  | 14,051 | Egypt                      | 4,657 | 13,633 |
| Saudi Arabia               | 6,585  | 10,850 | Morocco                    | 2,280 | 8,176  |
| Morocco                    | 4,278  | 9,288  | Lebanon                    | 742   | 8,174  |
| Syria                      | 2,100  | 8,546  | Saudi Arabia               |       | 7,655  |
| Indonesia                  | 5,064  | 7,003  | Indonesia                  | 4,975 | 7,618  |
| Tunisia                    | 5,058  | 6,903  | Syria                      | 1,082 | 6,308  |
| Bahrain                    | 2,420  | 5000   | Jordan                     | 935   | 4,018  |
| Jordan                     | 1,580  | 4,557  | Tunisia                    | 1,977 | 3,477  |

Source: World Development Indicator

It shows that the tourism receipts and number of tourism arrivals in Turkey have been tripled in the recent decade and Turkey is the most tourism recipient country. The number of tourism arrivals and tourism receipts in Malaysia have been doubled and tripled within the last 10 years respectively. Also, the tourism receipts of Egypt, Morocco and Lebanon have been multiplied by 3, 3.5 and 11 over the period of 2000-2010, respectively. But the world tourism receipts have been just doubled in the recent decade. Therefore, the speed of tourism growth in some OIC members is more than world tourism growth speed.

**Model Specification and Econometric Method:** The presented model in this section is the augmented Solow growth model and is based on the principles of the latest growth study of Seetanah [22] and Fayissa [19]. The model is:

$$\ln Gr_{it} = \beta_0 + \beta_1 \ln Gr_{it-1} + \beta_2 \ln in_{it} + \beta_3 \ln hu_{it} + \beta_4 \ln hce_{it} + \beta_5 \ln op_{it} + \beta_6 \ln tou_{it} + e_{it} \quad (1)$$

Where  $\ln Gr_{it}$  is the log of GDP per capita,  $\ln Gr_{it-1}$  is the log of GDP per capita in previous year which shows conditional convergence,  $\ln in_{it}$  is the log of gross fixed capital formation as percentage of real GDP that is used as investment in physical capital,  $\ln hu_{it}$  is log of human capital (sum of secondary and tertiary school enrolment),  $\ln hce_{it}$  is log of household consumption expenditure as percentage of real GDP per capita,  $\ln op_{it}$  is the log of openness (exports plus imports to GDP ratio) and finally  $\ln tou_{it}$  is the log of tourism receipts per capita. Using the World Bank database, this study focuses on a sample of 53 OIC countries over the period of 1995-2010. Mauritania, Palestine, Tajikistan and Somalia have been dropped in the estimation through the lack of data. In order to do

sensitivity analyses, the study is extended to two other samples of countries namely developing and developed countries and uses another tourism proxy "number of international tourism arrival".

In some econometric models especially in growth models, some explanatory variables are pre-determined (such as education years) or endogenous (such as foreign direct investment) and the growth in time  $t$  may depend on growth in previous year. So the use of panel data without considering the endogeneity would result in biased estimations [19, 15]. In order to overcome this problem, Arellano and Bond [25] developed a Generalized Method of Moment (GMM) dynamic panel data estimator, which can explain the dynamic factors of the growth model. This model includes lags of both the dependent and independent variables as instruments to explain the dynamic features of the model. The base model of GMM method is written as follows:

$$\Delta Y_{it} = \alpha \Delta X_{it-1} + \beta \Delta Y_{it-1} + YZ_{it} + v_i + \varepsilon_{it} \quad (2)$$

Where  $\Delta Y_{it}$  is the first difference of natural logarithm of GDP growth in country  $i$  in time  $t$ .  $\Delta Y_{it-1}$  indicates the first difference of independent variable in previous year.  $\Delta X_{it-1}$  is the vector of lagged variables and first differentiated endogenous variables.  $Z_{it}$  is the vector of endogenous variables and  $v_i, \varepsilon_{it}$  are country specific effects and error terms respectively.

## RESULTS

Using fixed and random effect models, this paper starts to do necessary estimations. The results of the Hausman test suggested using the fixed effect model. To test for heteroskedasticity of error terms problem, the Likelihood Ratio test has been used.

Table 2: The results of FGLS estimations for OIC countries

| variables             | Coefficient        |
|-----------------------|--------------------|
| C                     | -0.01<br>(-2.03)*  |
| LGD(-1)               | -0.007<br>(-4.45)* |
| LIN                   | 0.02<br>(5.64)*    |
| LHU                   | 0.002<br>(1.99)*   |
| LOPEN                 | 0.001<br>(0.043)   |
| LHC                   | 0.002<br>(2.52)*   |
| LTOUR RECEIPTS        | 0.002<br>(2.32)*   |
| Number of observation | 614                |
| Wald statistic        | 96.69              |

The numbers in parentheses shows t statistics

\*\*, \*, shows significant level at 99 and 95 percent respectively.

Table 3: The results of GMM estimation for OIC members

| Variables      | Coefficient       |
|----------------|-------------------|
| Gr (L1)        | 0.14<br>(15.32)*  |
| LIN            | 0.019<br>(5.89)*  |
| LHU            | 0.009<br>(11.22)* |
| LOPEN          | 0.029<br>(7.48)*  |
| LHC            | -0.03<br>(-9.41)* |
| LTOUR RECEIPTS | 0.008<br>(9.00)*  |

Sargan test of over identifying restrictions probe>chi2 = 1.0000

Arellano- Bond test for zero autocorrelation in first differenced errors  
probe>chi2 = 0.25

Wald test of joint significance probe> chi2 = 0.00

The numbers in parentheses shows t statistics

\*\*, \*, shows significant level at 99 and 95 percent respectively.

The results showed that there is heteroskedasticity problem between the error terms. To avoid this problem, at the last stage the Fixed- Generalized Least Square (FGLS) method has been used. The results of FGLS estimation for the members of OIC countries has been presented in table 2.

The results of FGLS estimations indicate that the effect of tourism expansion on economic growth in OIC members is positive and significant. These results are

consistent with economic theories and results obtained by Seetanah [22], Po [26] and Fayissa [19, 27]. The effect of initial GDP per capita on economic growth is negative and significant. This result is consistent with the results of Seetanah [22] and Fayissa [19, 27] and it shows the existence of conditional convergence theory in economic growth at aforesaid countries. Our results confirm that investment in physical capital has a positive and significant effect on economic growth in OIC countries. Theoretically, gross capital formation directly increases the physical capital stock and it results in economic growth. It also leads to technological improvements indirectly and therefore it gives rise to economic growth [28, 29]. The effect of human capital on economic growth is positive and significant. Some of economic theories consider human capital as an endogenous factor for economic growth, because education and manpower training is an investment which can improve labor productivity and cause economic growth. Openness also has a positive and significant effect on the economic growth of these countries. Household consumption expenditures have a positive effect on economic growth in OIC. This result indicates that household expenditures have been mostly expended on training, housing, nutrition and other factors which increased labor productivity.

In addition to FGLS method, we used Generalized Methods of Moments (GMM) to estimate the model. The result of GMM estimation for equation 1 in OIC countries has been reported in table 3.

Having expected signs of all coefficients, the results show that tourism expansion has a positive and significant effect on economic growth in OIC members. Physical investment, human capital and openness have also positive and significant effects on economic growth. In addition, the positive sign of initial GDP shows that economic growth has dynamic patterns in OIC countries. This result is consistent with the results of Seetanah [22] and Fayissa [19]. In according to the results of the Sargan test, it is concluded that there is no correlation between error terms and instrumental variables, so the validity of results has been confirmed to be interpreted. The null hypothesis that all coefficients are equal to zero has been rejected at the 1% significant level through the results of the Wald test. So the validity of the estimated coefficients has been approved. Also the Arellano- Bond test shows that there is no autocorrelation in first differenced error terms.

Table 4: results of FGLS and GMM estimation for OIC countries

| The results of FGLS estimation for OIC countries |                     | The result of GMM estimation for OIC countries |                   |
|--|---------------------|--|-------------------|
| Variable   | Coefficient         | variable                                       | coefficient       |
| C  | -0.0005<br>(-0.06)* | Gr (L1)  | 0.14<br>(14.16)*  |
| LGD(-1)  | -0.01<br>(-7.03)*   | LIN  | 0.02<br>(8.32)*   |
| LIN  | 0.01<br>(4.27)*     | LHU  | 0.003<br>(2.50)*  |
| LHU  | 0.002<br>(2.23)*    | LOPEN  | 0.3<br>(8.43)*    |
| LOPEN  | 0.003<br>(1.56)**   | LHC  | -0.03<br>(-9.45)* |
| LHC  | 0.002<br>(2.05)*    | LTOUR  | 0.024             |
| LTOUR  | 0.004<br>(4.01)*    | NUMBER   | (7.82)*           |
| Number of observation                            | 620                 | Sargan test probe>chi2=1.00                    |                   |
| Wald statistic                                   | 116.11              | Arellano- Bond test probe>chi2 =0.25           |                   |
|  |                     | Wald test probe> chi2 = 0.00                   |                   |

The numbers in parentheses shows t statistics,\*\*,\*shows significant level at 99 and 95 percent respectively.

Table 5: the results of FGLS estimation for developing and developed countries

| Coefficient           | Developing countries |                    | Developed countries |                   |
|-----------------------|----------------------|--------------------|---------------------|-------------------|
|                       | model 1              | model2             | model 1             | model2            |
| C                     | -0.027<br>(-3.53)*   | -0.03<br>(-3.64)*  | 0.11<br>(5.31)*     | 0.11<br>(5.11)*   |
| LGD(-1)               | -0.003<br>(-3.14)*   | 0.003-<br>(-3.16)* | -0.07<br>(-9.44)*   | -0.07<br>(-9.19)* |
| LIN                   | 0.027<br>(0.004)*    | 0.03<br>(6.61)*    | 0.05<br>(6.53)*     | 0.05<br>(6.27)*   |
| LHU                   | 0.005<br>(1.87)**    | 0.002<br>(0.82)    | 0.01<br>(1.63)**    | 0.01<br>(1.73)**  |
| LOPEN                 | 0.012<br>(4.33)*     | 0.01<br>(4.21)*    | 0.01<br>(6.08)*     | 0.017<br>(5.64)*  |
| LHC                   | -0.01<br>(-6.43)*    | -0.01<br>(-5.13)*  | 0.02<br>(5.25)*     | 0.024<br>(5.42)*  |
| LTOUR                 |                      |                    |                     |                   |
| RECEIPTS              | 0.002<br>(2.85)*     | -                  | 0.003<br>(3.29)*    | -                 |
| LTOUR                 |                      |                    |                     |                   |
| NUMBER                | -                    | 0.0014<br>(1.10)   | -                   | 0.002<br>(2.55)*  |
| Number of observation | 581                  | 556                | 575                 | 575               |
| Wald statistic        | 244.38               | 233.14             | 175.23              | 165.23            |

In order to do a sensitivity analysis, the equation (1) has been estimated again by using number of international tourism arrival proxy. The results have been presented in table 4.

According to table 4, the results are not sensitive to tourism proxy. In both cases tourism expansion has a positive and significant effect on economic growth. The study is also extended to two other samples of countries namely developing and developed countries for useful sensitivity analysis. Therefore the equation (1) has been re-estimated considering both developing and developed countries. The results of FGLS estimation has been reported in table 5.

The results show that tourism receipts and number of tourism arrivals have positive and significant effects on economic growth in developing and developed countries. Physical capital formation, human capital and openness have positive and significant effects on economic growth in the mentioned countries. Household consumption expenditure has negative and significant effect on economic growth in developing countries. According to the neoclassical theory, household consumption expenditure reduces saving rates and causes lower investment and lower economic growth in developing countries. Nonetheless, it has positive effect on economic growth in developed countries because household consumption expenditures expends on health, nutrition and education so it causes greater economic growth because of the higher productivity of healthy and educated households.

Finally in order to examine the long-run relationship between tourism expansion and economic growth in OIC countries, we should first examine the stationarity of variables. If the variables were non-stationary in the long-run, the results of OLS estimations would be biased and misleading [30]. Therefore, the unit root test has been conducted and Philips-Peron index has been used. The results in table 6 show that there is no unit root in both variables of economic growth rate and the number of international tourism arrivals and they are stationary in levels.

After investigation for unit roots, we adapt Johansen's multivariate test based on a VAR representation of the variables in order to investigate the long-run relationship between economic growth and tourism expansion. There are two indexes of the trace test and maximum Eigenvalue test to determine the number of co integration vectors between the mentioned variables. The results of trace test and Eigenvalue tests have been presented in tables 7 and 8.

Table 6: Panel unit root tests on levels of variables

| Variables    | PP statistics | Probe  |
|--------------|---------------|--------|
| Lgr          | 394.756       | 0.0000 |
| Ltour number | 87.47         | 0.05   |

Table 7: co integration test between economic growth and tourism expansion (trace test)

| Null hypotheses<br>(r: number of integrated vectors) | Eigenvalue | Trace<br>Statistic | critical value<br>(0.05) | probe  |
|--|------------|--------------------|--------------------------|--------|
| R=0  | 0.20       | 113.60             | 15.49                    | 0.0001 |
| R<= 1  | 0.002      | 1.04               | 3.84                     | 0.30   |

Table 8: co integration test between economic growth and tourism expansion (Eigenvalue test)

| Null hypotheses<br>(r: number of integrated vectors) | Eigenvalue | Trace<br>Statistic | critical value<br>(0.05) | Probe  |
|--|------------|--------------------|--------------------------|--------|
| R=0  | 0.200      | 112.55             | 14.26                    | 0.0001 |
| R<= 1  | 0.002      | 1.04               | 3.84                     | 0.306  |

The results of both trace and Eigenvalue tests show that there is one co integration equation between economic growth and tourism expansion. Therefore there exists a long-run relationship between economic growth and tourism expansion in OIC countries.

## CONCLUSION

The purpose of this study is to investigate the relationship between tourism expansion and economic growth in OIC countries by using a panel data method and GMM model over the period of 1995-2010. The results show that tourism expansion has a positive and significant effect on economic growth in OIC countries. Many of Islamic countries are developing countries that suffer from lack of physical capital, where the tourism industry is not a capital-intensive one and tourism development can be a low-cost solution to escape from low economic growth rates and unemployment. Moreover, some of these countries have a single-product economy (such as oil or agriculture), but tourism development can cause a variety of growth factors that can lead to economic growth. Tourism expansion has positive and significant effect on economic growth in both developed and developing countries. Investment, human capital and openness have positive and significant effects on economic growth in both of the two groups of countries. The result of the co integration test shows that there is a long-run relationship between tourism expansion and economic growth in OIC countries. So policy makers should have continuous programs to support the tourism industry agents.

## REFERENCE

1. Lee, C. and C. Chang, 2008. Tourism development and economic growth: a closer look at panel. *Tourism Management*, 29: 180-192.
2. Kreishan, F, 2010. Tourism and economic growth: the case of Jordan. *European Journal of Social Sciences*, 15: 229-234.
3. Chancharat, S., 2011. Thai Tourism and economic development: the current state of research. *Review Article*, 32: 340-351.
4. Henderson, J., 2003. Managing tourism and Islam in peninsular Malaysia. *Tourism Management*, 24: 447-456.
5. Shani, R. and D. Severt, 2007. To bring God's word to all people: the case of a religious theme-site. *Tourism: An International Interdisciplinary Journals*, 55: 39-50.
6. Anowar, M.D., 2011. Potentials of Islamic tourism: a case study of Malaysia on East Coast Economic Region. *Australian Journal of Basic and Applied Sciences*, 5: 1333-1340.
7. [www.worldtourism.org/facts/menu.html](http://www.worldtourism.org/facts/menu.html)
8. Idowu, O.K., 2008. Tourism- exports and economic growth in Africa. 13<sup>th</sup> African Econometrics Society (AES) Conference in Pretoria, South Africa.
9. Chi, O.H., 2005. The contribution of tourism development to economic growth in Korean economy. *Tourism Management*, 26: 39-44.
10. Brida, J. and M. Pulina, 2010. A literature review on the tourism led growth hypothesis. *CRENOS working papers*.
11. Cortes, I. and M. pulina, 2006. A further step into ELGH and TLGH for Spain and Italy. *Fondazione Eni Enrico Mattei*, no. 118.2006.
12. Balaguer, J. and J. Cantavella, 2002. Tourism as a long- run economic growth factor: the Spanish case. *Applied Economics*, 34: 877-884.
13. Dritsakis, N., 2004. Tourism as a long run economic growth factor: an empirical investigation for Greece. *Tourism Economics*, 10: 305-316.
14. Kim, H.J. and M.H. Chen and S. Jang, 2006. Tourism expansion and economic development: the case of Taiwan, *Tourism Management*, 27: 925-933.
15. Eugenio, J., N. Morales and R. Scarpa, 2004. Tourism and economic growth in Latin American countries: a panel data approach. *FondazioneEni Enrico Mattei Nota di Lavoro*, pp: 26.
16. Katircioglu, S., 2009. Revising the tourism led growth hypothesis for turkey using the bounds test and johansen approach for co integration. *Tourism Management*, 30: 17-20.

17. Balaguer, J. and M. Cantavella, 2000. Tourism as a Long-Run Economic Growth Factor: The Spanish Case. Instituto Valenciano de Investigaciones Economicas, 2576, June.
18. Liu, A. and G. Wall, 2006. Planning tourism employment: a developing country perspective. *Tourism Management*, 27: 159-170.
19. Fayissa, B., C. Nsiah and B. Tadasse, 2007. The impact of tourism on economic growth and development in Africa. Department of Economics and Finance working paper series.
20. Khalil, S. and M.W. Kakar, 2010. Role of tourism in economic growth: empirical evidence from Pakistan economy. Applied Economic Research Center, University of Karachi.
21. Schubert, S., J. Brida and W. Risso, 2011. The impact of international tourism demand on economic growth of small economies dependent on tourism. *Tourism Management*, 32: 377-385.
22. Seetanah, B., 2011. Assessing the dynamic economic impact of tourism for island economies. *Annals of Tourism Research*, 38: 291-308.
23. Akkemic, A., 2012. Assessing the importance of international tourism for the Turkish economy: a social accounting matrix analysis. *Tourism Management*, 33: 790-801.
24. Arsalanturk, Y., M. Balcilar and A. Ozdemir, 2012. Time varying linkages between tourism receipts and economic growth in a small open economy. *Economic Modeling*, 28: 664-671.
25. Arellano, M. and S. Bond, 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58: 277-297.
26. Po, W. and B. Huang, 2008. Tourism development and economic growth- a nonlinear approach. *Physica*, 22: 5535-5542.
27. Fayissa, B., C. Nsiah and B. Tades, 2009. Tourism and economic growth in Latin American countries(LAC): further empirical evidence. Department of Economics and Finance Working Papers Series.
28. Plossner, C., 1992. The search for growth in policies for long-run economic growth. Federal Reserve Bank of Kansas City, Kansas City.
29. Levine, R. and D. Renelt, 1992. A sensitivity analysis of cross-country growth regressions. *American Economic Review*, 82: 942-963.
30. Granger, C.W. and P. Newbold, 1974. Spurious regressions in econometrics. *Journal of Econometrics*, 2: 111-120.