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THE ROLE OF TERRESTRIAL AND MARINE PROTECTED AREAS IN DEVELOPING TOURISM INDUSTRY (CASE STUDY: A SELECTION OF THE WORLD'S HISTORICAL COUNTRIES)

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ABSTRACT
Tourism industry has a special place in today's world as one of the largest and cleanest industry in the glob. In the meantime, cultural and natural tourism as two major subfields of tourism may open new windows for better understanding of societies. The main objective of this research is to examine the role of terrestrial and marine protected areas in developing tourism industry in a selection of the world's historical countries. The variables of terrestrial protected areas, marine protected areas, tourism per capita income, gross domestic product (GDP), governance quality, rail lines and number of arrivals international tourists is used to construct and identify a model for empirical part. A research gravity model has been estimated by using panel data technique for twelve most selected historical countries of the world, during the (1996-2012) period. The findings indicate positive and significant effects on the tourism industry for marine protected areas, terrestrial protected areas, gross domestic product (GDP) and rail lines variables. While, the results of the study show a negative and significant impact on the tourism industry for tourism per capita income variable. In between, governance quality coefficient is not significant.

Keywords: Terrestrial and Marine Protected Areas, Tourism, the World's Historical Countries, Panel Data

INTRODUCTION
Today, paying attention to tourism industry in international space is considered one of the most important economic goals of most countries in the world since through correct and well planned investments in the infrastructures of this industry we will witness not only the entrance of international tourists and as a result a great flood of currency sources but the spaces made in the country for the citizens of that region will also have positive entailments. Tourism industry is considered one of the most lucrative and at the same time healthy and clean industries for the economy of each country. The prosperity of this industry expresses political, social, security, cultural, and scientific stability of countries. In other words, because tourism industry enjoys unique privileges it provides several goals in the national space of a country at the same time while other industries each provide only part of the goals aimed at; therefore, paying attention to tourism industry is particularly important in national and international equations (Ahmadi *et al.,* 2013).

Along the path of tourism industry expansion, it is indispensable and inevitable to make necessary infrastructures and pay attention of the country's potentials. In the past most historic countries of the world emphasized mostly on historical and cultural attractions to develop their tourism industry; however, with time, other factors in addition to historical attractions paved the way to this goal including but not limited to natural factors. Based on this, most historical countries in the world tried also to concentrate on nature and harmonizing it with man's tastes and increase their margin of tourism attraction internationally.

Paying attention to aspects such as terrestrial protected areas and protecting cultural and historical values, improving governance indicators, expanding infrastructural quantities and qualities in transportation, making cultural changes and finally realizing environmental potentials as environmental factors in a country on the one hand and paying attention to virgin natural areas such as marine protected areas, forests and mountains, and making further attractions in such areas on the other hand are considered some of the most effective factors in expanding tourism industry in all countries. For example making a feeling of security in society as one of the riskiest tasks of governments, using a more advanced and effective

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transportation system, investing in the education and service sectors, paying attention to urban views, introducing historical monuments of a country to international arenas and finally considering a countries nature as important will have great impact in international demand of tourists to enter a country. Therefore, the study of the roles of terrestrial and marine protected areas will be necessary in developing a country's tourism industry. In this study 12 selected historical countries of the world including Iran, Spain, Italy, Brazil, Thailand, Turkey, China, France, Egypt, Mexico, India and Greece were selected as the spatial territory of the research.

Tourism Industry: After the industrial revolution and change of form of man's existing lifestyle, many necessities and facts were either added or removed from which travel was not an exception. Starting 18th century, travel was amplified everyday as a necessity so that this becomes an industry. In a general definition, economists believe that any phenomenon that leads to an increase in national income can be named an industry and tourism is classified as a service industry. With time, the tourism industry thrived so much and found for itself an economic justification that after the oil and transportation industries it became the third highest-ranking industry in profitability (Drucker, 2003).

Today, tourism is considered one of the most important sources of income in many countries and has found importance as an economic, social and cultural activity for their development. Tourism is a phenomenon that, if planned correctly, can lead to higher production rates, better life levels, general welfare and jobs for many productive factors such as labor, investment and land (Samadi and Abolhasanbeygi, 2012). The expansion of this industry in any part of the world needs special facilities and conditions such as weather, historical and cultural monuments, natural attractions, customs, infrastructures, and equipment (Azarbayejani *et al.,* 2014).

Terrestrial Protected Areas as Tourist Destinations: Protected areas are those that have been formed in order to protect natural attractions and ecosystems, special economic, social and cultural conditions and values of natural landscapes by organizations protecting the nature and natural resources. The International Union for Conservation of Nature (IUCN) classifies protected areas to six different groups including:

Strict nature reserve

National parks

Natural monument

Protected view (historical and cultural views)

Habitats management areas

Managed resources protected area (Kazemi *et al.,* 2010)

The World Bank names the collection of strict nature reserve, national parks, protected views (historical and cultural views) and habitats management areas indicated in the division of IUCN as terrestrial protected areas defining them as: "areas designed by national authorities covering at least one thousand acres to which the public shall not have access since entering some of such areas requires paying a cost. These areas include historical monuments, national parks, wildlife refuges, green areas and protected views (Khatami *et al.,* 2012).

Marine Protected Areas and Marine and Coastal Tourism

The Iranian Organization for Protection of Nature and Natural Resources in its definition of protected areas indicates that a protected area is a clearly defined, known, allocated and managed geographic space determined through the law or any other effective means to access the long term protection of nature through employing the ecosystems and cultural values of that area. Concerning marine protected areas it can be said that such areas are considered a sub-set of natural monument protected areas (Khatami *et al.,* 2012).

The World Bank considers marine protected areas as those encompassing varied marine fauna and flora. In these areas, cultural and historical specifications and recreational-marine facilities are also seen which are protected in the space of the laws set by the country's authorities (Asghari *et al.,* 2011).

Marine tourism started since the development of recreation on Mediterranean and Caribbean coasts. The part of tourism that affects beaches and some offshore parts is called marine tourism. This type of tourism

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itself is divided to two other branches called marine and coastal tourisms. Marine tourism includes activities such as diving, marine sports, cruiser travel and polar tourism (Ziatavana *et al.,* 2014).

Marine Parks as Tourist Destinations

In 1983, the International Tourism Organization issued a general resolution concerning the role of tourism in protecting natural habitats and environment, and signed a joint charter on tourism and environment with collaboration of the United Nations Environment Program (UNEP). Finally, an organized program was ratified to construct marine parks and after that the construction of marine parks was started.

Marine parks are made in order to protect one or more marine ecosystems that have not been transformed because of human exploitation or activities. This marine ecosystem in addition to having various flora and fauna and land features is considered a habitat for aquatic animals and plants. These ecosystems also have special scientific, educational, research, tourist, and recreational values and enjoy incomparable views. Marine parks in addition to their many functions have remarkable importance in promoting tourism industry. If correct and organized management is implemented, marine parks are considered a main factor in attracting tourists by protecting the quality of tourist resources by offering a remarkable attraction to them (Memghani, 2012).

Coastal Tourism

By coastal tourism is meant a type of tourism in which coastal and marine areas are selected as destinations. In fact, coastal tourism entails traveling from permanent residence and concentrating on marine environments (Mohammad *et al.,* 2010). Generally, it could be said that coastal tourism encompasses a wide range of tourism, leisure, recreation and entertainment that occur on coastal, offshore and coastal waters. Two of the factors leading to the formation of coastal tourism include: the population of the world is increasing and naturally a large part of this population are attracted to coastal areas to use marine environments for pleasure or other purposes.

A larger part of people leave their residences for recreational purposes and a large part of that population visit coastal areas (Shahifar and Shahraki, 2010).

Coastal tourism includes four areas parallel to the coast called the coastal tourism areas. These four areas include:

1. Coastal waters area: the coastal waters area is an ecological marine area starting offshore and continuing up to the coast. This area is the richest place for fishing and generally includes attractive rocks and stone columns, too. This area is also use for travelling to closer islands.

2. The coastal area: a vast area including part of the sea and part of the land with sand cover. In this area, many marine recreations and water sports are done.

3. The bank band area, which includes the area behind the coastal area. In this area many marine recreations, such as camping, picnicking and urban sightseeing are done. Also in this area, many hotels and occupations are located. One of the most important views of this area is the sea view.

4. The post-bank area: the lands behind coastal areas generally include areas offering services for recreational activities. The features and flora constitute the coastal view in this area (Mohammad *et al.,* 2010).

Research Background

Asghari (2011) studied in his paper entitled "Tourist and Natural Resources" the relationship between natural recourses and natural attractions and net tourist exports for 15 European countries between 1990 and 2010 using Heckscher-Ohlin-Vanek (HOV) model. To do so, he used variables such as employment in the tourism and travel sector, economic investment in that sector, rate of use of oil energy, farmlands, forests and internal renewable sweet water resources currents. The results showed that farmlands and forests have positive significant effects and using oil energy has negative significant effect on tourism industry development (Ranjpour *et al.,* 2011).

In his paper entitled "Effect of Weather Changes on Caribbean Tourism Demands", Winston R. Moore (2010) studied the effects of weather changes on tourist demands in the Caribbean area between 1977 and 2007 using Panel ARDL (autoregressive distributed lag). He used general variables of tourists who entered from the source market, income in the source market, Barbados and source market relative price,

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relative price of Barbados and its main competitor, the cost of travel between Barbados and source market, bilateral exchange rate and the relative index of tourism weather as weighted average of seven climatic variables including the highest daily temperature, average daily temperature, minimum daily relative humidity, average daily relative humidity, total precipitation, total sunny hours, and average wind speed. The results showed that except the relative price of Barbados and its main competitor and the cost of travel between Barbados and source market, other variables positively affected tourist attraction (Bakhtiari *et al.,* 2014).

In their paper entitled "Cultural and Natural Tourism in Selected Countries Members of Islamic Conference Organization", Bakhtiari *et al.,* (2014) used the panel data method to study the role of some cultural and natural factors in the tourism industries of some selected member countries of the Islamic conference origination from 1995 to 2012. In designing their research model, they used variables such as number of historical monuments, forests, income per capita of tourism in the countries studied and gross national product (GNP). The results showed that number of historical monuments, forests, and GNP positively affected the development of tourism industry in the countries studied while the income per capita of tourism in those countries negatively affected tourism industry development (Motiei and Heydari, 2012).

MATERIALS AND METHODS
Research Methodology
This paper uses the descriptive-analytic method to set the subject, i.e. the study of the role of terrestrial and marine protected areas in developing tourism industry of some historical countries in addition to gravity model stipulation and the panel data methods in order to estimate gravity model. The method used to gather data in this study is library and since some of the variables in question including geographical distances between origin and destination countries were not measurable, substitute variables such as the tourism income per capita were used.

 In order to select the countries studied attempts have been made to select a collection of historical countries that in addition to enjoying terrestrial protected areas and historical monuments have marine protected areas, too. Four criteria including: being historical and enjoying terrestrial protected areas and historical monuments enjoying marine protected areas and coastal views being more addressed than other historical countries based on the statistics published by the World Bank more richness in terms of statistics and information needed were considered as the criteria to choose countries for the study. Finally, a selection of the world's historical countries including Iran, Spain, Italy, Brazil, Thailand, Turkey, China, France, Egypt, Mexico, India and Greece were studied.

Introduction of Gravity Model
The beginning point of the gravity model is Newton's law on the gravity force between two targets expressed as the following equation:

$$GF_{ij} = \frac{M_i M_j}{D_{ij}}$$
(1)

Where GF_{ij} indicates the gravity force between two targets i and j. This force is directly related to the mass of these targets M_i and M_j, and indirectly related to their distance D_{ij}. In the 60's, Newton's law was applied for the first time to studying man's behavior. After that, it was extensively applied to social sciences. The logarithmic form of Newton's law of gravity is as follows:

$$\ln GF_{ij} = \ln M_i + \ln M_j - \ln D_{ij}$$
(2)

Considering the application of equation 2 in different sciences such as socioeconomic sciences, different variables are used as substitutes for M_i and M_j. Generally, the gravity models used in economic sciences study the economic status as the object mass and geographical distance as distance. Thus, the larger the economies or the smaller the geographical distance of the two areas, the larger will be the trading currents, human force (migration) and information exchange between the two areas.

Gravity models are extensively used in international business to explain bilateral business currents. Within the framework of this model, existing hurdles and encouragements can be entered as either

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qualitative or quantitative variables accepted in special markets and the effects of which studied on bilateral business. In its simplest form, the gravity model was offered for the first time by Tinbergen in 1962 in economics. He extracted that model directly from Newton's gravity theory as follows:

$$T_{ij} = \alpha_1 Y_i^{\beta_1} Y_j^{\beta_2} POP_i^{\beta_3} POP_j^{\beta_4} D_{ij}^{\beta_5} D_{cu}^{\beta_6} D_{Lan}^{\beta_7} .. U_{ij} \qquad (3)$$

Where T_{ij} is country i's exports (or imports) to country j, Y_i is country j's income, POP_i is country i's population, POP_j is country j's income that appear as explanatory variables on the right side of the equation. Y_i and Y_j are taken as mass variables in Newton's equation. The population variable is two other scales.

In addition to the above-mentioned variables, a set of virtual variables are added to explain other effects on reciprocal business current in the country. D_{ij} is the virtual variable related to the distance between the two countries, D_{cu} is the virtual variable to explain other effects of business blocks on the two countries' reciprocal business trend, and D_{Lan} in the virtual variable for the two countries' common language (Sobhani, 1389).

Gravity Model Specification

Countries' protected areas as valuable natural endowments are considered some of the most important potentials of tourist attraction for a country. This has led to the discovery of new apertures in tourism studies. Terrestrial protected areas followed by cultural and historical attractions and marine protected areas are demanded by tourists due to their constituting moral and psychological utility and as a place for new and different experiences of sense of life and gaining psychological peace. The wise decisions of government managers and making creative attractions in such places will increase a country's share of tourism attraction.

By entering variables related to protected areas besides environmental and economic variables such as tourism income per capita, governance quality and gross national product (GNP), this study attempts to review the above mentioned factors on the tourism industry of a selection of the world's historical countries. Therefore, the model considered in this study is defined logarithmically as follows in order to study the role of terrestrial and marine protected areas in developing the tourism industry of a selection of the world's historical countries based on the theoretical bases existing in the framework of gravity model:

$$LnARV_{it} = \alpha_0 + \alpha_1 LnTPA_{it} + \alpha_2 LnMPA_{it} + \alpha_3 LnGGI_{it} + \alpha_4 LnRL_{it} + \alpha_5 LnGDP_{it} + \alpha_6 LnPREC_{it} + U_{it} \qquad (4)$$

Where (Ln) indicates logarithm in natural base, (ARV) represents the number of international tourists entering the destination country. (TPA) is terrestrial protected areas, (MPA) is marine protected areas, (GGI) represents average ranks of the six governance indicators, (RL) is rail transportation lines, (GDP) is gross domestic product (Constant prices of 2005), (PREC) is tourism income per capita of destination countries, and (U) is the error term. i=1,2,…,N indicates countries, and t=1,2,…,T indicates time.

Estimation Method

This study uses the regression econometrics based on panel data. This method was preferred to the time series and cross-section estimation methods because although time series estimates are usually used in economic studies, they do not have good validity due to lack of information or colinearity problems. On the other hand, cross-section estimates that are used to compare important countries in a specific period deprive the model of the ability to explain changes during time. Therefore, this study uses the panel data method to cover both cross-section and time effects.

Regression Models Based on Panel Data

Generally, in the econometric approach based on panel data, it is presupposed that the data used have cross-section independence. This presupposition may not realize just like other assumptions. Thus, one of the stages in panel data econometrics is testing to determine cross-section dependence or independence. To do so, various tests have been used in econometric literature such as Pesaran's (2004) cross-section test (Moore, 2010).

Cross-section independence study test is one of the first diagnostic tests in the way panel data are used. After examining the existence of cross-sectional dependence, variables' stability is studied. In order to study the stability of variables in panel data, unit root tests such as Levin, Lin and Chu, Im, Pesaran &

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Shin, Breitung, Fishcer and Hadri tests are used. In Levin, Lin and Chu, Im, Pesaran & Shin, Breitung, Fishcer and Hardi tests, the H_0 assumption of non-existence of stability appears against the H_1 assumption of existence of stability (World Bank, 2014).

Another diagnostic test in panel data method is the heteroscedasticity test. Considering the important effect of heteroscedasticity on factors' Standard deviation (SD) estimation and the problem of statistic inference, it is required that the non-existence of heteroscedasticity be examined. In order to do the heteroscedasticity test, the errors terms of the two models restrict regression and unrestrict regression are estimated using the generalized least squares (GLS) method. In the restrict model, the assumption of homoscedasticity or independently identically distribution of error terms are considered while in the unrestrict model, the heteroscedasticity of error terms between cross-sectional units is assumed (World Bank, 2014).

Since the serial correlation in the panel data model makes standard errors slanted and leads to less efficiency of results, researchers need to tell serial correlation in error terms in the panel data, too. While different tests have been suggested to recognize serial autocorrelation, the Wooldrige test is the most popular since it uses fewer assumptions and is easier to use than other tests. This test is very flexible and is simulated for many different cases. It is used for both constant and random effects and in the case of existence or non-existence of homoscedasticity in error terms and different or non-balanced panels and gains stronger results under weaker assumptions thus making it a very popular test (Nikbakht and Nikbakht, 2011).

In order to study the role of terrestrial and marine protected areas in developing tourism industry in a selection of the world's historical countries, the gravity model has been stipulated as follows:

$$LnARV_{it} = \alpha_0 + \alpha_1 LnTPA_{it} + \alpha_2 LnMPA_{it} + \alpha_3 LnGGI_{it} + \alpha_4 LnRL_{it} + \alpha_5 LnGDP_{it} + \alpha_6 LnPREC_{it} + U_{it} \quad (5)$$

In order to select from panel and pooling methods, Leamer's F test has been used. Based on the results reported in Table 1 and this test's statistic's being larger (188.72) than its crucial value (1.84) and the test statistic's probability being zero, the panel data method was selected as the estimation method.

Table 1: The Results of Leamer's F Test

Prob	Statistic
0.000	188.72

$F_{(11,185)} \approx 1.84 \ (\ 95\% \ Conf.interval)$

Source: The findings using the Stata12 software

Before model estimation and determination of stability test type, it was necessary to make sure of non-existence of cross sectional correlation. Thus, Pesaran's cross sectional independence test was used. According to the results reported in Table 2, it was observed that at the confidence level of 95% the statistical probability of this test is larger than 0.05, which indicates non-existence of cross sectional correlation.

Table 2: The Results of Pesaran's Cross Sectional Independence Test

Prob	Statistic
0.3883	0.863

Source: The findings using the Stata12 software

Since the cross sectional test resulted in the refusal of the assumption of existence of cross sectional correlation, the Levin, Lin and Chu unit root test was selected to review variables' stability. The results of this test are reported in Table 3. The results indicate stability for all variables, thus rendering spurious regression out of the question.

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Table 3: The Results of Levin, Lin and Chu Unit Root Test

Variables	Include Time Trend			Without Time Trend		
	Statistics	Probs	Stability Results	Statistics	Probs	Stability Results
LnARV	-5.3425	0.0000	Stable	-2.2242	0.0131	Stable
LnTPA	-5.7447	0.0000	Stable	-2.5685	0.0051	Stable
LnMPA	-9.7251	0.0000	Stable	-17.1957	0.0000	Stable
LnGGI	-2.9071	0.0018	Stable	-5.0377	0.0000	Stable
LnRL	-5.0821	0.0000	Stable	-7.2906	0.0000	Stable
LnGDP	-2.3107	0.0104	Stable	-1.3750	0.0846	Unstable
LnPREC	-6.1755	0.0000	Stable	-4.0976	0.0000	Stable

$Z_{0.05}=1.96$

Source: The findings using the Stata12 software

In order to determine the method to estimate in the framework of fixed or random effects, the Hasman test was used. As seen in Table 4, it was observed that the probability of the statistics of this test (0.5572) proves the existence of random effects; therefore, the estimation of the model in question was studied in the framework of randomized effects.

Table 4: The Results of Hausman Test

Prob	Statistic
0.5572	$\chi^2{}_{(7)} = 5.85$

Critical Value ≈ 2.16 (95% Conf.interval)

Source: The findings using the Stata12 software

Upon completion of Hasman's test and indicating the random nature of model's effects, it was necessary to test the truth of existence of random effects through the Breusch-Pagan method. The results of the Breusch-Pagan test are reported in Table 5:

Table 5: The Results of the Breusch-Pagan Test

Prob	Statistic
0.0000	$\chi^2{}_{(1)} = 816.54$

Critical Value ≈ 0.003 (95% Conf.interval)

Source: The findings using the Stata12 software

Since the test statistical probability is zero in the Breusch-Pagan method, the existence of random effects has been corroborated in order to continue the estimation process.

Table 6: The Results of Likelihood Ratio and Wooldrige Tests

Tests	Logarithm of the likelihood function		Statistics	Probs
LR	Restrict -169.247 0.0000	Unrestrict -46.9421 0.0000	$\chi^2{}_{(7)} = 244.61$	0.0000
Wooldrige $F_{(1,11)} = 30.363$				0.0002

Critical Value: $\chi^2{}_{(7)} \approx 2.16$ (95% Conf.interval)

Critical Value: $F_{(1,11)} = 4.84$ (95% Conf.interval)

Source: The findings using the Stata12 software

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In continuation, in order to study the existence of heteroscedasticity and autocorrelation between errors, the likelihood ratio and Wooldrige tests were used respectively. According to the results of these two tests appearing in Table 6 and the statistics of both tests being larger than the Table's crucial value, the existence of heteroscedasticity and autocorrelation between errors is corroborated.

Finally, due to non-existence of cross sectional correlation and existence of heteroscedasticity and autocorrelation between errors, the cluster analysis was used for final estimation of the model. The results of which are given in Table 7.

Table 7: The Results of Final Estimation

Dependent variable: International tourism, number of arrivals

Explanatory variables	Coefficients	Z Statistics	P>|Z|
LnTPA	0.0034	4.08	0.000
LnMPA	0.0244	7.48	0.000
LnGGI	-0.0445	-0.49	0.625
LnRL	0.1808	6.15	0.000
LnGDP	1.1095	15.41	0.000
LnPREC	-0.3861	-2.40	0.017
$R^2 = 0.7410$			

Source: The findings using the Stata12 software

The findings indicate positive and significant effects on the tourism industry for marine protected areas, terrestrial protected areas, gross domestic product (GDP) and rail lines variables. While, the results of the study show a negative and significant impact on the tourism industry for tourism per capita income variable. In between, governance quality coefficient is not significant.

RESULTS AND DISCUSSION
Results
1. The positive effects of terrestrial and marine protected areas on studied country's tourism industry development emphasize the necessity to pay attention to such areas. These countries can increase the surface areas of terrestrial protected areas by identifying more attractions and places and protecting them and then expand their tourist welcoming activities in such areas. Making regular, modern and creative tourist attractions in such areas in order to continue tourist attraction is suggested.
2. In order to continue the visits to marine protected areas and boosting marine and coastal tourism, it is suggested that recreational facilities and welfare services up to international standards and countries' dignity be used to make more attractions in such areas.
3. Since the results of this study indicate the positive effect of rail transportation lines on tourism industry in the countries studied, it is suggested that with the expansion of such lines in order to access terrestrial and marine protected areas, the visiting process of such areas is facilitated and the rates of visits are increased.
4. The positive effect of gross national product (GNP) on the number of international tourists coming in the country can also be a guide to increase the production of goods and services needed by tourists. Some of such goods and services in the above-mentioned protected areas can be offered to tourists. Considering the negative effect of tourist income per capita in the countries studied on their tourism industry, it is suggested, though; decrease the cost of the goods and services offered through methods such as implementing economy from scale while keeping quality.

REFERENCES
Ahmadi M, Bemanian R and Sadeghi A (2013). Providing sustainable tourism development models Margoon gulf cascade protected area with an emphasis on the principles and criteria for sustainable landscape design. *Journal of Environmental Science and Technology* **1** 151-165.

Research Article

Asghari M (2011). Tourism and natural resources. *Iranian Economic Review* **30** 103-117.

Azarbayejani K, Tayebi SK and Sharifzadeh M (2014). Empirical analysis of the effects of productivity on the development of non-oil exports (Case study: OIC member states), *Economic Journal* **3-4** 5-26.

Bakhtiari S, Torabi A and Sajjadieh Khajooei F (2014). Cultural and natural tourism in selected OIC 13. member states. International scientific strategic conferences on tourism development for Islamic republic of Iran, challenges and prospects, Ferdowsi University of Mashhad, Iran.

Drucker DM (2003). Testing for serial correlation in linear panel-data models, *Stata Journal* **2**(3) 168-177.

Kazemi A, Sanaei B, Ranjbarian and Azarbayejani K (2010). Identify competitive advantages of tourism industry in order to attract foreign tourists, Case study: Isfahan province. Urban regional studies and research, University of Isfahan Journals System **5** 93-110.

Khatami Firoozabadi H Askaripour and Bakhshandeh GH (2012). Assessment and placement rank of Chabahar coast compared to the shores of Kish and Qeshm in order to coastal tourism using AHP method, Makran coast and the maritime authority of the first national congress of Iran, Chabahar.

Memghani Nasab (2012). Assessment of the impacts of tourism development on the marine environment, (Case study: Chabahar bay). Makran coast and the maritime authority of the First national congress of Iran, Chabahar.

Mohammad Zadeh P, Behboudi D, Feshari M and Momipour S (2010). Estimation of international demand function for tourism in Iran (TVP approach), *Journal of Economic Growth and Development Research* **1** 107-132.

Moore WR (2010). The impact of climate change on Caribbean tourism demand. Current issues in tourism, University of the West Indies **13**(5) 495-505.

Motiei Langeroudi SH and Heydari Z (2012). Diversification of the economy of the coastal villages with emphasis on fishing tourism (Case study: coastal villages of Tonkabon city), *Journal of Space Economics and Rural Development* **1** 19-36.

Nikbakht Z and Nikbakht L (2011). Analysis of economic convergence (Bilateral foreign direct investment in the D-8 countries), Economic Development Research, Shahid Ashrafi Esfahani University **1**(2) 141-169.

Ranjpour Z, Karimi Takanloo and Najafi Nasab MH (2011). Check hypothesis leads to the growth of tourism in Iran during the period 88-1347. Economic Development Research, Shahid Ashrafi Esfahani University **3** 115-134.

Samadi H and Abolhasanbeygi K (2012). Wagner's Law test in selected countries of the Organization of the Islamic Cooperation member, *Quarterluy Journal of Economic Research and Policies* **64** 115-130.

Shahifar R and Shahraki M (2010). Marine park and its role in the development of tourism and natural attractions Persian Gulf, the sixth national conference of the Persian Gulf, center of scientific and cultural tourism of students, Kish Island.

Sobhani (1389). Recognizing the potential of tourism in the province of Ardabil basement spa area with SWOT. Urban Regional Studies and Research, University of Isfahan Journals System **4** 113-128.

World Bank (2014). *Marine Protected Areas*, Available: http://data.worldbank.org/indicator/ER.MRN.PTMR.ZS.

World Bank (2014). *Terrestrial Protected Areas*, Available: http://data.worldbank.org/indicator/ER.LND.PTLD.ZS.

Ziatavana MH, Biranvandzadeh M and Darvishi M (2014). Spatial outcomes of tourism development and improvement policies in the historical context of the Meybod garden city with emphasis on physical environmental factors. *Journal of Urban Landscape Research* **1** 67-78.