

## The Effective Factors on Increasing Visits of International Tourists to a Recognized Cultural or Natural Heritage in UNESCO World Heritage List

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### Abstract

*The main purpose of the present research is to study the effective factors on increasing visits of international tourists to a recognized cultural or natural heritage in UNESCO World Heritage List. The method of this research is quantitative approach using attributive technique. Data gathering was done based on information and statistics recorded by statistical centers and organizations in Iran including Cultural heritage, Handicrafts and Tourism Organization, Iran Travel and Tourism Organization .... After gathering information, research data was analyzed by Eviews7 software. The main hypothesis of the research was conformed and the value of statistic  $t$  for the research variables, (i.e. recognition the heritage in UNESCO List, improving services, geographical distance of the countries, changes of the exchange rate on the part of visiting country, social security, economic development of the visiting country, the number of attractions in Zanzan, and the population of the tourist country), showed that except for social security, distance and exchange fluctuations, all of them are placed in the realm of rejecting null hypothesis. It means that all variable are significant in the model. Determination coefficient equals 0.77, which means that 77 percent of the changes of dependent variable were explained by independent variables. This would be a significant percentage.*

**Keywords:** recognition of cultural or natural heritage in UNISCO list, visiting of international tourists, improving services, social security.

## 1. Introduction

Tourism has different consequences and it can be motor power of economic development in all countries. In fact, there is no country not having the primary materials of tourism. What differentiate countries from each other is there tourist attractions. Thus, any country with appropriate effort in tourism field can import tourists and in this way achieve much dealing with progressing, flourishing and increasing its exchange income. Tourism may affects the economy of a state directly and indirectly.

- Directly: exchanges that tourists spend on different expenses while staying in the country.
- Indirectly: repayments that tourists make to move from a country to the other and these repayments can be considered as one of important sources for the developing countries to provide exchanges (Rezvani, 2002, 15).

Recognition of a cultural or natural heritage in UNISCO list is considered a great honor to any country and each year addressing their heritage, countries try to increase the number of their recognized heritage in UNESCO world heritage list. When a heritage recognized in UNESCO world heritage list, global attention and support would guarantee them and this not only improves tourism rank of that country but also is considered as a capacity to flourish its tourism. As a result, domestic and foreign tourists are motivated to visit them.

Given that, so far, (2014) Iran has 17 recognized heritages in UNESCO world heritage list, this country is ranked 12-13 in the world involving discovering and registering historical monuments but considering the number of its historical monuments, potentially it could be ranked among three superior countries. Moreover, Iran's share of world countries' income earned from foreign tourism that amounted to 1250 billion \$ (187 million tourists) in 2013 was only .5% (about 6 billion \$). Based on the tourism section of Iran's Vision Document, this country should host about 20 million foreign tourists earning 25 to 30 billion \$ by the year 2025. Nevertheless, the current state is by no means satisfactory and presents the challenge Iran faces to achieve 2 percent of the world tourism income.

Although many experts judge twenty-year-old vision of Iran tourism industry to be weak - because it deals with only general principles - and bring into question the predicted minimum share of the world market of tourism (1.5%, the rate needed revision), looking at the potential capacities of our own country we learn that the predicted rate would be even higher. UNESCO confirmed that Islamic Republic of Iran is placed among the first eight countries of the world concerning its historical and cultural monuments. It is also one of five superior countries in terms of having ecotourism attractions and climatic variety. Four seasonal nature of Iran, existence of sea, desert, hot water springs, various and unique wildlife, religious tourist attractions and seven thousand-year-old civilization all give Iran the ability to get a first in world tourism.

Hui-Lin and Yu-Wen Su (2013) examined the effect of world heritage on inducing more foreign tourists and used a panel data consisting of 66 countries over a period from 2006 to 2009. They observed that there is a positive relation between world heritage and increasing foreign and domestic tourists in a country. The empirical results of a study by Chih-Hai Yang, Hui-Lin Lin, and Chia-Chun Han (2010) showed that the main variables including income, population of the source country and geographical distance of the regional features – i.e. tourist infrastructures in terms of roads, railroads and started hotels - are among the important factors involving foreign

tourism and are of great importance for the tourists from all over the world. Specifically, the transportation expense which represented by distance is one of important factors affecting the international tourist arrivals in China. Moreover, the results showed that Cultural Heritage Sites have a stronger influence on increasing arriving tourists rather than Natural Heritage Sites. Chia-Hui Huang and Chih-Hai Yang (2012) studied the effect of registering 'Historical Center of Macao' in UNESCO World Heritage List on inducing more tourists to Macao. The period of 1999 – 2009 was considered as time limitation of their study and statistics relating to the international tourists from 19 countries who arrived in Macao was examined by using data panel of their research and 'Gravity Model' to study the effect of recognized heritage in UNESCO World Heritage List on arriving international tourists to Macao. Their findings showed that announcing and introducing a heritage in UNESCO World Heritage List, in short time, would be an effective propaganda and improving strategy to induce tourists. We could not find in Iran any identical research on the subject based on registering natural and cultural heritages in UNESCO World Heritage List and its effect on inducing more tourists to visit it. Nevertheless, we continue to deal with some domestic research on 'the effective factors on attracting foreign tourist'. Hezarjaribi and Najafi (2012) in 'A Sociological Study of the Effecting Factors on Tourism Development in Iran: Attracting International Tourists Approach' showed that there is a significant correlation between two variables of satisfactory sense and preference for visit once more. Since the coefficient was positive, it represents direct relation between these two variables. Given the value of determination coefficient (0.34), about 0.34 percent of the changes concerning the preference for second travel can be explained by visitors' satisfaction from Iranian people. The results of a study titled 'The Effect of Psychological and Social Security on Attracting of International Tourists' by Shahivandi et al. (2011) showed that there is a significant relation between psychological and social security and travel motivation to Isfahan (historical and tourist attractions). Saei et al. (2010) showed in their study, 'The Effect of Tourist Target Attractions on Inducing International Cultural Tourists to Isfahan', that historical landscapes of Iran were the most important motivation to attract cultural tourists to Iran. Furthermore, the regression of correlation coefficient involving the variable of target attractions with the attraction value equaled 0.37 and no difference observed between male and female tourists dealing with their approach to target attractions. Kazemi et al (2010) observed in their research titled, 'Recognizing Competition Advantages in Tourist Industry with the Aim of Attracting International Tourists', that there is much difference between the current and desired state concerning attracting international tourists to Isfahan. Many factors can be responsible of this gap. In this research, current obstacles involving attracting tourists were studied in three contexts of domestic, near and distant ones with the aim of moving the obstacles and identifying competition advantages. Naseri (1996) in his research titled 'Identifying Obstacles Effecting on Iran Tourism Industry and Designing an Explaining Pattern to Develop and Attract Tourist', developed a marketing model. Analyzing the information, the researcher suggested the followings as the most important problems of tourism industry in Iran: a) organizational obstacles, b) existing of parallel organizations, c) lack of monotony between the related organizations to tourism in the state, and d) restricting rules and laws and issuing visa.

However, tourist attraction requires many different mechanisms. According to World Tourism Organization, total world tourists in 1950 was around 25 million, in 2000 700 million, which amounted to 842 million in 2006 and 905 million tourists in 2012 out of which Europe

had 51%, Asia and Pacific 22%, America 20%, Africa 3% and Middle East 4%. The latest statistics, in 2013, showed about 5.2 million tourists travelled Iran (Najafi, 2014).

Thus, considering the extent, history and civilization, and tourist attractions of Iran its share in attracting foreign tourists is trivial and requires different strategies concerning hardware fields (i.e. providing health and comfort facilities) and software fields (i.e. facilitating tourist acceptance, educating people treat tourists with respect because of possible cultural differentiations, providing social safety). Therefore, many experts spoke of tourism as an industry. The present study tries to study the effective factors involving development of foreign tourism to visit cultural or natural heritages.

## **2. Methodology**

This research is categorized as Applied Research by its objective, and semi experimental and post event by its method. It is also descriptive-correlated given its method in data gathering and it used a methodology based on the market.

In present study, the statistic universe consists of the international tourists visiting Soltaneih historical Dome, an Iranian recognized heritage in UNESCO, located in Zanjan province. According to information from Cultural Heritage, Handicrafts and Tourism Organization of Zanjan province, so far, tourists from 45 countries all over the world have visited Soltaneih historical Dome. However, because of dispersed information of Cultural Heritage Organization and sometimes lack of precise information about the right number of international tourists visited Soltaneih Dome, the statistic universe of the research included only 10 countries. According to the Organization, the most number of tourists who visited Soltaneih Dome in recent years came from these 10 countries. The current existed information was gathered by referring in person to Cultural Heritage, Handicrafts and Tourism Organization of Zanjan province and interviewing with the managers and deputies of this Organization.

The information of international tourists related to the following countries:

- |              |                    |
|--------------|--------------------|
| 1. Australia | 2. Germany         |
| 3. America   | 4. England         |
| 5. France    | 6. Switzerland     |
| 7. Japan     | 8. Belgium         |
| 9. Holland   | 10. Czech Republic |

The tourists from these countries visited Soltaneih Dome during 2001-2014) and in comparison with the other countries, they had the highest number of tourists. It is worth to note that we did not analyze and include the information of Arab and Muslim countries due to the lowest number of their tourists.

Data gathering method in this research carried out based on the recorded statistics and information in statistic organizations of Iran including Cultural heritage, Handicrafts and Tourism Organization, Iran and World Tourism Organization, and certain international organizations such as World Tourism Organization, The International Monetary Fund, the World Bank, and gathering information by interviewing with the managers and experts in province tourism field as well as library studies and consulting internet sites. Eview7 software was used to analyze information about hypotheses tests. Given the research objective, we studied following hypothesis, which is derived from Huang et al. (2012).

$$\text{Tour} = \alpha_0 + \beta_1 \text{WHL} + \beta_2 \text{Hotel} + \beta_3 \text{Health} + \beta_4 \text{DIS} + \beta_5 \text{EXC} + \beta_6 \text{Security} + \beta_7 \text{GDP} + \beta_8 \text{POP} + \beta_9 \text{POP} + \epsilon$$

Where:

Tour= number of visits by international tourists

WHL= recognition the heritage in in UNESCO list

Hotel= beds of the hotels in Zanjan

Health= number of healthcare centers in Zanjan

DIS= geographical distance of the visiting countries

EXC= changing of the exchange of visiting country

Security= annual crime in Zanjan

GDP= per capita income of the visiting country

POP= number of Zanjan attractions

POP= population of the visiting country

### 3. Results

Table 1 shows descriptive statistic of independent variables. The results showed that independent variable concerning the number of beds in the hotels of Zanjan changed from 620 to 371 the mean of which was 500 beds. The results of other independent variables including number of healthcare centers, geographical distance of the visiting countries, changing of the exchange of visiting country, annual crimes in Zanjan, per capita income of the visiting country, and number of Zanjan tourist attractions, were 108, 3682, 0.24, 1100, 10938.73, and 67, respectively. Their highest values were 149, 11657, 4.37, 10671, 59036.54, and 98, and their means were 128, 5595, 0.423, 5102, 37249, and 79, respectively.

Table1. Descriptive statistic of independent variables

Variable	Minimum	Maximum	Mean	Standard deviation
Number of beds in the hotels of Zanjan	371	620	500	4
Number of healthcare centers	108	149	128	1
Geographical distance of the visiting countries	3682	11657	5595	25
Changing of the exchange of visiting country	-0/24	4/37	0/423	1/08
Annual crimes in Zanjan	1100	10671	5102	13
Per capita income of the visiting country	/73 10938	/54 59036	37249	196/35
Number of Zanjan tourist attractions	67	98	79	6

Kolmogorov Smirnov test was used to examine whether the variables are normal or not. If the remainder of regression model is normal it will show one regression hypothesis meaning that, the regression test can be valuable. To examine whether distribution of the variable concerning the number of visits about international tourists is normal or not, we used

Kolmogorov Smirnov test. Since, if the dependent variables are normal then the remainder of model (difference between calculated values and real values) will also be normal.

Table2. Kolmogorov Smirnov test for single sample

Indexes	Number of visits by tourists
Number	140
Mean	121
Standard deviation	6
Total positive	0/383
Negative	0/269
Kolmogorov Smirnov z	-0/383
Significance level (two-tailed test)	4/128
	0/08

Based on the information in table 3, average number of visits by international tourists is 121 with standard deviation of 6. In this respect, the minimum number of the visits 28 and maximum 562 were resulted. The distortion factor from evaluating the number of the visits equals -0.23, which shows distortion, is negative. In other words, accumulation of frequencies is higher after mean.

Table3. Distribution the number of visits by international tourists

Index title	Value of index
Mean	121
Standard deviation	6
Distortion factor	-0/23
Kurtosis	1/004
Range of changes	534
Minimum	28
Maximum	562



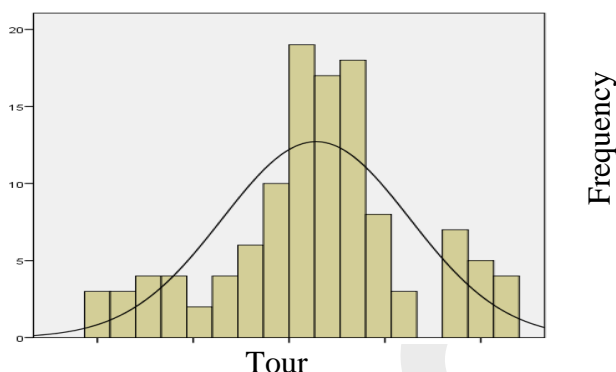


Chart4. Histogram chart of the number of visits by international tourists

Like as the study by Namazi and Ebrahimi (2011), in present study we used unit root tests such as Levin, Leen and Cho tests (2013) to examine reliability of the research variables. According to these tests, if the significance of the statistic is lower than 0.05 dependent and independent variables during the research period will be reliable. The results from using this test to examine the reliability of the research variables are shown in table 4. As seen, the significance level dealing with all variables in Levin’s unit root test is lower than 0.05, which indicates the variables are reliable. It means that the mean and variance of the variables during the time and covariance of the variables over the different years were the same. Thus, studied countries have not experienced structural changes and using these variables in the model does not create false regression.

Table4. Results from reliability test of Levin, Leen and Cho

Variable	The statistic of test	The value of possibility
Number of beds in the hotels of Zanja	30/435	0/018
Number of healthcare centers	37/554	0/000
Geographical distance of the visiting countries	-27/455	0/000
Changing of the exchange of visiting country	9/905	0/025
Annual crimes in Zanja	-34/236	0/000
Per capita income of the visiting country	18/112	0/017
Number of Zanja tourist attractions	22/823	0/007

In order to study whether the combined data is efficient to estimate the model or not, we used Chow test and to study which method of fixed or random effects is suitable to estimate the

model we used Hausman test. The statistic of this test was 2-chi distribution with freedom degree equal to the number of independent variables. If the possibility of the statistic is lower than error level of 5, then using the method of fixed effects can be confirmed, otherwise, the method of random effects should be used. Table 5 shows the results from Chow and Hausman tests.

Table5. Results from Chow and Hausman tests

Test model	Title of test	Statistic of test (p-value)	Test result
Main hypothesis model	Chow test	25/128 (0/0000)	Hausman test (fixed effects method)

According to table 5 and the results of Chow test in the research model, since the statistic of test F is rather crisis quantity (besides, the possibility value is lower than 0.05), null hypothesis of this test (the similarity of width from the start point) is rejected to the advantage of the opposite hypothesis (suitability of using FE). Furthermore, it is obvious from Hausman test null hypothesis of this test is rejected to the advantage of the opposite hypothesis. Thus, the selected method to estimate our purposed functions will be FE method. After selecting suitable model to test research hypotheses, based on FE model, we studied the relation between dependent and independent variables by using the first, second and third models.

As seen in table 6, t statistic for registering the heritage in UNESCO list is 4.63, the beds of hotels in Zanjan 0.733, number of healthcare centers 4.4, geographical distance of the countries -2.24, changing of the exchange of visiting country -0.033, annual crimes in Zanjan -0.208, per capita income of the visiting country 2.183, Number of Zanjan tourist attractions 0.116, and population of visiting country 2.189, all of which are placed in the range of rejected null hypothesis with the exception of beds of hotels and changing of the exchange. In other words, the whole variables of the model are significant. Moreover, the measure of t statistic for width from start in confidence level of 99% locates on the region of rejecting null hypothesis, which represents the significance of fixed value.

Determination coefficient equals 0.77, which means that 77 % of changes of the dependent variable expresses by independent variables. This value is practically significant. It shows the strength of relation between the variables. The measure of Durbin Watson statistic is not much different from 2. The values close to 2 represent lack of self-correlation of the remainder, which shows other regression hypotheses.

Table6. Results from the main hypothesis test

$Tour = \alpha_0 + \beta_1 WHL + \beta_2 Hotel + \beta_3 Health + \beta_4 DIS + \beta_5 EXC + \beta_6 Security + \beta_7 GDP + \beta_8 POP + \beta_9 Attrac + \epsilon$				
Variable	Measure of coefficient	T statistic	Significance level	Relation
Constant	-13/718	-6/65	0/0000	Significant
Registration of the heritage in UNESCO list	102/63	4/633	0/0000	Significant
Number of beds in the	0/12	0/733	0/4666	Insignificant



hotels of Zanjan				
Number of healthcare centers of Zanjan	6/97	4/4	0/0000	Significant
Geographical distance of the countries	-0/004	-2/24	0/0261	Significant
Changing of the exchange of visiting country	-0/11	-0/033	0/0736	Insignificant
Annual crimes in Zanjan	-0/0003	-0/21	0/0348	Significant
Per capita income of the visiting country	0/002	2/18	0/0308	Significant
Number of Zanjan tourist attractions	0/005	0/116	0/0077	Significant
Population of the visiting country	0/005	2/189	0/0128	Significant
Statistic F	55/92			
Significance level	0/0000			
R <sup>2</sup>	0/773			
Durbin Watson statistic	1/89			

#### 4. Discussion and conclusion

This research tries to study the effect of recognition a cultural or natural heritage in UNESCO World Heritage List, health and comfort facilities, social security of tourist destination, changes of the exchange rate, indexes of economic development, population of the source countries, distance between the source and target countries, and the number of attractions in destination country on inducing more foreign tourists to visit the heritage. The results showed that the research model is significant in 99% level. Moreover, t measure concerning the variables of the model (i.e. recognition a cultural or natural heritage in UNESCO World Heritage List, number of beds in Zanjan hotels, number of healthcare centers, geographical distance the countries, changes of the exchange rate of the visiting country, annual crimes in Zanjan, per capita income of the visiting country, the number of attractions in Zanjan and population of the visiting country) showed that all of them are placed in the range of rejected null hypothesis with the exception of beds of hotels and changing of the exchange. It means that the all variables of the model are significant. Determination coefficient is 77% meaning that 77 percent of the changes of dependent variable were explained by independent variables. In fact, this is a significant percentage.

The result of the research hypothesis not only can be explained by gravity and hierarchy of needs theories but also can be confirmed by the results of other international and domestic studies. For example, the empirical results of a study by Chih-Hai Yang, Hui-Lin Lin, and Chia-Chun Han (2010) showed that cultural heritage sites have a stronger influence on increasing arriving tourists rather than natural heritage sites. Furthermore, research findings showed a relation between the numbers of world recognized heritages in a country and inducing more international tourists. Moreover, it is confirmed by the empirical results of a study carried out in China by Chih-Hai Yang, Hui-Lin Lin, and Chia-Chun Han (2010) in that, the main variables

including income, population of the source countries and geographical distance of the regional features – i.e. tourist infrastructures in terms of roads, railroads and started hotels - are among the important factors involving foreign tourism and are of great importance for the tourists from all over the world. On the other hand, the results of the research confirmed past research results from other countries such as England, China, Germany, Hungary, and Romania, all which studied the positive effect of world heritages of a country on inducing more international and domestic tourists. Finally, the results of the research confirmed research results carried out by Chia-Hui Huang and Chih-Hai Yang (2012). They showed that introducing heritages in UNESCO World Heritage List could be regarded as an effective propaganda and improving strategy to induce tourists in short time. On the other hand, the results of the research match with the results of some domestic research including Hezarjaribi and Najafi (2012), Shahivandi et al. (2011), and Saei et al. (2010).

Based on the findings of the present research, the following suggestions can be provide for those are active in attracting cultural tourists:

- Given many natural and cultural monuments of our country deserved introducing and registration in world heritage list, it is suggested to use the potentials relating to natural and cultural heritages of the state and to identify, introduce and register them in UNESCO World Heritage List,
- Establishing recreation centers and parks around all over cultural monuments and heritages,
- Establishing buildings such as guesthouses and huts around the tourist attractions located in distant areas,
- Making diversity and developing advertising programs in order to introduce natural and historical attractions, dominant cultural attributes, architecture, and ceremonies on world webs,
- Extending tourism educations through TV stations of the provinces, in forms of sessions participated by people and taught by the experts and experienced professionals,
- Interacting with tourist offices, agencies and organizations of successful countries involving international tourism,
- Setting centers in international level to introduce, market and advertise Iranian monuments recognized in UNESCO list,
- Leading investment and distributing tourist facilities and services in local level and prioritizing these facilities in rural areas with the aim of tourism or having higher capacities to attracting tourists,
- Developing advertising programs to introduce actively natural and human attractions, dominant cultural attributes, architecture, and ceremonies of each area in festivals, seminars and exhibitions and trying to neutralize negative propaganda of the western media,
- And most important of all, planning and maintaining heritages and cultural attractions and repairing ancient monuments affected by natural disasters

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