

Research Article

Investigation of Tourism Demand in the Context of Development: Empirical Evidences^{*}

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ARTICLEINFO ABSTRACT

Background:

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Keywords:

Tourism Demand, Developed Countries, Undeveloped Countries, Panel Data Analysis In this study, it is aimed to determine the factors affecting tourism demand for Turkey from an economic, socio-demographic, Tourism-Travel and technological point of view. Another purpose of the study is to determine the decisive role of the development situations of the countries sending tourists in determining these factors. Tourism demand can vary according to the social, political and economic development of the countries sending tourists. Quantitative research methods were used in the study and panel data analysis was used. In the analysis of the data, the STATA program was preferred and the evaluations were made by taking into account comparisons between ordinary least squares, fixed effects and random effects models. 26-year-old data from 82 countries that send the most tourists to Turkey has been analyzed. Countries were divided into two separate groups according to their development status and a comparative analysis was carried out. According to the results of the study, it was found that related factors affect the demand for tourism in Turkey in different directions and with different severity. In addition, another important result of the study is that the development status of the countries sending tourists plays role in determining the factors affecting Turkey's tourism demand.

Introduction

Globalization, whose effects on the world have reached a great extent, is one of the modern terms that are accepted in scientific evaluations and make its weight felt in many areas. The concept brings communication to a multidimensional and rapid level. In addition, thanks to this process that enables free movement in foreign trade and capital circulation of national markets, national firms and markets gain an international identity. This situation creates a heavy internationalization process in terms of competition (Taptik and Keleş, 1998).

Increasing leisure time and high income and fast and easy transportation opportunities in the world have paved the way for travel movements to be made individual wishes and needs such as pleasure, entertainment, sightseeing, seeing unknown places and personal satisfaction. Thus, all these developments have enabled the formation of modern tourism movements. Tourism movements have developed so rapidly that tourism, which was recently referred to as a sector, has started to be expressed as an industry today. One of the other important factors behind the rapid development of tourism is the development of Civil Aviation. Especially The introduction of military aircraft used in World War II to civilian use after the war and the invention of jet engines pioneered the development of civil aviation. In addition, Charter flights started in the 1950s and civil aviation became widespread. As of the 1970s, scheduled flights have emerged. All these civil aviation activities have prepared the

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ground for people to travel comfortably and economically to long distances in a short time and served as a driving force in terms of tourism.

The rapid increase in information and communication technologies (ICT) makes the world a global village. The increase in ICTs makes itself felt in many areas due to its structure that makes the world a small place. These technologies are used in many areas such as politics, human rights, environment, culture, law, especially economy, and these areas are shaped according to these technologies. The common feature of these areas is that the smallest changes affect individual or social life. Therefore, developments in ICT affect globalization, and developments in globalization affect the life of individuals and society (Çeken et al., 2008; Şengel, 2015).

While the demand for tourism increased rapidly in the 20th century, countries started to make touristic investments to meet this demand. All developments in tourism have made tourism a major industry with economic powers. These economic forces manifest themselves in terms of micro-economic effects at the firm and household level and contribute to countries. However, the main emphasis of the countries is the macroeconomic effects of tourism. It is possible to see the effects of tourism in many macroeconomic parameters such as GNP, income, balance of payments, economic growth, employment and social development (Çımat and Bahar, 2003; Kar et al., 2004).

Such rapid development of the tourism industry can affect societies in many ways. Tourism can affect societies in many ways, including social, cultural, psychological, demographic and environmental. However, tourism is known to affect its own sectors such as accommodation, travel, transport and food and beverage sectors, as well as sectors such as construction, trade, health, banking and agriculture. Thus, tourism has an expansionist effect on many other sectors (Bahar and Bozkurt, 2010). In fact, the underlying reason for many of the stated effects are the economic effects of Tourism. Economy can affect tourism both ways. In other words, while the countries where tourism is developing are developing economically, the countries that send tourists also need to have a good economy in order to send tourists.

In this study, it is aimed to determine the factors affecting the demand for tourism in Turkey from an economic, socio-demographic, Tourism-Travel and technological point of view. Another purpose of the study is to determine the decisive role of the development situations of the countries sending tourists in determining these factors. Especially the fact that the variables are related to countries sending tourists makes the study different and important. Also, the fact that there are variables related to technology and travel makes the study even more important. It is believed that this study will guide decision makers related to tourism in Turkey and contribute to promotional activities carried out in accordance with Turkey's tourism policies. Determining the factors that are effective in the demand for tourism to Turkey according to the development status of the countries sending tourists can also lead to the formation of a marketing process in which these factors are at the forefront.

Theoretical Background

The concepts of supply and demand are related to each other and are mutually evaluated in many aspects. For example; money supply and demand or investment supply and demand are the best known of these (Branson, 1995; Paraless, 1998; Hall & Taylor, 1998; Gordon, 2000). Supply and demand concepts are one of the most important topics for economics and economists. In fact, Rodrik (2015) sees supply and demand as the most valuable assets of the economy to protect from the ignorant masses, together with the issues of market efficiency, comparative advantages and motives (cause, motive). In the light of this information, it is useful to explain the balance between these two concepts in terms of economy the mutual impulses between them.

In order to understand the demand for tourism, it is useful to know the concept of tourist. Because the main factor that creates tourism demand is tourists. Travelers must fulfill the following conditions to be considered tourists (Eralp, 1983; Olali, 1990; Ünüsan and Sezgin, 2004; Roney, 2011).

- People should travel for any touristic purpose (entertainment, recreation, scientific, cultural, sporting, administrative, religious, diplomatic, health).
- Travel must be more than 24 hours and less than 1 year.
- People should constantly travel outside of where they live.
- Persons should not aim to make money.
- Travelers have limited economic power and leisure time
- At least one-night accommodation should be made in the destinations.
- The periods of travelers to the place where they live are essential.

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Motivations that drive people to tourism activities; it consists of innate motivations such as the desire to see beautiful places, the desire to gain new experiences, and the desire to rest, and two basic motives such as gaining prestige, participating in sports activities and seeking adventure (Cooper, et al., 1993; Rızaoğlu, 2007). Regardless of the reason, any tourism movement that takes place can be considered as a demand for tourism.

Although the factors affecting the demand for tourism vary widely, economic, social, psychological, tourismbased factors and technological factors are the leading them. These evaluations differ according to different sources. Usta (2014) classifies the factors affecting tourism demand as economic, social, political, and psychological. Bahar and Kozak (2014) also make similar evaluations. It takes only political factors together with legal factors and evaluates all factors other than these in the category of other factors. Roney (2011) prioritized economic factors regarding this issue. It also handles the factors affecting the tourism demand as economic and non-economic factors. McIntosh et al. (1995) state that tourism demand is affected by economic distance, cultural distance, service cost, service quality and seasonality.

Many economic factors can be mentioned that affect the demand for tourism. These factors may be demanddriven or not demand-driven. These can be supply-driven factors. For example, while income is a factor that affects demand and is generally demand-driven, price is a factor that affects demand and is generally supply-driven. Price, income, exchange rates, transportation facilities and travel costs, current economic conjuncture, the state of the tourism industry (supply sources), seasonality, balance of payments, technology and marketing efforts can be considered as economic factors affecting the tourism demand (Olalı and Timur, 1988; Usta, 2014; Çeken, 2016).

The sources of motivation that direct people to travel have changed significantly over time from the past to the present, and the sources of motivation that emerged due to the socio-cultural structure were among them. Socio-cultural motivations have an important place in travel movements, especially in the context of modern tourism movements. People who want to see historical, natural and cultural places participate in tourism activities. In this case, it can be said that the socio-cultural structures of the participants in tourism movements have an important place, too. Although some factors related to the issue are given under different categories in different sources, socio-cultural issues such as family, religion, education, profession, urbanization phenomenon, social value judgments and culture can play an active role in determining the demand for tourism (Kozak et al., 2015; Ünlüönen et al., 2015).

When the factors affecting tourism demand are grouped, political factors are evaluated as a group, while legal factors remain a topic that is briefly mentioned under political factors. However, it may be more useful to evaluate the political and legal factors together and with a grouping with its own subtitles. In general, the country that sends tourists, the country visited, and the general international political situation stand out as the political factors that are generally discussed (Olali and Timur, 1988). Elements such as security and stability, terrorism, war, visa applications, tax policies, strict bureaucracy, border barriers and human rights are dealt with politically and legally, each of which affects tourism demand (Öztaş and Karabulut, 2006).

As a factors group affecting the demand for tourism, psycho-demographic factors mostly include the descriptive characteristics and psychological elements of individuals. Particularly, the fact that the demographic and psychological factors of the individuals affect each other has prepared the ground for such a common assessment on this issue. In the tourism event, individuals who have reached a psychological satisfaction travel outside their places of residence in order to renew themselves and gain psychological relief. In this sense, the general characteristics of individuals affect their psychology and tourism is one of the most important methods used by individuals to solve their psychological problems (Yapıcı, 2018).

There is a close and strong relationship between geography and tourism. However, considering the factors affecting the demand for tourism, studies in which geography is considered as a separate category are rarely encountered. Although factors such as income and leisure are necessary for the realization of a tourism event, the most important way to talk about tourism activities in a destination is geographic indicators. First of all, a destination must have tourist attraction resources. These touristic resources should be supported with factors such as climate and nature. When there is no problem with the resources, the second stage is the people who will go to these resources and the distance and accessibility that will enable these people to reach that place is the important geographic resources. In the light of this information, some of the geographic factors that affect tourism demand can be expressed as distance, accessibility, population, natural disasters and climate (Brouder and Lundmark, 2011; Becken, 2013; Aydemir and Şenerol, 2014).

Method

Aim and Method

Many factors such as the economic structure and power, social-cultural structure, demographic structure, geographic situation, political-legal status of the tourist originating country can affect the tourist profile in these countries and the destinations of tourists. Although studies about the structure of tourism affecting social life are frequently encountered in the literature, studies on the effect of social life on tourism are less common. In this sense, the development levels of societies can affect their travels in terms of tourist profile. Therefore, it is aimed to determine the factors affecting tourism demand for Turkey from an economic, socio-demographic, Tourism-Travel and technological point of view. Another purpose of the study is to determine the decisive role of the development situations of the countries sending tourists in determining these factors. To this end, the tourist originating countries to Turkey has reached the national data between the years 1992-2017. In addition, the number of tourists visiting Turkey was prepared according to the nationality of the tourists. This research is expected to contribute to Turkey's tourism promotion.

Quantitative research methods were used in the research. The data are secondary data consisting of statistics for the 82 countries sending tourists to Turkey. In the design phase of the research, it is planned to include as wide a time period and number of countries as possible. Due to the fact that two important developments, both the January 24 Liberal economy decisions and the tourism incentive law numbered 2634, coincided with the beginning of the 1980s, data scanning was carried out for the periods after 1980. According to Ministry of Tourism statistics based on the regular and systematic data on the nationality of tourists who visited Turkey in 1984 and after are available for. However, the data from 1992 and later were included in the study, as the study was intended to continue with the least data loss for the desired country group.

Variables and Dataset

The dataset used in the study covers a period of 26 years, covering the years 1992-2017. The dependent variable in the dataset are the number of tourists coming to Turkey. This number is taken according to the nationality of the tourists. The Ministry of Culture and Tourism was used to obtain data on this variable. Moreover, these data were revised taking into consideration Turkey Statistical Institute data. The data, which economic, socio-demographic, technological and tourism-travel tourist originating country to Turkey was obtained from open access database of the World Bank.

In this study, which determined the factors affecting tourism demand for Turkey from 82 countries and covered a period of 26 years, a total of 42 variables were used with one dependent and 41 independent. But some of these variables were disabled because they contained statistical inconsistencies in the preliminary assessment result. Data from three of the variables is not included in the analysis process because it is not compatible with the program. As multi-collinearity test, Variance Inflation Factors (VIF) were used and 14 other variables with VIF values above 10 were disabled. There is a strong correlation between VIF value and correlation. As the correlation between the arguments approaches 0, the VIF value is expected to approach 1. In this context, variables with a VIF value of 10 and above are explained by other variables and the corresponding variables must be disabled. In the light of this information, a total of 24 independent variables were analyzed (Sevinç, 2013).

Equation of the Study

In this study, which examined the economic, socio-demographic, technological and tourism or travel-related dynamics affecting tourism demand for Turkey, the analyses were carried out with the help of annual data belonging to the countries. The relationship between tourism demand and factors affecting tourism demand is explained with the help of a regression model. In this context, the correlation between the dependent variable and the independent variables is given by the following regression equation.

 $Y it = \alpha + \beta 1X1it + \beta 2X2ci + \beta 3X3it + \beta 4X4it + \beta 5X5it + \beta 6X6it + \beta 7X7it + \beta 8X8it + \beta 9X9it + \beta 10X10it + \beta 11X11it$

+ $\beta 12X12it + \beta 13X13it + \beta 14X14it + \beta 15X15it + \beta 16X16it + \beta 17X17it + \beta 18X18it + \beta 19X19it + \beta 20X20it + \beta 21X21it + \beta 22X22it + \beta 23X23it + \beta 24X24ct + vi + \varepsilon it$

Knowing what the letters and symbols in the equation mean contributes to understanding the next stages. Here Y: nationality tourists number (depend variables), X1: Gross Domestic Product (GDP) (\$), X2: per capita disposable income (\$), X3: annual growth rate, X4: the Gini coefficient, X5: employment (Labor), X6: Unemployment (Percent), X7: Expenditure (%of GDP), X8: trade services (%of GDP), X9: real exchange rate index (2010=100) Dollars, X10:

Turkish population (and over 20 thousand), X11: Population, X12: average life, X13: birth number, X14: death number, X15: Urbanization Rate, X16: 65+ population, X17: travel services (service imports,%), X18: International travel expenditures (\$), X19: Transport services (%of Service imports), X20: International Tourism (Arrivals), X21: Air Transport, X22: Communication Computer, etc. (%Of Service Exports), X23: persons using the Internet (%of the population), X24: Communication Computer, etc. (%Of Service imports) are letters or symbols that make up variables. It also shows α constant in the equation, β : coefficient of the variables, I: index, t: time Index, by virtue of the unobservable time effect, ϵ it: the error term.

Data Analysis

In the study, panel data analysis was used to analyze the data and was used in Stata 14.2 program. The most important feature of Panel data is that it combines Time series and horizontal section data. Therefore, pooled data is also referred to by names such as enriched data, mixed data, or long-section data. If the horizontal section data is longer than the time dimension, the panel is called a short panel and if it is short, a long panel (Tarı, 2016). In light of this information, it can be stated that the panel used in the research is a short panel (41 variables>26 years). If there is a difference in observations (lack of data) between variables in the time series, the created panel is called an unbalanced panel (Tatoglu, 2016). Therefore, an unbalanced panel was used in the research. Multiple regression has been used in determining the factors affecting tourism demand for Turkey. Ordinary Least Squares (Stock and Watson, 2011), fixed effects (Erkan, 2015) and random effects (Tatoğlu, 2016) models were used for testing linear panel data models. The method to be used in the estimation of the regression coefficients was determined by mathematical calculations or computer programs.

Finding and Discussion

Descriptive statistics for developed countries are given in Table 1. The maximum number of observations processed in data for each of the research variables is 779. The average number of tourists coming to Turkey from these countries during the 26-year period covering this research is 423596.5. This is generally an acceptable number above average compared to other country group. The per capita disposable national income for the country group is approximately \$ 22,500. With this, the annual growth rate in the region is 3.7%. The number of countries with over Turkish population living in the country is the majority.

Table 1. Descriptive Statistics of Developed Countries

Variables	N	Mean	Standard deviation	Min. value	Max. value
GDP	778	1.39e+12	2.62e+12	7.16e+09	1.94e+13
Disposable national income	733	22459.21	16772.1	259.9217	82019.95
Growth Rate	715	3.730802	5.617698	-28.93297	33.7
Gini Coefficient	257	38.13	5542.47	24.9	67.2
Employment	779	6.37e+07	1.51e+08	167624	7.87e+08
Unemployment	779	7.222232	4.75205	0.122	27.33
Expenditure	619	29.85496	10.85639	3.895282	49.70964
Invisible items of trade	680	21.98832	36.11393	2.055087	301.3771
Reel exchange rate	766	100.5082	17.50177	46.75081	285.8321
Turkish Population	779	0.5661104	0.4959286	0	1
Population	779	1.34e+08	2.98e+08	414	1.39e+09
Average life	778	75.73342	6.406853	51.6	83.8
Birth number	778	2300156	5604646	6	2.79e+07
Death number	778	1031435	2212732	39	1.00e+07
Urbanization	777	74.97891	17.64148	25.98	100
65+ population	779	1.14e+07	2.10e+07	6675	1.48e+08
Tourist number	765	423596.5	828457.3	108	5580792
Travel services	669	25.11741	9.215213	3.717365	57.40757
Travel Goods Expenditure	648	2.05e+10	2.84e+10	1.53e+08	2.58e+11
Transport services	667	28.36645	11.53961	4.121863	71.22066
International arrivals	668	2.33e+10	3.16e+10	1.55e+08	2.58e+11
Airline transport	736	5.94e+07	1.28e+08	460600	8.49e+08
Communication, computer (export)	667	42.65034	17.75626	4.703329	100
Persons Using the Internet	751	40.34938	33.93571	0.0001113	98.1367
Communication, computer (import)	667	39.72808	12.33236	4.012775	90.85912

Technology-related variables average at 40%, and these averages are close to groups of countries with high levels of prosperity. The unemployment rate is around 7% for the region. Services trade is equivalent to an average of 21% of GDP. The average number of births per year in the region is 2 times the number of deaths. The average life expectancy is 75.7, while the average urbanization rate is about 75%. Travel services account for about 25% of service imports on average, while transport services account for about 28%.

According to Table 2, the maximum number of observations processed for data of each variable for undeveloped countries is 1352. The average number of tourists coming to Turkey from undeveloped countries for the 26-year period examined within the scope of the research is 127296.2. This average number is lower than developed country group. This result can also be explained by the economic development of the countries. As a matter of fact, the disposable national income per person is the lowest amount with the level of 7.000\$. As for the Turkish population living, there is no high statistical average in this country group. The main reason here is that these countries have low levels of economic development. People are more comfortable living in countries with a better economic situation than the country in which they live.

Table 2. Descriptive Statistics of Undeveloped Countries

Variables	Ν	Mean	Standard deviation	Min. value	Max. value
GDP	1316	1.15e+11	1.73e+11	6.52e+08	1.31e+12
Disposable national income	1141	7310.738	10539.58	-9.753427	71216.59
Growth Rate	1024	3.587056	5.370119	-36.66869	43.94274
Gini coefficient	453	35.4415	8.342712	16.2	58.7
Employment	1349	1.02e+07	1.76e+07	147806	1.27e+08
Unemployment	1352	9.664501	6.663759	0.481	37.25
Expenditure	867	28.27739	10.23992	7.604977	92.25092
Invisible items of trade	1166	18.96073	13.66423	1.74892	114.4268
Reel exchange rate	1237	99.49887	28.9944	30.38222	779.7657
Turkish population	1352	0.2307692	0.4214809	0	1
Population	1352	2.41e+07	3.94e+07	56373	2.64e+08
Average life	1352	72.32936	4.961197	55.9	83.3
Birth number	1352	488384.3	892567.6	112	5108811
Death number	1352	168092.9	275914	175	1868525
Urbanization	1352	61.41728	17.82806	20.61	98.36
65+ population	1349	1626621	2158218	12087	1.40e+07
Tourist number	1229	127296.2	262350.7	104	2438730
Travel services	1151	25.19003	13.14994	0.0028677	79.99835
Travel Goods Expenditure	1118	2.18e+09	2.73e+09	1700000	1.71e+10
Transport services	1153	34.47517	15.0162	.287464	89.93719
International arrivals	1117	2.54e+09	3.13e+09	1700000	1.99e+10
Airline transport	1293	6640341	1.37e+07	0	1.54e+08
Communication, computer (export)	1161	32.92628	23.07498	-379.717	100
Persons using the internet	1210	25.91293	27.39939	0	98.24002
Communication, computer (import)	1154	33.93238	16.37394	0.1785714	84.07917

In the undeveloped country group, the average of technology-related variables remained at low levels compared to the developed country group. In particular, the average of individuals using the internet is quite low, with 25%. The average life expectancy was 72.3, while the average rate of urbanization remained at about 61%. In addition, an average of more than 6.6 million people are transported by air in the region annually for a 26-year period. The growth rate is 3.5% year-on-year, while unemployment is close to 10%. In addition, the average annual number of births in the region is close to 4 times the number of deaths.

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Table 3 includes comparisons of developed and undeveloped country groups. It includes regression and significance values for three models related to factors affecting tourism demand from developed countries to Turkey. Breusch-Pagan LM test was performed on which model to use and "H₀: variance of the unit effect is equal to zero." the hypothesis has been tested. As a result of the LM test, the hypothesis was accepted (probe>chi2=1,0000 > 0.05) and it was decided that the least squares (OLS) model was the appropriate model for prediction (Halunga, et al., 2017).

Similarly, Table 3 contains regression and significance values for three models of factors affecting tourism demand from undeveloped countries to Turkey. The Breusch-Pagan LM test was first performed on which model to use, and "H₀: variance of the unit effect is equal to zero." the hypothesis has been tested. As a result of the LM test, the hypothesis was rejected (probe>chi2=0.0000 < 0.05) and it was decided that the least squares (OLS) model was not suitable for prediction. As for which of the other two models to use, the Hausman test was looked at. The hypothesis "H₀: the difference between parameters is not systematic" was tested with Hausman and the hypothesis was rejected (probe>chi2=0.0001 < 0.05). In light of this information, it turns out that the random effects estimator is inconsistent, and estimates are made using the fixed effects model (Pace and LeSage, 2008).

Countries		Developed Countri	ies	Undeveloped Countries			
Mariahlas	(1)	(2)	(3)	(1)	(2)	(3)	
Valiables	Ordinary Least Squares	Fixed Effects	Random Effects	Ordinary Least Squares	Fixed Effects	Random Effects	
CDR	-1.18e-07*	1.92e-08	-1.18e-07*	-1.14e-07	7.51e-07***	1.42e-07	
GDr	(6.40e-08)	(8.46e-08)	(6.40e-08)	(2.01e-07)	(2.48e-07)	(2.07e-07)	
Dismoschla mational in some	-19.95***	-20.83***	-19.95***	2.240	Undeveloped Count (2) Fixed Effects 7.51e-07*** (2.48e-07) 18.35*** (5.502) 1,131 (1,725) 2,762 (3,774) 0.00207 (0.0164) 368.6 (3,926) 3,671 (2,340) -1,591 (3,237) 937.5 (778.6) -0.0251** (0.0115) 11,211 (14,920) 0.0389 (0.114) 0.158** (0.0711) 162.9 (5,546) 0.00269 (0.0545) 3,219*** (1,143) 5.28e-05 (4.07e-05) -3,555** (1,381) -4.32e-05 (4.07e-05) (0.00762***	-4.634	
Disposable national income	(5.525)	(7.008)	(5.525)	(2.329)	(5.502)	(3.726)	
Crosseth Data	-11,498***	-3,122	-11,498***	5,123*	Undeveloped Count (2) st Fixed Effects 7 7.51e-07*** 9 (2.48e-07) 18.35*** (5.502) 1,131 (1.725) 2,762 (3,774) 0.00207 (0.0164) 368.6 (3,926) 3,671 (2,340) -1,591 (3,237) 937.5 (778.6) ** (0.0115) 11,211 (14,920) 0.0389 (0.114) 0.158** (0.00711) 162.9 (5,546) * 0.00269 (0.0545) (1,143) *** 5.28e-05 (4.03e-05) (4.07e-05) * 0.00762*** (1,381) ***	1,374	
Growth Rate	(3,276)	(8,630)	(3,276)	Undeveloped Corr(1)(2)Ordinary Least SquaresFixed Effects $-1.14e-07$ $7.51e-07^{**}$ $(2.01e-07)$ $(2.48e-07)$ 2.240 18.35^{***} (2.329) (5.502) $5,123^*$ $1,131$ $(2,676)$ $(1,725)$ 387.5 $2,762$ $(2,292)$ $(3,774)$ 0.00342 0.00207 (0.00855) (0.0164) $4,817^*$ 368.6 $(2,656)$ $(3,926)$ $1,613$ $3,671$ $(1,913)$ $(2,340)$ $4,079^{**}$ -1.591 $(1,849)$ $(3,237)$ -382.0 937.5 (877.6) (778.6) $163,115^{***}$ $(33,484)$ -0.00799 -0.0251^{**} (0.00603) (0.0115) $5,254$ $11,211$ $(4,769)$ $(14,920)$ 0.191 0.0389 (0.133) (0.114) 0.173 0.158^{**} (0.16) (0.0711) 355.1 162.9 $(1,244)$ $(1,143)$ 0.000143^{***} $5.28e-05$ $(4.69e-05)$ $(4.03e-05)$ $4,222^{***}$ $-3,555^{**}$ $(1,490)$ $(1,381)$ -0.000120^{***} $-4.32e-05$ $(4.25e-05)$ $(4.07e-05)$ -0.00511^{*} 0.00762^{**}	(1,725)	(1,821)	
	-1.371	0.628	-1.371	387.5	leveloped Countr (2) Fixed Effects 7.51e-07*** (2.48e-07) 18.35*** (5.502) 1,131 (1,725) 2,762 (3,774) 0.00207 (0.0164) 368.6 (3,926) 3,671 (2,340) -1,591 (3,237) 937.5 (778.6) -0.0251** (0.0115) 11,211 (14,920) 0.0389 (0.114) 0.158** (0.0711) 162.9 (5,546) 0.00269 (0.0545) 3,219*** (1,143) 5.28e-05 (4.07e-05) 0.00762*** (0.00272)	4,849	
Gini coefficient	(3.390)	(3.153)	(3.390)	(2,292)	(3,774)	(3,154)	
	0.0783***	0.0771***	0.0783***	Undeveloped Com (1) (2) Ordinary Least Squares Fixed Effects -1.14e-07 7.51e-07*** (2.01e-07) (2.48e-07) 2.240 18.35*** (2.329) (5.502) 5.123* 1.131 (2,676) (1.725) 387.5 2.762 (2,292) (3,774) 0.00342 0.00207 (0.00855) (0.0164) 4,817* 368.6 (2,656) (3,926) 1,613 3,671 (1,913) (2,340) 4,079** -1,591 (1,849) (3,237) -382.0 937.5 (877.6) (778.6) 163,115*** (33,484) -0.00799 -0.0251** (0.00603) (0.0115) 5,254 11,211 (4,769) (14,920) 0.133 (0.114) 0.173 0.158** (0.116) (0.0711) 355.1 16	0.00207	-0.00754	
Employment	(0.0128)	(0.0241)	(0.0128)	(0.00855)	(0.0164)	(0.0124)	
TT 1 .	14,324	18,943	14,324	Undeveloped Count (1) (2) Ordinary Least Squares Fixed Effects -1.14e-07 7.51e-07*** (2.01e-07) (2.48e-07) 2.240 18.35*** (2.329) (5.502) 5,123* 1,131 (2,676) (1.725) 387.5 2,762 (2,292) (3,774) 0.00342 0.00207 (0.00855) (0.0164) 4,817* 368.6 (2,656) (3,926) 1,613 3,671 (1,913) (2,340) 4,079** -1,591 (1,849) (3,237) -382.0 937.5 (877.6) (778.6) 163,115*** (33,484) -0.00799 -0.0251** (0.00603) (0.0115) 5,254 11,211 (4,769) (14,920) 0.191 0.0389 (0.133) (0.114) 0.173 0.158** (0.0164) <td< td=""><td>-1,076</td></td<>	-1,076		
Unemployment	(8,983)	(17,229)	(8,983)	(2,656)	(3,926)	(3,667)	
	1,236	1,372	1,236	1,613	3,671	2,688	
Expenditure	(4,842)	(11,576)	(4,842)	(1,913)	(2,340)	(2,180)	
	12,559***	4,111	12,559***	(3) (1) ndom Effects Ordinary Least Squares -1.18e-07* -1.14e-07 (6.40e-08) (2.01e-07) -19.95*** 2.240 (5.525) (2.329) -11.498*** 5,123* (3,276) (2,676) -1.371 387.5 (3.390) (2,292) 0.0783*** 0.00342 (0.0128) (0.00855) 14,324 4,817* (8,983) (2,656) 1,236 1,613 (4,842) (1,913) 12,559*** 4,079** (2,427) (1,849) 4,979** -382.0 (2,285) (877.6) 204,023 163,115*** (192,111) (33,484) -0.0600*** -0.00799 (0.00773) (0.00603) 4,486 5,254 (10,013) (4,769) 0.900*** 0.191 (0.125) (0.133) 0.791*** 0.173	-1,591	2,405	
Invisible items of trade Reel exchange rate	(2.427)	(4,796)	(2.427)	(1.849)	(3.237)	(2.387)	
	4.979**	3.347	4.979**	-382.0	developed Countr (2) Fixed Effects 7.51e-07*** (2.48e-07) 18.35*** (5.502) 1,131 (1,725) 2,762 (3,774) 0.00207 (0.0164) 368.6 (3,926) 3,671 (2,340) -1,591 (3,237) 937.5 (778.6) -0.0251** (0.0115) 11,211 (14,920) 0.0389 (0.114) 0.158** (0.0711) 162.9 (5,546) 0.00269 (0.0545) 3,219*** (1,143) 5.28e-05 (4.07e-05) (4.07e-05) (0.00762*** (0.00762***	1.527**	
Reel exchange rate	(2,285)	(2.988)	(2.285)	(877.6)	(778.6)	(736.8)	
	204 023	(/ /	204 023	163 115***	· · · ·	183 471**	
Turkish population	(192 111)		(192 111)	(33 484)		(86,608)	
	-0.0600***	-0.0765***	-0.0600***	-0.00799	-0.0251**	-0.00608	
Population	-0.0000	(0.0139)	-0.0000	(0.0077)	(0.0115)	-0.00000	
	(0.00775)	(0.0135)	4 486	5 254	(0.0113)	(0.00040)	
Average life	(10.012)	(51.901)	(10.012)	(4 769)	(14.920)	(0.710)	
	(10,013)	0.596***	(10,013)	(4,709)	(14,920)	(9,719)	
Birth number	(0.125)	(0.122)	(0.125)	(0.122)	(0.114)	(0.0982)	
	(0.123)	(0.132)	(0.123)	(0.133)	Jndeveloped Countri (2) Fixed Effects $7.51e-07^{***}$ (2.48e-07) 18.35^{***} (5.502) 1,131 (1,725) 2,762 (3,774) 0.00207 (0.0164) 368.6 (3,926) 3,671 (2,340) -1,591 (3,237) 937.5 (778.6) -0.0251^{**} (0.0115) 11,211 (14,920) 0.0389 (0.114) 0.158^{**} (0.0711) 162.9 (5,546) 0.00269 (0.0545) $3,219^{***}$ (1,143) 5.28e-05 (4.03e-05) $-3,555^{**}$ (1,381) -4.32e-05 (4.07e-05) 0.00762^{***}	(0.0903)	
Death number	(0.15()	(0.1(0))	0.791	0.173	(0.0711)	(0.0720)	
	(0.156)	(0.109)	(0.158)	(0.110)	developed Countri (2) Fixed Effects 7.51e-07*** (2.48e-07) 18.35*** (5.502) 1,131 (1,725) 2,762 (3,774) 0.00207 (0.0164) 368.6 (3,926) 3,671 (2,340) -1,591 (3,237) 937.5 (778.6) -0.0251** (0.0115) 11,211 (14,920) 0.0389 (0.114) 0.158** (0.0711) 162.9 (5,546) 0.00269 (0.0545) 3,219*** (1,143) 5.28e-05 (4.07e-05) (4.07e-05) (0.00762*** (0.00722)	(0.0739)	
Urbanization	(5.057)	(26,265)	(5.057)	(1 205)	(5.546)	-3,101	
	(3,037)	(26,265)	(5,057)	(1,303)	(2) Fixed Effects Ra $7.51e-07^{***}$ $(2.48e-07)$ 18.35^{***} (5.502) $1,131$ (1.725) $2,762$ $(3,774)$ 0.00207 (0.0164) 368.6 $(3,926)$ $3,671$ $(2,340)$ $-1,591$ $(3,237)$ 937.5 (778.6) -0.0251^{**} (0.0115) $11,211$ $(14,920)$ 0.0389 (0.114) 0.158^{**} (0.0711) 162.9 $(5,546)$ 0.00269 (0.0545) $3,219^{***}$ $(1,143)$ $5.28e-05$ $(4.03e-05)$ $-3,555^{**}$ $(1,381)$ $-4.32e-05$ $(4.07e-05)$ 0.00762^{***} (0.00772)	(2,546)	
65+ population	(0.0370**	0.0430	(0.0370**	(0.0215)	(0.0545)	(0.0300	
	(0.0232)	(0.0418)	(0.0232)	(0.0213)	(0.0343)	(0.0323)	
Travel services	3,440	-3,997	3,440	5,329***	3,219***	3,082***	
	(4,962)	(6,080)	(4,962)	(1,244)	Fixed EffectsI $7.51e-07^{***}$ $(2.48e-07)$ 18.35^{***} (5.502) $1,131$ (1.725) $2,762$ (3.774) 0.00207 (0.0164) 368.6 (3.926) $3,671$ (2.340) $-1,591$ (3.237) 937.5 (778.6) -0.0251^{**} (0.0115) $11,211$ $(14,920)$ 0.0389 (0.114) 0.158^{**} (0.0711) 162.9 $(5,546)$ 0.00269 (0.0545) $3,219^{***}$ $(1,381)$ $-4.32e-05$ $(4.07e-05)$ (0.0767^{***})	(1,107)	
Travel Goods Expenditure	0.000211***	0.000145***	0.000211***	0.000143***	5.28e-05	6.46e-05*	
1	(2.21e-05)	(3.34e-05)	(2.21e-05)	(4.69e-05)	(4.03e-05)	(3.82e-05)	
Transport services	29,375***	36,027***	29,375***	4,222***	-3,555**	-1,463	
T	(5,077)	(8,120)	(5,077)	(1,490)	(1,381)	(1,364)	
International arrivals	-0.000130***	-8.24e-05***	-0.000130***	-0.000120***	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-4.87e-05	
	(1.98e-05)	(2.75e-05)	(1.98e-05)	(4.25e-05)		(3.83e-05)	
Airline transport	-0.00341***	-0.00211	-0.00341***	-0.00511*	0.00762***	-0.00536**	
	(0.00112)	(0.00302)	(0.00112)	(0.00292)	(0.00272)	(0.00224)	

Table 3. Comparison of Regression Results of OLS, FE, RE Models of Demand for Turkey in Developed and Undeveloped Countries

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Communication, computer	-9,600**	5,514	-9,600**	-1,757	-2,660**	-1,793*
(export)	(3,918)	(6,599)	(3,918)	(1,109)	(1,029)	(1,025)
Persons using the internet	2,537*	99.26	2,537*	1,781**	2,879***	2,275***
	(1,423)	(2,308)	(1,423)	(798.8)	(1,089)	(747.9)
Communication, computer	29,306***	25,927***	29,306***	1,173	-3,599***	-2,860**
(import)	(5,786)	(7,393)	(5,786)	(1,318)	(1,208)	(1,220)
	-3.234e+06***	-8.777e+06**	-3.234e+06***	-841,734**	-209,540	-34,895
Constant	(956,953)	(3.955e+06)	(956,953)	(377,336)	(1.064e+06)	(669,906)
Observations	182	182	182	209	209	209
R-squared	0.926	0.792		0.486	0.450	
Number of Rank	22	22	22	31	31	31

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

In the study, tourism demand according to Turkey's nationalities was used as a dependent variable. It is known in the literature that tourism demand is measured by the number of tourists or tourism income (Dritsakis, 2004; Aktaş, 2005; Ouerfelli, 2008). GDP and disposable national income per capita have shown a significant impact within both groups of countries. The effects of these two variables are negative for developed countries, while positive for undeveloped countries. This result is similar to the results of different studies (Görmüş and Göçer, 2010; Kaya and Canlı, 2013) of the socio-demographic variables, four variables in developed countries are common to variables in developed countries. The effect direction of these common variables is the same, but the confidence intervals in which they show significance are different.

Tourism and travel variables differ for both groups of countries. For example, travel services of developed countries do not affect demand for Turkey, while travel services of undeveloped countries have a positive effect. Transport services affect requests from developed countries to Turkey positively in the 99% confidence range (1% error margin), while undeveloped countries negatively in the 95% confidence range (5% error margin). It can be said that the results of travel-related variables in this study are parallel to the results of Lim (1997). In addition, airline transportation makes sense in the 99% confidence range (1% error margin) for both groups of countries. This variable affects the relevant demand negatively in developed countries, while it affects positively in undeveloped countries. The effects of variables related to travel movements on tourism demand have also been identified in different studies (Lim and McAleer, 2002; Wang, 2009).

Three of the variables related technology affect tourism demand of Turkey for both groups of countries. The variable of person using the Internet positively affects the relevant demand of both country groups. Depending on the use of this variable in the countries, considering the increases of each unit, the increase in developing countries is 0.3 units more. Depending on the percentage of spending communications and computer services imports adversely affect the demand for Turkey from developing countries. This effect is positive for developed countries. On the other hand, depending on the percentage of service exports, communication and computer spending negatively affect the respective demand for both country groups.

Results and Conclusions

It is known that there are many factors affecting the tourism demand for a country. These factors may be related to the country that accepts tourists as well as the country that tourist originating country. In this sense, one of the factors that arise from developments in economic, social, demographic, geographic, technological and general tourism and travel fields, some or all together, has the power to affect the tourism demand for a country. When all of these factors are considered together, it can be said that they may show the character of affecting the tourism demand for different destinations, especially based upon the tourist originating countries.

Population-related variables positively affect tourism demand for Turkey from developed countries (Schiff and Becken, 2011; Güneş and Kabadayı, 2015). In the same way, increasing the use of technology causes such an effect. Many economic indicators influence demand for Turkey. While the effects of service trade and employment are positive, the effects of other meaningful economic indicators are negative. From socio-demographic variables, international tourism and airline transport negatively affect demand for Turkey, while transport services and travel goods positively affect.

Although very few variables affect demand for Turkey from undeveloped countries, these effects are generally the opposite of developed countries. Disposable national income and GDP from economic indicators, in contrast to developed countries, have a positive impact on demand for Turkey. Similar results were obtained in a study by Dritsakis and Athanasiadis (2000), which investigated factors affecting Greece tourism demand. Travel services in developed countries are adversely affect the demand for Turkey. Travel services in undeveloped countries

positively affects the demand for Turkey. The same result applies to air transport and transportation services. Crouch (1995) obtained similar results.

In this study, the overall economic context affecting the international tourism demand for Turkey, sociodemographic, technological and tourism and travel-related indicators have been identified. The direction and levels of impact of these indicators may differ according to country groups. These differences can have many reasons. The economic development and social welfare levels of the countries emerge as an important criterion here. In addition, the geographical and cultural relations of countries with each other also come to the fore as an important factor (Görmüş and Göçer, 2010).

As the development of country groups increases, the effects of urbanization, average life expectancy and the population over 65 on tourism demand for Turkey become more positive. All of these indicators are already increasing parameters with development. In this sense, such a result is an expected situation. The positive developments in healthcare services, especially depending on the development, cause the average life span to increase. Therefore, the fact that the population over the age of 65 has had a positive impact on the demand for tourism is a very important result for Turkey.

Ethics Statement

During the writing process of this study titled "*Investigation of Tourism Demand in the Context of Development: Empirical Evidences*", scientific rules, ethics and quotation rules were followed; No falsification has been made on the data collection and this study has not been sent to any other journal for evaluation.

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