



Econometrical Analysis of the Demand for Entrance Tourism in Kazakhstan

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ABSTRACT

The article deals with the modeling the demand for inbound tourism in Kazakhstan and in the regions. The panel data for 16 countries was used - the basic sources of tourist flows and the period from 2010 to 2014. Modeling is carried out separately for the South-Kazakhstan region of 5 tourist zones. As the determinants of demand the gross national product in the country of origin, exchange rate, transport costs, cost of living and the lagged demand variable was considered. The estimates of dynamic models of demand correspond to the expectations, are statistically significant and can be useful in the practice of development planning of tourism in different municipalities and regions of Kazakhstan.

Keywords: Demand for Entrance Tourism, Tourist Areas, Tourist Flows, Dynamic Model, Panel Data

JEL Classifications: O18, Z30, Z39

1. INTRODUCTION

The modern world tourism has become one of the leading directions of socio-economic, cultural and political activities of many States and regions of the world. Travel is no longer just a pleasure, fun or luxury but has become an integral part of modern life associated with the satisfaction of his spiritual, intellectual and aesthetic needs, rehabilitation and development of physical strength, maintenance of the required level of activity.

Tourism plays an important role in addressing social issues, stimulating the creation of additional jobs, providing employment and improving the quality of life of the population, which is especially important during the economic crisis. UNESCO has recognized tourism as one of the main factors in the cultural and humanitarian development, contributing to the preservation of peace and the rapprochement between peoples through dialogue between cultures.

The tourism, directly or indirectly, have more than 30 industries. For its successful development requires quality infrastructure, including roads, bridges, hotels, catering. All this gives the

opportunity to solve complex regional problems, to create many jobs and to overcome the heterogeneity of economic space. Finally, tourism is an effective means of preserving historical, cultural and natural heritage.

The development of tourism is one of the priority programs of the government of the Republic of Kazakhstan, since tourism and travel is a leading exporter of: Entering, guests are directly involved in the process of injection of foreign currency into the economy of the country. However, tourist demand is highly volatile, subject to sharp seasonal fluctuations, depending on the geographical region, market changes, political, social, economic, demographic, psychological, and other factors. In this regard, it is important to identify the main determinants of international tourist flows significantly determine the demand for entrance tourism to see the possibility of its development and regulation.

Most studies of tourism demand focused on the study of the influence of income and price factors on the demand that leads to some unexpected results in elasticity values or to inaccurate forecasts. To improve these results, we design the dynamic model estimated on panel data.

As the informational basis we using the statistics of Ministry of National economy of the Republic of Kazakhstan Committee on statistics, Kazakhstan tourist Association, the Ministry of investments and development of Republic of Kazakhstan Department of tourism and the world tourism organization.

Kazakhstan's format in tourism as well as all other sectors of the economy functioned through the state. Typically, all these were large businesses, offering such services as accommodation, meals, excursions, etc. In the conditions of market economy such a scheme of management too cumbersome, inefficient and require significant financial investments was become. As in other industries and the service sectors, the preference was given to small and medium enterprises, because at present they are more mobile, agile, manageable and effective.

The important is the fact that in a market economy competition is the main driving force for the creation of high-quality and affordable goods and services. The company possesses a competitive advantage to other enterprises producing the same product, if it reduces their costs of production, effectively uses all available resources, uses the latest technologies and techniques was compared. The practice if the industry is a monopolist, it dictates to the consumer and their conditions was showed. Such approach is characteristic for all sectors of the economy in market conditions. The tourism industry is no exception (Kuralbayev et al., 2015).

2. ANALYSIS OF THE KAZAKHSTAN MARKET OF ENTRANCE TOURISM

2.1. Potential and Prospects of Development of Entrance Tourism in Kazakhstan and South Kazakhstan Regions

Kazakhstan is a country possessing rich cultural heritage and unique natural landmarks, nature reserves, lakes, deserts, forests. Friendly people, open to communication and perception of new cultural values, stable political and economic situation, policies aimed at strengthening peace and accord between Nations and expanding international cooperation, developing infrastructure – all this allows Kazakhstan to develop the domestic and international tourism. In this regard, a special role is given to support its development on the basis of a coordinated mechanism for the planning, regulation, coordination and control (Approved by the decree of the President of the Republic of Kazakhstan, 2010).

The territory of Kazakhstan is divided into regions: Southern, Northern, Western, Eastern and Central, and each of them has a great tourist potential, which is the presence of historical sites, attractive landscapes, nature reserves and unique lakes and monuments contemporaries.

Southern Kazakhstan includes the Almaty, Zhambyl, South Kazakhstan and Kyzylorda region. The climate of the southern region is very good for relaxation, treatment, and mountaineering, skiing and hunting. In addition, this is the region of ancient culture. It is the largest city of the middle ages Shymkent, where the “Holy

place” in Sairam district and “Arystanbab” - the place of worship of saints in the ancient city of Turkestan is the famous mausoleum of Khoja Ahmed Yasawi. Taraz - one of the centers of the Great silk road, the main attractions of which are the mausoleums of Aisha-Bibi, Karakhan, Tekturmas, etc. In the seven rivers is a unique Scythian burial mound. Also in southern Kazakhstan is well-known Baikonur cosmodrome. As for the unique natural resources in their region there is great diversity. This is one of the most beautiful mountain peaks of the world - Khan-Tengri. The popularity peak is due to the perfect, pointed peak, which is during sunrise and sunset is painted in bright red color. One of the most beautiful resort areas of the region is Medeo. Medeo is located 15 km from Almaty. Medeo is famous for its mild climate, beautiful mountains and sports facilities. Here is the biggest ice rink for speed skating. The area of ice field - 10.5 thousand m², it has repeatedly established world records in speed skating. Chimbulak is the second most popular ski resort located at an altitude of 2200 m in the vicinity of Almaty. One of the best places in Central Asia was considered.

The region has picturesque turquoise Big Almaty Lake, a famous mineral water Saryagash, Kyzylorda region - mud Yana-Kurgan reserve Aksu-Dzhabagly.

This region is a cluster which includes the Central and Eastern parts of the Kyzylorda region, southern part of South Kazakhstan region and South-Western part of Zhambyl region (Table 1).

The city of Shymkent will be the center of the cluster, which presents the key places of tourist interest. In the future, the cluster may expand, including other parts of all three regions and also to provide new places of tourist interest, such as the Turkic sanctuary of Merke, included in the provisional list of UNESCO, and state natural reserve Barsakelmesskiy, the objects included in the serial transnational nomination “silk road” (monuments Djetyysay oasis, the settlement of national importance).

The cluster in South Kazakhstan will be positioned as “the heart of the Great silk road.” The main tourist products that will be developed here include cultural tourism and tour.

According to the forecast of the world Tourism Organization Kazakhstan has potential to become one of the leaders in the field of tourism and travel. With the development of tourist infrastructure at the international level, our country is able to take a year to 10 million foreign tourists and 10 years can enter the top ten of the most popular tourism destinations.

However, the tourism potential of the country is used far not in full. The main factors constraining the development of domestic and inbound tourism is underdeveloped tourism infrastructure, lack of favorable conditions for investment, low quality of tourist service and lack of active brand positioning of Kazakhstan as a tourist power in the domestic and international markets, which has a negative impact on the ratings of the country.

From the point of view of a foreign tourist, the main complaints in connection with the stay in Kazakhstan or the ability to go

concerning the length of bureaucratic procedures, the cost of visas and the time needed to acquire it low-quality service. Among the major obstacles is called also the prohibitive cost of travel to the major tourist destinations in Kazakhstan - Almaty and Turkestan, Kyzylorda-Taraz, etc. The cost of 1 week stay in any of these cities is constantly growing and now exceeds the cost of a similar trip to Bishkek or Tashkent. As for visiting other parts of the region, the price is also a deterrent for tourists, mainly because of the range of travel, but even greater concern is the questionable quality of tourist services. The reason the vast majority of cases is poor development and poor condition of the infrastructure - roads, transport, lack of hotels of acceptable quality and the lack of tourist services - such as, for example, information centres.

2.2. The Modern State of Tourism of Kazakhstan

Today in Kazakhstan there is stable demand for tourist services, this trend is due to increased interest of foreign businessmen to the economy of Kazakhstan, the emergence of the new state and its culture became attractive to foreign tourists. Mostly foreign tourists are residents of China, Germany, USA, UK, and Turkey this is due to the economic ties of Kazakhstan with the above mentioned countries (Kurbanov, 2003).

The growth of tourist flows testifies to the increase of tourist attractiveness of the country, and the development of appropriate infrastructure and increasing citizen's ability to visit other countries. In 2014 functioned 1777 tourist organizations tourism services providing. During the year they served 6 million 332.7 thousand tourists. Compared to 2013, the number of tourist organizations decreased by 22% and of tourists - 8%. The total volume of services provided by tourist firms and individual entrepreneurs in 2014 amounted to 29,586.3 thousand tenge. The volume of services provided to the level of 2013 decreased by 32%.

Analysis of the distribution of tourists by types of tourism showed that in Kazakhstan, the tourist business is growing yet with the primary focus on travel (Table 2).

As we can see from Table 2 from the total number of served 2014 the greatest tourists' share of 60.6% in outbound tourism, inbound tourism, only 39.4% (Agency of Kazakhstan of Statistics, 2015).

The number of tourists, who issued their trip abroad through a travel company in 2014 amounted to 95.7% (10,449.7 thousand). Of the total number of traveling of 87.5% (9,375.7 tourists) visited the neighboring countries. The most visited foreign countries remain Turkey - 72.3%, UAE 11.3%, and China - 3.4%, Thailand 3%. The share of these countries accounted for 87% of all visits. The rest of the country is a small percentage among travel tours: Egypt of 0.9%, Czech Republic 0.87%, Lithuania of 0.74%, Italy 0.61%, etc. (Transport, Communications and Tourism in the South-Kazakhstan Region, 2014).

In 2014 with the general increase in tourists by 117% compared to the previous year, but still marked increase in the number of incoming tourists. In 2014 in Kazakhstan visited 677.5 thousand foreign citizens from 120 countries.

In the structure of foreign citizens visiting Kazakhstan, the largest share are: China - 15.1% and Germany at 8.5, Turkey - 6.3%, etc., the share of these countries account for 60% of arrivals. The rest of the country is a small percentage.

In the analyzed period, The Commonwealth of Independent States (CIS) entered 5,655.2 thousand of tourists-non-residents. Of these, 43% came from Uzbekistan, 17% from the Russian Federation, etc.

Table 1: Components cluster in South Kazakhstan

The theme of the cluster	Components territories	The location
South Kazakhstan	Turkestan city with mausoleum of Khoja Ahmed Yasawi (UNESCO site)	South Kazakhstan region
	Archaeological sites of the medieval Otrar and Otrar oasis included in the provisional list of UNESCO	South Kazakhstan region
	The archaeological complex of Sauran	South Kazakhstan region
	The Karatau state natural reserve with paleolithic sites and geomorphology	Zhambyl region
	Petroglyphs of Arpa-Uzen included in the provisional list of UNESCO	South Kazakhstan region
	Aksu-Zhabagly state natural reserve, in the tentative list of UNESCO	South Kazakhstan region
	Sairam-Ugam state national park	South Kazakhstan region
	Baikonur Cosmodrome	Kyzylorda region
	Kyzylorda city	Kyzylorda region
	Saryagash city	South Kazakhstan region
	Taraz city	Zhambyl region

Table 2: Information about tourist services for 2009-2014 in the Republic of Kazakhstan people

Indicators	2010	2011	2012	2013	2014
The number of visitors for exit tourism, totaly	6,019,171	8,020,400	9,065,579	10,143,710	10,449,972
Including: CIS	5,270,466	7,031,721	7,834,651	9,037,804	9,375,785
Outside of the CIS	748,705	988,679	1,230,928	1,105,906	1,074,187
The number of visitors of entrance tourism only	4,097,387	5,685,132	6,163,204	6,841,085	6,332,734
Including: CIS	3,642,311	5,195,043	5,542,447	6,213,390	5,655,246
Outside of the CIS	455,076	490,089	620,757	627,695	677,488

CIS: Commonwealth of Independent States

3. DEMAND MODELING

The analysis of the current state of the tourist market in southern Kazakhstan shows that the main countries supplying tourists to Kazakhstan, not including the CIS countries are: UK, Germany, India, Italy, China, USA, Turkey, South Korea, France, Mongolia, Canada, Georgia, Netherlands, Israel, Poland and Japan (Table 3).

The main tourist areas of Kazakhstan, where most of international tourists are: Almaty region, Almaty city (45%), South Kazakhstan region Shymkent city and Turkestan (30%), Taraz (5%), Kyzylorda (5%), Resort Drilling (Kokshetau), Astana, etc. (Agency of Kazakhstan of Statistics, 2015).

3.1. Determinants of Demand for Tourism

Classical economic theory suggests that the main determinants of tourism demand are income of the tourist, the cost of goods and services relative to the cost of substitutes. Marketing and advertising tourism public and private sector, the political situation, cost of living at destination, the exchange rate have a significant impact on international demand (Lim, 1997; Song and Witt, 2000; Croes and Vanegas, 2005).

3.1.1. The dependent variable

Tourist arrivals variable is the most popular measure of tourism demand over the past few years. It measures the total flow of tourists from the place of origin to the destination. In the future, there is a classification of streams according to their arrival: Vacation, business, visit friends or relatives (Witt and Martin, 1987). Some researchers have used tourist expenditure in the destination as a variable demand, others used tourist expenditure on specific categories of the tourism product, such as the cost of food, sightseeing expenses and shopping (Li et al., 2005). There are also such measures of tourism demand used in the literature as the tourism revenues, employment in tourism, import and export in tourism (Witt et al., 2003).

The expenditure of tourists is the only measure that can directly affect the economy. However due to the complexity of obtaining them and the high probability of measurement errors as a measure of demand for inbound tourism is more common (about 59% of studies) used the variable of tourist flow.

Our work will also be used flow measured by the number of foreign citizens entering Russia for tourism.

3.1.2. Explanatory variables

The choice of explanatory variables for inclusion in the model was also made based on the analysis of international tourism demand.

3.1.3. Population

The extent of the demand for tourism services from any country of origin of the tourist is obviously tied to the actual value of the population. However, the inclusion of population as a separate explanatory variable may be a problem of multicollinearity. Therefore, in the case of modeling tourist flows to Russia, as a measure of demand for inbound tourism will be used, the number of tourists coming to Russia, per capita, in the country of origin of the tourist.

3.1.4. Income

Classical economic theory suggests that one of the main determinants of tourism demand is the personal disposable income of the tourist in the country of origin (defined as the portion of personal income remaining in the employee after-tax. However, it is a subjective variable, and the data on it cannot be retrieved. Alternatively real personal disposable income in our model included the variable national income per capita. The increase in income per capita in the country of origin will increase the number of foreign citizens visiting Kazakhstan. Therefore, the expected sign of the coefficient on this variable should be positive.

3.1.5. The transport costs

Transportation cost represents a significant share of the total cost of leisure and thus affects the tourist flow. Unlike other costs, there is no problem of measurement, because the data on fares are available from official sources. Therefore, the model included a variable cost of tickets of economy class one-way between countries of origin and tourist centers of Kazakhstan, expressed in the currency of the host country. Also in the model variable cost of travel for ground-water transport was included: The cost of travel by rail and travel cost by bus.

3.1.6. The cost of air travel from the country of origin in the tourist center of Kazakhstan

Is calculated for each tourist center as the product of the rate of travel at 1000 km distance from the capital of the monitored countries to this centre, in Kazakhstan tenge. If direct flights between observable objects no, the data on transit flights via Almaty.

3.1.7. The cost of moving on land and water transport from the country of origin

Is calculated for each tourist center as the product of the tariff for travel in compartment carriage of the train on a 100 km distance from the capital of the monitored countries to this centre by the Railways of Kazakhstan and on the territory of other countries, in Kazakhstan tenge. If a direct rail link between observable objects no, the data on transit by rail through Almaty and Astana.

3.1.8. The cost of living

The second price variable in the model - the price of accommodation in tourist centre. In the study model as this variable was used average cost of hotel accommodation per night in a tourist center in Kazakhstan tenge. By increasing the cost of hotel accommodation in tourist center of Kazakhstan, ceteris paribus, the number of tourists coming to Kazakhstan will fall.

3.1.9. Exchange rate

Consumers know more about exchange rates than about the cost of living in the destination country, so the model includes a variable exchange rate, as a measure of relative prices.

In this study, we used exchange rates for Kazakh tenge by the National Bank of the Republic of Kazakhstan. It should be noted that our model, as will be explained hereinafter, has a logarithmic form and estimated in first differences. This means that it allows identifying the relative effect of changes in exchange

rates on changes in demand. It is expected that the exchange rate depreciation in the country of destination, i.e., in Kazakhstan, leads to an increase in demand for inbound tourism.

3.1.10. The lagged dependent variable

The variable indicating the attachment to the tourist centre is the potentially important factor that influences international tourism flow. When selecting a previously visited country for tourism there is less uncertainty compared with the journey in a previously unvisited foreign country. If the holidays leave pleasant memories about the tourist center, they will certainly be back there, otherwise they can your stories to discourage other potential tourists. Also this variable shows the inflexibility of the proposal: Limiting supply, etc.

3.2. Specification Model

To build econometric models of demand for inbound tourism in Kazakhstan, we used data on the number of foreign tourist arrivals from 16 major (not including the CIS) countries sources of tourism ($i = 1, \dots, 16$) as listed at the beginning of section 3. The dataset corresponds to an arrival for a 5-year period from 2010 to 2014 ($t = 2010, \dots, 2014$). Therefore, there is a complete group set of data with 160 observations.

The function of demand for inbound tourism is:

$$V_{ijt} = f(V_{ijt-1}, I_{it}, P_{jt}, PX_{it}, PA_{ijt}, PT_{ijt}) \quad (1)$$

V_{ijt} - the number of tourist arrivals from country i (per capita in this country) a tourist center in j^{th} year;

V_{ijt-1} - is the variable, showing affection to a tourist centre;

I_{it} - the income per capita in the country of origin i during the year;

P_{jt} - the price of accommodation in tourist centre in j^{th} year;

PX_{it} - it cost of a unit of currency, in tenge for the country of origin i during the year;

PA_{ijt} - cost of airfare from country of origin i in the tourist center of the j^{th} year;

PT_{ijt} - cost of moving by ground transport from the country of origin i in the tourist center of the j^{th} year;

There are several functional forms of the model tourism demand. In this study, as in most previous empirical studies on this topic, a model of demand for entrance tourism is of logarithmic form:

$$\ln V_{ijt} = \alpha + \beta_1 \ln V_{ijt-1} + \beta_2 \ln I_{it} + \beta_3 \ln P_{jt} + \beta_4 \ln PX_{it} + \beta_5 \ln PA_{ijt} + \beta_6 \ln PT_{ijt} + \mu_t + v_i + \varepsilon_{it} \quad (2)$$

When the $u_{it} = \mu_t + v_i + \varepsilon_{it}$ - a complicated error that includes, in addition to white noise, time effects and individual effects of countries. Components errors ε_{it} - correlated, with zero mean and independently distributed for each country. In addition, ε_{it} are uncorrelated with the regressors and individual effects v_i .

A positive sign is expected for the coefficients of $\beta_1, \beta_2, \beta_4$ and negative for the coefficients $\beta_3, \beta_5, \beta_6$.

It should be noted that the constructed model is dynamic. It is known that the MLS and FE estimates of this model are

inconsistent for finite values of T , and this failure is not related to the properties of the unobserved individual effect v_i . To obtain consistent estimates, it is necessary to use the method of instrumental variables (IV) or generalized method of moments (GMM).

One possible solution to this problem - assessment based on the methodology of Arellano-bond GMM - construction of the equations in first differences with the aim of eliminating unobserved individual effect and then the estimation of the parameters obtained equation by the method of IV, using as instruments values of the dependent variable with a lag of two or more of the period.

The dynamic model would be:

$$\Delta \ln V_{ijt} = \beta_1 \Delta \ln V_{ijt-1} + \beta_2 \Delta \ln I_{it} + \beta_3 \Delta \ln P_{jt} + \beta_4 \Delta \ln PX_{it} + \beta_5 \Delta \ln PA_{ijt} + \beta_6 \Delta \ln PT_{ijt} + \Delta \mu_t + \Delta \varepsilon_{it} \quad (3)$$

Where the $i=1, \dots, 16$; $t=2010, \dots, 2014$; all variables are first difference: $\Delta \ln V_{ijt} = \ln V_{ijt} - \ln V_{ijt-1}$, similarly for other variables.

Since the model has the double logarithmic form, the coefficients can be interpreted as elasticity. The parameter β_1 shows the extent to which the current tourist flow is determined by the value of the previous flow. Since this is a dynamic model, the estimated coefficients are the short - term elasticity. Long-term elasticity can be obtained after dividing each coefficient by $1 - \beta_1$.

Thus, one of the benefits of using dynamic models is that it can be obtained of the elasticity in both the short and long term.

3.3. Empirical Results and their Interpretation

To estimate equation using Arellano-bond used econometric package STATA v.10 (Ratnikova, 2005). The consistency of the estimates depends on whether lagged values of endogenous and exogenous variables are instruments in our regression. To this end, we conducted a test for autocorrelation and the Sargan test for over identification restrictions. Table 4 presents estimates of the model for all tourist areas and for Russia as a whole. The results show that there are no signs of autocorrelation is not found, the absolute values and signs of the coefficients coincide with the base assumptions, the most estimates significant at the 1% level.

3.3.1. The lagged dependent variable

The results presented in Table 4 show that the lagged variable has a significant effect on tourism demand of foreign nationals in Kazakhstan as a whole and in all tourist centers. The coefficient is traditionally interpreted in this way: 60% of the total international arrivals in Kazakhstan belong to the constancy of habits and/or the effect of "word of mouth." The main significance of this fact for the tourism industry is that the availability of high - quality services is essential to attracting new and repeat tourists to Kazakhstan.

With regard to the tourist centers of Kazakhstan, the greatest impact this variable has on inbound tourism in the Central, North-Kazakhstan and South tourist areas (69%, 70% and 67%,

Table 3: The number of visitors of entrance tourism in Kazakhstan

Countries	2010	2011	2012	2013	2014
UK	25,911	26,330	27,482	22,389	23,036
Germany	74,311	67,725	100,911	75,491	79,572
Georgia	7,661	10,536	11,686	12,462	14,758
Israel	4,212	4,614	6,042	5,078	5,179
India	11,904	13,778	14,716	9,929	10,725
Italy	14,223	15,161	18,445	14,961	14,596
Canada	5,155	5,393	6,024	4,798	4,628
China	108,630	128,312	154,226	205,066	228,617
Mongolia	10,419	11,305	9,077	10,750	10,622
Netherlands	5,372	5,035	5,983	8,198	8,269
Poland	4,400	5,157	7,405	8,208	9,229
USA	20,461	21,463	25,606	22,508	25,824
Turkey	52,276	60,728	85,857	92,070	104,986
France	8,606	9,141	12,394	10,245	10,935
South Korea	13,740	16,589	16,963	16,620	20,445
Japan	4,428	4,716	6,049	5,202	6,379

Table 4: Parameter estimation for dynamic models 2010-2014 for tourist areas and for Kazakhstan as a whole. Short-term elasticity

Indicator names	lnV (t-1)	ln I	ln P	Ln PA	Ln PX
The Republic of Kazakhstan	0.60	1.70	-0.69	-0.15	0.67
Southern region	0.65	1.90	-0.75	-0.16	0.73
Northern region	0.70	2.10	-0.76	-0.17	0.63
Western region	0.40	1.40	-0.50	-0.12	0.65
Eastern region	0.69	2.30	-0.85	-0.18	0.64
Central region	0.57	1.70	-0.68	-0.15	0.61

respectively), that is, these areas are re-visited the largest number of tourists and/or their friends.

3.3.2. The income for one people

The income per capita in the country of origin is the main determinant of demand for inbound tourism in Kazakhstan. For every tourist center in the estimated coefficient in front of the income variable - the expected positive sign and absolute value, they are significant at 1% confidence level. Anticipated short-term and long-term value of elasticity for Kazakhstan was equal to 1.7 and 2.83, respectively. Elasticity of demand under the income is >1 , i.e., the demand is income-elastic, which suggests that the visit to Kazakhstan is of luxury goods to foreign consumers of the tourism product. This means that the growth of income of tourists and at constant prices on travel demand for tours to Kazakhstan will increase. Therefore, we can assume that the number of foreign tourists and thus the income from tourism is significantly dependent on the economic situation in the main countries of origin of the tourist flow. For tourist centers of Kazakhstan elasticity of demand, income varies greatly. So, to the East, South and North Kazakhstan regions, tourism zones, it is the highest short-term elasticity is 2.3, 1.9 and 2.1 respectively. And the least sensitive demand by income visible in all tourist areas. A possible explanation of this fact is the distance between the tourist centers of Kazakhstan and the main countries of origin of foreign tourists and in the length of stay in tourist center. The farther away is the tourist center, the more time it takes to drive to him. A change in income leads to profound changes in the structure of tourist

demand. Getting a well-paid job, the person often sacrifices their leisure time. Not having enough free time, he, as before, selects a short tour, but shows increased requirements to the level of comfort, thus takes the East and South, the tourist area. And the North, the Central zone is mostly visited for ecological, sports and adventure tourism, recreational hunting and fishing and for a longer period, i.e., tourists with an average income and have a longer vacation or free time.

3.3.3. The cost of living

The cost of accommodation in the tourism center of Kazakhstan is significant for all tourist areas and for Kazakhstan as a whole, has the expected negative sign and absolute value.

The demand for inbound tourism in Kazakhstan is generally quite sensitive to price, the short-term elasticity is -0.69 . That is, for most foreign tourists, the financial factor is usually the determining factor, therefore reducing the cost of living will greatly facilitate the inflow of foreign tourists. An important factor in causing the change in the elasticity of demand on price are the time frame within which a decision about the trip. Elasticity higher in the long-term than on short intervals. Over time, consumers can find a greater number of substitutes for the trip, the price of which rises gradually change their tastes, habits and attachments.

Long-term elasticity of tourist demand (-1.15) may be a reflection of the many alternatives to travel to Kazakhstan. As the cost of living in tourist centers of Kazakhstan is rather high and is not inferior to prices in alternative locations, to support the competitiveness of travel to Kazakhstan, the essential strategy must be to improve the quality of services provided.

As an example and not a large sensitivity of demand on price can serve as Astana, Shymkent and Almaty. Over the past few years in the summer most of the hotels have 100% occupancy rate, despite the almost double price increase. In low season most of the hotels filled an average of 40%, while the average occupancy rate at hotels in the range of 50-60%.

3.3.4. The cost of air travel

Unlike other studies of tourism demand, in our case it turned out that the cost of air travel is also a significant determinant of demand for inbound tourism in Kazakhstan. This, as already mentioned, due to the dominance of the share of expenses for travel to tourist center in the total tourist expenditure foreign tourist. Anticipated short-term and long-term value of elasticity for Kazakhstan as a whole is equal to -0.15 and -0.25 respectively (Table 5).

As for the variable "cost of accommodation in tourist centre" the demand for long distance travel are less sensitive to price changes than the near distance. So the short-term elasticity of demand the price of air travel in absolute value throughout the region of Kazakhstan.

3.3.5. The cost of moving on land transport

This variable proved insignificant as for Kazakhstan as a whole and for each tourism zone, which indicates a small effect of changes in the cost of passenger transportation on tourist demand. Not

Table 5: Long-term elasticity

Indicator names	ln I	ln P	Ln PA	Ln PX
The Republic of Kazakhstan	2.83	-1.15	-0.25	1.12
Southern region	2.92	-1.15	-0.25	1.12
Northern region	3.00	-1.09	-0.24	0.90
Western region	3.50	-1.25	-0.30	1.63
Eastern region	3.33	-1.23	-0.26	0.93
Central region	2.98	-1.19	-0.26	1.07

surprisingly, a very small fraction of foreign citizens arriving in Kazakhstan of these types of transport is by train to an average Kazakhstan takes 1 to 10 days. As noted above, for most foreign tourists who decided to visit Kazakhstan, the financial factor, as a rule, is not determinative, therefore, despite the lower fares (relative to the cost of air travel), tourists prefer to use the aircraft.

3.3.6. Exchange rate

The coefficient before this variable is significant at the 1% confidence level for all tourism zones.

In a relatively short period of time (up to years) tourist demand may be very inelastic. However, when you consider that the implementation of important quantitative shifts need time in the long term (over years), the demand may become more elastic. As a result, almost all tourist areas the short-term elasticity of tourism demand is significantly below the long-term. Short-term elasticity of demand for Kazakhstan is equal to 0.67, which confirms the hypothesis that due to the significant weakening of the tenge the cost of tours in Kazakhstan for foreign tourists from most developed countries is markedly reduced and thus increases tourism. Long-term elasticity, as expected, much higher and equal to 1.12. The most sensitive is the demand in the southern region of the tourist area (0.73). A possible explanation for this fact might be the fact that the main countries - suppliers of tourists in this area are the European and Asian countries. And for the last 10 years most of them moved on to a single currency - the dollar, which every year was strengthened, making the cost of tours to Kazakhstan for foreign tourists more accessible and thereby contributing to the increase in demand for inbound tourism to Kazakhstan.

4. CONCLUSION

One of the main conclusions of the study is the significant influence of a lag of the dependent variable on tourism demand, indicating a high consumer loyalty to travel to Kazakhstan. The lowest rate was in the tourist zone of the Western region, which may indicate the low quality of services in this area. The elasticity of demand, income was greater than unity for all tourist centers, which suggests that the visit to Kazakhstan is of luxury goods to foreign consumers of the tourism product. Therefore, we can assume that the number of foreign tourists and thus the income from tourism is very dependent on the economic situation in the main countries of origin of the tourist flow. The most elastic demand by income in

tourist centers, with a short trip compared to travelling to remote tourist areas.

Tourism in Kazakhstan is very sensitive to the prices for accommodation in tourist areas. As the cost of living in Kazakhstan is quite high and not inferior to prices in alternative locations, to support the competitiveness of the trips to Kazakhstan, it is necessary to improve the quality of services provided. The most elastic demand at the price of accommodation in tourist centers with a short drive, the demand for long distance travel are less sensitive to price changes than the near distance.

Unlike other studies of tourism demand, in our case, the cost of air travel has also been found an important determinant of the demand for inbound tourism in Kazakhstan because of the large share of the costs of travelling to a tourist center in the total tourism expenditures of foreigners. As for the variable "Cost of accommodation in tourist centre" the demand for long distance travel are less sensitive to price changes than the near distance. The demand for inbound tourism proved to be very sensitive to changes in the exchange rate, because in practice people are more knowledgeable about exchange rates than about the relative cost of living in the country.

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