THE IMPACT OF ORGANIZATIONAL AND ECONOMIC FACTORS ON TOURISM DEVELOPMENT

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Abstract: Tourism sector remains under- analyzed by economists and specifically there is a need to develop a model which allows clarifying the impact of government policy in transition countries on this sector. This paper aims to analyze the influence of currency liberalization on the volume of services in tourism from 1995 to 2009.

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Introduction

Tourism is one of the biggest and dynamically developing branches of the economy in many countries. Nowadays it is obvious how great the influence of the tourism industry on the world economy is. It is sufficiently to note that the share of tourism contains about 10% of the world gross national income and the charges to internal and international tourism make 12% of the world gross national product. The number of international tourists in all over the world annually increases by 6% (Bar, 1997). The same picture is typical for many regions and territories (Fletcher and Latham, 1997).

The tourism services which are ones of the service sectors have features similar to services in general and have their own peculiarities. First of all the tourist service occupies quite considerable place in the service market, because it is a very multifaceted conception including transportation, accommodation feeding, excursion and other services. Therefore, its peculiarity is that it creates new form of customer demand not for a single good but for the whole complex of goods and services. The unit of measure is a tour, correlation of elements and its components is ranging widely.

Central Asia is one of the regions specializing on the tourism, specifically such cities like Tashkent, Samarkand, Bukhara, Alma-Ata, Ashgabat, etc. Studying tourism dynamics on the country with transition economy such as Uzbekistan gives opportunity to estimate influence of the state regulatory mechanisms on the tourism sector being important source generating foreign currency resources along with traditional or production export industries.

According to Song and Witt (2000) "the demand for tourism is defined as a quantity of tour products which the consumers are ready to pay for the definite period. The determining factors of the quantity of tourism products are the price of accommodation in the receiving country and transportation charges, availability of tour product, prices for tours in the competitive countries, potential incomes of tourists, expenses for advertisement and tourists' preferences and other social, geographical and political factors".

As noted by Philips (1986), numerous variables which are included in the regression analysis of tourism development (prices, incomes, currency rates and etc.) are the dynamically changeable non-stationary variables which are characterized by simultaneity. Ignoring the simultaneity problem leads to wrong test results (particularly t-tests and F-tests may give wrong results). But not looking on the existing restrictions is not reasonable because at definite circumstances they are the most simple, effective and valuable parameters. But Eugenio-Martin and others (2004) argue that demand for tourism and economical growth in Latin American countries are correlated and the prices on the recipient countries do not have considerable influence on the tourism growth.

One of the perspective directions in the modeling of tourism processes is handling diffusion model. Nowadays the diffusion models are used in different spheres such as marketing, management, technologies of informational business (Mahajan et al., 1990; Woodside and Lysonski, 1989).

The considerable problem of above mentioned models on the practice is a selection of factors. It is specific for each region and determinate by surrounding territories by the level of development of the region, service level and etc. for example, the dominating factors for Australia (Kulendran and Wilson, 2000) are the actual level of incomes, openness for trade, attractiveness of import, comparative level of prices, rest and entertainment and etc. the collection of factors always will be characterized by incompleteness. The other big problem is a usage of diverse natural indexes on the models, the change character of which frequently is unpredictable and which are interdependent. All of these pit serious restrictions on the tourism models; particularly prognostic qualities may be insufficiently high.

However, in the above-mentioned works was not considered influence of currency conversion regulation namely liberalization of currency exchange market on tourism which is one of the most actual questions for the countries specializing on tourism and specifically countries in transition. For the analysis of the effect of regulation of currency conversion the model similar to model of Song and Vitt (2000) was used.

Methodology

The research objective is to construct an econometric model of tourism development particularly of influence of exchange rate liberalization on the volume of rendered tourism services.

For estimation purpose we used the following model:

$$y_t = \beta_1 + \beta_2 x_{1t} + \beta_3 x_{2t} + \beta_4 x_{3t} + \beta_5 x_{4t} + \varepsilon_t, \quad (1)$$

where y_t - the volume of rendered tourism services in thousands dollars of USA (after logarithmic transformation), x_{1t} - the price of tourism product, x_{2t} - number of firms in tourism, x_{3t} - indicator of period during

which was regulated the currency conversion, x_{4t} - quantity of internet sites advertising the tourism products of the country, ε_t - approximation error, t–time index.

Data

As a retrospective base were used observations of the National Company "Uzbektourism" by the regional tourism development for the period from 1995 till 2009. Figure 1 shows that in 2003 there was a growth in the volume of services and it had stable tendency up to 2005 following which again began a growth.

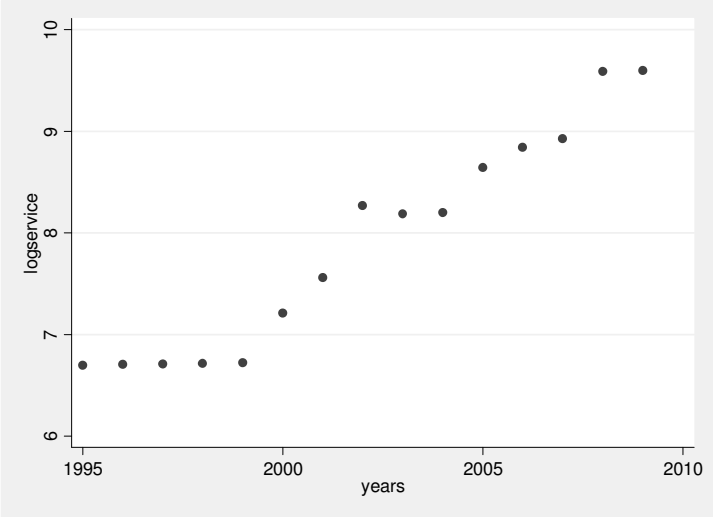
So far as the data of the Government of Uzbekistan indicates the year 2003 is a year of currency liberalization on the exchange market therefore as one of the parameters of the model the indicator of changes in the currency market was used.

Results

Econometric analysis of the tourism model shows how each parameter influences the tourism service dynamics. As we see from the given table the currency liberalization in 2003 has a positive influence on the volume of rendered services' growth in the tourism sphere, the price of the product negatively influences on the same indicator. Expenses on marketing activity that is shown in the quantity of internet sites advertising the tourism product of the country is positively influences on the volume of rendered services in tourism quantity of tourism firms also renders a positive influence on the volume of services.

The coefficient of determination (R-squared) shows that variables included into the model reflect 95% of variations in the volume of rendered tourism services. F-test also more then 10, that means the importance of the variables in the model.

FIGURE 1. DYNAMICS OF TOURISM SERVICES BY YEARS



Source: Data of "Uzbektourism" National Company of Uzbekistan

TABLE 1. ESTIMATION OF THE VOLUME OF RENDERED TOURISM SERVICES (OLS)

Variable	Coefficient
Number of tourism firms	0.057**
	(0.025)
Number of advertisement sites	0.025***
	(0.008)
Conversion indicator	0.033***
	(0.015)
Price of the tour product	-0.862**
	(0.361)
Constant	9.830***
	(3.094)
Number of observations	15
R-squared	0.957
F- test	79.700

Note: * 10% of importance level; ** 5% of importance level; *** 1% of importance level, in the brackets are shown the standard errors of coefficients

Conclusion

Summarizing results of the method of mathematical modeling in the tourism provides us with the following generalizations:

1. Perspective direction in the modeling of the processes in tourism along with c diffusive and econometric models is a usage of model approximated to the model of Song & Witt.
2. Econometric analysis of the tourism model shows that introduction of the conversion in 2003 has a positive influence on the growth of the volume of rendered services in tourism along with expenses for marketing activity that is reflected in the number of internet sites advertising the tourism product of the country and also the quantity of firms.
3. Regression analysis allows forecasting in tourism with the error, as a rule, which does not exceed 5-10%.
4. Irregularity of regional economic processes in tourism does not sufficiently influence on the character of the given model.
5. There is no necessity to perform additional estimation and correction of model's parameters at the analysis of data of different region that confirms their general character.
6. The problem of prognostication of the volume of rendered services in tourism sphere demands additional study because the considered model allows receiving only of approximated estimations.

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