

## DEMOGRAPHIC FACTOR IN INTERNATIONAL (OUTBOUND) TOURISM

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### **ABSTRACT. – Demographic Factor in International (Outbound) Tourism.**

Basing on statistical data and World Bank's and World Tourism Organization's standards, we have considered gross and per capita international (outbound) tourism flows checked against such population's demographic attributes as its number, age structure and urban extent. Calculations were performed with respect to nearly 70 countries of the world to help establish the effects of demographic factor upon international tourism. The conducted analysis showed that international tourism activity is the most strongly effected upon by the age structure, in particular, children and seniors should be in the first place outlined with their differently directed influence. These two demographic characteristics inversely depicted the level of the country's development. If households' per capita consumption expenditures are taken to be an indicator of the country's level of development, it will be with the share of seniors that such expenditures correlate to its best ( $r = 0.7$ ). This is why it seems to be well-substantiated that the share of people ageing 65 years and older can serve as the major demographic indicator of influence on international tourism. Having made use of the multivariate regression analysis, we checked the number of international tourism departures per 100 people against such demographic attributes as shares of seniors and urban population. The findings showed an average correlation  $R = 0.62$ , that is, the same as in the case of pair correlation with age group above 64 years old. In other words, the urban extent as additional parameter did not at any rate reduce the strength of relationship.

**Keywords:** *international tourism, tourism departures, international tourism activity, demographic factor, population number, age structure, urbanization.*

## 1. INTRODUCTION

*Problem Statement and Purpose.* According to the data available at the World Tourism Organization (UNWTO), there were nearly 1 billion international tourists at the turn of the millennium throughout the world. The involvement

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of this great number of people from many countries could not but make international tourism significantly effect on different spheres of human relations. At the same time, some aspects of international tourism are still insufficiently highlighted. In particular, the study of the effects of population characteristics as one of the factors of international tourism upon the formation of outbound tourism flows seems to be very important. Therefore the present work aims at analyzing the impact of the demographic factor in international tourism, in particular, the influence of population number, age structure and urbanization upon the formation of outbound tourism flows.

*Analysis of latest studies and publications.* Among the scope of works devoted to international tourism we would highlight the publications by A. Yu. Aleksandrova (2002) and O. O. Lyubitseva (2003). The authors characterize basic concepts of international tourism, analyze geography of tourist demands with respect to world regions, and describe the latest trends and processes of globalization in this industry. The latest statistical information can be found in the annual analytical electronic edition "*UNWTO Tourism Highlights*". However, some aspects of international tourism are still insufficiently studied, in particular, the effects of the demographic factor on the number of outbound tourists in one country.

## **2. THEORY AND METHODOLOGY**

Methods of study lie in the use of statistical data and methodologies available with the World Bank and World Tourism Organization, as well as in the use of methods of mathematical statistics, including correlation analysis.

Tourism is understood as one of the form of population migration, not connected with place of residence or work changes. The necessity of definition of the term "tourism" arouse in the first half of the 20<sup>th</sup> century, caused by the growth of the flow of tourists, the increase of tourism economic significance and, as a result, the efforts to statistically account the travelers.

The Committee of Experts in Statistics at the Nations' League was the first to offer definition of the term "tourist" (1937). The term found international acknowledgement and preserved its form till nowadays, with some further amendments. At present, a definition worked out at the International Conference for Travels and Tourism Statistics (Ottawa, 1991) is widely used in international practice. The World Tourism Organization (WTO) and the UN Committee for Tourism Statistics approved the definition. According to it, a tourist is a visiting person, i.e., "a person who travels outside his/her usual environment for not more than one consecutive year with any purpose, excluding activity remunerated from within the destinations" (O. D. Korol & T. D. Skutar, 2008, p. 5).

The definition allowed for a clearer outlining of the part of travelers who can be the object of statistical research in tourism. The summarizing documents of the Ottawa Conference and the WTO technical recommendations refer to the tourist as a visitor. This definition is recommended to be used in tourism statistics as a basic one. Alongside with tourists (overnight visitors), the term is also extended to same-day visitors. Probably, the latter is the reason of absence in definition of the minimal stay outside the usual environment (24 hours), set in national tourism legislation in many countries.

Tourism takes the forms of domestic and international tourism. International tourism supposes travels outside the country of residence. It covers visitors who are non-residents in the country of destination.

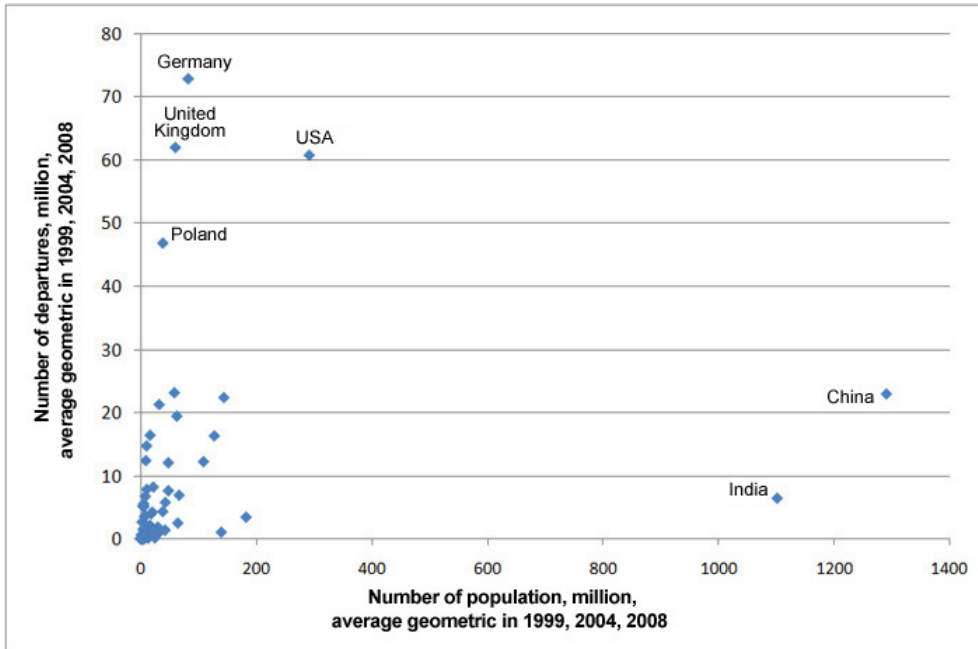
Depending upon whether a person is traveling to or from a certain country, international tourism is subdivided into inbound and outbound tourism. From the point of view of the country of residence, the tourist who travels to another country is the outbound one, whereas from the point of view of the country of destination, the one who is received by a destination country is the inbound tourist. According to the UNWTO standards, outbound tourism flows are estimated in number of departures counted from the moment when the residents leave their country to travel abroad for a period not exceeding 12 months and whose main visiting purpose is other than an activity remunerated from within the visited country.

### **3. RESULTS AND DISCUSSION**

#### **3.1. Population number as a factor in international (outbound) tourism**

Since the outbound tourists of any country are part of its population, it is expected that the number of departures would first depend on the number of country residents. To prove this, it was important to check the numbers against each other. Such a check was made with respect to over 80 countries. To make the sample more representative and to neutralize the effect of the events that could occur in one year year, all figures were regarded as average geometric values for 1999, 2004 and 2008, with which further computations were performed. The choice of the above-stated years was substantiated by the fact that there was a more or less stable political and economic situation established in the world after disintegration of the Soviet Union and until the beginning of the global economic crisis.

The correlation analysis did not witness a relation between the attributes under the study ( $r = 0.21$ ). As seen from the diagram of distribution, the lowest correlation between the number of population and the number of tourism departures was remarked in India and China (fig. 1). Without these two cases, there is a moderate correlation with  $r$  amounting to 0.54. Thus, the assertion that the number of departures would increase with the increase of the population number appears to be rather poor (fig. 1).



**Fig. 1.** The population number in world countries and the number of international tourism departures.

Source: World Bank Open Data, <http://data.worldbank.org>

We assume that it is the proportion of the involvement of residents of one country to travels abroad that should be suggested by way of checking the number of outbound tourists against the number of population. That is, the international tourism departures per 100 people ( $Dep$ ) may serve as a parameter that would show the international tourism activity of the country population:

$$Dep = \frac{\text{number of departures}}{\text{population number}} * 100$$

It seemed necessary to ascertain whether or not the departures (*Dep*) depended on the characteristics of the population, because differences in the demographic structures of the countries could appear to strongly effect on their residents' wishes and capabilities to travel abroad. In particular, the influence of such demographic characteristics as age structure and urbanization within one country had to be established.

### **3.2. Age structure as a factor in international (outbound) tourism**

It should be reminded that the increase in the number of people ageing 60 years and more was among the most remarkable demographic changes, mainly in the developed countries. The situation is explained by the decline of fertility between the 1960s and the 1980s and the gradual growth of the average life span.

Traditionally, the retired people were consumers characterized by their low purchasing power, continual economy, and disenfranchisement. However, it was due to the state and private pension systems and the pension amounts' regular indexation that the welfare of a significant part of seniors continuously grew and subsequently allowed for their active travels abroad. Today, the UNWTO experts emphasize that the present-day average pensioner is more than ever a well-educated, well-to-do and active individual. Consequently, there was every indication that the seniors appeared to be the newcoming tourism consumers, specifically demanding as follows [O. D. Korol & M. P. Krachulo, 2008, p. 27]:

- to have lasting journeys to the most attractive destinations;
- to have trips as far as possible distant from their places of residence;
- to enjoy routes with active cultural and recreational programmes.

The “welfare society” with its high living standards and capacity to satisfy different material needs transformed the social conscience towards hedonism in the 1980s-1990s. Pleasure became the only worthy benefit a human being might have from living on Earth. Work was no more for earning but for self-realization and career development. Free time was no more devoted to consumption of material values as well-being attributes but to services which broadened “life horizons” and provided enjoyments and impressions. Simultaneously, tourism irrevocably transformed from splendor to necessity and daily wishes.

In the context of these transformations, a social-demographic group emerged - the young singles of up to 35 years old that live apart from parents, and middle-age loners. Highly cultural, well-educated and materially independent, these people do not wish to commit themselves to family life and obligations.

Informal marriages as an alternative of a relationship between persons of opposite sex grew in popularity. The “loners” are peculiar for high educational background, pursuit of professional success and high demands for comfort and quality of living. They extensively focus on the organization of their free time and try to enjoy life thus predetermining their high tourism activity.

The tourism activity of the couples having pre-school and school-aged children is to a smaller extent lower than that of the “loners”, since parents are now responsible for the children’s education and upbringing which requires more time and spending. Families are formed at a later age today, and women give birth later than a few decades ago. Such a situation favours the tourism activity of the population though generates a problem regarding the decline in the birth rate.

All aforesaid demographic changes tell on population’s age structure. First, the share of seniors increases. Besides, the increase in the number of employed women and couples without children, as well as the increase in the number of “loners” and trends towards late marriages lead to a decline of the share of children in the population’s age structure. Therefore our analysis of the age structure as a factor of international tourism activity is based on the age categories of 0–14, 15–64, and above 64 years old.

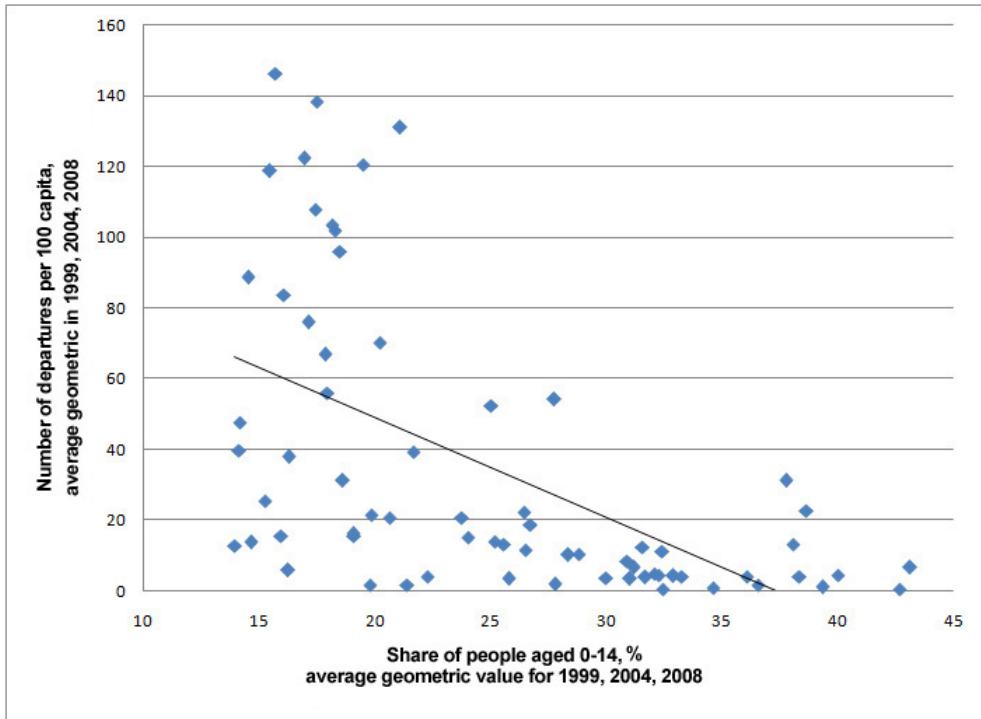
*The age category of 0–14 years old covers children* who are not yet involved into economic activity and can not therefore earn money to support themselves. In the meantime, people having children are bound to spend more. The income in the families with many children is distributed among more people that decreases the household’s consumer per capita expenditures. Besides, during the travel, a child is an additional individual who increases the cost of tourism service, the one who only tightens the travel.

Thus, the bigger the share of the children in the age structure, the inhabitants of one country will be less active in traveling abroad. To prove or disprove that thesis, we had to check the shares of 0–14 category against international departures per 100 people (*Dep*) in the sampled countries. To make the results more reliable, we took the data for 1999, 2004, 2008 and calculated average geometric values, with which further analysis was performed.

The diagram of the distribution by country demonstrates the average inverted dependence between the share of persons aged 0–14 and the number of international tourism departures per 100 people (*Dep*), the same being confirmed by the correlation analysis:  $r = -0.57$ . This shows a moderate dependence – international tourism activity decreased with the increase of the share of children in the population’s age structure (see fig. 2).

*The age category of 15–64 years old covers people of employable age* who represent the economically active population that leaves a positive effect on their income, and, consequently, on the expenditures and consumption per

capita. Hence, the bigger the share of employable people in the age structure, the population of the country will more actively travel abroad. To substantiate this conclusion, we have conducted the analysis similar to that for the previous age category.



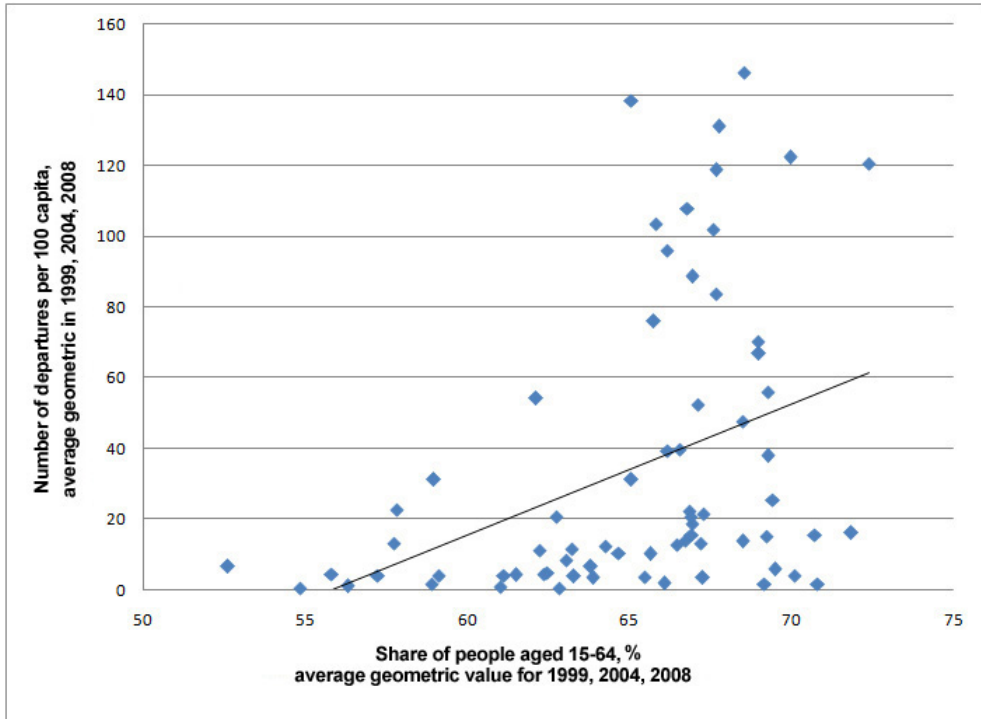
**Fig. 2.** Population's age structure and per capita international tourism departures. Share of people aged 0-14.

Source: World Bank Open Data, <http://data.worldbank.org>

In the case of the employable population, one noticed a weak direct relation between the people aged 15–64 and the number of international tourism departures per 100 people (*Dep*) with the correlation coefficient  $r = 0.39$  (see fig. 3). That is, there is no ground to maintain that the increase in the share of employable people in the age structure of population would lead to the increase of its international tourism activity.

*Age category above 64 years covers retired people* who are not anymore involved in economic activities, though, unlike children, have a regular income in the form of their pension. Though pensioners' consumption expenditures are slightly less than that of the employable people, they have a great advantage –

their free time. Hence, it is reasonable to assume that the increase in the share of this age category in the population's age structure would lead to the increase of its international tourism activity. To verify this assumption, we have conducted the same analysis as in two previous cases.

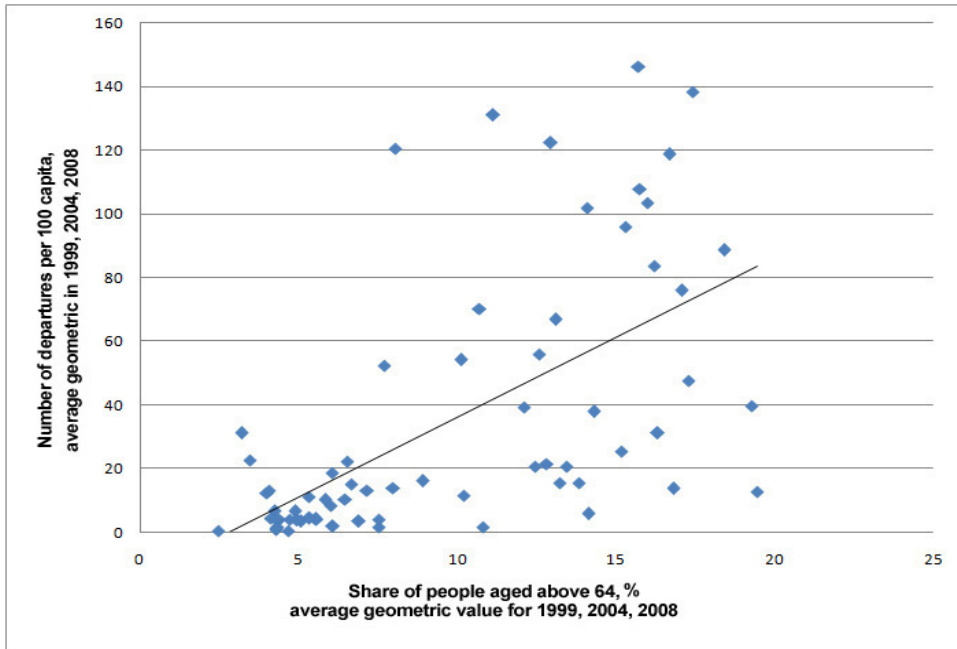


**Fig. 3.** Population's age structure and per capita international tourism departures. Share of people aged 15-64.

Source: World Bank Open Data, <http://data.worldbank.org>

In this case we noticed an average direct relation between the share of people above 64 years old and the number of international tourism departures per 100 people (*Dep*), in particular, the correlation coefficient  $r$  was 0.61. That is, the correlation between the increase of international tourism activity and the increase of the share of seniors in population's age structure was as high as in the case of the children, but inversely directed (see fig. 2, 4).





**Fig. 4.** Population’s age structure and per capita international tourism departures. Share of people aged above 64  
*Source: World Bank Open Data, <http://data.worldbank.org>*

### 3.3. Urbanization as a factor in international (outbound) tourism

The urban extent can contribute to the growth of the population international tourism activity, since city dwellers feel higher demands for active rest in the open countryside to get some free time outside the big city where they live and work. The hustle and bustle of the urban “monster”, the anonymity of the existence, the sterility of the city landscapes, the alienation from nature, the necessity to possess continuous accelerated reactions and the unceasing attention on the streets, the daily coverage of enormous distances – all these form and strengthen the nervous strain, and further the accretion of mental fatigue.

People’s personal living space in the city is compressed to their apartment, while streets represent a competitive environment where, due to the high density, an individual is made to literally fight for his “place in the sun” from the seat in the public transport to a parking slot for his vehicle. Such urban conditions do not allow for the ease and make citizens leave their homes running away from the “stone jungles” outside to find peace of mind and social contacts.

The engagement in non-agricultural production can also contribute to the growth of the tourism activity of the population. Having lessened physical loads, technical progress nevertheless increases nervous strain. The development of mechanization and automation of the industrial production processes led to mechanisms substituting people in many production areas, and left them perform psychically exhausting monotonous and simple operations. Office employees who work with information spend great efforts to be ceaselessly concentrated. Such a nature of work adds to the increase of nervous strain and results in the advent and accumulation of mental fatigue, which, unlike the physical one, is calmed only through active rest.

On the opposite, the engagement in agriculture and in the first place in homestead management significantly restricts tourism. This is explained by the fact that rural homesteads may not be left unsupervised for a long period of time, since farm livestock requires everyday attention. This is why the whole-family tourism is so problematic in rural regions.

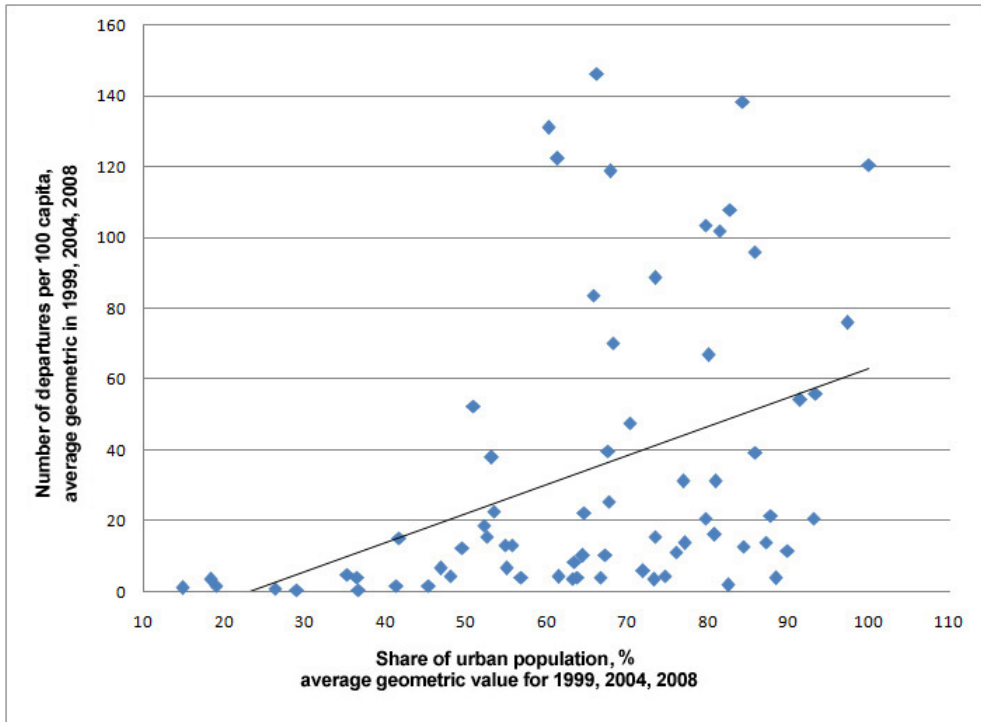
As a consequence of the above, it seems probable that the expansion of urbanization would result in the increase of the international tourism activity in one country. To verify the assumption, we have checked the share of urban citizens against the number of international tourism departures per 100 people (*Dep*). The same as in the case of the age structure, in order to have more reliable results, we have taken the data for 1999, 2004, 2008 and calculated average geometric values, with which further analysis has been performed.

The relation between the share of urban population and the number of international tourism departures per 100 people (*Dep*) appeared to be very poor with the coefficient of correlation  $r = 0.4$  (see fig. 5). Hence, such a demographic characteristic of the country as urbanization does not significantly effect on international tourism activity of its inhabitants.

The summary table hereunder with regression equations and correlation coefficients represents the result of the analysis of the extent of demographic characteristic effects upon international tourism activity in the selected countries (see table 1).

**Table 1.** Relation between demographic characteristics and the number of international tourism departures per 100 people

Departures depending upon	age structure			urbanization
	0-14 years	15-64 years	above 64 years	
Function	$y = -2.81x + 105.3$	$y = 3.71x - 206.8$	$y = 4.99x - 13.85$	$y = 0.82x - 19.02$
Correlation	$r = -0.57$	$r = 0.39$	$r = 0.61$	$r = 0.40$
Countries	N = 69	N = 69	N = 69	N = 69



**Fig. 5.** Degree of urbanization and per capita international tourism departures.  
 Source: World Bank Open Data, <http://data.worldbank.org>

#### 4. CONCLUSION

International tourism activity is strongly effected upon by the age structure and in particular by the age groups of children and seniors who have opposite effects. This in its turn gives the idea that these two demographic characteristics represent the opposite sides of something like the level of the country's development, for example, as the coefficient of correlation between them amounts to -0.9. The higher number of children in the age structure is characteristic for developing countries, related to the traditional type of population natural increase. Meanwhile, the rational type of reproduction and a higher average life span in developed countries are responsible for the higher share of seniors. When the per capita household consumption expenditures was taken in consideration to be the indicator of the country's level of development (average geometric values for 1999, 2004, 2008, in fixed price as 1996), such values best correlated with the

share of retired persons with  $r = 0.7$ . This cost parameter is a weighty economic factor that makes an effect on the formation of international tourism flows. Therefore, it seems to be well-substantiated that the share of people above 64 years old could be the major demographic indicator that impacts upon international tourism.

Finally we have tried to consider the complex effect of demographic characteristics on international tourism activity. Having made use of the multivariate regression analysis, we checked the number of international tourism departures per 100 people against the shares of seniors and urban population. All three parameters were taken as average geometric values for 1999, 2004 and 2008. The analysis results showed the average relationship  $R$  to amount to 0.62, that is, to be the same as in the case of pair correlation with the age group of 65 years and older. In other words, the level of urbanization as an additional parameter did not affect the strength of the relation.

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