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STATISTICAL DATA OF DIFFERENTIATION OF TOURIST EXPENSES

Abstract. The main purpose of the article is to make complex statistical analysis of tourist expenses of foreign visitors. We used mixed technique of selection that implies rules of random and proportional selection. Computer software SPSS was used to compute statistical data for corresponding analysis. Corresponding methodology of tourism statistics was implemented according to international standards. Important information was collected and grouped from the major Georgian airports. Techniques of statistical observation were prepared. Representative population of foreign visitors and a rule of selection of respondents were determined. We have a trend of growth of tourist numbers and share of tourists from post-soviet countriesconstantly increases. Level of satisfaction with tourist facilities and quality of service has grown, but still we have a problem of disparity between quality of service and prices. The design of tourist expenses of foreign visitors is diverse; competitiveness of tourist products of Georgian tourist companies is higher

Keywords: tourist, expense, technique, statistics, analysis **Jel Classification:** C19, C 10. Formulas: 0, fig.: 6, tabl.: 2, bibl.: 13

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СТАТИСТИЧНІ ДАНІ ДИФЕРЕНЦІАЦІЇ ТУРИСТИЧНИХ ВИТРАТ

Анотація. Основною метою статті є комплексний статистичний аналіз туристичних витрат іноземних відвідувачів. У роботі виявлена репрезентативна популяція іноземних відвідувачів, виявлені тенденції збільшення об'єму туристичних потоків, долі туристів з пострадянських країн, проблеми пов'язані з відповідністю між якістю послуг і цін.

Ключові слова: туристи, вартість, методи, статистика, аналіз Формул: 0; Рис.: 6, табл.: 2, бібл.: 13

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СТАТИСТИЧЕСКИЕ ДАННЫЕ ДИФФЕРЕНЦИАЦИИ ТУРИСТИЧЕСКИХ РАСХОДОВ

Аннотация. Основной целью статьи является комплексный статистический анализ туристических расходов иностранных посетителей. В работе выявлена репрезентативная популяция иностранных посетителей, выявлены тенденции увеличения объема туристических потоков, доли туристов из постсоветских стран, проблемы связанные с соответствием между качеством услуг и цен.

Ключевые слова: туристы, стоимость, методы, статистика, анализ Формул: 0; Рис.: 6, табл.: 2, библ.: 13

Introduction. Caucasus has its important place among 34 "Hot Spots" of biological diversity identified on earth. Georgia is considered among 200 global ecoregions identified by the World Wildlife Fund (WWF). Several animal and plant species spread in Georgia are included in the Red List of Georgia and Red List of the International Union for Conservation of Nature (IUCN) (N. Paresashvili. 2014). Therefore, eco-tourism, as well as other types of tourism are still actual in Georgia. Tourism needs more support to use its full potential. One main promoting factor can be developing tourism destination management, including understanding importance of stakeholders and their cooperation. (N.Paresashvili, T. Maisuradze, 2016). So it is important to estimate events in a tourism field, detect trends and determine statistical rules. For this purpose we need objective information that requires perfect adaptation of international techniques of statistical accounting of tourism and practical implementation of these techniques on-site. The main problems of tourism statistics are related to complexity of information gathering and incomplete accounting. Currently, tourism indicators are not realistically estimated in Georgia and correspondingly, their quantitative analysis is impossible. Because of non-adequate and incompatible information, precise determination of touristic opportunities with its anticipated results and predictions is also impossible. Selected study of this market field gave interesting and important results. They create precondition for establishment of efficient technique of determination of impact of tourism on country's economic growth. Georgian touristic opportunities were quantitatively estimated and touristic expenses was statistically analyzed by means of the modern methodological apparatus of study.

The basic aim of study was to make complex statistical analysis of touristic expenses of foreign visitors.

Scientific aim. Study was oriented on solution of the following problems: the design of expenses of foreign visitors; competitiveness of touristic products of tourist companies. In case of necessity, recommendations will be prepared to develop activities of tourist companies.

Methodology/methods. We used mixed technique from the techniques of selection in the study process. It implies rules of random and proportional selection, because random technique guarantees the most objective results and the proportional technique is the most available taking into account the project resources. It implies completely random selection of certain part of population of international visitors of the airports (selection base) and proportional distribution of this population in the cities according to interesting indicator (in this case expenses). Data from airports was uploaded to a united database and analyzed in MS Excel and SPSS 20 software by means of sorting, filtering, recoding, cross-tabulation, typological, structural and

analytical grouping, preparation of group and combinational tables, as well as calculation of different statistical indicators.

Study questionnaire including 16 questions was developed according to respondents' age, sex, employment status, citizenship, number of visits in Georgia, number of days spent in Georgia, location types, purpose of arrival, types of transport, travelled places, types of tourist packets, prices, expenses, etc.

Results. Study of foreign visitors included persons who arrived in April-August of 2016 by means of air transport. Therefore, information gathering and grouping was accomplished according to major Georgian airports.

On the basis of our calculations and pilot study, selection size was determined and representative population of foreign visitors was selected. It included 2167 persons. Selection base included passengers in May-August of 2016. We used data from Tbilisi, Batumi and Kutaisi airports, particularly flight schedule, average number of flights and number of sold tickets. On the basis of official schedule of international flights, we determined number of daily, each alternate day and singular flights during month, as well as average number of passengers. We determined above-mentioned number on the basis of weighted arithmetic mean.

According to official data of Georgian Ministry of Internal Affairs, Tbilisi airport is absolute leader by number of foreign visitors leaving Georgia. Its share is 81.9%, if we count number of foreign visitors using air transport.

Table 1

Number of passengers leaving Georgia ¹												
Check point	Georgia	Turkey	Armenia	Azerbaijan	Russian Federation	Other	Sum	%				
Batumi airport	15,189	11,539	226	359	15,051	30,605	72,969	8.0				
Tbilisi airport	286,142	22,130	19,419	17,236	94,260	311,488	750,675	81.9				
Kutaisi airport	26,901	109	652	395	8,019	56,940	93,016	10.1				
Sum	328,232	33,778	20,297	17,990	217,33	399,033	916660					

When number of respondents was determined, they were distributed according to citizenship and proportionally to number of visitors of international airports and

¹Table is based on a data of Georgian Ministry of Internal Affairs about crossing the borders in 2013

number of sold tickets. The following quotas were established for the cities: 1775 – Tbilisi; 174 – Kutaisi and 218 – Batumi. These quotas were distributed among regions according to Tbilisi, Kutaisi and Batumi.

Table 2

Share of border	11.0	26.0	20.0		14.8		11.5	100.0				
crossing	%	%	%	7.7%	%	9.0%	%	%				
Check point	Germany	Turkey	Ukraine	Azerbaijan	Russian Federation	Belorussia	Other	Sum				
Batumi airport - air	0	140	20	0	40	10	8	218				
Tbilisi airport - air	220	405	340	165	250	185	210	1775				
Kutaisi airport - air	10	25	80	0	30	0	29	174				
Sum	230	570	440	165	320	195	247	2167				

Distribution of questioned respondents according to airports

Daily study was conducted in May-August of 2016. Target segment of study included 15 years old and older foreign visitors who arrived in Georgia during target month (data was generalized for target month with current methodology). Weighting and imputation of results was conducted according to each particular month.

Study showed that 47.2% of respondents was a woman and 52.8% was a man. 58.3% was a hired employee, 18.9% - self-employed, 4.7% - retired, 2.5% - unemployed and 5.4% - housewife.

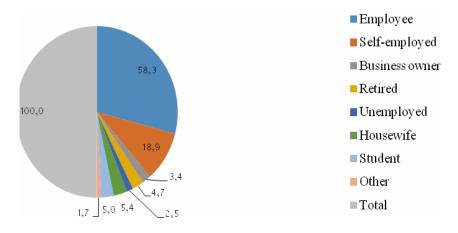


Fig.1 Distribution of Tourists by Economic Status

Source: fig.1 is based on our calculations.

The biggest part of selected population, i.e. 33.5% belongs to 20-30 years old age group, 32.2% is 31-40 years old, 16.5% - 41-50 years old and 12.3% - reaches 60.

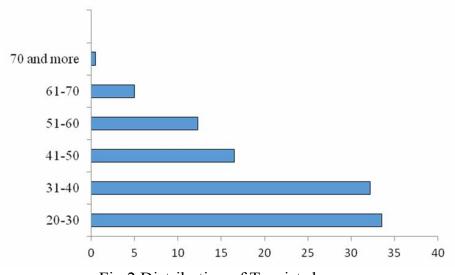


Fig.2 Distribution of Tourists by age Source: fig.2 is based on our calculations.

As we concluded, the most frequent visitors of Georgia are citizens of Ukraine (21.4%), Russian Federation (18.3%), Middle Asia (9.3%), Armenia (8.6%), Iran (5.3%), Azerbaijan (4.6%), European Union (7.9%), etc.

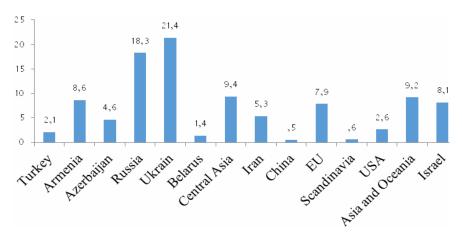


Fig.3 Distribution of Tourists by citizenship Source: fig.3 is based on our calculations.

Growth of tourist numbers from Russian Federation and Ukraine is especially important, because it is quite profitable for our economics, if we take into account the fact that citizens of these two countries have significant share in tourist expenses. As study showed, majority of tourists belong to younger age population (see. Fig. 4) who visited Georgia for the first time. Share of 20-40 years old tourists is very large (71%). So there is an expectation that they will visit Georgia once again.

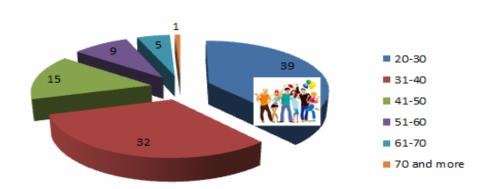


Fig.4 Age and first visit cross tabulation of Tourists Source: Fig.4 is based on our calculations.

1295 respondents, i.e. 59% visited Georgia for the first time. Most of them (13.6%) spent 6 nights in Georgia, 11.7% - 7 nights and 8.8% - 1 night. Generally, average number of nights spent by foreign visitors in Georgia was 8.5 according to our calculations. 21.4% of visitors travelled alone, 39.6% - with relatives, 26.5% - with friends and 4.4% - with group. Besides, 34.8% of visitors was accompanied by 2 persons, 22.4% - 1 person, 17.4% - 3 persons and 11.2% - 4 persons.

Majority of respondents (59.6%) visited hotels as the most popular means of placement, 10.8% - guest house, 9.9% - hired apartment, 9.2% - hired private building, 5% - lived in friends' apartments.

For 67.8% of visitors, purpose of visit was recreational, 14.4% visited Georgia for seeing friends and relatives and 13.7% had professional goals. It should be noted that as study showed, tourists also had business interests. In this regard the following post-soviet countries were distinguished: Russia, Ukraine and Middle Asia (Kazakhstan and Uzbekistan).

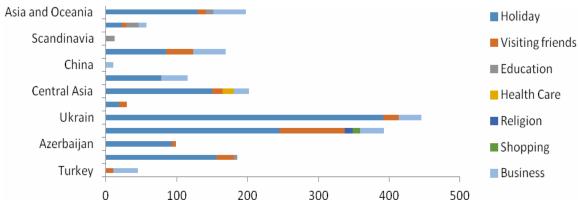


Fig.5 Cross tabulation of purpose and citizenship Source: fig.5 is based on our calculations.

It is a fact that majority of respondents (85.7%) used services of foreign airlines for visiting Georgia. According to study results, as it was predicted, the most frequently visited sites are Tbilisi and Batumi seasonally. 71.9% of respondents visited Tbilisi, 52% - Batumi, 15.2% - Borjomi, 13.8% - Kutaisi, 11.7% - Gori, 3.2% - Bakuriani, 2.7% - Dmanisi, 3.8% - Gudauri, 10.5% - Kazbegi, 3.2% - Kvareli, 2.8% - Marneuli, 6.7% - Mestia and Ushguli, 15.7% - Mtskheta, 5% - Rustavi, 10.7% - Signagi, 5.5% - Telavi, 4.2% - Zugdidi, 3.4% - Ureki, etc.

80.2% of respondents didn't buy tourist packet and planned Georgian tour independently. From other respondents (19.8%), 2.4% bought tourist packet from Georgian tour operators and 17.4% used services of foreign tour operators. The price of majority of tourist packets was 601-1000 US dollars and 26.5% paid 401-500 US dollars for the packets. Statistics of tourist expenses without buying packets is quite interesting. In the case of independently planned tours, 34.3% of respondents paid 101-300 US dollars to hire translator, 31.7% paid 301-700 US dollars for the same purpose and 18.9% paid over 1000 US dollars.

31.1% of visitors paid 101-200 US dollars for recreational purposes, but 38.7% paid only 50 US dollars for the same purpose. In this regard residents of Russia, Ukraine, Israel and EU countries stand out once again.

28.2% of respondents paid over 100 US dollars to buy different goods and 15.3% paid 201-500 US dollars for the same purpose. Once again residents of Russia, Ukraine and Middle Asian countries stand out. 82.5% of visitors expended over 500 US dollars for commercial purchases and 8.8% expended over 1000 US dollars for the same purpose. Commercial purchases were basically made by tourists from Russia, Ukraine and Israel.

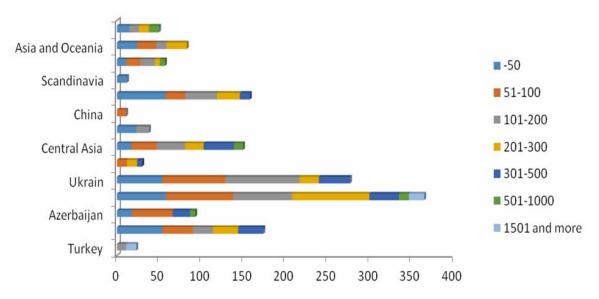


Fig.6 Cross tabulation of food expenses and citizenship Source: fig.6 is based on our calculations.

According to study results, every questioned respondent used local transport services. 64.5% expended over 50 US dollars for this purpose, 21.4% - 50-100 US dollars and 10.6% - 101-300 US dollars.

Conclusions. If we summarize theoretical-methodological and practical problems of our study, we can conclude that sources of informational guaranteeing of tourism was described in details; population necessary for study was determined and rules of selection from this population were established; tools of statistical observation of tourism field were prepared; study materials were included step by step and different statistical indicators were calculated by means of computer software SPSS.

When we processed empirical data, the following important problems were outlined that deserve our attention:

- There is a trend of growth of tourist numbers;
- Share of tourists from post-soviet countries constantly grows;
- Level of satisfaction with tourist facilities and quality of services is higher, but the problem of disparity between quality of service and prices still exists;
- Respondents who bought tourist packets (in spite of residency of tour operator), indicated only food expenses (average of 152 US dollars), when they classified expenses;
- Tourist visits have similar trends according to cities, but representatives of Middle Asian countries and Israel are especially interested in resorts of Borjomi and Tskaltubo;
- Social-cultural, as well as political factors have impact on distribution of visitors according to cities. Particularly, majority of citizens of Azerbaijan visit Batumi and Armenians prefer Kobuleti.

Currently we are developing recommendations for improvement of statistical accounting of tourism and these recommendations will be presented to National Statistics Office of Georgia, Georgian National Tourism Administration and other interested organizations.

Література

1. Abesadze, N. Statistics for Tourism [Text] / N. Abesadze, R. Kinkladze, K. Chitaladze. - 2015. - P. 15-27.

2. Alternative methodologies for studying the tourism experience [Electronic recourse]. – Available at: http://www.goodfellowpublishers.com/free_files/Chapter%2010– afe06955ded846d9978f7a4bfe466367.pdf.

3. Basic questionnaire proposed by WTO to estimate visitor expenditure associated to inbound tourism [Electronic recourse]. – Available at: http://www.sesrtcic.org/imgs/news/Image

4. Paresashvili, N. Major Tasks of Ecotourism Management in Georgia Social and Behavioral Sciences [Text] / N. Paresashvili. – 2014. – P. 170–173.

5. Paresashvili, N. Involvement Problems of Tourism Stakeholders and Managing the Process of Solving Them [Text] / N. Paresashvili, T. Maisuradze // International Journal of Management and Commerce Innovations. -2016. $-N_{2}4$ (1). -P. 515–520.

6. Methodological manual for tourism statistics [Electronic recourse] : Version 3.1. (2014). – Available at: http://ec.europa.eu/eurostat/documents/3859598/6454997/KS-GQ-14-013-EN-N.pdf

7. Dann, G. Methodology in tourism research [Electronic recourse] / G. Dann, D. Nash, P. Pearce // Annals of tourism research. $-N \ge 15$ (1). -P. 1-28. - Available at: http://www.sciencedirect.com/science/journal/01607383/15/1

8. Lorraine, B. Research methods in tourism [Electronic recourse] / B. Lorraine. – Bornemouth : Bournemouth University, 2009. – Available at: http://eprints.bournemouth.ac.uk/12871/2/RESEARCH_METHODS_IN_TOURISM.pdf

9. Dwyer, L. Recent Advances in Tourism Economics [Electronic recourse] / L. Dwyer. – Available at: https://elgarblog.com/2013/09/27/recent-advances-in-tourism-economics-by-larry-dwyer/

10. Dwyer, L. Research Methods in Tourism: Quantitative and Qualitative Approaches [Electronic recourse] / L. Dwyer. – Available at: https://elgarblog.com/2012/09/07/research-methods-in-tourism-quantitative-and-qualitative-approaches-by-larry-dwyer/

11. Research on International Experiences in Measuring Visitor Expenditure Associated with Inbound Tourism [Electronic recourse]. – Available at: https://www.imf.org/external/pubs/ft/bop/2002/02–38.pdf

12. Available at: http://www.e–unwto.org/doi/abs/10.18111/9789284406173.2

13. Available at: www.geostat.ge

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References

1. Abesadze, N., Kinkladze, R., & Chitaladze, K. (2015). *Statistics for Tourism*, 15–27.

2. Alternative methodologies for studying the tourism experience. Available at http://www.goodfellowpublishers.com/free_files/Chapter%2010-

afe06955ded846d9978f7a4bfe466367.pdf

3. Basic questionnaire proposed by WTO to estimate visitor expenditure associated to inbound tourism. Available at http://www.sesrtcic.org/imgs/news/Image

4. Paresashvili, N. (2014). *Major Tasks of Ecotourism Management in Georgia Social and Behavioral Sciences*, 170–173.

5. Paresashvili, N., & Maisuradze, T. (2016). Involvement Problems of Tourism Stakeholders and Managing the Process of Solving Them. *International Journal of Management and Commerce Innovations*, *4* (1), 515–520.

6. *Methodological manual for tourism statistics. Version 3.1.* (2014). Available at http://ec.europa.eu/eurostat/documents/3859598/6454997/KS-GQ-14-013-EN-N.pdf

7. Dann, G., Nash, D., & Pearce, P. Methodology in tourism research. *Annals of tourism research*, 15 (1), 1–28. Available at http://www.sciencedirect.com/science/journal/01607383/15/1

8. Lorraine, B. (2009). *Research methods in tourism*. Bornemouth: Bournemouth University. Available at

http://eprints.bournemouth.ac.uk/12871/2/RESEARCH_METHODS_IN_TOURISM.pdf

9. Dwyer, L. *Recent Advances in Tourism Economics*. Available at https://elgarblog.com/2013/09/27/recent-advances-in-tourism-economics-by-larry-dwyer/

10. Dwyer, L. Research Methods in Tourism: Quantitative and Qualitative Approaches. https://elgarblog.com/2012/09/07/research-methods-in-tourism-quantitative-and-qualitativeapproaches-by-larry-dwyer/

11. Research on International Experiences in Measuring Visitor Expenditure Associated with Inbound Tourism. Available at https://www.imf.org/external/pubs/ft/bop/2002/02–38.pdf

12. Available at http://www.e–unwto.org/doi/abs/10.18111/9789284406173.2

13. Available at www.geostat.ge

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