



THE IMPACT OF TOURISM INDUSTRY IN THE ECONOMY. THE CASE OF BLACK SEA REGION COUNTRIES

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Abstract *The Black Sea region is an area of high importance, both geopolitically and economically. In terms of socio-human and tourism resources, the region is characterized by a high degree of heterogeneity; this generates a special interest for tourists around the world. If on the social and environmental dimensions of development tourism activity effects are both positive and negative, the tourism and travel industry bring indisputable benefits to the economy. Based on this premise, this paper proposes to evaluate the impact of tourism in the economy of the Black Sea region. The importance of tourism in the economy is given by the share of tourism in GDP and employment, and also by the multiplier effect of tourism and industry efficiency. Calculating the Tourism Multiplier Coefficient for the 12 countries in the region, and making the ratio of the share of industry in GDP and the share of industry in employment has been determined in comparison, the degree that the tourism industry is a key sector in the economy.*

Key words:

Tourism, economic impact, tourism multiplier coefficient, GDP, employment

JEL Codes:

L83, F63, E24, O87

1. Introduction

In an interconnected and interdependent world, the Black Sea region should be regarded with attention from all possible perspectives, including in relation to the tourism industry. With a strategic position, region lies at the crossroads of geopolitical, energy, culture and business interests of Europe, U.S. and Russian Federation. A region is defined, in most cases, based on the proximity principle, but the general concept refers to international relations even greater than geographical location. So, discussing about the delimitation of the Black Sea region, there are different views. If one considers that the region includes only the coastal states - Romania, Bulgaria, Turkey, Georgia, Russian Federation, Ukraine, others include Moldova, Armenia and Azerbaijan, considering the region as a strategic area, and the Organization of the Black Sea Economic Cooperation, largest organization of states in the region, including in addition to those mentioned countries Greece, Serbia and Albania. Black Sea region countries benefit from geographical and environmental favorable conditions, and represent important tourist destinations. Furthermore, based on the complementarity of tourist resources of these countries, their culture, language and history, in the future we could talk about a regional destination.

We have proposed in this paper to make an important step in assessing the real impact of tourism in the Black

Sea countries, analyzing not only at the surface structure indicators (contribution of tourism in the economy), but going further to the multiplier effect of tourism and industry efficiency. At the end of the paper, we open a research topic, the correlation of impact of tourism with a qualitative measure of the industry, represented by Travel and Tourism Competitiveness Index.

The paper is structured as follows: literature review, research methodology, results and discussion, conclusions.

2. Literature Review

Assessment of the impact of tourism has been a research topic extensively approached over the time, being complexity of the phenomenon generating methodologies and offering a wide range of options for researchers.

Since 40 years ago the research on the benefits of tourism has been studied by many authors (Sadler, 1975; Duffield, 1982; Hughes, 1982; Archer, 1982; Liu et al., 1984). Sadler (1975) examined the benefits of tourism in developing countries, as well as costs to the industry. Duffield (1982) identified a number of features to consider in assessing the impact of tourism as an economic and social activity - tourism is a dynamic agent of change, it is an amalgam of a number of

industrial activities, it occurs within distinctive contexts. Hughes (1982) analyzed four important facets of tourism - the part of tourism in the growth of the service sector, the multiplier, employment generation and local authority rate generation.

Studies on the impact of tourism followed enshrined methodologies as input-output analysis - (Fletcher, 1989, Heng and Low, 1990) or tourism multiplier - Liu et al. (1984), Archer (1982). Fletcher (1989) improved input-output analysis, widely used to evaluate the economic impact of tourism and Heng and Low (1990), using the same methodology, evaluated perspectives and the impact of tourism development in Singapore, highlighting the role of human resources in this sector. Liu et al. (1984) have calculated revenues multipliers for tourism in Turkey, using input-output method and linear equations, analyzing the direct and induced spending tourists. Archer (1982) studied the nature of tourism multipliers, origin, their evolution, strengths and weaknesses, limits, drawing attention to their use sometimes abusive and sought to observe their importance tourism policies.

The researches focused on groups of countries or regions (Fayissa et al., 2008), Lee and Chang, 2008) Ivanov and Webster, 2007), but also to case studies of national economies (Narayan, 2004), Heng and Low, 1990, Archer and Fletcher, 1999, Freeman and Sultan, 1997, Ahlert, 2008). Fayissa et al. (2008), using panel data for 42 African countries for the period 1995-2004, studied the potential contribution of tourism to economic growth and development, showing that income from tourism industry contributes significantly to the gross domestic product and economic growth in sub-Saharan Africa. Lee and Chang (2008) have tested the causal links between tourism development and economic growth, concluding that tourism has a higher impact in non OECD countries, compared with OECD countries. Archer and Fletcher (1996) analyze the impact made by tourism expenditure on incomes, employment, public sector revenue and the balance of payments in the Seychelles. Freeman and Sultan (1997) studied the impact of tourism - incoming and domestic tourism expenditure, on Israel economy, measured on three levels: direct, indirect and induced. Ivanov and Webster (2007) proposed a methodology for measuring the contribution of tourism to economic growth, using GDP per capita as the primary indicator and testing data on three countries: Cyprus, Greece and Spain. Narayan (2004), analyzing the Fiji tourism industry has shown its impact on GDP, balance of payments, real consumption, exchange rate, and domestic prices and wages, Ahlert (2008) developed a superior model input-output analysis using structural information provided by the Tourism Satellite Account, testing scenarios on tourism industry in Germany.

Last but not least, we note the opinions of Dwyer et al. (2004) who drew attention to the limits evaluation techniques tourism-multiplier analysis, input-output analysis thus bringing a critical perspective on research in recent decades.

3. Research Methodology

Using statistics of the World Tourism and Travel Council, we analyzed impact indicators of tourism in the 12 countries of the Black Sea region (states of the Organization of the Black Sea Economic Cooperation): direct contribution to GDP (share of total GDP generated both directly and indirectly by the tourism industry.); direct contribution to employment (number of jobs generated directly in tourism and travel, plus indirect and induced contributions.); total contribution to GDP (the GDP site generated by the tourism industry - hotels, travel agencies, airlines and other transportation, food and leisure units, of the total value of the GDP); total contribution to employment (the percentage of seats direct employment generated by the tourism industry in the total economy).

The next step was to calculate the multiplier effect of tourism in the 12 countries of the Black Sea region. The World Tourism Organization defines the multiplier effect as the additional volume of income earned by a unit of tourist expenditure that will be used in the economy. Some authors (Gheres, 2013) propose the following method of calculating the multiplier effect:

$$K = \frac{\text{direct impact} + \text{indirect} + \text{impact} + \text{induced impact}}{\text{direct impact}}$$

Adapting the formula, we used shares of tourism contribution to GDP, respectively employment, and K multiplier values were determined as follows:

$$K \text{ GDP} = \frac{\% \text{ total GDP}}{\% \text{ direct GDP}}$$

$$K \text{ Employment} = \frac{\% \text{ total Employment}}{\% \text{ direct Employment}}$$

Thus multipliers calculated were compared, both between countries and between categories - GDP and Employment, considering the reference value in the literature, $K = 3$.

The next phase was to assess the impact of tourism through effective, analogy with labor productivity. Thus, the share of the total contribution/direct contribution of tourism to GDP and total/direct tourism employment tourism industry show efficiency.

$$E \text{ direct} = \frac{\% \text{ direct GDP}}{\% \text{ direct Employment}}$$

$$E \text{ total} = \frac{\% \text{ total GDP}}{\% \text{ total Employment}}$$

The values of E(Efficiency) have been compared with the value 1, such that if e is less than 1, then we speak of a tourism industry inefficient, otherwise if E is greater than 1, then we are in a situation of effective tourism in the economy of the country concerned.

Further, the 12 countries have been grouped according to K and E, respectively the Travel and Tourism Competitiveness Index recorded in 2013. Since 2007, World Economic Forum, an independent international organization, has developed a model for measuring tourism competitiveness, based on 14 pillars grouped into 3 categories: Regulatory framework (Policy rules and regulations, Environmental sustainability, Safety and security, Health and hygiene, Prioritization of Travel and Tourism), Business environment and infrastructure (Air transport infrastructure, Ground transport infrastructure, Tourism infrastructure, Information and Communications Technology infrastructure), Human, cultural and natural resource (Human resources, Affinity for Travel&Tourism, Natural resources, Cultural resources). Each of the 14 pillars consists of subcategories, quantifying results on a scale of 1 (low competitiveness) to 7 (high competitiveness).

4. Results and Discussion

4.1. Empirical investigation

The direct impact of tourism in the Black Sea countries ranges between 6.5% of GDP in Greece and only 0.9% of GDP in Moldova, only in five of the 12 countries the tourism industry's contribution to GDP is higher global average (2.9%). The total contribution of tourism to GDP ranges between 16.7% in Albania and only 2.6% in Moldova, also only in five analyzed countries share of industry is higher than the global average (9.5%). Estimates for this year show a growth of GDP generated by the tourism industry by 4.3%, registering significant increases Russian Federation (direct -7%, total - 5.7%), Serbia (direct - 6.6% total - 6.2%) and Georgia (direct - 6.4% total - 6.1%). Projections for the next 10 years show an increase in industry by 4.2% annually, around which the global average stands and Black Sea countries, higher performances are recorded by Georgia (6.10% direct, total -6.00%), Albania (direct - 5.60%, total - 5.40%) and Azerbaijan (5.50% direct, total - 5.30%).

Table 1a. T&T industry direct in GDP

COUNTRY	2013	Growth 2014*	Annual growth* 2014-2024
Albania	4.80%	5.50%	5.60%
Armenia	2.00%	3.20%	3.40%
Azerbaijan	2.40%	0.50%	5.50%
Bulgaria	3.70%	4.80%	2.80%
Georgia	6.20%	6.40%	6.10%

COUNTRY	2013	Growth 2014*	Annual growth* 2014-2024
Greece	6.50%	3.10%	3.40%
Moldova	0.90%	3.20%	3.30%
Romania	1.60%	3.70%	4.00%
Russian Federation	1.40%	7.00%	3.90%
Serbia	1.90%	6.60%	4.90%
Turkey	4.60%	6.10%	4.20%
Ukraine	2.30%	4.90%	4.30%
World	2.90%	4.30%	4.20%

Source: by authors based on World Travel and Tourism Council Reports - Travel & Tourism Economic Impact 2014

Note: *forecast

Table 1b. T&T industry total in GDP

COUNTRY	2013	Growth 2014*	Annual growth* 2014-2024
Albania	16.70%	4.60%	5.40%
Armenia	7.70%	3.80%	3.70%
Azerbaijan	8.80%	1.40%	5.30%
Bulgaria	13.30%	3.70%	2.60%
Georgia	21.20%	6.10%	6.00%
Greece	16.30%	3.00%	3.70%
Moldova	2.60%	3.40%	3.50%
Romania	5.10%	5.40%	3.80%
Russian Federation	5.80%	5.70%	3.70%
Serbia	5.70%	6.20%	4.50%
Turkey	12.30%	4.10%	4.20%
Ukraine	8.60%	4.60%	3.90%
World	9.50%	4.30%	4.20%

Source: by authors based on World Travel and Tourism Council Reports - Travel & Tourism Economic Impact 2014

Note: *forecast

Absolute volume of the tourism industry in the Black Sea countries ranks Russian Federation on position 12th in the world, Turkey ranked 14th and Greece 27th position. However, based on industry contribution to GDP, only Greece maintains an honorable position in the world (40), being surpassed by Albania (39) and the highest-ranked country in the group, Georgia (30). Projections for the next decade show that the tourism industry as the Black Sea countries will not grow spectacularly, countries with developed tourism to Greece and Turkey being located after half in the World Ranking.

Table 2. Black Sea countries rankings on T&T industry

COUNTRY	Absolute	Relative	Growth	Long term
Albania	107	39	85	46
Armenia	143	114	112	120
Azerbaijan	72	98	172	51
Bulgaria	66	58	113	169
Georgia	92	30	47	32
Greece	27	40	134	121
Moldova	169	181	123	133
Romania	60	154	68	115
Russian Federation	12	141	56	118
Serbia	102	144	44	82
Turkey	14	63	101	100
Ukraine	53	100	82	109

Source: by authors based on World Travel and Tourism Council Reports - Travel & Tourism Economic Impact 2014

The total number of jobs created (direct, indirect and induced) of tourism industry in the Black Sea countries in 2013 was more than 10 million, of which nearly 3 million jobs directly in the industry. Direct contribution of tourism in employment of 3.4% globally is reached by Bulgaria and breached by Albania (4.3%) and Georgia (5.1%), the performer being Greece (8.9%). Estimates of the increase in the number of direct jobs in tourism worldwide is 2.2%, Serbia (6%), Albania (5.2%) and Bulgaria (4,3%) being among countries in the region with superior evolutions. Instead, Moldova and Azerbaijan the number of jobs will drop. If in the next 10 years we expect a 2% annual increase of jobs directly generated in the tourism industry worldwide, the evolutions in the Black Sea region are different: Turkey (4.1%) and Albania (3.5%) will record higher rates, while in Armenia, Bulgaria, Moldova and Ukraine the number of jobs in tourism will decrease. Nearly 9 percent of the jobs in the world are related to the tourism industry, in five of the 12 countries in the Black Sea region the share is higher: Greece (18.2%), Georgia (18%), Albania (15.2%), Bulgaria (12.2%) and Ukraine (9.1%). 2,4 percent growth estimated for 2014 worldwide is reflected in the evolution of countries in the region, only in Azerbaijan the number of jobs generated by the industry will drop (3%). For the next 10 years is projected to increase globally the total number of jobs, direct, indirect and induced tourism industry by 2.5%, the rate exceeded only by Turkey (2.7%) of the Black Sea region, in four countries expecting declines (Armenia, Bulgaria, Moldova, Ukraine).

Table 3a. T&T direct contribution in employment

COUNTRY	2013 %	2013 Jobs	Growth 2014*	Annual growth* 2014-2024
Albania	4.30%	41000	5.20%	3.50%
Armenia	1.80%	21500	0.00%	-0.60%
Azerbaijan	2.20%	95000	-3.70%	1.00%
Bulgaria	3.40%	100100	4.30%	-0.40%
Georgia	5.10%	89500	2.00%	1.60%
Greece	8.90%	319500	2.60%	1.70%
Moldova	0.70%	8800	-1.40%	-2.60%
Romania	2.40%	212500	3.20%	0.50%
Russian Federation	1.40%	967000	1.60%	0.70%
Serbia	2.60%	35000	6.00%	1.70%
Turkey	2.30%	587500	3.80%	4.10%
Ukraine	2.00%	416000	3.00%	-0.10%
World	3.40%	2893400	2.20%	2.00%

Source: by authors based on World Travel and Tourism Council Reports - Travel & Tourism Economic Impact 2014
Note: *forecast

Table 3b. T&T total contribution in employment

COUNTRY	2013 %	2013 Jobs	Growth 2014*	Annual growth* 2014-2024
Albania	15.20%	146500	4.10%	3.20%
Armenia	6.80%	81500	1.10%	-0.40%
Azerbaijan	8.00%	351500	-3.00%	0.70%
Bulgaria	12.20%	356000	3.00%	-0.90%
Georgia	18.00%	318000	1.60%	1.50%
Greece	18.20%	657000	2.70%	2.30%
Moldova	2.20%	26700	1.30%	-2.50%
Romania	5.70%	500500	5.30%	0.50%
Russian Federation	5.50%	3935000	0.80%	0.30%
Serbia	6.40%	86500	5.60%	1.20%
Turkey	9.10%	2317500	1.00%	2.70%
Ukraine	7.70%	1570000	2.60%	-0.60%
World	8.90%	10346700	2.40%	2.50%

Source: by authors based on World Travel and Tourism Council Reports - Travel & Tourism Economic Impact 2014
Note: *forecast

4.2. Tourism Multiplier Coefficient

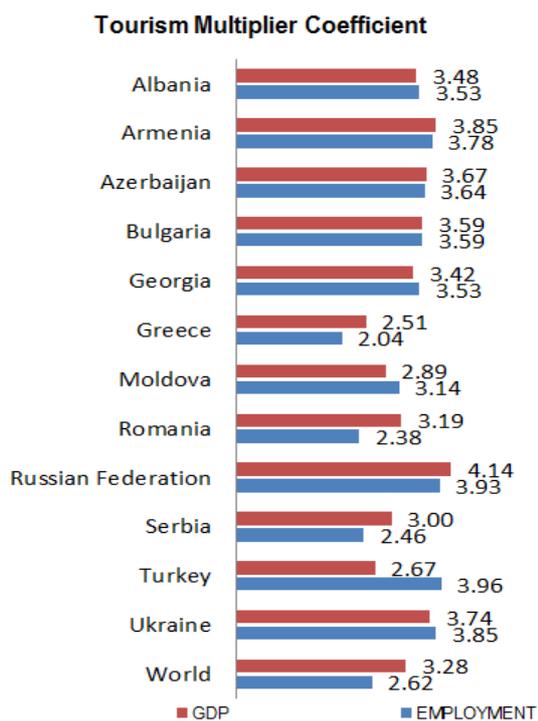
Globally, tourism multiplier coefficient for GDP (3.28) is higher than for the employed population (2,62), a phenomenon that are registered in most countries in the Black Sea region (8 of them, Bulgaria recorded equal values).

Theoretical value of the multiplier (3) is exceeded in 7 of the 12 countries analyzed for both GDP and employment, only in Greece multiplier values are less than 3 in both cases.

It is worth mentioning the high values recorded by the Russian Federation (4.14 GDP; 3.93 Employment), and discrepancies between the Turkey tourism multiplier coefficient for GDP (2.67), than for the employment (3.96).

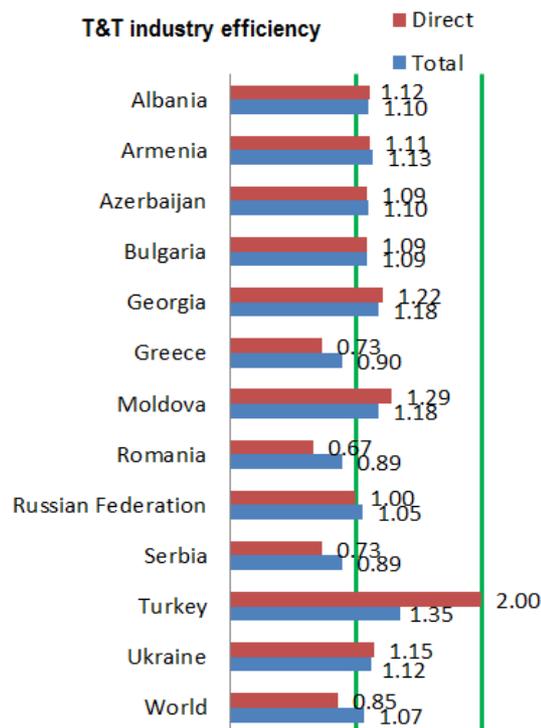
4.3. T&T industry efficiency

Supraunitary values of E suggest tourism industry is efficient, because the share of T&T industry in GDP is higher than the share in employment. Worldwide tourism activity itself is ineffective (0.85), but the industry as a whole is effective (1.07), a phenomenon that is not registered in the Black Sea region. In eight of the 12 countries in the tourism industry is effective both directly and total, in six of these direct efficiency is higher or at least equal the total efficiency (Albania, Bulgaria, Georgia, Moldova, Turkey, Ukraine). In contrast, in Greece, Romania and Serbia there is an inefficiency of tourism, especially worrying thing for Greece, a major international tourism destination. It is worth mentioning the efficiency of tourist activity in Turkey itself, the direct effects of tourism in the economy is higher than the global average.



Source: authors' calculations

Fig. no. 1. Tourism Multiplier Coefficient



Source: authors' calculations

Fig. no. 2. Industry efficiency

5. Conclusions

Looking as a whole the tourism multiplier values and T & T industry efficiency and correlates them with travel and tourism competitiveness index values for 2013, it is found that the Black Sea region countries do not form a homogeneous group. So, we are talking about an efficiency of T&T industry (>1) and a higher K multiplier than the reference value from the literature (> 3) in 7 of the 12 countries analyzed, three of them - Bulgaria, Georgia and the Russian Federation, recording for

2013 travel and tourism competitiveness indexes above the global average.

Instead although the coefficient multiplier of the tourism for GDP is low, Turkey has a higher TTCI than countries with better results on this aspect. Furthermore, although Greece is the top country on the Black Sea Region in the ranking of Travel and Tourism Competitiveness Index, both efficiency and the multiplier effect of the tourism is low.

Table 4. Tourism impact in Black Sea region

Efficiency < 1 AND Multiplier Coefficient < 3	Efficiency < 1 AND Multiplier Coefficient GDP <= 3	Efficiency > 1 AND Multiplier Coefficient Employment > 3	Efficiency > 1 AND Multiplier Coefficient > 3	TTCI Global Average = 4.09
Greece (4.75)		Turkey (4.44)	Bulgaria (4.38) Georgia (4.1) Russian Federation (4.16)	ICT > 4.09
	Romania (4.04) Serbia (3.78)	Moldova (3.6)	Albania (3.97) Armenia (3.96) Azerbaijan (3.97) Ukraine (3.98)	ICT < 4.09

Source: based on Fig. no.1, Fig no.2 and TheTravelandTourismCompetitivenessIndex2013Data Analyzer accessed at <http://www.weforum.org/issues/travel-and-tourism-competitiveness/tci-platform>

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