

# INTERNATIONAL TOURISM IN THE SUSTAINABLE DEVELOPMENT GOALS FRAMEWORK

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**Abstract.** The purpose of the paper was to reveal the cumulative characteristics of international tourism for the implementation of the Sustainable Development Goals. The tourism competitiveness indices of Ukraine were analysed in comparison with the EU countries, and the directions on increasing the efficiency of international tourism in Ukraine in the framework of the Sustainable Development Goals were substantiated. According to the Travel & Tourism Competitiveness Index for the period 2007-2019, Ukraine was found to be on lower positions than the EU countries, although in a few components of the index it had a competitive advantage compared with some countries of the European Union. To achieve the Sustainable Development Goals and the principles of the Global Code of Ethics for Tourism, Ukraine should concentrate on such dimensions as the increase of the economic and social value of T&T sector, the transition to a new mode of T&T management using Destination Management Organizations, and the implementation of the tourism impact assessment. In this context, the highest priority is given to the rural, mountain, ecological, cognitive-cultural and educational international kinds of tourism.

**Key words:** international tourism, Sustainable Development Goals, tourism competitiveness indices, efficiency of international tourism.

**Introduction.** The year 2020 starts the decade of active actions directed at implementing the Sustainable Development Goals (SDGs) (United Nations Economic Commission for Europe, 2020).

“They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental” (United Nations’ General Assembly, 2015, p. 2/35).

The “tourism” concept has the same systemic nature. Thus, Xia Wang and Danli Liu (2020) consider tourism as a catalyzer of the economic and social development; Stephen J. Page and Joanne Connell (2009, p. 23), inter alia, view the tourism as “heritage industry”, stressing its historical and cultural role; Leah Burns (2004, p. 11) notes that “Tourism has become a set of global activities crossing many cultures”; Marta Malska and Volodymyr Khudo (2007) characterize tourism as a sphere of business. According to Geoffrey I. Crouch and J. R. Brent Ritchie (1999, p. 137) “changes in the public perceptions of tourism as a major sector of the economy have thrust the industry into a limelight in which it is called upon to demonstrate its economic efficiency, its environmental stewardship, and its societal relevance”.

These three aspects manifest differently in the international tourism sector. First, the attention is focused on the capability of the country to build its competitive advantage at the expense of tourism. For instance, Bojan Krstic, Sonja Jovanovic, Vesna Jankovic-Milic and Tanja Stanisic (2016) analyze the influence of travel and tourism sector on the competitiveness of the national economy. Secondly, international tourism is viewed as a factor of interaction between the countries within a certain region to solve mutual tasks. Thus, João Romao, João Guerreiro and Paulo M. M. Rodrigues (2017) shed the light on the tourism impact on the social-economic dynamics of the European region. Thirdly, the analysis of Tourism destination competitiveness (TDC) has a significant weight, taking into account, among others, the social-ecological effects of tourism activities. The paper by Beatriz Rodríguez-Díaz and Juan Ignacio Puli do-Fernández (2019) provides an example of such an approach.

The purpose of this research is to reveal the cumulative properties of international tourism to implement the Sustainable Development Goals (SDGs). To reach the purpose the following objectives of the research were identified:

- to analyze the tourism competitiveness indices of Ukraine compared with the EU countries;
- to justify the directions on increasing the efficiency of international tourism in Ukraine in the context of the Sustainable Development Goals.

### **The tourism competitiveness indices of Ukraine and the European Union.**

The current challenges make governments around the world care about the competitiveness of their countries. A growing problem of limited raw materials

facilitates the industry re-orientation to the development of the service sector, an important component of which is travel and tourism. The report of the World Economic Forum (WEF) states that during the seven-year period the export of tourism has been exceeded the export of goods and emphasizes that:

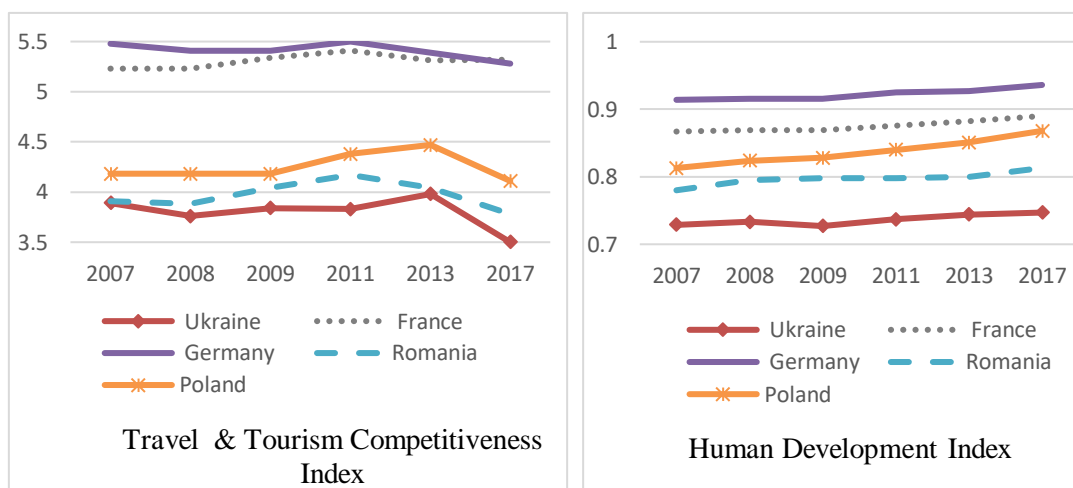
“Growth in T&T competitiveness has traditionally offered tremendous returns, from increases to GDP and labour absorption, to local economic development for more remote communities” (WEF, 2019, p. V).

Hence, the analysis of the tourism sector effectiveness is relevant and viable for any country.

The aggregate indicator of the sustainable development of the travel and tourism sector is the Travel & Tourism Competitiveness Index (TTCI), announced every second year by the World Economic Forum. In 2019, it was calculated on the basis of 4 subindices comprising 14 components and 90 indicators. This index allows comparing achievements of different countries in the travel and tourism sector (T&T). Given that the tourism business contributes to the gross domestic product of the country, it can be asserted that higher competitiveness of tourist sector means higher prosperity of the country. The aggregate indicator of social welfare is the Human Development Index (HDI) released by the United Nations Development Programme (UNDP)'s Human Development Report Office. This index is based on three principal indicators: the average life expectancy at birth – longevity index; education level and purchasing power parity adjusted to the real GDP by capita – the material welfare index.

The research revealed that the relation between these aggregate indices is implicit, meaning that there is no strict correlation. However, the data in Figure 1 show that higher tourism and travel competitiveness of the country matches its higher position by the human development index when compared with other countries. When building the chart the following preconditions were taken into account: 1) two countries were selected from a group of leaders (Germany-France), 2 – from a group of outsiders (Romania-Ukraine) and 1 – with the average Travel & Tourism Competitiveness Index (Poland) among European countries; 2) annual TTCI data for the period 2007-2009 and further biannual data were taken from the publication *The Travel & Tourism Competitiveness Report*, excluding 2015, when Ukraine was not available in the ranking; 3) for the selected countries the values of the Human Development Index are given for the above-mentioned period.

The figure allows concluding that higher competitiveness in the T&T sector contributes to higher ranking of the country according to the Human Development Index. And vice versa, the country with higher levels of human development has better conditions to increase its competitiveness in the T&T sector. However, this dependence is not absolute and rather manifests itself as a trend. Nevertheless, it shows that a deeper analysis of ways to increase the country competitiveness in the T&T sector is required.



*Fig. 1. Coherence of the country position in relation to others according to TTCI and HDI – from the World Economic Forum and the United Nations Development Programme, the author’s chart.*

When dividing the total number of the countries into 3 groups according to the TTCI index (high, average and low levels), the vast majority of the EU countries should be referred as the first group. The countries, belonging to the middle group during 2007-2019, included Latvia, Lithuania, and Romania. Several countries moved from the first to the second group or vice versa, like Bulgaria (the first group – 2008, 2017 and 2019, other years – the second group) Cyprus (2017 – the second group, other years – the first group), Hungary (2017 and 2019 – the second group, other years – the first group), Poland (2013, 2015, 2019 – the first group, other years – the second group), Slovak Republic (2007, 2008 – the first group, other years – the second group), and Slovenia (2007 – the second group, other years – the first group). Ukraine, during the mentioned period, always remained in the second group, i.e. belonged to the countries with the average Travel & Tourism Competitiveness Index.

Although, in 2007-2019, Ukraine ranked lower by the T&T Competitiveness Index than the EU countries, in a few components of the index it had a competitive advantage compared with some countries of the European Union as can be seen from Table 1.

*Table 1. The countries ranking according to the components of Travel & Tourism Competitiveness Index in 2019 <sup>1</sup>*

Global Rank	Economy	Enabling Environment	T&T Policy and Enabling Conditions	Infrastructure	Natural and Cultural Resources
1	Spain	33	10	4	3
2	France	28	23	11	2
3	Germany	6	19	7	8
8	Italy	57	75	17	4
11	Austria	12	7	12	22
12	Portugal	31	20	15	15
15	Netherlands	9	24	10	38
21	Denmark	11	35	23	45
22	Sweden	13	58	25	37
23	Luxembourg	5	3	18	77
24	Belgium	23	59	21	32
25	Greece	58	26	26	25
26	Ireland	24	13	20	50
27	Croatia	62	22	31	23
28	Finland	3	15	29	63
35	Malta	27	6	28	82
36	Slovenia	38	18	43	43
38	Czech Republic	26	36	36	61
42	Poland	45	55	50	34
44	Cyprus	32	38	33	91
45	Bulgaria	52	27	53	44
46	Estonia	18	8	44	104
48	Hungary	42	17	45	60
53	Latvia	35	29	46	111
56	Romania	51	64	70	49
59	Lithuania	22	39	59	114
60	Slovak Republic	47	51	68	59
78	Ukraine	65	70	73	89

<sup>1</sup> *Compiled by the authors using the data of The Travel & Tourism Competitiveness Report 2019. Travel and Tourism at a Tipping Point, p. 65-69*

The table data shows that in the subindex “Natural and Cultural Resources” which characterizes the availability of tourist attraction factors, Ukraine in 2019 beat

(position 89) such countries as Cyprus (91), Estonia (104), Latvia (111) and Lithuania (114). It indicates quite a significant potential in terms of environmental protection, preservation of historical monuments and cultural enrichment within the Sustainable Development Goals. By the index of “T&T Policy and Enabling Conditions” Ukraine (position 70) outran Italy (position 75). Given that for 2 years Ukraine has managed to rise 10 places in the general TTCI ranking, it can be asserted that there is certain progress in the implementation of its strategic programme for the development of travel and tourism sector.

At the same time, the table data also point at the substantial challenges, confronting the T&T business in Ukraine. Thus, the ranking of the country shows relatively worse than in the EU indices of “Enabling Environment” (65<sup>th</sup> position of Ukraine vs 62<sup>d</sup> of Croatia which is the lowest in the EU) and unsatisfactory level of the tourism infrastructure (73<sup>d</sup> position of Ukraine vs 70<sup>th</sup> position of Romania, the lowest in the EU).

Competitive positions of Ukraine against the EU countries are illustrated in Figure 2, where the components of TTCI subindices are given. The “Enabling Environment” subindex includes 5 indicators:

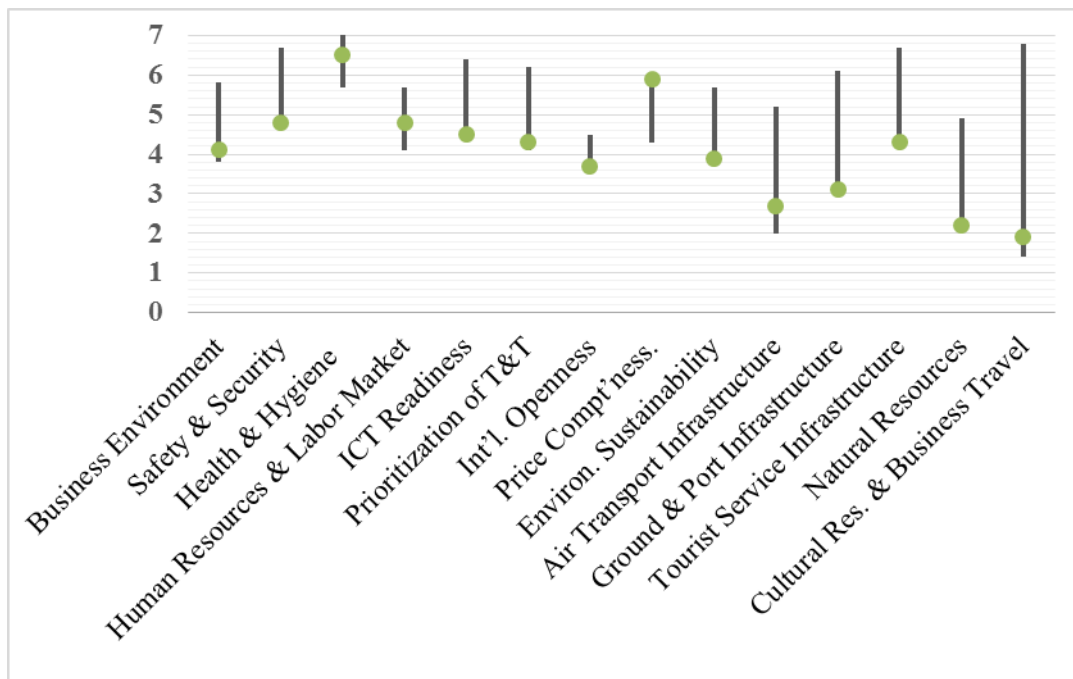
- “Business Environment” characterizes the policy environment conducive to companies to doing T&T business. According to this parameter, Ukraine occupies a competitive position in 2019 (4,1 Ukraine > min 3,8 Croatia);

- “Safety & Security” indicates the extent to which police services can be relied upon to provide protection from crime. The position of Ukraine is not competitive (4,8 Ukraine < min 5,2 Bulgaria);

- “Health & Hygiene” characterizes the access to improved drinking water and sanitation and the country’s health sector legal capacity. Ukraine occupies a competitive position (6,5 Ukraine > min 5,7 Cyprus);

- “Human Resources & Labor Market” measures how well countries develop skills through education and training, and enhance the best allocation of those skills through an efficient labour market. Ukraine has a competitive position (4,8 Ukraine > min 4,1 Croatia);

- “ICT Readiness” evaluates the options to provide and use online services in the travel and tourism sector. The position of Ukraine is not competitive (4,5 Ukraine < min 5,2 Bulgaria, Croatia, Greece, Romania).



*Fig. 2. The position of Ukraine relating to boundary values of the EU countries according to the components of the Travel & Tourism Competitiveness Index in 2019. The data from The Travel & Tourism Competitiveness Report 2019. Travel and Tourism at a Tipping Point (p. 37), the author's chart.*

The subindex “T&T Policy and Enabling Conditions” includes 4 indicators:

- “Prioritization of Travel and Tourism”, the extent to which the policy environment is conducive to developing the T&T sector in each country. Ukraine occupies a competitive position (4,3 Ukraine > min 4,1 Romania);
- “International Openness” shows the degree of openness and simplification of international tourism. Ukraine occupies a minimal competitive position (3,7 Ukraine = min 3,7 Estonia);
- “Price Competitiveness in the T&T Industry” assesses the availability of travel services in each country in terms of customer spending. Ukraine has an extremely competitive position (5,9 Ukraine > max 5,7 Bulgaria, Lithuania, Poland);
- “Environmental Sustainability”, which characterizes policies and factors enhancing environmental sustainability. Ukraine occupies a minimal competitive position (3,9 Ukraine = min 3,9 Cyprus).

The subindex “Infrastructure” includes 3 indicators:

- “Air Transport Infrastructure” evaluates the number and availability of airports, and the quality of services for domestic and international flights. Ukraine occupies a competitive position (2,7 Ukraine > min 2 Slovak Republic);

- “Ground and Port Infrastructure” takes into account the quality of roads, railroads, and ports. Ukraine has a minimal competitive position (3,1 Ukraine = min 3,1 Romania);

- “Tourist Service Infrastructure” takes into account the availability of sufficient quality housing, resorts and entertainment facilities, as well as the degree of accessibility of car rental services and ATMs. The position of Ukraine is not competitive (4,3 Ukraine < min 4,4 Slovak Republic).

The subindex “Natural and Cultural Resources” includes 2 indicators:

- “Natural Resources” assesses measures to ensure the ecological attractiveness of the country's natural sites. The position of Ukraine position is not competitive (2,2 Ukraine < min 2,3 Lithuania);

- “Cultural Resources and Business Travel» shows cultural resources at each country’s disposal, the digital demand for cultural and entertainment resources and the number of international association meetings taking place in a country. Ukraine occupies a competitive position (1.9 Ukraine > min 1,4 Lithuania, Latvia).

- Therefore, out of 14 TTCI components, Ukraine occupied competitive positions in 8 indicators compared with the EU countries.

- Comparative analysis of the changes in the last two years is given in Table 2.

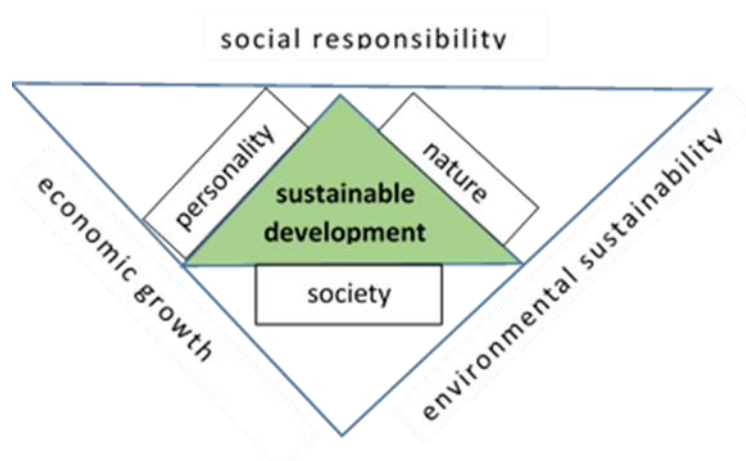
The tables data allows making a conclusion that the dynamics of tourism indicators in Ukraine for the last two years mostly corresponded to the changes observed in the EU countries. The fact that for the period 2017-2019 Ukraine improved its positions in most of TTCI components is commendable. However, the situation with “Natural and Cultural Resources” and “Health & Hygiene” components became worse in Ukraine against the relative improvement of these indicators in the EU. Therefore, to obtain higher levels of competitiveness in the T&T sector, Ukraine should find inner resources and new management solutions capable of providing stable characteristics in the T&T sector.

### **Directions to increase the efficiency of international tourism in Ukraine.**

Introduction of the sustainable development requires from the governments of the countries to build development strategies taking into account the three important aspects shown in Figure 3.

The goal of the Strategy is to create favourable conditions for living and doing business in the country based on the efficient use of available resources, modern technologies, preserving the environment and developing human capital, as well as

introducing innovations and the best world practices of sustainable development management.



*Fig. 3. Targets of the sustainable development strategy, the author's design.*

These objectives are reflected in the main principles of the Global Code of Ethics for Tourism, adopted by resolution A/RES/406(XIII) at the thirteenth World Tourism Organization (WTO) General Assembly (Santiago, Chile, 27 September – 1 October 1999). They include as follows:

- the principle of tolerance and respect;
- promotion of individual and collective fulfilment;
- environmental protection, conservation of resources, taking into account environmental restrictions of tourist activities;
- conservation and enrichment of cultural heritage;
- beneficial activity for host countries and communities;
- high professional standards in tourist services;
- equal rights for all for tourist services;
- liberty of tourist movements;
- protection of the rights of the workers and entrepreneurs in the tourism industry, fair competition; acknowledgment of the role of NGOs and international institutes (WTO, 1999).

The systemic content of both categories – “system development” and “tourism” requires a balanced approach for building development strategies, thereby the mechanism of reaching the targets should be balanced as well. This process has a comprehensive nature and foresees as follows: first, the structural transformation of national economics towards the increase of the tertiary sector, i.e. services for

population and businesses (Potapenko, 2012, p. 139); secondly, the mutual participation of territorial communities of cities and villages, local authorities, regional and central governmental bodies, NGOs and international institutes, i.e. certain “political consensus” (Berezina, Tkachenko ed., 2016, p. 31); thirdly, re-orientation of economic policy towards “green economy” and resource conservation (The Organisation for Economic Co-operation and Development (OECD), 2011).

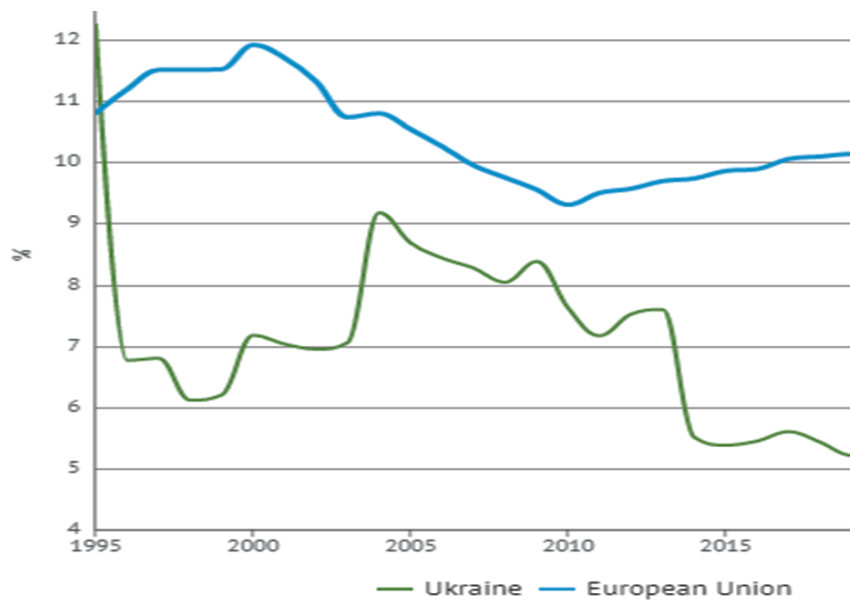
*Table 2. Changes in Ukraine indices compared with average EU indices in 2017-2019 by TTCI<sup>1</sup> components.*

Pillars of TTCI	Ukraine		US (27), average		(+ / -)		number of the EU countries
	2017	2019	2017	2019	Ukraine	US	
Business Environment	3,7	4,1	4,76	4,75	0,4	-0,01	9 ↓, 11 ↑, 7 const
Safety & Security	3,5	4,8	5,92	5,91	1,3	-0,01	11 ↓, 10 ↑, 6 const
Health & Hygiene	6,6	6,5	6,36	6,38	-0,1	0,02	8 ↓, 14 ↑, 5 const
Human Resources & Labor Market	4,9	4,8	5,06	5,03	-0,1	-0,03	12 ↓, 6 ↑, 9 const
ICT Readiness	4,2	4,5	5,52	5,75	0,3	0,23	1 ↓, 21 ↑, 5 const
Prioritization of T&T	4,3	4,3	4,83	4,99	0	0,16	3 ↓, 19 ↑, 5 const
Int'l, Openness	2,9	3,7	4,08	4,08	0,8	0	27 const
Price Compt'ness,	5,2	5,9	4,55	5,01	0,7	0,46	27 ↑
Environ, Sustainability	3,9	3,9	4,81	4,9	0	0,09	8 ↓, 17 ↑, 2 const
Air Transport Infrastructure	2,4	2,7	3,56	3,87	0,3	0,31	2 ↓, 21 ↑, 4 const
Ground & Port Infrastructure	3	3,1	4,61	4,64	0,1	0,03	7 ↓, 8 ↑, 12 const
Tourist Service Infrastructure	4	4,3	5,37	5,42	0,3	0,05	7 ↓, 10 ↑, 10 const
Natural Resources	2,3	2,2	3,31	3,33	-0,1	0,02	7 ↓, 13 ↑, 7 const
Cultural Res, & Business Travel	2,1	1,9	3,02	3,03	-0,2	0,01	7 ↓, 8 ↑, 12 const

<sup>1</sup> *Compiled by the authors using the data of The Travel & Tourism Competitiveness Report 2017 (p. 10-13), 2019 (p. 37).*

Analysis of these tasks for the T&T sector of Ukraine requires focusing on such aspects as the increase of economic and social value of the T&T sector; drastic changes in the management model the T&T sector; implementation of the assessment of tourism impacts.

As for the economic importance of tourism, the role of the T&T sector should be reviewed, since, despite having considerable natural and cultural capacities for the tourism development, the contribution of this sector in Ukrainian GDP is smaller than in the EU which can be seen in Figure 4.



*Fig. 4. Ukraine and the EU contribution of travel and tourism to GDP (% of GDP).*

*From: <https://knoema.com/WTTC2019/world-travel-and-tourism-council-data>*

The picture data shows that since 2010 the European Union has demonstrated an increasing contribution of the tourism sector in GDP, whereas for Ukraine the opposite is true. Surely, the social-political tension during 2013-2014 along with the occupation of part of the country has dramatically deteriorated the situation in the tourism sector. However, even under these conditions, Ukraine demonstrated the vitality of the tourism sector: in 2016 the contribution of the T&T sector to GDP was 5.44% compared with 5.38% in 2015 and even higher in the subsequent 2017 – 5.6%. It means that the efforts should be made as well to improve the situation under the present conditions since in 2019 the T&T contribution in the Ukrainian GDP dropped to 5.21% compared with 10.13% in the EU (Knoema, 2020). Moreover, these efforts should be consolidated as the importance of the service sector in the added value, in particular, the T&T sector, is becoming even more critical when viewed against stagnation in the traditional export branches of Ukraine (mining, chemical and metallurgy industries). An important step in solving the task was the adoption in 2017 “The strategy of the development of tourism and recreation sites until 2026” which declares as follows:

“The only way to solve systemic problems in the field of tourism and recreational areas is a strategically oriented state policy, the main objective of which is to define tourism as one of the main priorities of the state, to introduce economic and legal mechanisms for successful tourism business, investment mechanisms for tourism infrastructure, awareness and marketing activities to form the tourist image of Ukraine”(CMU, 2017).

This strategy also creates ample opportunities for the development of small and medium-sized businesses, job creation and the development of public-private partnerships. Table 3 shows that for the period 2017-2019, the number of tourism entities being individual entrepreneurs increased by 62%. It indicates that the development of small business in the field of tourism in Ukraine is gradually increasing.

*Table 3. Number dynamics of participants of the tourism sector in Ukraine <sup>1</sup>*

	Legal entities			Individual entrepreneurs		
	2017	2018	2019	2017	2018	2019
Total	1743	1833	1867	1726	2460	2797
including:						
tour operators	498	529	538	x	x	x
tourist agents	x	1243	1259	1630	2322	2644
participants, involved in excursion activities	73	61	70	96	138	153

<sup>1</sup> *Compiled by the authors using the data of the State Statistics Service of Ukraine*

An important current task for Ukraine in the field of international tourism is the development of those kinds of tourism which are available for small businesses and, at the same time, more conducive to the practical introduction of inclusive development, creative industries, and innovative tourism products of educational, sports or cultural orientation. UNWTO Secretary-General Zurab Pololikashvili said:

“Governments have an opportunity to recognize tourism’s unique ability to not only provide employment but to drive equality and inclusivity” (Available at: <<https://www.unwto.org/news/firm-action-by-governments-to-support-tourism-recovery-covid-19>>).

This task is of medium term. The fact is that the current structure of international tourism in Ukraine is narrow-oriented, as can be seen from Table 4.

*Table 4. The international tourism structure in Ukraine in 2019 <sup>1</sup>*

	Outbound tourists		inbound (foreign) tourists	
	ind.	%	ind.	%
Total number of tourists	5524866	100	86840	100
including by the purpose of visit:				
official, business, study	91778	1,66	5324	6,13
recreation, holidays	5407575	97,88	61027	70,28
medical treatment	18255	0,33	2812	3,24
sports tourism	1599	0,03	194	0,22
tourism for special purposes	1985	0,04	16874	19,43
other	3674	0,07	609	0,7

<sup>1</sup> *Compiled by the authors using the data of the State Statistics Service of Ukraine*

The international tourism includes inbound tourism – travels of non-residents within Ukraine and outbound tourism – travels of Ukrainian citizens and residents to other countries. The table shows that in 2019 the outbound tourism was almost exclusively for recreation and holidays (98%), whereas the inbound tourism mainly comprised recreation and holidays (70%). Tourism for special purposes ranked second (19%) and the third place was occupied by tourism for business and study (6%). Therefore, the optimization of the international tourism structure is an important task for Ukraine, with its substantial capacities for the development of special kinds of tourism, including ecological, exotic, cognitive-cultural, religious, visiting events, congresses, exhibitions and other. Moreover, wide perspectives for Ukraine is open in the area of aquatic, rural and mountain tourism. Rural and mountain tourism can help to deal with the problem related to the seasonal nature of tourism and provide a positive impact on the development of remote rural areas. A new promising direction in the world, potentially possible for Ukraine, is the gastronomy and wine tourism. Some positive steps are also taken for the development of urban tourism in the country (Lviv, Kyiv, Odesa, etc.)

To develop the tourism, including international, Ukraine needs to introduce a new approach to tourism management – a destination management model. It is based on the coalition of all relevant tourism stakeholders coordinated and guided by a destination management organization. The priority of such management is to promote Ukraine and its regions as tourist attractions, and to develop a comprehensive set of actions for the efficient use of existing tourist facilities, development of appropriate infrastructure, creation of a tourist product, etc.

For Ukraine, the introduction of this model is crucial to mitigate a number of existing problems. First, the economy of the country is transformational, not yet free from the effects of the command-and-control system, such as high levels of monopoly, corruption, and bureaucracy. Secondly, in the context of decentralization reform, a significant number of management decisions are made by local authorities, for which local interests are a priority. In addition, given some political instability and the rapid change of political elites at the central and local levels, these decisions are often short-lived and have a low level of social responsibility. Thirdly, the public administration bodies in the field of tourism have often been reformed during the history of Ukraine's independence, which also introduced a certain inconsistency in the development of the travel and tourism sector. Therefore, the introduction of a destination management model is a need not only for the present but also for the future of Ukraine. Moreover, this is one of the strategic objectives announced by the World Tourism Organization for the entire world community:

“Destination management takes a strategic approach to link-up the sometimes very isolated and occasionally diverging elements for the better planning and management of the destination calling for a coalition of many organizations and interests working under a coherent strategy in pursuit of this common goal led and coordinated by the DMO” (WTO. 2019, p. 6).

Another task in the tourism development is cumulative. It foresees the formation of the effective mechanism to counteract human impact of the T&T sector on environment. This goal can be achieved only in case of consolidated efforts in the chain consisting of "education – innovation – environmental law – environmental control – public-private enterprise". This task is not new for Ukraine in terms of theoretical justification, but in practice, the country has a lot of negative cases of habitat loss (continuous deforestation, illegal amber mining, underdeveloped waste sorting system, lack of waste processing network, pollution of water bodies, etc.) compared with relatively small achievements (the network of national protected areas, recreation of the Chernobyl zone, the gradual introduction of international environmental standards, etc.). Therefore, environmental policy should become a target for all the participants in the tourism industry – the state, entrepreneurs, consumers, NGOs, and the media. The EU countries can provide significant assistance for Ukraine in this aspect, for instance, by sharing experience, information, educational services, financial resources, technical support and other, including those

in the field of international tourism. International tourism is an important factor in the global development of mankind allowing the achievement of the Sustainable Development Goals, where the international T&T cooperation is required.

**Conclusion.** Tourism in Ukraine is gradually becoming the driving force in the implementation of the Sustainable Development Goals (SDGs) since the variety of its kinds encompasses all 17 SDGs. Thus, rural tourism is related to Goal 1: No Poverty, Goal 2: Zero Hunger, Goal 5: Gender Equality, Goal 8: Decent Work and Economic Growth, Goal 10: Reduced Inequalities, Goal 15: Life on Land, urban tourism is associated with Goal 9: Industry, Innovation, and Infrastructure, Goal 11: Sustainable Cities and Communities, environmental tourism is additionally linked to Goal 3: Good Health and Well-Being, Goal 6: Clean Water and Sanitation, Goal 7: Affordable and Clean Energy, Goal 13: Climate Action, Goal 14: Life Below Water, educational tourism is related to Goal 4: Quality Education, Goal 12: Responsible Consumption and Production, whereas their implementation in the context of international tourism is also extended to Goal 9: Industry, Innovation, and Infrastructure, Goal 16: Peace, Justice and Strong Institutions, Goal 17: Partnerships.

In order to increase its tourism competitiveness, which is still relatively lower than that in the European Union, Ukraine should develop the kinds of tourism which provide solutions to three current problems – job creation and development of small and medium businesses; inclusiveness (taking into account the increase in affected population due to military aggression and occupation of part of the country); environmental orientation. Priority kinds of tourism, including international tourism, are rural, mountain, ecological, cognitive-cultural, and educational tourism. Opportunities for sports, religious, gastronomic and wine tourism are expected to be broadened as well. Thanks to these kinds of tourism, Ukraine is improving its results in the following areas: Job creation; Increased incomes; Improved livelihoods; Preserved local authenticity; Improved tourism branding; New linkages to formal economy.

Ukraine has sufficient potential to meet the goals and is demonstrating certain positive changes in the international tourism sector. To ensure steady progress a close cooperative relationship among stakeholders in the Travel & Tourism sector is required. Ukraine should take advantage of the latest technology and innovation, which can make sports tourism more exciting and entertaining, and effectively support the tourism sector at different levels: national, regional and local. In this

context, highly important is the Unified management of the T&T sector in the hands of the Destination Management Organizations (DMO) that can help to avoid overlapping functions and duplication of effort with regards to promotion, visitor services, training, business support and identify any management gaps that are not being addressed.

### *References*

1. Berezina, O. Yu. and Tkachenko, Yu. V. 2016. *Problems of the sustainable development of society: a look through the eyes of different generations*. Chabanenko Press, Cherkasy.
2. Crouch, G. I. and Ritchie, J. R. B. 1999. Tourism, Competitiveness, and Societal Prosperity. *Journal of Business Research*. [online] 44, pp. 137-152 Available at: <<http://wwwwdata.unibg.it/dati/corsi/44127/85182-JBR-tourism&competiveness&social%20prosperity.pdf>> [Accessed 15 July 2020].
3. Knoema Enterprise Data Solutions. 2020. [online] Available at: <<https://knoema.com/WTTC2019/world-travel-and-tourism-council-data>> [Accessed 15 July 2020].
4. Krstic, B., Jovanovic, S., Jankovic-Milic, V. and Stanisic, T. 2016. Examination of travel and tourism competitiveness contribution to national economy competitiveness of sub-Saharan Africa countries. *Development Southern Africa*. 33. 1-16. 10.1080/0376835X.2016.1179103.
5. Malskaya, M. P. and Khudo, V. V. 2007. *Tourism business: theory and practice*. Center for Educational Literature, Kyiv.
6. OECD. 2011. *Towards Green Growth*. Paris: OECD Publishing, Available at: <<https://doi.org/10.1787/9789264111318-en>>. [Accessed 15 July 2020].
7. Page, S and Connell, J. 2009. *Tourism – A modern synthesis*. Andover: South-Western Cengage Learning.
8. Potapenko, V. G. 2012. *Strategic priorities for the secure development of Ukraine based on "green economy"*. NISD, Kyiv.
9. Rodríguez-Díaz, B. and Pulido-Fernández, J. I. 2020. Sustainability as a Key Factor in Tourism Competitiveness: A Global Analysis. *Sustainability*. 12, 51; doi:10.3390/su12010051.

10. Romão, J., Guerreiro, J. and Rodrigues, P. M. M. 2017. Territory and Sustainable Tourism Development: A Space-Time Analysis on European Regions. *REGION*. Volume 4, Number 3, pp. 1-17.
11. State Statistics Service of Ukraine. 2020. Tourist activity in Ukraine. [online] Available at: <<http://www.ukrstat.gov.ua/>> [Accessed 20 July 2020].
12. The Cabinet of Ministers of Ukraine. 2017. Strategy for the development of tourism and recreation sites until 2026. Approved by the order of the Cabinet of Ministers of 16. 03. 2017 No 168-r. [online] Available at: <<https://zakon.rada.gov.ua/laws/show/168-2017-%D1%80#Text>> [Accessed 15 July 2020].
13. United Nations Development Programme. Human development index (HDI) [online] Available at: <<http://hdr.undp.org/en/data>> [Accessed 15 July 2020].
14. United Nations Economic Commission for Europe. 2020. *Towards achieving the Sustainable Development Goals in the UNECE region. A statistical portrait of progress and challenges*. Geneva: United Nations.
15. United Nations' General Assembly. 2015. *Transforming our world: the 2030 Agenda for Sustainable Development*
16. Wang, X. and Liu, D. 2020. The Coupling Coordination Relationship between Tourism Competitiveness and Economic Growth of Developing Countries. *Sustainability* [online], 12, 2350. Available at: <<file:///C:/Users/User/Downloads/sustainability-12-02350-v2.pdf>> [Accessed 15 July 2020].
17. World Tourism Organization. 2019, UNWTO Guidelines for Institutional Strengthening of Destination Management Organizations (DMOs) – Preparing DMOs for new challenges, UNWTO, Madrid, DOI: <https://doi.org/10.18111/9789284420841>.
18. World Economic Forum, [2007, 2008, 2009, 2011, 2013, 2017]. *The Travel & Tourism Competitiveness Report*. Geneva: World Economic Forum.
19. World Tourism Organization. 1999. *Global Code of Ethics for Tourism*. [online] Available at: <[https://webunwto.s3.eu-west-1.amazonaws.com/imported\\_images/37802/gcetbrochureglobalcodeen.pdf](https://webunwto.s3.eu-west-1.amazonaws.com/imported_images/37802/gcetbrochureglobalcodeen.pdf)> [Accessed 15 July 2020].

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## **NATIONAL HEALTH AS DETERMINANT OF SUSTAINABLE DEVELOPMENT OF SOCIETY**

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**Edited by Nadiya Dubrovina**

**Stanislav Filip**

**Bratislava 2021**

School of Economics and Management in Public Administration  
in Bratislava

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