Diagnosis of the Travel and Tourism Competitiveness Index Methodology on the Example of Poland's Position on the Tourist Market

Małgorzata Januszewska, Daria Jaremen, Elżbieta Nawrocka

Wrocław University of Economics, Poland

Abstract

The purpose of the article is to assess Poland's position on the international tourist market taking a comparative approach, in the light of the Travel and Tourism Competitiveness Index (TTCI) developed by the World Economic Forum (WEF), and also critical analysis of the TTCI methodology used in the years 2009–2016. The countries (Czech Republic, Slovak Republic, Hungary, Lithuania, Latvia and Estonia) indicated by the Polish Tourism Organization as the most important competitors were selected for the comparative analysis of Poland's position on the tourist market. The research proved that in the analyzed period the position of Polish tourism against the background of competitors is growing as a result of the significant improvement of the Travel & Tourism regulatory framework and infrastructure. The WEF methodology is not yet perfect due to the selection and number of respondents, whereas the modification of competition factors, consistent with the evolution of theoretical concepts and also keeping up with the progress in business practice, deserves a positive assessment.

Keywords: competitiveness, tourism, travel and tourism competitiveness index

JEL: O57, Z32

Introduction

The tourist market has a built-in self-regulatory mechanism based, for example, on the rules of competition. Until recently competition was considered exclusively from the perspective of a contest between countries and enterprises. Current analyses cover competitive rivalry in sectoral (including tourism) and territorial (regions and cities) systems, which can be evaluated on the basis of the competition outcome or the factors which determine it. The analysis of subject literature and the initiatives of supranational economic institutions—e.g., World Economic Forum (WEF), and OECD—provide conclusions that the evaluation of international competitiveness related to the tourism sector is becoming a key issue of tourism policy.

The purpose of the article is to identify Poland's position on the international tourist market and to diagnose the methodology of information sources and the construction of the Travel and Tourism Competitiveness Index (TTCI). The TTCI, developed by the WEF, has been one of the most popular measures to evaluate international competitiveness in the tourism industry since 2007 (Crotti and Misrahi 2017, 7–8). The countries indicated by the Polish Tourism Organization (PTO) as the most important competitors were selected for the comparative analysis of Poland's market position.

E-mail addresses of the authors

Małgorzata Januszewska: malgorzata.januszewska@ue.wroc.pl

Daria Jaremen: daria.jaremen@ue.wroc.pl

Elżbieta Nawrocka: elzbieta.nawrocka@ue.wroc.pl

1 Competition and competitiveness on the international tourist market

The position of an entity on the tourist market results from its capacity to generate relatively high revenues from production factors and a relatively high level of employment in the conditions of ongoing submission to international competition. It means that such positions result from an entity's long-term competitive behavior on the market and proves its competitiveness. According to the OECD, tourism competitiveness of a destination is about the ability of the place to optimize its attractiveness for residents and non-residents, to deliver quality, innovative, and attractive (e.g., providing good value for money) tourism services to consumers, and to gain market share on the domestic and global markets, while ensuring that the available resources supporting tourism are used efficiently and in a sustainable way (Dupeyras and MacCallum 2013, 14).

Competition can be analyzed from different perspectives: subjective, objective or scope oriented. The criterion of competition object divides the participants into: blocs of countries, national economies (countries), and companies. In tourism economics the definition of a tourism destination (tourism place) is very broad and approached as a municipality, a country, a region or a country, depending on the adopted research perspective (Nawrocka 2013, 76). A country's ability to compete on the international tourist market depends on many factors included in competitiveness models representing the simplified versions of a complex reality and illustrating competition on the international market. Table 1 presents the characteristics of models taking into account competitiveness of a country on the international tourist market. The definitions presented in table 1 are not mutually exclusive, but have a supplementary character, as they take into account various aspects of the described phenomenon and different levels of detail.¹

2 Competitiveness of Polish tourism among its closest competitors

The World Economic Forum is the only organization systematically monitoring competitiveness in international tourism through the Travel and Tourism Competitiveness Index, which includes the following 4 sub-indexes: Enabling Environment, Travel and Tourism Policy and Enabling Conditions, Infrastructure and Natural and Cultural Resources. Each sub-index covers from two to five pillars forming the subsequent level of the TTCI index structure. The total of 14 pillars are distinguished in the version of the TTCI index from 2017. In turn, each of these pillars is divided into detailed factors. In total, 90 detailed factors are distinguished in the TTCI index. In addition, apart from WEF specialists the following organizations are also involved in the index concept development: Deloitte, the International Air Transport Association (IATA), the International Union for Conservation of Nature (IUCN), the World Tourism Organization (UNWTO), the World Travel & Tourism Council (WTTC) and Bloom Consulting and the representatives of tourist enterprises. Each sub-index, as well as the general index, take values on the scale from 1—the worst, up to 7—the best. Changes have been introduced in the pillars and the detailed factors since 2015. For example: in the Enabling Environment sub-index and the ICT Readiness pillar the following two factors were introduced: Mobile network coverage and Quality of electricity supply, originating respectively from statistics and survey studies. In turn, the category Fixed telephone lines was removed as outdated, since both mobile or broadband penetration is rising in all countries. Overall, the new methodology applies more factors (90 instead of 79), of which two thirds are statistical and one third are data from the Executive Opinion Survey.

The TTCI represents an index developed every two years for a variable number of countries, but Poland and its closest competitors participated in each edition of the report. The TTCI (index value) is used to develop the ranking of all countries being analyzed, and thus to determine the position of a given country against the background of other countries. Figure 1 shows the position of Poland in the comparative system, in the years 2009–2017. The results obtained using the TTCI were compiled in one Figure, despite the authors' awareness of a certain methodical error, consisting

^{1.} The subject literature provides examples of a broader analysis of the respective models, see for example Żemła (2010) or Dziedzic and Skalska (2014).

in comparing the results achieved using different methodology (changes in factors without changing the method of data collection and processing). The argument supporting such an approach is the desire to show the continuity of changes in the position of individual countries in the analyzed period.

Tab. 1. The characteristics of selected models of international competitiveness of a country

Author and year	Characteristics
Bordas 1993	The model takes into account the role of demand factors. The perceived value of a country's image and the perceived costs of creating a tourist product are emphasized in developing dynamic competitiveness.
WES(a) 1994	The concept describes competitiveness considering productivity indicators and productivity drivers. The model emphasizes the importance of demand and supply factors, natural environment and tourism policy.
Ritchie and Crouch 2003	The model covers more than thirty factors grouped in five areas: key resources, supporting resources, management, country policy and development (brand, vision, control), improvement factors (security, cohesion, image).
Mihalic 2000	The model is based on the Crouch and Ritchie concept. The competitiveness of a destination can be enhanced owing to the relationship between the activities having impact on the environment and environmental quality management, and also as a result of marketing activities.
Dwyer and Kim 2003	The authors concluded that resources (inherited, created and supporting) and situational factors (destination management and demand determinants) have a crucial impact on the competitiveness of a destination.
Heath 2003	The author compares the development of a country's competitiveness to building a house. The foundations take the form of provided and managed key tourist attractions and experiences. Bricks represent the elements focused on supply (including national regulations, investment climate, financial and organizational framework) and on demand (e.g. destination image and brand, marketing strategies, managing visitor satisfaction), whereas the forms of cooperation and the involvement of stakeholders are the cementing agents. The roof covering the entire structure stands for values, principles and common vision of the country's tourism development.
Zhang and Jensen 2007	The model is an econometric analysis based on the following factors: price level (measured using PPP), level of economic development (GDP), infrastructure investments (accommodation capacity), technology level (R&D expenditure), economy receptiveness (export and import ratio against GDP).
Żemła 2009	The author highlights that the competitiveness of a destination is essentially influenced by three factors: location, tourism potential and the country image. One of the important factors of competitiveness is the occurrence of cooperation relationships between stakeholders.
Bobrica and Cristureanu 2009	The evaluation of competitiveness is carried out by comparing the pace of changes in the share of tourist services export in the export of total services. The higher than average rate, the higher the share increase in tourist services trade, thus indicating the tourist offer competitiveness.
Dupeyras and MacCallum 2013	The indicators are organized around four categories: (1) measuring the tourism performance and impacts, (2) monitoring the ability of a destination to deliver quality and competitive tourism services, (3) monitoring the attractiveness of a destination, and (4) describing policy responses and economic opportunities.

Source: Authors' compilation based on Bobrica and Cristureanu (2009), Bordas (1994), Dupeyras and MacCallum (2013, 8), Dwyer and Kim (2003), Heath (2003), Kozak and Andreu (2006, 112–113), Mazurek (2014), Mihalic (2000), Palatková, Zichová and Hrubcová (2014), Ritchie and Crouch (2003, 60–78), Vanhove (2011, 164–165), Zhang and Jensen (2007), and Żemła (2010, 212–223, 331–336)

^aConcept WES was described by Vanhove (2011)

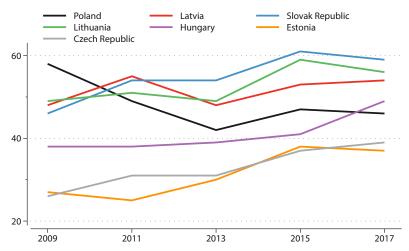


Fig. 1. Changes of TTCI of Poland and the selected countries in the years 2009–2017.

Source: Authors' compilation based on Travel & Tourism Competitiveness Reports for the years 2009, 2011, 2013, 2015, and 2017, available at World Economic Forum website (http://reports.weforum.org/)

In analyzing the international competitiveness of Polish tourism, we decided to examine the position in the WEF ranking rather than the value of TTCI indexes, because the differences between indexes in mathematical terms are, in many cases, so small that they are even unnoticeable and thus difficult to interpret. Compared to other countries, the situation in Poland, in terms of competitiveness in the area of tourism, should be evaluated quite critically. Poland is ranked 46th in the group of 140 countries covered by the WEF research in 2017 and remains behind the majority of European countries. However, taking the closest competitors into account (i.e., the Czech Republic, the Slovak Republic, Hungary, Lithuania, Latvia and Estonia),² Poland is ranked higher than Hungary, the Slovak Republic, Latvia and Lithuania. If analyzed in dynamics, Poland has improved the TTCI index in recent years and moved up in the competitiveness ranking from 58th position in 2009 to 42nd in 2013, only to lose this position in the years to follow. It is worth observing that, apart from Estonia, all Poland's competitors recorded a decline in their position in the same period. This results most probably from changes in the TTCI sub-factors. It should be highlighted that in 2009 Poland's position in the group of its closest competitors was the lowest (the weakest competitiveness), whereas in the recent period it is the third competitive force among the seven analyzed countries. The research results show that only Poland has improved its position, while all the other countries lost ground. It may mean that from the perspective of the adopted factors the Polish tourism economy remains relatively strong.

The position held, in accordance with the TTCI, results from sub-indexes, the details of which are presented in tables 1 and 2. The division of the WEF ranking results into two separate tables is the consequence of methodological changes, as well as difficulties in interpreting the sub-positions determined by the sub-indexes.

In more detail, the worst position held by Poland, in 2009, resulted from the very unfavorable regulatory framework of T&T as well as a weak business environment and tourist infrastructure (tab. 2). In turn, Poland's 46th position in the WEF ranking in 2017 is mainly due to a well-managed tourism policy and creation of conditions for tourism development (25th place), environmental conditions (41st place) and also cultural and natural resources (47th place). Tourism resources in Poland are rated the highest in the group of analyzed countries, which is a good incentive for building the competitive advantage of Polish tourism in the future. Insufficient tourism infrastructure, in terms of both quantity and quality, remains the major weakness of tourism in Poland (only

^{2.} The countries indicated as the main competitors of Poland by the Polish Tourism Organization in the Marketing; see: Marketingowa strategia Polski w sektorze turystyki na lata 2012–2020 [Marketing Strategy of Poland in the tourism sector for the years 2012–2020]. By Bartłomiej Walas et al., Aktualizacja dokumentu z 2008 roku, przyjęta przez Radę POT w dniu 5.12.2011, Polska Organizacja Turystyczna, [@:] https://www.pot.gov.pl/pl/o-pot/plany-i-sprawozdania-pot/marketingowa-strategia-polski-w-sektorze-turystyki-na-lata-2012–2020–2.

Tab. 2. Competitive position from the perspective of the TTCI and sub-indexes in the selected countries in the years 2009–2013

	2009				2011					2013			
Country	GR	1	2	3	GR	1	2	3	GR	1	2	3	
Poland	58	72	68	29	49	49	65	30	42	49	65	32	
Czech Republic	26	16	36	24	31	26	37	31	31	28	37	28	
Slovak Republic	46	34	54	55	54	39	57	52	54	43	57	55	
Hungary	38	26	42	59	38	24	45	48	39	26	45	54	
Lithuania	49	30	46	89	51	33	46	85	49	41	46	61	
Latvia	48	32	43	86	55	38	39	83	48	35	39	77	
Estonia	27	17	21	47	25	17	19	50	30	10	19	51	

Source: Travel & Tourism Competitiveness Reports for the years 2009, 2011, and 2013, available at World Economic Forum website (http://reports.weforum.org/)

Note: GR—global rank, competitive position according to TTCI

- 1—position according to sub-index "T&T regulatory framework"
- 2—position according to sub-index "T&T business environment and infrastructure"
- 3—position according to sub-index "T&T human, cultural and natural resources"

Tab. 3. Competitive position from the perspective of the TTCI and sub-indexes in the selected countries in the years 2015-2017

		2015			2017					
Country	GR	1	2	3	4	GR	1	2	3	4
Poland	47	39	23	62	43	46	41	25	59	47
Czech Republic	37	34	14	35	63	39	27	32	37	69
Slovak Republic	61	44	58	66	67	59	43	43	64	67
Hungary	41	33	2	48	62	49	45	20	46	68
Lithuania	59	26	27	61	100	56	28	35	54	116
Latvia	53	25	16	46	102	54	32	16	47	113
Estonia	38	18	7	43	84	37	17	6	39	104

Source: Travel & Tourism Competitiveness Reports for the years 2015 and 2017, available at World Economic Forum website (http://reports.weforum.org/)

 $\it Note:$ GR—global rank, competitive position according to TTCI

- 1—position according to sub-index "Enabling environment"
- 2—position according to sub-index "T&T policy and enabling conditions"
- 3—position according to sub-index "Infrastructure"
- 4—position according to sub-index "Natural and cultural resources"

Slovakia is weaker in this respect). Attention should be paid to certain stability of Poland's place in the WEF ranking. The position has been maintained over a long period of time, unlike in the case of other countries. For example: in 2015 Hungary reached the second position regarding policy and conditions for tourism development, however, in the next period it was ranked 20th (tab. 3).

The results of WEF research using the TTCI are often used in practice, primarily for carrying out tourism policy by government administration institutions, and also by potential investors.

3 Diagnosis of the TTCI methodology

The TTCI has been developed within the framework of The Global Competitiveness Report—the Global Competitiveness Index (GCI). As mentioned above, one third of the data originates from the Executive Opinion Survey. The group of respondents is made up of global business leaders and changes over time—e.g., in 2015 it amounted to approximately 14 000 leaders from 144 countries worldwide, whereas in 2017, 12 400 people from 136 countries responded to the survey. The GCI Survey is divided into 15 sections: I. About Your Company, II. Most Problematic Factors for Doing Business, III. Infrastructure, IV. Technology, V. Financial Environment, VI. Foreign Trade and Investment, VII. Domestic Competition, VIII. Business Operations and Innovation, IX. Security,

X. Governance, XI. Education and Human Capital, XII. Health, XIII. Travel and Tourism, XIV. Environment, and XV. Risks (Browne et al. 2015). In 2017, on average, the opinions of about 90 experts, who expressed their views in 15 different fields, were analyzed in one country, and in tourism they predominantly related to the phenomena regarding legal regulations, tourism policy, as well as material and social conditions of tourist service provision. The choice of issues in the presented questions clearly indicates the supply approach to the problems of competitiveness. However, due to tourist demand characteristics—i.e., the service nature of its object and the mobility of demand towards tourist destinations—a given country's competitiveness should also be considered from the perspective of a customer as a tourist. This sphere, however, is taken into account to a small extent only in the construction of the TTCI, which remains its significant weak point.

On the one hand, the advantage of the division into sub-indexes results in the ability to analyze each of the pillars and to highlight factors remaining the strong points of tourism economics in a given country, as well as the ones which delay its development in terms of tourism. The selection of 90 detailed indicators (factors) adequately reflects the interdisciplinary nature and the complexity of international competitiveness in tourism. On the other hand, however, each of them is considered equally important in developing the competitive position of a given country, which can remain debatable. The subject literature (e.g., Gołembski 2002) emphasizes the importance of selected factors as particularly significant for competitiveness in tourism (e.g., tourism values, hence, the need to apply weights).

The conducted surveys captured the non-measurable components of competitiveness (e.g., investment climate, the analysis of which is not highly reliable if based on secondary sources). The survey, however, disregards the issues related to the need of coordinating joint activities and the cooperation of stakeholders, moreover, tourist attractiveness of individual countries is taken into account only to a small extent. As Hall (2007) emphasizes, the TTCI reflects the perception of one of the parties involved in the development of tourism—the tourism industry in its global dimension, disregarding regional and local entrepreneurs. In turn, Żemła (2010) believes that the TTCI reflects, to a greater extent, a country's openness to international tourism investment and illustrates investment attractiveness for companies from the tourism sector rather than the actual level of countries' competitiveness, taking into account tourist attractiveness. The positive aspect of the WEF methodology is the fact that changes are made considering alterations in the theory of competitiveness, trends on the tourist market consisting in higher importance attributed to soft (qualitative) factors, as well as the increasing interdisciplinary nature of tourism sector. These changes have contributed to a clearer description of the international competitiveness factors in tourism and the transparency of reasoning.

Conclusion

The approaches to understanding the competitiveness of countries and regions are diversified both from the perspective of the essence of the problem and the influencing factors. For this reason, the methodologies applied in its evaluation are different. The article uses the TTCI, which has both advantages and disadvantages. The suggested set of 90 sub-indexes for all significant countries present on the international tourist market should be evaluated positively, however, the structure of factors remains a certain deficiency, as it poorly reflects the specificity of tourism (e.g., the demand aspect is insufficiently reflected). Some reservations can also be expressed with regard to the index construction, which does not take into account the diversified meaning of individual indicators in the development of competitiveness. It should be emphasized that the regularity of issuing reports on the TTCI provides opportunities to monitor changes in tourism competitiveness in individual countries against the background of other countries, also in terms of the distance between the particular research objects within the framework of a given sub-index.

In general terms, however, the methodology shortcomings can present significant constraints for the representativeness of the conducted research and the correctness of the obtained results. Measuring international competitiveness in tourism is not an easy task, but it is well worth undertaking further research and analyses in order to develop a more universal tool for its evaluation.

References

- Bobrica, A., and C. Cristureanu. 2009. "The International Competitiveness of Trade in Tourist Services: Evidence from Romania." In *Advances in Tourism Economics. New Developments*, edited by A. Matias, P. Nijkamp and M. Sarmento, 189–202. Heidelberg New York: Physica Verlag a Springer Company.
- BORDAS, E. 1994. "Competitiveness of Tourist Destinations in Long Distance Markets." *The Tourist Review* 49 (3): 3–9. doi: 10.1108/eb058158.
- Browne, C., A. Di Battista, T. Geiger, and T. Gutknecht. 2015. "The Executive Opinion Survey: the Voice of the Business Community." In *The Global Competitiveness Report* 2015–2016, edited by K. Schwab, 75–86. Geneva: World Economic Forum.
- CROTTI, R., and T. MISRAHI. 2017. "The Travel & Tourism Competitiveness Index: Travel & Tourism as an Enabler of Inclusive and Sustainable Growth." In *The Travel & Tourism Competitiveness Report 2017. Paving the Way for a More Sustainable and Inclusive Future*, edited by R. Crotti and T. Misrahi, 3–50. Geneva: World Economic Forum.
- DUPEYRAS, A., and N. MACCALLUM. 2013. "Indicators for Measuring Competitiveness in Tourism: a Guidance Document." *OECD Tourism Papers* (2013/02): 1–65. doi: 10.1787/5k47t9q2t923-en.
- DWYER, L., and C. Kim. 2003. "Destination Competitiveness: Determinants and Indicators." Current Issues in Tourism 6 (5): 369–414.
- DZIEDZIC, E., and T. SKALSKA. 2014. "Metodologiczne podstawy budowy indeksu konkurencyjności w obszarze turystyki w Polsce." *Ekonomiczne Problemy Turystyki* (1): 129–143.
- Golembski, G. ed. 2002. Metody stymulowania rozwoju turystyki w ujęciu przestrzennym. Poznań: Wydawnictwo AE.
- HALL, M.C. 2007. What Makes a Destination Competitive? Approaches and Issues. Paper read at ATLAS Annual Conference 2007. Destinations Revisited. Perspectives on Developing and Managing Tourist Areas 2007.09.5–8, at Viana do Castelo, Portugal.
- HEATH, E.T. 2003. "Towards a Model to Enhance Destination Competitiveness. A Southern African Perspective." *Journal of Hospitality and Tourism Management* 10 (2): 124–141.
- KOZAK, M., and L. Andreu. eds. 2006. *Progress in Tourism Marketing*. Advances in Tourism Research. Amsterdam-Oxford: Elsevier.
- MAZUREK, M. 2014. "Competitiveness in Tourism—Models of Tourism Competitiveness and Their Applicability. Case Study Austria and Switzerland." *European Journal of Tourism*, *Hospitality and Recreation* (Special Issue): 73–94.
- MIHALIC, T. 2000. "Environmental Management of a Tourist Destination—a Factor of Tourism Competitiveness." Tourism Management 21 (1): 65–78. doi: 10.1016/S0261-5177(99)00096-5.
- NAWROCKA, E.D. 2013. Wizerunek obszaru recepcji turystycznej. Podstawy konceptualizacji i czynniki jego kreowania. Monografie i Opracowania / Uniwersytet Ekonomiczny we Wrocławiu. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego.
- PALATKOVÁ, M., J. ZICHOVÁ, and G. HRUBCOVÁ. 2014. Tourism Competitiveness of the Czech Republic Regions and the Possibility of the Marketing Measures Performance Evaluation Using the BSC Method. Paper read at 12th Global Forum on Tourism Statistics, 2014.05.15–16, at Prague, Czech Republic.
- RITCHIE, J.R.B., and G.I. CROUCH. 2003. The Competitive Destination. A Sustainable Tourism Perspective. Oxon, UK: CABI Pub.
- Stankiewicz, M.J. 2002. Konkurencyjność przedsiębiorstwa. Budowanie konkurencyjności przedsiębiorstwa w warunkach globalizacji. Toruń: TNOiK "Dom Organizatora."
- Vanhove, N. 2011. The Economics of Tourism Destinations. 2nd ed. Elsevier Insights. London: Elsevier.
- ZHANG, J., and C. JENSEN. 2007. "Comparative Advantage Explaining Tourism Flows." Annals of Tourism Research 34 (1): 223–243. doi: 10.1016/j.annals.2006.08.004.
- Żemła, M. 2010. Wartość dla klienta w procesie kształtowania konkurencyjności obszaru recepcji turystycznej. Katowice: Górnośląska Wyższa Szkoła Handlowa im. Wojciecha Korfantego.