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## Tourist Competitiveness of Polish Rural Areas

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**Abstract:**

**Purpose:** The process of diversifying economic activity in rural areas and incorporating new non-agricultural and non-production functions into the rural space is currently one of the key determinants of development in these areas. A comparative assessment of Poland's competitiveness against selected European countries has been made in the study. The main objective was to present the conditions of international tourist competitiveness of rural areas in Poland in comparison to other European areas.

**Design/Methodology/Approach:** An in-depth analysis of Poland's competitiveness as a tourist region against the European countries was carried out taking into consideration individual indicators of the second pillar. The study uses a synthetic tourist competitiveness index and panel regression to demonstrate the determinants of this phenomenon.

**Findings:** On the basis of the conducted research, it has been shown that the natural and landscape value of Poland's agricultural areas is highly assessed on a European scale. Therefore, for many consumers in the European Union, Poland is increasingly seen as an attractive region for tourists. At the same time, the importance of these factors in the demand for tourist places has been demonstrated by distinguishing selected aspects of these conditions. Economic factors affecting internal demand as well as environmental and institutional conditions turned out to be the key ones.

**Practical Implications:** The presented considerations are of great importance for practical reasons. They constitute an indicator which, under certain conditions can influence the increase of tourist competitive attractiveness of rural areas in an international perspective. Therefore, they allow to indicate the proper structure of investments and activities aimed at valuing public goods by both private and public entities.

**Originality/Value:** The development of rural areas in the current conditions requires the development of non-agricultural and non-production functions. The article indicates the importance of individual resources and conditions in the proposed model. Not only was their role emphasized, but mutual relations between the factors considered were determined.

**Keywords:** Rural economics, tourism competitiveness.

**JEL codes:** R1, Z3.

**Paper type:** Research article.

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## **1. Introduction**

The process of diversifying economic activity in rural areas is the result of socio-economic changes taking place in the rural space and the entire economy. It is closely related to the policy of multifunctional and sustainable rural development, and the dominant tourist function (McAreevey and McDonagh, 2011; Fons *et al.*, 2011). In the literature on the subject, the region's competitiveness is defined as the ability to adapt the region to emerging new social, economic and environmental tasks and challenges as well as the ability to create alternative development conditions (opportunities) that allows maintaining or strengthening the region's position both in the country and abroad (Alavi and Yasin, 2000; Kozak and Rimmington, 1999; Cracolici and Nijkamp, 2008; Batey and Friedrich, 2013).

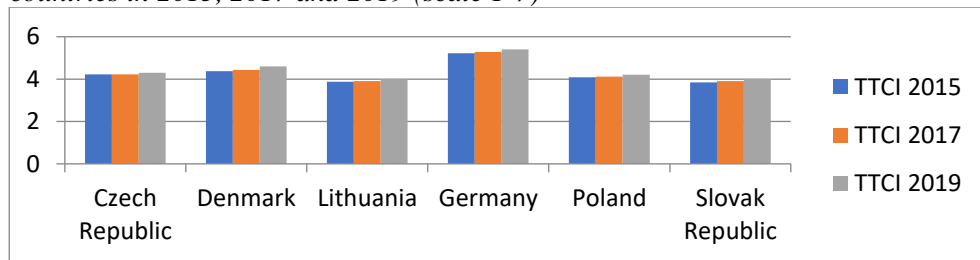
Competitiveness is currently one of the key economic issues considered in various dimensions including micro-, meso- and macroeconomic terms. Achieving better results compared to competitors is a condition for the sustainable development of both enterprises and sectors, regions or entire countries on a competitive market. Competitiveness is a complex issue that is difficult to clearly define. The complexity of this phenomenon is even deeper in the face of contemporary challenges related to globalization processes of the world economy and implementation of the idea of sustainable development (Klamut, 2008; Peter *et al.*, 2008; Kułyk, 2013).

A tourist destination (e.g. city, region or site) is no longer seen as a set of distinct natural, cultural, artistic or environmental resources, but as an overall appealing product available in a certain area: a complex and integrated portfolio of services offered by a destination that supplies a holiday experience which meets the needs of the tourist. A tourist destination thus produces a compound package of tourist services based on its indigenous supply potential. This may also create fierce competition between traditional destinations seeking to maintain and expand their market share and new destinations that are trying to acquire a significant and growing market share. The success of tourist destinations thus depends on their regional tourism competitiveness in terms of the attractiveness characteristics (or quality profile) that makes up the tourist strength of a certain area (Scott, 1985; Agrawal, 1997; Butler, 1980; Hovinen, 2002; Betta and Amenta, 2013; Brelik and Kułyk, 2014).

Competition between regions is now becoming more sophisticated. The areas that have chosen new management methods and are able to bring out their potential are winning. The subject of competition between regions may attract tourists, and competitiveness in this case is based on attractive natural resources and elements of cultural heritage, as well as their appropriate display and use. The role that the region can play in the Polish or European economy depends on its competitive position. Competitiveness potential determines the type, size and durability of a competitive advantage. A competitive advantage is the basis for formulating such a market offer that will allow achieving a specific competitive position.

The specificity of the tourism economy and the assessment of the competitiveness of tourist regions is facilitated by the Travel & Tourism Competitiveness Index proposed by the World Economic Forum (TTCI – Travel & Tourism Competitiveness Index). The design of the TTCI indicator has three levels. The first level consists of four sub-indexes: tourism environment, tourism policy, infrastructure, natural and cultural resources. Each sub-index includes so-called pillars forming the next level of TTCI indicator construction. In the version of the TTCI index from 2015, 2017 and 2019, a total of 14 pillars are identified. In turn, each pillar consists of several partial indicators. In total, 90 indicators were used in the TTCI index. The value of the TTCI index from 2019 for Poland was 4,2 (on a scale of 1-7), which gives the 27th place in the ranking of European countries (Figure 1).

**Figure 1.** TTCI indicators of tourist competitiveness of selected European countries in 2015, 2017 and 2019 (scale 1-7)



**Source:** Own study based on: *The Travel... [2015, 2017, 2019]*.

That is why many consumers in the European Union see our country as an attractive region. Thus, the importance of the tourism economy is growing, which is a very important source of income (Cohen *et al.*, 2014). The Travel and Tourism Competitiveness Index (TTCI) proposed by the World Economic Forum includes factors determining the level of competitiveness of a particular region. Thanks to it, we are able to identify and compare the tourism competitiveness of countries, assess the impact of individual factors on this competitiveness and identify the strengths and weaknesses of tourist regions. Taking into consideration the changes taking place in tourism conditions with the help of a synthetic Travel and Tourist Competitiveness Index, it is possible to indicate how they influenced the development of tourism in general and agritourism in particular (Table 1).

**Table 1.** Agritourism in Poland in 2010-2017

Item	Specification	2010	2011	2012	2013	2014	2015	2016	2017	2017/2010 dynamics
1	Total number of agritourism accommodations	346	582	683	800	804	811	802	746	215.61
2	Number of year-round agritourism accommodations	262	412	479	539	535	539	538	516	196.95

3	Total number of beds in agritourism accommodations	5 672	9 281	11 124	12 771	12 810	13 351	13 526	12 837	226,32
4	Number of beds in agritourism accommodations all year round	4 398	6 726	7 829	8 880	8 580	8 954	9 214	8 873	201,75
5	Number of tourists in agritourism accommodations (in thousands)	62 902	94 119	109 560	108 140	111 105	127 099	138 777	140 437	223,26
6	Number of nights spent in agritourism accommodations (in thousands)	241 391	339 111	392 182	370 552	384 763	452 071	507 762	537 024	222,47
7	Total number of tourist facilities	7 206	7 039	9 483	9 775	9 885	10 024	10 509	10 681	148,22
8	Year-round tourist facilities	5 323	5 236	6 629	6 661	6 770	6 845	7 214	7 310	137,33
9	Total number of beds	610 111	606 246	675 433	679 445	694 023	710 274	749 191	773 957	126,86
10	Number of beds in all-year facilities	408 924	413 929	456 307	464 652	478 979	490 023	521 938	532 598	130,24
11	Number of tourists (in thousands)	20 461 496	21 476 616	22 635 388	23 401 138	25 083 978	26 942 056	30 108 308	31 989 344	156,34
12	Number of nights spent (in thousands)	55 794 467	57 148 253	62 014 890	62 959 452	66 579 589	71 234 421	79 393 860	83 880 930	150,34

Source: Own study based on: <https://bdل.stat.gov.pl/BDL/dane> access on 6.04.2018.

Undoubtedly, in the period under consideration the tourist accommodation base significantly expanded (an increase was recorded in all highlighted sizes). First of all, the number of tourist facilities and, to a lesser extent, the number of beds increased. Thus, the average size of newly constructed objects was lower than existing ones. However, what is particularly important, both the number of tourists and the number of nights spent increased faster. This indicates an improvement in competitiveness and proper orientation of investments in this segment aimed at expanding the tourist base.

As a consequence, the capacity utilization rate increased from 34,27% in 2010 to 38,1% in 2016. An even faster improvement occurred in the case of agritourism accommodations. Although they constituted and still constitute a relatively small part of the tourist offer<sup>3</sup>, it is also worth noting that this segment showed very rapid development. The fastest increase in the number of beds in this type of facilities was very strongly associated with both the increase in the number of tourists and the number of nights spent in agritourism facilities (Table 1). Thus, it was stimulated by

<sup>3</sup>Bed places in agritourism accommodations in 2010 constituted only 0,93% of the total number of beds in Poland, and their share in 2017 increased to 1,66% and still did not play a significant role. It should also be added that the presented calculations concern facilities with ten or more beds, which in the case of agritourism facilities (although not only) does not include a significant part of very small entities.

the demand side. It should be noted, however, that in the last two years (2016-2017), despite the increase in the number of tourists as a whole and those using agritourism facilities, there was a slight reduction in the tourist offer, especially in relation to the number of this type of accommodation. At the same time, the utilization rate of bed places in these facilities was relatively low and in 2016 amounted to only 13,7%. This demonstrates the weakness of this segment of tourism in Poland and the creation of development barriers.

## 2. Material and Methods

The study covered six countries: the Czech Republic, Denmark, Lithuania, Germany, Poland and Slovakia, located in one climate zone, being EU countries and neighbouring each other. Variables were distinguished based on the research of other authors and own studies (Lewis, 1998; Reardon *et al.*, 2000; Holzner, 2011; Dritsakis, 2012; Massidda and Etzo, 2012; Snieška *et al.*, 2014).

In the model we assumed: the number of beds in tourist establishments in rural areas in relation to the total number of inhabitants as the dependent variable (*Naberbed*), GDP per capita (*GDP per capita*), farm income (*IndicatorA*) which is the index of the real income of factors in agriculture per annual work unit, greenhouse gas emission in rural areas (*Greenhousegasemission*), unemployment rate in the economy (*Totalunemploymentrate*), uneven distribution of income across the entire economy (*Incomedistribution*) and total taxes on environmental protection measured as a percentage of their share in GDP (*Environmentaltaxrevenues*). All variables are in logarithmic form. The research model takes the following form:

$$l_{Naberbed} = const + l_{GDP\ per\ capita} + l_{IndicatorA} + l_{Greenhousegasemission} + l_{Totalunemploymentrate} + l_{Incomedistribution} + l_{Environmentaltaxrevenues} + u_i + e_{it}, \quad (1)$$

where:

*ui* - individual effect,

*eit* - pure random error.

The research period covered the years 2012-2018. In order to examine the impact of selected economic, environmental and social factors on the development of tourism in rural areas in the surveyed countries, the panel regression method was chosen. The selection was made after an OLS regression analysis involving 6 countries, using a total of 42 observations. The verification was based on the Breuch-Pagan test. The null hypothesis of the test indicates that the error variance in the unit = 0. Asymptotic test statistics: Chi-square (1) = 14,8603 with p-value = 0,0001158. In this case, the low p-value means rejecting the hypothesis that the OLS model is correct in favour of the alternative hypothesis that the panel model is correct.

The next stage of the study was to determine whether a model with permanent or random effects is appropriate. For this purpose, the Hausman test was carried out.

Hausman test - null hypothesis: UMNK estimator (GLS) is consistent. Asymptotic test statistics: Chi-square (5) = 4,75807 with p-value = 0,446114. Since p-value is higher than the standard 5% level in statistics, the model with random effects turned out to be the best. Nerlove transformation was used to estimate the model. Six cross-sectional data units were included for the time series length = 7.

All variables were in logarithmic form to determine the elasticity of the independent variables' impact on the dependent variable. Spatial changes of the analysed phenomenon were also examined by analysing "between" and "within" variances. The "between" variance was 0,461491, while the "within" variance was 0,000435885. A smaller "within" value suggests that the model better explains the differences between countries than within them, which confirms the validity of the adopted model solution.

### 3. Results

In the developed model, all variables turned out to be statistically significant at the level of 1% to 10%. Increasing the number of beds in tourist facilities in rural areas in relation to the total number of inhabitants was treated as improving the competitiveness of this type of tourism. It means an increase in demand for this type of tourist units compared to other activities. Among the analysed explanatory variables, only the variable characterizing farm income (2) showed a negative impact on the development of the tourist function in rural areas and greenhouse gas emission.

Thus, the improvement of income obtained from agricultural production had an adverse effect on the creation of beds in the areas under consideration. It improved the profitability of the productive function in relation to the tourist function. Moreover, increasing greenhouse gas emission also had a negative impact on the development of the tourist function, as it meant deterioration of environmental values on the pattern of development unfavourable for the creation of places in tourist accommodation in rural areas, at the same time shaping unfavourable conditions for the development of tourism. Other variables had a positive impact (Tables 2 and 3).

**Table 2.** Values of the RM panel model for bed places in rural areas

Variable	Coefficient	Standard error	z	P value	S
const	-11,4146	2,65646	-4,297	<0,0001	***
<i>l</i> _GDP per capita (1)	1,240362	0,240488	5,158	<0,0001	***
<i>l</i> _IndicatorA (2)	-0,066512	0,024496	-2,715	0,0066	***
<i>l</i> _Greenhousegasemission (3)	-0,424687	0,153935	-2,759	0,0058	***
<i>l</i> _Totalunemploymentrate (4)	0,187812	0,048284	3,890	0,0001	***
<i>l</i> _Incomedistribution (5)	0,129165	0,072059	1,792	0,0731	*

<i>l_Environmentaltaxrevenues (6)</i>	0,252150	0,106029	2,378	0,0174	**
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*Source:* Own calculations based on: <https://ec.europa.eu/eurostat>.

**Table 3.** Model statistics

<i>Average value of dependent variable</i>	3,010777	<i>Standard deviation of dependent variable</i>	0,656046
<i>Sum of squared residues</i>	14,72293	<i>Residual standard error</i>	0,639508

*Source:* Own calculations.

A factor supporting the development of the tourist function in rural areas was the increase in tax revenues for environmental protection, which means increasing care for the environment and moving towards a resource-efficient economy. Therefore, it favours pro-environmental investments and is a manifestation of policy changes in the area under consideration. Also, the improvement of living conditions (GDP per capita) while reducing the differences in income distribution (Incomedistribution) were conducive to increasing the number of beds. It resulted from the increasing purchasing power of the inhabitants.

Thus, internal demand for tourist services and its conditions were key. On the other hand, the increase in the level of unemployment was also a factor contributing to the increase in the number of beds in rural areas, but here the impact was related to the supply side. In the situation of deteriorating conditions on the labour market, the barrier in migration of inhabitants from rural areas to cities increased and other forms of obtaining income were searched, often associated with support for creating jobs in rural areas through the transfer of public funds (Panyik *et al.*, 2011).

#### 4. Conclusions

The contemporary environment forces continuous and constant changes of all market entities - institutions, enterprises and, above all, regions. Their flexible adaptation to the existing conditions of competitiveness becomes a necessity and is determined by the possession and skilful use of various material resources, in particular intangible resources. Cities and regions are also increasingly competing for tourists. Joining the rivalry for tourists is conditioned by a wide group of economic, environmental and social factors. Tourist regions, wanting to exist or consolidate their market position, must, however, take care of shaping individual aspects that determine that they will be competitive in relation to other areas.

The presented level of competitiveness and its determinants in the area of Poland's international competitiveness in the aspect of tourism indicate an improvement in competitiveness, especially against the Central and Eastern Europe. Strengths include cultural resources, port and land transport infrastructure, as well as price competitiveness. These elements constitute a competitive advantage in relation to the countries of Central and Eastern Europe and in international terms (compared

to the average in the ranking). However, in relation to the group of countries mentioned above, natural and human resources are among the assets.

In the light of the presented conditions, there is a clear increase in the demand for tourist services both in total (for all types of tourism) and agritourism. The development of tourism in rural areas is strongly associated with economic conditions, in particular the improvement of income conditions (GDP per capita), but above all the economic and environmental policy conducive to improving the environment, which is a synthetic manifestation of reducing greenhouse gas emission and tax policy shaping such behaviour among business entities and households.

The development of the tourist function in rural areas is strongly dependent on domestic demand and its conditions, in particular economic conditions. The second group consists of institutional factors affecting the supply side, and above all environmental values and the competitiveness of the tourist function in relation to other activities in rural areas.

### **References:**

- Agrawal, S. 1997. The resort cycle and seaside tourism: An assessment of its application and validity. *Tourism Management*, 22(2), 65-73.
- Alavi, J. and Yasin, M.M. 2000. Iran's tourism potential, and market realities: an empirical approach to closing the gap. *Journal of Travel & Tourism Marketing*, 9(3), 1-22.
- Batey, P.W.J. and Friedrich, P. 2013. *Regional Competition*, Springer-Verlag, Heideberg.
- Betta, P.D. and Amenta, C. 2013. Environmental quality and entrepreneurial activity in rural tourism in Italy. *Journal of Management and Sustainability*, 3(1), 33-44.
- Brelík, A. and Kulyk, P. 2014. The evaluation of the attractiveness of the tourist commune as conditioning of the development of agricultural tourism farms. *Tourism Management*, 18(1), 504-515.
- Butler, R.W. 1980. The concept of a tourist area cycle of evolution: implications for management of resources. *Canadian Geographer*, 24, 5-12.
- Cohen, S.A., Prayag, G. and Moital, M. 2014. Consumer behaviour in tourism: Concepts, influences and opportunities. *Current Issues in Tourism*, 17(10), 872-909.
- Cracolici, M.F. and Nijkamp, P. 2009. The Attractiveness and Competitiveness of Tourist Destinations: A Study of Southern Italian Regions. *Tourism Management*, 30(3), 336-344.
- Dritsakis, N. 2012. Tourism Development and Economic Growth in Seven Mediterranean Countries: A Panel Data Approach. *Tourism Economics*, 18(4), 801-816.
- Fons, M.V.S., Fierro, J.A.M. and Patiño, M.M. 2011. Rural tourism: A sustainable alternative. *Applied Energy*, 88, 551-557.
- Holzner, M. 2011. Tourism and Economic Development: the Beach Disease? *Tourism Management*, 32(4), 922-933.
- Hovinen, G.R. 2002. Revisiting the destination lifecycle model. *Annals of Tourism Research*, 29(1), 209-230.



- Klamut, M. 2008. Konkurencyjność gospodarki regionalnej i lokalnej. W: Strzelecki Z. (red.), *Gospodarka regionalna i lokalna*, PWN, Warszawa.
- Kozak, M. and Rimmington, M. 1999. Measuring tourist destination competitiveness: conceptual considerations and empirical findings. *International Journal of Hospitality Management*, 18(3), 273-283.
- Kułyk, P. 2014. Finansowe wsparcie rolnictwa w krajach o różnym poziomie rozwoju gospodarczego, Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań.
- Lewis, J.B. 1998. A Rural Tourism Development Model. *Tourism Analysis*, 2(2), 91-105.
- Massidda, C. and Etzo, I. 2012. The determinants of Italian domestic tourism: A panel data analysis. *Tourism Management*, 33(3), 603-610.
- McAreavey, R. and McDonagh, J. 2011. Sustainable rural tourism: Lessons for rural development. *Sociologia Ruralis*, 51(2), 175-194.
- Panyik, E., Costa, C. and Rátz, T. 2011. Implementing integrated rural tourism: An event-based approach. *Tourism Management*, 32(6), 1352-1363.
- Reardon, T., Taylor, J.E., Stamolis, K., Lanjouw, P. and Balisacan, A. 2000. Effects of nonfarm employment on rural income inequality in developing countries: An investment perspective. *Journal of Agricultural Economics*, 51(2), 266-288.
- Rogers, P.P., Jalal, K.F. and Boyd, J.A. 2008. *An Introduction to Sustainable Development*. London: Earthscan.
- Scott, B.R. 1985. *U.S. Competitiveness: Concepts, Performance and Implications*. W: *Competitiveness in the World Economy*. Harvard Business School Press, Boston, Massachusetts.
- Snieška, V., Barkauskienė, K. and Barkauskas, V. 2014. The Impact of Economic Factors on the Development of Rural Tourism: Lithuanian Case. *Procedia - Social and Behavioral Sciences*, 156, 280-285.
- The Travel & Tourism Competitiveness Report. 2015. *Growth through Shocks*. World Economic Forum, Geneva.
- The Travel & Tourism Competitiveness Report. 2017. *Growth through Shocks*. World Economic Forum, Geneva.