

Coopetition of European Union Countries within Destination Management

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Received: 20 March 2022. **Revision received:** 30 May 2022. **Accepted:** 21 June 2022

Abstract

Coopetition has been the issue of various studies in different fields, but there is a research gap in examining coopetition within the tourism sector and destination management. This paper aims to determine whether there are internally homogeneous and externally heterogeneous groups of European Union countries regarding indicators of natural and cultural resources of the Travel and Tourism Competitiveness Index (TTCI), and thus subsequently identify the importance and possibilities of competition among countries within the tourism sector. Multidimensional scaling and cluster analysis are used to verify the research hypothesis, along with ten indicators of the fourth sub-index (Natural and Cultural Resources) of TTCI. The results of the cluster analysis led to a six-group solution. Italy, Spain, and France have the best position in terms of tourism competitiveness. The results show space for competition in the international tourism market. Even though EU countries are competitors at a global level, their cooperation could be beneficial to tourism development. The findings of this study can be helpful in planning and strategy development for tourism policymakers and destination management organizations but can also be used to develop various marketing strategies. Furthermore, cooperation between destinations will support the need for strategic flexibility in the tourism sector, as the diversity of tourism attractions will increase.

Key Words: tourism, competition, cooperation, competitiveness, European Union, destination management.

JEL Classification: Z38, L83, Q26.

Reference: Vasanicova, P., Jencova, S., Gavurova, B. & Bacik, R. (2022). Coopetition of European Union Countries within Destination Management. *Journal of Tourism and Services*, 24(13), 71-89. 10.29036/jots.v13i24.368

1. Introduction

Increasing global interconnectedness and turbulent economic or social changes emphasize the importance of competition, as well as the importance of competitiveness. Whether we are talking about national, industrial, or corporate competitiveness, competitiveness is always subject to change over time, which affects how the whole environment to which the competitiveness relates develops. Competitiveness also stimulates innovative activities that provide competitive advantages (Mura, 2020; Hudáková et al., 2019; Ključnikov et al., 2021). Therefore, discontinuous innovations cause firms to lose

these competitive advantages (Ik., & Azeez, 2020) and to fail in development (Kolková, & Ključnikov, 2021) and export (Ključnikov et al., 2022; Civelek & Krajčík, 2022).

These economic and social changes with competition have also caused a snowballing impact in the development sectors, especially in the tourism industry (Pimonenko et al., 2021). Tourism is often seen as an important engine of economic growth and development in countries, helping to develop the economic well-being of local people. This perspective justifies the allocation of public resources to attract more visitors to destinations by increasing their competitive position concerning other destinations. The importance of the destination's competitiveness in attracting visitors and its determinants are widely recognized (Webster & Ivanov, 2014). Buhalis (2000) and da Silva Añaña et al. (2018) state that a destination can be a perceptual concept that visitors can interpret subjectively depending on their travel itinerary, cultural background, the purpose of visit, or previous experience. In this paper, we deal with the tourism competitiveness of countries; it means the country is considered as a tourism destination.

With the onset of the COVID-19 pandemic, it is even more apparent that the tourism sector is operating in an unstable environment, and the presence of various crises has serious social and economic consequences in this area (Vasanicova et al., 2021; Charala, Chochia, & Lashkhi, 2021). Competitiveness is a major challenge for the tourism sector (Alberti & Giusti, 2012), and therefore, tourism competitiveness management has become a key focus of policymakers and research of strategic management.

The European tourism sector is one of the largest in the world (Ferreira & Castro, 2020) and plays an important role in the development of some regions. According to Assaf & Josaissen (2012), the rapid growth of the tourism sector came at the same time as growing diversification and competition between destinations (especially neighbouring ones). Therefore, we believe that the diversity in the competitiveness of European countries justifies the need for research to identify the attributes that are crucial for tourism competitiveness. In addition, there is a space for cooperation on the international market. Coopetition (i.e., cooperation between competitors) among countries as tourism destinations can help expand the visitor experience because, from a global perspective, the range of services and tourist attractions will expand.

Destinations at the global level can be characterized by geographical position, which includes many resources for tourism development. The question is whether it is possible to expand relations between these destinations to contribute to the overall quality of the experience that tourists perceive while meeting their expectations and needs. Would it make sense to create joint marketing programs and mutual destination management policies for certain groups of countries based on some common sources and competitiveness indicators? We will demonstrate the answer to this question on a sample of 27 European Union (EU) countries. As part of the research carried out in this paper, we will try to identify groups of European Union countries based on Travel & Tourism Competitiveness Index (TTCI) indicators that could cooperate in destination management.

This paper aims to find out whether there are internally homogeneous and externally heterogeneous groups of EU countries regarding indicators of natural and cultural resources of TTCI, and thus subsequently identify the importance and possibilities of coopetition among countries within the tourism sector. Based on this aim, the following research hypothesis is formulated:

Hypothesis: We assume there are internally homogeneous and externally heterogeneous groups of EU countries regarding the indicators of natural and cultural resources.

2. Literature review

According to Dupreyras & MacCallum (2013), country's tourism competitiveness lies in the ability of tourist destinations and tourist attractions to optimize its attractiveness for residents and non-residents, in providing attractive, high-quality, and innovative services for visitors, gaining domestic and

foreign markets shares, and ensuring that available resources supporting tourism are used efficiently and sustainably.

The destination is competitive if it can attract and satisfy potential tourists, which is determined by factors specific to tourism, but also by a wider range of factors that affect tourism service providers. To achieve the right alignment between tourism resources and management strategies, tourism policymakers and stakeholders need to understand which the weakest and strongest feature is influencing a country's position among competitors and what changes are taking place over time (Ekin & Akbulut, 2015; He et al. 2021).

Competitive advantages give the country better opportunities to sell tourism services on international markets while allowing them to offer these services at a lower price compared to competitors. When countries (tourism destinations) specialize according to their competitive advantages, they can successfully compete in international markets, increase profits, support job creation (Algieri et al., 2018; Mura, 2021; Jurásek et al. 2020) so, human resources (Urbancová et al., 2020).

Current tourism policies require a proper understanding of the tourism competitiveness determinants (Dupeyras & Maccallum, 2013; Fernando, 2020), which should be the focus of studies as well as destination management policymakers. It follows only destinations that analyse and understand the competitive environment can gain a better position and thus strengthen their status. Understanding the key determinants of tourism competitiveness from a global perspective has a crucial impact in creating a country's brand to maintain its growth and vitality (Hassan & Mahrous, 2019).

2.1 Natural and Cultural Resources in Tourism Competitiveness

As is stated in Vasanicova et al. (2021), although there are many indicators of the tourism destination competitiveness, several studies have shown that cultural and natural resources are among the most important indicators of destination attractiveness (Crouch & Ritchie, 1999; Buhalis, 2000; Lane, 2009; Assaf & Josiassen, 2012; Dupeyras & Maccallum, 2013). These factors are part of almost all models measuring destination competitiveness (e.g., Ritchie & Crouch 2003; Dweyer & Kim 2003; Crotti & Misrahi 2015; Calderwood & Soshkin 2019) because the most important attractions are extremely dependent on the availability of the destination's natural and cultural resources (Thong et al., 2020). The right indicators and models of the destination's natural and cultural resources can show how important these resources are in determining the tourism destination's competitiveness and how the development of these resources can improve the destination's competitive position.

According to Algieri et al. (2018), if a country has natural and cultural resources, its competitive advantage in tourism services increases. According to factor proportions theory, a country with a favourable natural and cultural environment should specialize in the tourism sector. Empirical studies by Algieri et al. (2018) suggest that activities closely linked to the natural and cultural environment should be encouraged and promoted in such countries to strengthen their competitive advantages and attract more visitors. At the same time, the biggest challenge for the economy based on the tourism sector is to maintain and preserve natural and cultural resources. This is important from an ecological, managerial, and economic point of view, as the tourism service competitiveness can be strengthened by ensuring the environment attractiveness and sustainable resource management. This fact is also confirmed by recent studies by Radovanov et al. (2020), Ali et al. (2021), Streimikiene et al. (2021) or Pereira-Moliner et al. (2021).

The positive, statistically significant impact of natural and cultural resources on the tourism destination's competitiveness was found by Lo et al. (2017). Algieri et al. (2018) came to the same conclusion, as they proved that natural, cultural, and historical monuments are statistically significant in determining tourism competitiveness. Destinations with quality and preserved natural and cultural resources can attract visitors from new markets while ensuring positive experiences, reminiscences, and impressions among visitors (Thong et al., 2020) because natural and cultural resources, such as flora,

fauna, nature, national parks, historical and archaeological sites, artistic and architectural elements, traditional art, cultural heritage, etc., give potential visitors a reason to come to the destination (Goffi, 2013; Pietrzak & Balcerzak, 2021). The destination having mentioned resources also has a significant economic and social impact, because it generates cash flow for all types of services, generates revenue for the state, municipalities, but also businesses, creates new jobs, improves living standards, develops small municipalities and rural communities, and, ancient crafts, customs and traditions are restored and preserved (Rabe et al. 2021; Poliak et al. 2021; Skalický et al. 2021). Among the positive environmental impacts, we can highlight environmental awareness, interest in natural sites, and protection of local sites (Nematpour & Faraji, 2019; Taušová et al. 2021). A competitive destination should be able to protect its cultural and natural resources and provide long-term prosperity to residents (Nadalipour et al., 2019; Razminienė et al. 2021).

Presenting cultural heritage and raising awareness of the destination increase tourism demand and tourism revenue (Yang et al., 2019), as more unique and diverse cultural experiences make the destination more attractive to tourists (Manrai et al., 2018) and thus more competitive. Destinations with an active and remarkable cultural identity, giving access to unique experiences through local culture, have a competitive advantage and a basis for creating publicity to attract more visitors, increase their interest and consequently increase their spending (Dupeyras & Maccallum, 2013). Thus, such destinations ultimately have significant economic advantages.

The connection between cultural and natural resources can be found in many studies. Wei et al. (2020) examined cultural experiences in natural tourism sites. Ataberk & Baykal (2011) dealt with the use of natural and cultural resources in a coastal city in Turkey. Esfehani & Albrecht (2018) discussed the roles of the intangible cultural heritage in tourism in protected natural areas. Del Río-Rama et al. (2020) provided a comprehensive literature review on the tourism natural and cultural resources in island destinations. Orellana et al. (2012) studied the patterns of visitors' movement in natural recreational areas and found that natural and cultural leisure activities are the main attractions in which visitors spend their time.

The results of a study by Joshi et al. (2017) showed that natural and cultural resources such as the TTCI pillars have a statistically significant impact on international tourism revenues. According to these authors, it is, therefore, justified to invest in the protection of nature and cultural resources. Many tourists are looking for experiences in a unique natural or cultural environment, so protecting these resources can help maintain the authenticity and attractiveness of destinations.

To maintain the country's competitive position in the tourism sector, it needs to develop integrated activities and products, which usually range from nature education, culture, heritage, history to outdoor tourism activities, and sports, or wildlife observation. We believe that the lack of attention paid to the importance of cultural and natural resources in determining the country's tourism competitiveness can significantly distort destination management strategies.

2.2 Coopetition in Destination Management

The concept of cooperation and parallel competition is appearing more and more frequently in the current literature (e.g., Nguyen et al., 2022; Gernsheimer et al., 2021; Kelić et al., 2020; Fong et al., 2018; Wang & Krakover, 2008). This activity is defined by the term coopetition or co-opetition, which originated from two words, namely cooperation and competition. It is a new way of doing business in which there is legal cooperation between competitors. The coopetition is a behaviour that creates a networked relationship in which there is both cooperation and competition. As this relationship occurs in a network of companies or in the economic sector and is managed as a continuous process, the result is a system (Chim-Miki & Batista-Canino, 2017b).

Already in 1995, the authors Edgell & Haenisch (1995) presented in their publication entitled *Coopetition: Global Tourism beyond the Millennium* that coopetition, as a process and attitude, should

be the main idea within tourism to become tourism sector a focal sector so as stated in many economic forecasts (Chim-Miki & Batista-Canino, 2017b). Bengtsson & Kock (2014) stated that cooperation is a positive strategy that brings opportunities and can contribute to the development of tourism destinations.

The main rationale for cooperating with competitors is to achieve a lasting competitive advantage by linking resources or abilities to share knowledge about tourism in common locations and to jointly initiate activities and create resources to achieve agreed goals. In terms of network theories, the main argument is the creation of a cooperation network between selected actors (Fong et al., 2018). There is empirical evidence that different organizations engage in collaboration through the interconnection of different tourism actors, including competitors, suppliers, customers in supply chains and networks (Marcoz et al., 2016). However, in cooperation, stakeholders need to develop common rules, standards, and structures that they will follow together to avoid problems caused by the different basic philosophies of stakeholders (Wang, 2008). It is important to note that if a tourist destination seeks to improve its ability to attract international tourists, the cooperation network should include both local and national companies (Chim-Miki & Batista-Canino, 2017b).

Individual countries are usually considered to be separate tourism destinations that compete. However, there is the possibility of connecting two or more countries and creating a major tourist destination to increase international success. The main motivation of countries for tourism development may differ depending on the economic, strategic, social, and legal goals, which are given by the environment and the overall functioning of a particular country. Cooperation can help to overcome various economic, technological, and other changes resulting from future trends and existing, identifiable determinants of tourism development. Chim-Miki & Batista-Canino (2018) showed that cooperation of tourism destination is determined by co-location, associationism, competition, cooperation, strategic management, co-entrepreneurship, and co-production.

An example of a planned cooperation network is the destination of Iguassu in southern Brazil, which falls under three border areas, namely Brazil, Argentina, and Paraguay. These are competing countries in terms of attracting international tourists. However, they created the PoloIguassu Institute, which brings together companies and institutions from all three countries to develop this destination. The basic principle of this international network is cooperation, the implementation of joint marketing activities, social inclusion programs, training to improve tourism infrastructure, and, among other things, the pursuit of joint solutions to local problems (Chim-Miki & Batista-Canino 2017b). There is also a well-known cooperation project called Shrines of Europe, which represents cooperation between five cities that are considered shrines of Europe. These are the cities of Lourdes (France), Fatima (Portugal), Czestochowa (Poland), Loreto (Italy), Mariazell (Austria), and Altötting (Germany) (Stefko & Nowak 2014). Another example is the cooperation of the Visegrad Group countries under the motto European Quartet - One Melody. In this way, a strong regional brand has been created, which allows countries to offer more efficient and cheaper services. Thanks to their cooperation, it is possible to create professional management, which forms space for better and professional solutions to various problems, while the advantage is also a larger marketing budget.

Cooperation makes it possible to strengthen the collective power of the tourism destinations and strengthen the market position within the cooperation group. It is especially true if these countries dominate the global market (Luo, 2007).

3. Methods

3.1 Data

Due to the economic comparison of the tourism competitiveness, since 2007, the publication The Travel and Tourism Competitiveness Report has been published by the World Economic Forum

(Blanke & Chiesa 2007). Based on the statistical database and expert evaluations, the position of the countries in terms of tourism competitiveness is expressed in the form of the TTCI. Since 2015, the top TTCI has consisted of 4 sub-indexes (i.e., Enabling Environment, Travel and Tourism Policy and Enabling Conditions, Infrastructure, Natural and Cultural Resources). These are composed of several pillars, of which there are a total of 14, and those of the indicators, of which there are 90 in the given period.

This paper contributes to the literature on the importance of natural and cultural attractions in the tourism sector, and therefore, we will use the indicators of the 13th (Natural Resources) and 14th pillar (Cultural Resources and Business Travel) of TTCI. The individual indicators forming the mentioned pillars, the source (in the first bracket) from which the data were obtained to the TTCI, and the code of indicator (in the second bracket) are:

- Number of World Heritage natural sites (UNESCO World Heritage List) (NR1),
- Total known species (The International Union for Conservation of Nature, Red List Threatened Species) (NR2),
- Total protected areas (United Nations Statistics Division) (NR3),
- Natural tourism digital demand (Bloom Consulting based on Country Brand Ranking, Tourism Edition) (NR4),
- Attractiveness of natural assets (World Economic Forum, Executive Opinion Survey) (NR5),
- Number of World Heritage cultural sites (UNESCO World Heritage List) (CR1),
- Oral and intangible cultural heritage expressions (UNESCO World Heritage List) (CR2),
- Number of large sports stadiums (calculation based on Worldstadiums.com) (CR3),
- Number of international association meetings (The International Congress and Convention Association) (CR4),
- Cultural and entertainment tourism digital demand (Bloom Consulting based on Country Brand Ranking, Tourism Edition) (CR5).

We consider the values of indicators for 2015, 2017 and 2019.

3.2 Methodology

In this paper, multidimensional scaling and cluster analysis through the Stata statistical program are used to verify the research hypothesis.

Multidimensional scaling is used to find meaningful dimensions that make it possible to explain observed distances (so-called dissimilarities) or similarities between objects. The result of multidimensional scaling is the display of observed relationships between objects in reduced space ((in this paper, it is a two-dimensional space). In general, we distinguish between classical multidimensional scaling (Principal Coordinate Analysis) and Nonmetric Multidimensional Scaling (NMDS). The disadvantage of Principal Coordinate Analysis is that the main coordinates cannot be easily interpreted using the original variables (Haruštiaková et al., 2012), and therefore, we will use NMDS to verify the hypothesis. The advantage is that if there is enough information left to place each object with respect to several other objects, then the NMDS can work with a higher number of missing values in the association matrix. Another advantage is its robustness to outliers (Haruštiaková et al., 2012). To determine the quality of the NMDS model, we will use a stress function (or loss function), which can take values from 0 to 1, while the lower the value, the better the result (Haruštiaková et al., 2012). The specific values of the stress function and the corresponding quality of the model (according to Kruskal, 1964) are given in Table 1.

Table 1. Quality of NMDS model

Loss function	Goodness of fit
$\langle 0;0.025 \rangle$	Perfect
$(0.025;0.05)$	Excellent
$(0.05;0.1)$	Good
$(0.1;0.2)$	Fair
$(0.2;1)$	Poor

Source: own processing according to Kruskal (1964)

In this paper, the NMDS is used only for the preparation of materials for cluster analysis.

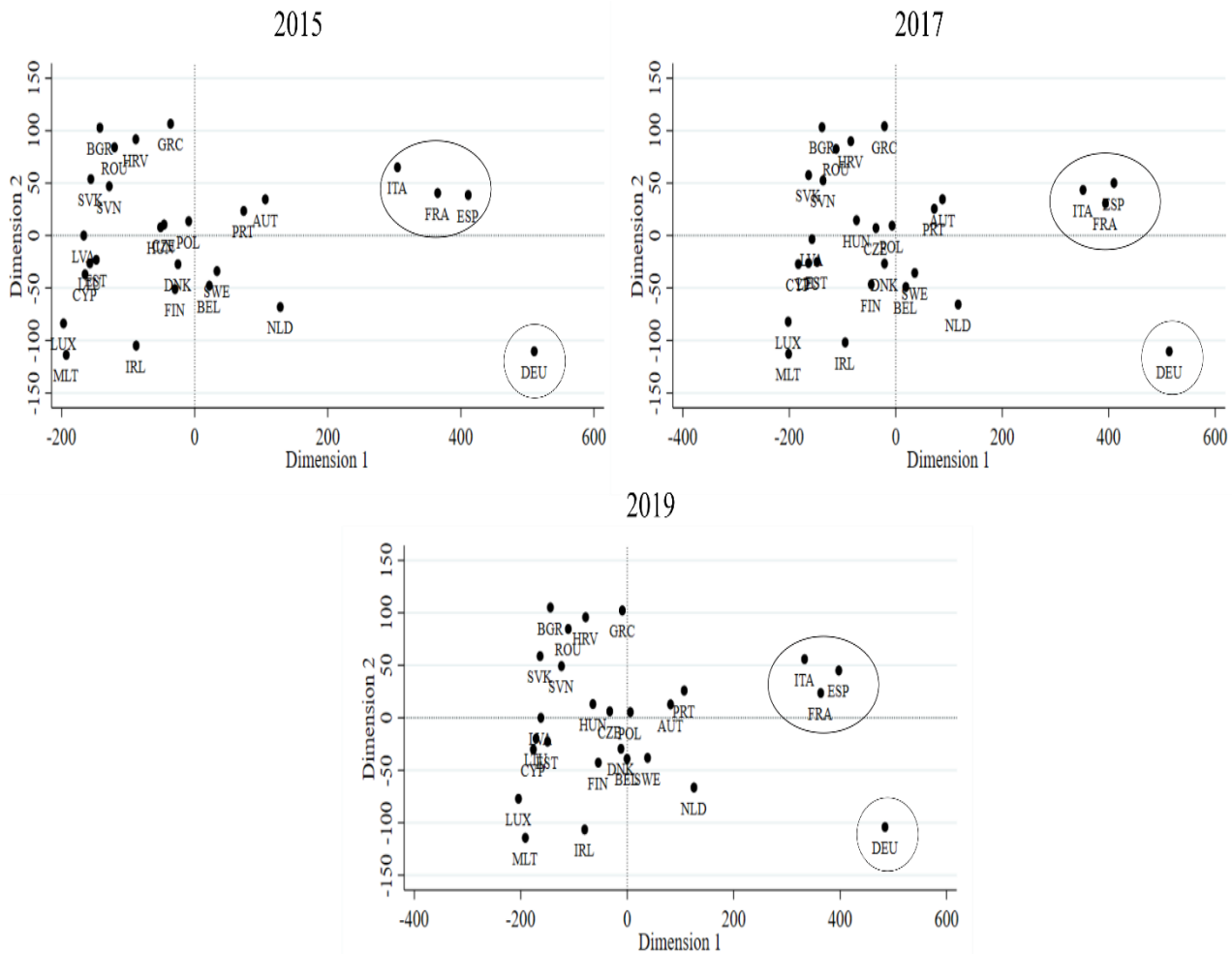
One way to use the information contained in multidimensional observations is to classify objects into several relatively homogeneous groups (clusters) in such a way that objects belonging to the same group are more similar than objects from different groups. For this purpose, cluster analysis is used, which reduces the number of dimensions of the object so that several considered variables are represented by only one variable expressing the membership of the object to a defined group (Haruštiaková et al., 2012). This paper uses a hierarchical cluster analysis that creates a system of groups and subgroups so that each group can contain several lower-order subgroups and itself can be part of a higher-order group (Haruštiaková et al., 2012). As a clustering method, we will use Ward's most widely used method, which leads to the formation of clusters of the same size and shape. Clusters are formed here by maximizing intra-cluster homogeneity. The results will be graphically represented by a dendrogram (hierarchical tree). The resulting number of clusters shown on the dendrogram will be reduced using the stopping rule with the Duda-Hart $J_e(2)/J_e(1)$ index, which associates with the pseudo- T^2 . The number of clusters that are most different from each other is determined using the highest value of the Duda-Hart index, which also has the lowest pseudo- T^2 value (Duda et al., 2000).

4. Results

4.1 Multidimensional Scaling

Figure 1 visualizes two-dimensional plots created by the NMDS method, while each plot represents the result for an individual year. Plots are a visual prerequisite for cluster analysis. Multidimensional scaling allows visualizing the level of similarity between countries based on the proximity of countries in the generated plot. We see in the plots in Figure 1 that Italy, Spain, and France have a specific position, which indicates that they could also form a separate cluster in cluster analysis. Furthermore, Germany appears to be unique. For these plots, we present the values of stress functions in Table 2. The quality of all three models is perfect because the value of stress function is lower than 0.025.

Figure 1. Multidimensional scaling – matching configuration plot



Source: own processing in Stata

Table 2. Stress function

Model for year	2015	2017	2019
Stress	0.0213	0.0199	0.0221

Source: own calculations in Stata

4.2 Cluster Analysis

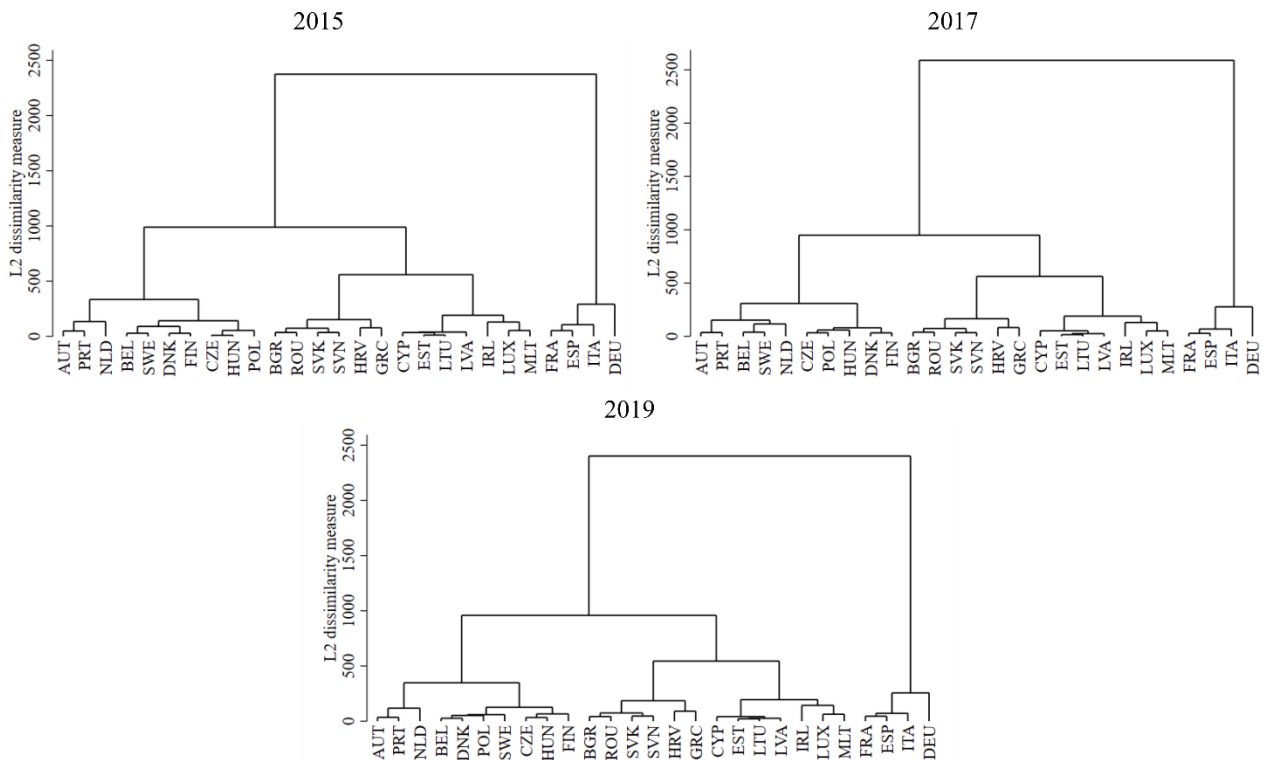
We used cluster analysis and Ward's method to verify the hypothesis. We performed the analysis for all 10 indicators of the Natural and Cultural Resources sub-index of TICI. Figure 2 shows the individual dendrograms. Because several smaller clusters were formed using Ward's method, we used the Duda-Hart $Je(2)/Je(1)$ index to decide on the final number of clusters. The calculation was performed for one to 15 possible groups, while the optimal number is associated with the highest possible level of the index and at the same time the lowest value of pseudo- T^2 . The results of the stopping rule for each year are shown in Table 3, while we choose six-group solution. The classification of European Union countries into resulting groups is shown in Table 4 in Appendix A (the country's code used in Figure 2 is explained in Table 4, too).

Table 3. Stopping rule – Duda-Hart index

Number of clusters	2015		2017		2019	
	$Je(2)/Je(1)$	Pseudo- T^2	$Je(2)/Je(1)$	Pseudo- T^2	$Je(2)/Je(1)$	Pseudo- T^2
1	0.3131	54.85	0.2834	63.21	0.3127	54.95
2	0.5182	19.53	0.5336	18.36	0.5385	18.00
3	0.3733	18.46	0.3828	17.74	0.4239	14.95
4	0.4103	11.50	0.4506	9.75	0.3737	13.41
5	0.1644	10.17	0.0819	22.43	0.1193	14.76
6	0.4911	5.18	0.4951	5.10	0.5275	4.48
7	0.4263	5.38	0.3985	6.04	0.3909	6.23
8	0.4420	6.31	0.4655	3.44	0.1720	4.81
9	0.1263	6.92	0.1430	5.99	0.4804	5.41
10	0.1541	5.49	0.1130	7.85	0.0931	9.75
11	0.1968	4.08	0.0000	.	0.0000	.
12	0.2103	7.51	0.5075	2.91	0.4362	2.58
13	0.0000	.	0.3677	3.44	0.2911	2.44
14	0.3533	3.66	0.1603	5.24	0.2175	3.60
15	0.0399	24.09	0.2394	3.18	0.0000	.

Source: own calculations in Stata

Figure 2. Cluster analysis – dendrograms



Source: own processing in Stata

We interpret the resulting clusters concerning cluster centroids, which represent the average value of the relevant indicator in each cluster (Table 5 in Appendix B):

Cluster 1: Austria, Netherlands, Portugal (Sweden and Belgium, in 2017). These countries have higher values of Total known species and Natural tourism digital demand; on the other hand, lagging in terms of Number of World Heritage natural sites and Oral and intangible cultural heritage expressions. Although it may seem that these countries do not have much in common, in fact, they excel in their historical and cultural monuments. Therefore, within the destination management, we recommend concentrating on the common policy of the countries in this direction.

Cluster 2: Sweden, Belgium, Denmark, Finland, Czechia, Poland, and Hungary (excluding Sweden and Belgium, in 2017). According to the resulting cluster centroids, these countries have the lowest values of Natural tourism digital demand and Attractiveness of natural assets. These countries do not excel in natural tourism. The characteristic of these countries is that tourism is mainly focused on the capital and the cultural and historical monuments in it. The common destination management policy of these countries could be oriented on the creating sightseeing tours packages in their capitals. Due to the geographical location of the countries belonging to the cluster, we would recommend creating separate sightseeing tours for the countries of Poland, the Czech Republic, and Hungary. Slovakia could also be included (although it does not belong to this cluster), which would ensure policy coherence for the Visegrad group countries. For Sweden, Belgium, Denmark, and Finland, a cruise could be attractive because the capitals have a port (excluding Belgium). From the port of Belgium, the journey to Brussels would take about one hour by motorway.

Cluster 3: Bulgaria, Romania, Croatia, Greece, Slovakia, Slovenia. These countries have a relatively good position within natural resources (Total known species and Total protected areas); on the other hand, they have small values of cluster centroids for Number of large sports stadiums, Number of international association meetings, and Cultural and entertainment tourism digital demand. The countries of this cluster are characterized by year-round tourism and several natural resources, e.g., Rila National Park in Bulgaria, Transylvania region in Romania, Plitvice Lakes in Croatia, Mount Olympus in Greece, the Tatras in Slovakia, or the Alps in Slovenia.

Cluster 4: Estonia, Latvia, Lithuania, Luxembourg, Ireland, Malta, Cyprus. The fourth cluster includes the countries that are in the worst position in terms of the indicators examined, and thus their competitiveness in terms of natural and cultural resources is the lowest. From the indicators in which they did not reach the lowest value, we can highlight Natural tourism digital demand and Attractiveness of natural assets. The connection of these countries can be found in business tourism. These countries are visited on business trips, they are trade crossings and industrial centres (e.g., Ireland). In this regard, we can highlight, e.g., Luxembourg, which has a dominant position in banking and finance, and various institutions of the European Union are located here. Malta and Cyprus appear to be specific in this respect, but they often cooperate with educational institutions and provide training and practices in tourism and hospitality. It may be clear that the capitals of the countries with cultural monuments will be visited.

Cluster 5: Italy, Spain, France. Cluster 5 is in the best position in terms of tourism competitiveness. It reaches the highest values for almost all indicators from which we highlight Number of World Heritage natural sites, Number of World Heritage cultural sites, Total known species, Natural tourism digital demand, Cultural and entertainment tourism digital demand, Oral and intangible cultural heritage expressions. The Attractiveness of natural assets is also rated very highly. In this case, it is a group of countries that have a very rich history and culture, have many natural resources, and developed tourism. In addition to having access to the sea and being attractive destinations during summer holidays, these countries are also characterized by natural resources related to the mountains, such as the Alps or the Pyrenees. Last but not least, tourism will also focus on exploring cultural monuments, not only in the capitals of these countries.

Cluster 6: Germany. Germany, as the only country belonging to the cluster 6, has a specific status. It excels in the highest value Total protected areas, Number of large sports stadiums, Number of international association meetings, Cultural and entertainment tourism digital demand. Although

Germany did not belong to any of the existing clusters, we think that it could cooperate with any country and offer various packages of sightseeing tours. On the other hand, Germany excels with its cultural traditions and historical monuments, natural resources such as the Alps, many lakes (e.g., in Bavaria), spa towns (e.g., Baden-Baden), but also the offer of various water sports (e.g., around the Baltic Sea), or amusement parks (e.g., Legoland or Europa-Park), is self-sufficient in tourism and is not forced to develop common destination policies with other countries.

Based on the results, we confirm the hypothesis that there exist internally homogeneous and externally heterogeneous groups of EU countries regarding the indicators of natural and cultural resources. At the same time, we identified the importance of natural and cultural resources in measuring tourism competitiveness. We consider the aim of the paper to be fulfilled.

5. Discussion

Several studies have been devoted to cooperation so far (Kavirathna et al., 2019; Bengtsson et al., 2016; Chang & Chiu, 2016; Bengtsson & Kock, 2014; Kim et al., 2013; Lin et al., 2010; Luo, 2007; Bengtsson & Kock, 2000). On the other hand, the cooperation in tourism sector were examined only in a few studies (e.g., Kirillova et al., 2020; Chim-Miki & Batista-Canino, 2018; Chim-Miki & Batista-Canino, 2017a; Chim-Miki & Batista-Canino, 2017b; Czakon & Czernek, 2016; Della Corte & Aria, 2016; Bengtsson & Kock, 2014; Kylänen & Rusko, 2011; Edgell & Haenisch, 1995). Trust is a crucial factor since it might influence decision-making processes, ideas (Ključnikov et al., 2020a) and brand reputation (Ključnikov et al., 2020b). In this regard, Czakon & Czernek (2016) examined how and why the trust necessary to join a cooperation network is developed. They provided interviews among managers in a tourist region in Poland. Della Corte & Aria (2016) studied cooperation among small and medium tourism companies (accommodation providers) in Naples and Sorrento (Italy). Kylänen & Rusko (2011) examined cooperation between companies in Pyhä-Luosto tourism destination (Lapland, Finland). Kirillova et al. (2020) studied cooperative destination brand for Guangdong–Hong Kong–Macao Greater Bay Area. Chim-Miki & Batista-Canino (2018), Chim-Miki & Batista-Canino (2017a), Chim-Miki & Batista-Canino (2017b), Bengtsson & Kock (2014) looked at the tourism cooperation only from the theoretical perspective. Unfortunately, we are not aware that a sample of European Union countries, TTCI data, or a cluster analysis method have been used. Therefore, the study in this paper fills a research gap.

According to the definition of cooperation, the country's cooperation with competitors will allow it to take comparative advantages of the partner country. These will appear in the specific outputs of the cooperative relationship (Luo, 2007). Cooperation also increase innovativeness (Civelek et al., 2021) and trustworthiness among parties (Civelek et al., 2020). Cooperation between analysed countries belonging to a common group will support the need for strategic flexibility in the tourism sector, as the diversity of tourism attractions will increase. Moreover, a recent study by Bhaskara & Filimonau (2021) pointed to the importance of cooperation in tourism businesses as one way to regrowth the tourism sector after the COVID-19 pandemic.

The question for discussion is for what purpose and how the resulting clusters of countries could form common policies in destination management. A strategic focus on sustainable competitiveness in the market means a decision to attract a diverse audience in any part of the world through a harmonic and synergistic brand strategy (see, e.g., Polat & Çetinsöz, 2021). The continued growth of the national brand will have to be driven by a global perspective to remain competitiveness in an increasingly saturated market. According to Hassan & Mahrous (2019), national brand leadership can be achieved by building a different strategy of the overall experience in the destination from the perspective of all stakeholders. The starting point should be to distinguish the national brand from others. Destinations should pay attention to branding, as it is an effective tool through which destination managers can establish an

adequate connection with the consumer (Morgan et al., 2002). However, in this paper, we have shown that it is appropriate to formulate countries' strategies as tourism destinations together based on groups that have been created using indicators of competitiveness within natural and cultural resources. It would seem appropriate to create tourist programs to create an authentic experience for visitors to destinations. The strategy of building a national brand in tourism should reflect the number and nature of the common or characteristic tangible and intangible elements offered by the country. The issue of cooperative branding in tourism at the macro level was examined in the study by Kirillova et al. (2020). The aim of this paper was not to propose specific marketing strategies at the level of international cooperation but to get acquainted with marketing strategies as tools of destination management, we recommend the papers by Fernando (2020), Malachovský & Királová (2015), Királová & Malachovský (2014). Malakauskaite & Navickas (2010) stated in 2010 that thanks to modern business processes, the mentioned cooperation relations could be transferred to the online space and create virtual tourism clusters.

An interesting strategy to support tourism was proposed in 2004 by Weiler and Seidl (2004), who recommended that a comprehensive inventory and publication of natural and cultural attractions be made, or that protected areas and cultural heritage sites be designated and promoted with appropriate recognition at international level. Of course, other strategies, such as the organization of international fairs and exhibitions to showcase the natural and cultural heritage, can help develop the curiosity and willingness of foreigners to consider unique attractions in an authentic environment.

It is difficult for managers to decide on best practices for tourism development, as competition and cooperation develop together. Despite the institutional complexity of the tourism sector itself, it would be appropriate for individual European countries to be involved in processes of competition that can help to improve the tourism development on a global scale. The benefits of joint marketing and joint supply are economic because countries connect their resources and thus have a stronger effect, even though they invest less. The collaboration attracts more potential customers as the offer becomes universal. The competition benefits are evident in the context of the seasonal nature of tourism because the necessary resources increase in the high season, but in the off-season, synergies appear to be a rational solution. Synergies are also being gained in strategic regional development and planning because the group of destinations represents a higher region with a higher status, which is stronger in terms of funding, regional development, and tourism development.

Although this study focused mainly on the natural and cultural resources of tourism, it is obvious that due to the unique nature of the tourism sector, it is important to focus on other aspects of countries that influence the views of visitors, e.g., environmental aspects or transport infrastructure. Further research could focus on the use of other TTCI indicators, which could show other clusters of countries whose cooperation could increase their competitiveness in the global tourism market.

6. Conclusion

The paper's contribution is to capture externally heterogeneous and internally homogeneous groups of European Union countries concerning various indicators of natural and cultural indicators related to the tourism sector's competitiveness. Moreover, the research identified the importance and possibilities of cooperation among EU countries within the tourism sector. The results show that even though EU countries are competitors at a global level, their cooperation could be beneficial to tourism development. Furthermore, cluster analysis has shown that individual groups will compete, but the countries that make them up will cooperate.

Regarding the benefits of management practice, the findings of this study can be helpful in planning and strategy development for tourism policymakers, destination management organizations, regional organizations, but also state-level organizations. The results can also be used to develop various marketing strategies. To formulate an effective tourism policy, policymakers and destination managers in

countries with low tourism competitiveness need to consider the elements that can increase a country's attractiveness as a destination, i.e., the various factors that motivate individuals to choose a particular country over others. Effective policy interventions can provide guidelines for tourism planning and development, thus creating a favourable environment for the country's tourism.

Acknowledgments

This paper was supported by the Scientific Grant Agency of the Ministry of Education, Science, Research, and Sport of the Slovak Republic and the Slovak Academy Sciences as part of the research project VEGA No. 1/0590/22: "Exploration of natural, social and economic potential of areas with environmental burdens in the Slovak Republic for the development of specific forms of domestic tourism and quantification of environmental risks."

This paper was supported by research grant KEGA No. 001PU-4/2022, "Application of Modern Trends in Quantitative Methods in the Teaching of Financial and Managerial Subjects."

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Appendix A.

Table 4. Belonging the country to the cluster

Country	Code	2015	2017	2019	Country	Code	2015	2017	2019
Austria	AUT	1	1	1	Estonia	EST	4	4	4
Netherlands	NLD	1	1	1	Latvia	LVA	4	4	4
Portugal	PRT	1	1	1	Lithuania	LTU	4	4	4
Sweden	SWE	2	1	2	Luxembourg	LUX	4	4	4
Belgium	BEL	2	1	2	Ireland	IRL	4	4	4
Denmark	DNK	2	2	2	Malta	MLT	4	4	4
Finland	FIN	2	2	2	Cyprus	CYP	4	4	4
Czechia	CZE	2	2	2	Italy	ITA	5	5	5
Poland	POL	2	2	2	Spain	ESP	5	5	5
Hungary	HUN	2	2	2	France	FRA	5	5	5
Bulgaria	BGR	3	3	3	Germany	DEU	6	6	6
Romania	ROU	3	3	3					
Croatia	HRV	3	3	3					
Greece	GRC	3	3	3					
Slovakia	SVK	3	3	3					
Slovenia	SVN	3	3	3					

Source: own processing

Appendix B.

Table 5. Cluster centroids

Indicator	NR1	NR2	NR3	NR4	NR5	CR1	CR2	CR3	CR4	CR5
Cluster	2015									
1	0.67	398.00	23.27	60.53	5.78	10.67	1.67	10.67	288.00	22.55
2	1.07	366.57	22.48	13.17	5.20	9.36	2.43	6.29	182.05	13.63
3	1.33	429.67	29.57	31.75	4.79	7.00	4.17	6.50	63.17	9.57
4	0.00	292.29	18.55	13.58	5.39	2.43	1.86	3.86	52.00	11.44
5	3.83	518.67	25.02	81.06	4.82	40.50	10.00	39.67	514.78	80.81
6	3.00	432.00	49.04	22.97	5.87	36.00	0.00	69.00	702.33	70.68
	2017									
1	0.70	384.00	19.93	38.06	4.74	11.50	4.60	10.40	266.33	23.94
2	1.20	371.20	21.36	11.00	4.60	8.60	2.00	5.00	167.60	9.73
3	1.33	431.33	37.86	30.22	5.51	7.33	5.83	6.50	74.11	10.15
4	0.00	293.00	20.88	15.93	5.02	2.43	1.86	3.86	55.90	12.62
5	3.83	523.00	24.92	76.40	5.61	42.17	12.67	40.33	549.56	82.20
6	3.00	432.00	37.40	20.01	5.32	38.00	2.00	69.00	714.67	77.96
	2019									
1	1.00	400.00	22.16	53.26	5.40	10.67	4.67	10.67	297.56	20.22
2	1.21	365.00	22.07	13.58	4.72	10.21	3.86	5.43	186.29	13.22
3	2.00	429.00	29.99	30.89	5.55	7.50	7.83	5.33	74.44	12.45
4	0.00	291.57	15.40	15.68	5.15	2.43	2.29	2.86	56.10	10.84
5	4.83	521.00	20.52	70.74	5.84	43.50	14.67	37.33	525.44	77.57
6	3.00	431.00	38.79	23.11	5.35	41.00	4.00	64.00	679.33	91.50

Source: own processing