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## Social and Economic Potential of the EU Countries' Tourism and Hospitality Industry

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## Spółeczny i gospodarczy potencjał branży turystycznej i hotelarskiej w krajach Unii Europejskiej

### Streszczenie

Obecnie popyt na rynku usług turystycznych ma tendencję do szybkiego wzrostu, co świadczy o atrakcyjności turystycznej krajów Unii Europejskiej i potencjalnej rentowności branży. Zaspokajając popyt konsumpcyjny, branża turystyczna i hotelarska pozytywnie wpływa na rozwój społeczno-gospodarczy. Wpływ ten zależy od specyfiki regionalnej i potencjału poszczególnych krajów. Celem opracowania jest ocena potencjału społeczno-gospodarczego branży turystycznej i hotelarskiej na podstawie aktywności turystycznej w krajach Unii Europejskiej. W procesie badawczym wykorzystano następujące metody naukowe: metodę współczynników, metodę odległości euklidesowej, metodę rankingową, metodę grupowania oraz metodę segmentacji. Zdefiniowano integralny wskaźnik oceny potencjału społeczno-gospodarczego branży turystycznej i hotelarskiej; obliczono integralny wskaźnik oceny potencjału społeczno-gospodarczego branży turystycznej i hotelarskiej w krajach UE; przeprowadzono ranking i grupowanie krajów UE według potencjału społeczno-gospodarczego rozwoju branży turystycznej i hotelarskiej; określono regionalne cechy potencjału społeczno-gospodarczego branży turystycznej i hotelarskiej krajów UE.

**Słowa kluczowe:** przemysł turystyczno-hotelarski, aktywność turystyczna, potencjał społeczno-gospodarczy.

### Abstract

Currently, the demand in the tourist services market tends to grow rapidly, which proves the tourist attractiveness of the EU member states and the industry's potential profitability. By satisfying consumer demand, the tourism and hospitality industry positively impacts social and economic development. This impact depends on specific regional characteristics and the potential of each country. The study aims to assess the social and economic potential of the tourism and hospitality industry based on tourist activity in the EU countries. The following scientific methods were used in the research process: the coefficient method, the Euclidean distance method, the ranking method, the grouping method, and the segmentation method. Indicators for assessing the social and economic potential of the tourism and hospitality industry have been defined; an integral indicator has been calculated to assess the social and economic potential of the tourism and hospitality industry in the EU countries; the ranking and grouping of the EU countries according to the social and economic potential of the tourism and hospitality industry development has been carried out; regional features of the social and economic potential of the tourism and hospitality industry of the EU countries have been identified.

**Keywords:** tourism and hospitality industry, tourist activity, social and economic potential.

### Introduction

Analysis of global trends in the tourism and hospitality industry shows a high level of income and rapid development in this area. As one of the world's largest economic sectors, tourism creates jobs, stimulates export, and improves the lives of millions.

Tourism is traditionally described as a contributor to Gross Domestic Product (GDP) [15], a 1% increase in tourism revenues significantly increases GDP by 0.051%, direct foreign investment by 2.647%, development of the energy sector by 0.134%, and agriculture by 0.26%, and even reduces poverty by 0.51% [19].

Tourism is the sector most affected by the coronavirus pandemic. Experts estimate possible losses in this industry from COVID-19 to be around US\$22 billion [14]. The pandemic affected all branches of this industry: airlines, transport, cruise lines, hotels, restaurants, cultural monuments, travel agencies, and tour operators [26].

The tourism and hospitality industry sensitively reacts to fluctuations in the number of tourists. In 2020, international tourist arrivals (the number of overnight visitors) decreased by 73% [42]. In 2021, the global economic contribution of the tourism and hospitality industry started to recover and was estimated at almost US\$5,812 billion (6.1% of the world GDP), US\$1450.1 billion of which was the contribution of European countries [45]. In 2022, the tourism and hospitality industry was affected by the military conflict between Russia and Ukraine, which led to the shutdown of Ukrainian and Russian airspace and the ban on Russian carriers by many European countries [43].

Until now, the prospects of the tourism and hospitality industry remain uncertain, as life will not be the same as before. It is important to anticipate various opportunities and challenges that the tourism sector can expect in the future [5]. It is difficult to predict the future, so the tourism industry should always be ready to find opportunities in the flow of crisis events [17]. Despite negative external impacts, a study by McKinsey predicts a surge in demand in the tourism and hospitality sphere and shows that travel will recover with double force [21].

The further development of the tourism and hospitality industry is determined by the indicators of the pre-pandemic situation and will depend on the activation of its social and economic potential.

## Literature review

The tourism and hospitality industry is the subject of numerous scientific studies and is given considerable attention in the documents of international organizations.

The tourism and hospitality industry is an open system characterized by a high level of globalization, which makes it vulnerable to the damaging effects of economic and political turbulence. Millions of professionals work in this sphere to meet the needs of services consumers (tourists). A tourist is a guest who stays in a country for 24 hours (or more) or spends at least one night in the

host country. If the stay lasts less than 24 hours, a person is classified as a same-day visitor or an excursionist [16].

In modern research, scientists study tourism's impact on accelerating the economic growth of neighbouring countries [23]. Tourism has become a catalyst for the countries' development, therefore, an economic policy aimed at promoting tourism as an expected source of economic growth is important [7].

Globalization is the most noticeable in the strive for a wider geographical presence in international markets, and the pursuit of global branding, positioning, and uniform service standards [44]. International tourism has become one of the most important phenomena in the world economy. It can be defined as the travel of tourists across the countries' borders for a short period for entertainment and leisure, or business purposes. Residents of a certain region who travel only within that region belong to domestic tourism [35].

Tourism influences economy in almost all aspects of society. It is also the most significant catalyst for the economic growth of whole regions, as it acts as a channel for the redistributing gross national product between countries. Tourism is one of the priorities for national cultural and economic development since it actively influences the region where it develops, and its economic, social, and humanitarian foundations [2]. Tourism positively contributes to the quality of life (satisfaction with life and emotional well-being) of the travelling population [18].

The reasons for the economic growth in this area are a whole set of factors, including the increase in the general well-being of the world population, which allows for choosing educational and recreational leisure activities. Other factors include the strengthening of the middle class as the main consumer of tourist services, the development of transport infrastructure, Internet and communication technologies. Tourism has become a global trend and will remain at the top of global demand in the years to come [37]. International organizations analyse tourism development trends to specify the need to increase tourist flows, raise tourist revenues, and increase the number of jobs [41].

The European Union, which was created without internal borders for the free movement of goods, services, and citizens, with a unified taxation policy and deregulated transportation, forms conditions for tourism development. The EU tourism policy includes tourists' protection, ensures their free movement, sets rules for the tourism industry, and promotes tourism and its promotion in less developed EU regions [8]. The European Union tourism policy increasingly focuses on social tourism initiatives that are one of the ways to achieve sustainability in the European tourism economy [24].

There is a great need to analyse the tourism market, supply and demand of services to get a perfect position in the international tourism market and to promote tourism products [36]. At the same time, social and economic development and the concept of the tourism industry are a multidimensional phenom-

ena the study of which is particularly important for the EU countries. As noted by Stec and Grzebyk [33], the level of tourism industry development cannot be assessed with a single universal indicator, it should be seen as a complex phenomenon influenced by many different factors. Scientific publications on tourism demand examine tourist motivations, assess the response of demand to various determinants, and predict future demand levels [31].

Tourism has a wide range of dynamic effects. Tourism development can influence local household funding strategies, the business climate for small business development, local or national economy growth patterns, as well as infrastructure or the base of natural resources at a destination. Tourism also tends to employ a high proportion of women and promote the purchase of products such as food and handicrafts produced by women in the informal sector and thus can improve women's economic status and help overcome gender barriers. Finally, in some places, the tourism sector plays a key role in planning and responding to natural disasters, which often have particularly severe consequences for the poor [2].

The tourism industry is volatile and does not operate in isolation, so the industry is sensitive to changes and trends. Tourism stakeholders must consider trends to ensure prosperity [13].

Hospitality industry workers produce and provide qualified services to their guests. Satisfaction with the quality of the services received leads to a positive image of the city, region, and country and provides an opportunity for the reuse of services [35].

The tourism and hospitality industry has a potential influence on the economy in the future and is also strategically important as a catalyst for other industries and business activities. According to experts, the 21<sup>st</sup> century is expected to become the age of tourism. Tourist activity significantly changes society, and contributes to meeting the needs of the population in spending leisure time in a meaningful way [25].

The success of the tourism sphere in a given country depends directly on the degree of its tourism potential realization, since the tourism potential is a straightforward factor for the formation and development of the country's tourism activity [1, 22]. Although the category of potential is a characteristic of development, it is rather inert and needs to be activated to obtain the desired social and economic effect [2]. The situation is now favourable for meeting tourism demand, as the potential has been activated and the tourism and hospitality industry has started working again, restoring its influence on the socio-economic development of the EU countries.

The review of scientific publications shows the importance of the tourism and hospitality industry for the social and economic development of the EU member states. The reports of international organizations highlight issues that

require efforts on the part of the EU countries to activate the tourism potential. However, the current scientific literature does not assess the potential of this industry based on the tourist activity of the EU countries, which confirms the relevance of this study.

The study is aimed at assessing the social and economic development potential of the tourism and hospitality industry based on the analysis of tourist activity in the EU countries. To achieve the defined objective, the following tasks were set and completed:

- To propose indicators for assessing the social and economic potential of the tourism and hospitality industry;
- To calculate an integral indicator for assessing the socio-economic potential of the tourism and hospitality industry in the EU countries;
- To rank and group the EU countries according to the social and economic potential of the development of the tourism and hospitality industry;
- To identify regional characteristics of the social and economic potential of the tourism and hospitality industry of the EU countries.

## **Research methodology**

The study was conducted for the EU member states based on open data from statistical sources Eurostat and Statista. The study was based on the year 2019 as it was the last year of full-fledged activity of the tourism and hospitality industry before the pandemic since tourist activity was suspended in the following two years.

The research process was divided into 4 stages.

Stage 1. Selection of indicators for assessing the social and economic potential of the tourism and hospitality industry.

Based on the need to boost the potential of the tourism and hospitality industry in the EU countries, scientists focus on the need to increase tourist flows, generate income and create jobs. Consequently, we used these indicators as a basis for assessing the social and economic potential of the tourism and hospitality industry in the EU countries. In particular, the following statistical indicators were chosen:

1. Arrivals at tourist accommodation establishments by country/world region of residence of the tourist;
2. Expenditure on accommodation by country/world region of destination;
3. Expenditure on transport by country/world region of destination;
4. Employed persons by full-time/part-time activity in the accommodation and food service;
5. Total population of a given country.

Considering the fundamental principles of the official UN statistics [39], based on selected statistical indicators, it is advisable to evaluate tourist activity using the coefficients given in Table 1.

**Table 1.** Tourist activity coefficients

<b>Coefficient</b>	<b>Formula</b>	<b>Legend</b>	<b>Social and economic meaning</b>
Tourist arrival intensity coefficient (Aat)	$Aat = At / Pc$	At – number of tourist arrivals Pc – population of the country	The ability to receive a certain number of arriving tourists. relating to the number of the country's permanent residents
Tourist solvency coefficient (Eat)	$Eat = (Ea + Et) / At$	Ea – accommodation expenditure Et – transport expenditure At – number of tourist arrivals	The ability to pay for the accommodation and food services during every stay
Relative employment coefficient (Ept)	$Ept = Ep / Pc$	Ep – employment of the population in the accommodation and food sectors Pc – population of the country	The ratio of the number of people's employed in the tourist accommodation and food sectors to the total population of the country

Stage 2. Determination of an integral indicator for assessing the social and economic potential of the tourism and hospitality industry in the EU countries and its ranking.

The integral indicator for assessing the social and economic potential of the tourism and hospitality industry in the EU countries is calculated based on the coefficients Aat, Eat, Ept. The Euclidean distance method was used to calculate the integral index, which consists in evaluating the results against a benchmark. This method is based on determining the degree of proximity of the studied objects to the object acting as a standard. This method is described by many scientists, such as Sydsaeter et al. [34], Cleff [4], Schweinzer [29] and others.

The algorithm for assessing the social and economic potential based on the Euclidean distance method involves the following sequence of actions:

1. Create a data matrix that includes a set of Aat, Eat, and Ept coefficients for all EU countries.
2. In each graph with the coefficients Aat, Eat, Ept, determine the maximum element and take it as one.

3. Divide all the elements of each column by the maximum element of the reference country, resulting in a matrix of standardized coefficients ( $x_{ij}$ ), where  $i$  is the number of coefficients,  $j$  is the number of countries.
4. Based on the elements of this matrix, calculate the integral indicator ( $R_j$ ) using the formula (1):

$$R_j = \sqrt{\sum_{i=1}^n (y_{ij} - y_{ij})^2} \quad (1)$$

where

$i = 1, 2, \dots, n; j = 1, 2, \dots, m;$

$x_{1j}, x_{2j}, x_{3j}$  – are standardized coefficients;

$y_{1j}, y_{2j}, y_{3j}$  – are reference coefficients.

5. Rank the integral indicator in the order of decreasing  $R_j$ , as the smallest distance from the reference means the highest value of the rating.

Excel was used to evaluate the integral indicator ( $R_j$ ) and determine each country's position with regard to the social and economic potential of the EU tourism and hospitality industry.

Stage 3. Identification of the groups of EU countries with different levels of the social and economic potential of the tourism and hospitality industry.

The grouping method is proposed to divide all EU countries into groups: those with the largest (group III), average (group II), and smallest (group I) socio-economic potential of the tourism and hospitality industry ( $R_j$ ). The interval for grouping is determined based on the range of variation and the number of groups according to the formula (2):

$$h = \frac{x_{max} - x_{min}}{n} = \frac{R}{n} \quad (2)$$

where

$h$  – is the value of the interval;

$x_{max}$  – is the maximum value;

$x_{min}$  – is the minimum value;

$R$  – is the range of variation;

$n$  – is the number of groups.

Stage 4. Segmentation of the EU countries to identify regional features of the social and economic potential of the tourism and hospitality industry.

To identify regional characteristics of the EU countries, a regional grouping was carried out under the UN M49 classification [40], four groups were selected, which include the countries of Eastern, Western, Northern, and Southern Europe.

The countries' segmentation of the tourism and hospitality industry's social and economic potential was made by the regions (columns: E, W, N, S) and groups of rating (rows: I, II, III). A matrix consisting of twelve segments is ob-

tained as the result. The percentage of countries in each segment of the matrix was calculated by dividing the total number of countries in each region by the number of countries in each group in that region. Thus, it was possible to reveal the dependence of the social and economic potential of the tourism and hospitality industry on regional characteristics.

## Results

The regional distribution of international tourism revenues coincides with the geography of tourist arrivals. The highest intensity of tourist arrivals is characteristic of such countries as Malta and Austria, the lowest is for Romania and Poland (the value of the Aat coefficient in Table 2).

**Table 2.** Tourist activity in the EU countries\*

Countries. EU	At. (quantity)	Pc. (people. thousands)	Aat	Ea. (Euro. thou- sands)	Et. (Euro. thou- sands)	Eat	Ep. (people. thousands)	Ept
Austria	29702400	8900	3.33	6918545.5	4583592.95	0.39	268.7	0.03019
Belgium	10237091	11500	0.89	4922580.95	3368421.53	0.81	183.3	0.01594
Bulgaria	6963694	7000	0.98	242256.13	266855.51	0.07	182.6	0.02609
Croatia	6134301	4100	1.49	457161.14	503225.42	0.16	107.5	0.02622
The Republic of Cyprus	2931007	1300	2.25	450277.13	594230.67	0.36	37.9	0.02915
The Czech Re- public	14912982	10700	1.39	1610885.3	1293440.76	0.2	194.7	0.0182
Denmark	4983931	5800	0.86	5618835.99	4745335.77	2.08	112.4	0.01938
Estonia	2929312	1300	2.25	530318.48	607150.85	0.39	29.7	0.02285
Finland	9782511	5500	1.78	4256540.21	4708462.54	0.92	97.3	0.01769
France	111683204	64800	1.72	22784201.15	22129562.44	0.3	1020.9	0.01575
Germany	140030631	83100	1.69	59606179.21	48995234.22	0.78	1586.1	0.01909
Greece	23057480	10700	2.15	450285.6	582152.32	0.06	381.9	0.03569
Hungary	9629966	9800	0.98	1026843.09	648389.39	0.17	190.6	0.01945
Ireland	10276932	4900	2.1	3054402.97	2657768.08	0.56	178.1	0.03635
Italy	81050181	60300	1.34	10346545.47	7804204.17	0.22	1480.1	0.02455
Latvia	2237710	1900	1.18	260018.23	292517.94	0.25	32	0.01684
Lithuania	2531865	2800	0.9	470300.2	378777.67	0.34	39.1	0.01396
Luxembourg	794803	600	1.32	907822.48	790599.27	2.14	11.1	0.0185
Malta	1806007	0500	3.61	194167.68	139765.15	0.18	19.5	0.039
The Nether- lands	26549072	17300	1.53	9061432.82	7145785.72	0.61	387.1	0.02238
Poland	25995214	38400	0.68	4557863.75	4104748.81	0.33	403.3	0.0105
Portugal	17732696	10300	1.72	1109154	1167424.57	0.13	320.8	0.03115

**Table 2.** Tourist activity in the EU countries... (cont.)

Countries. EU	At. (quantity)	Pc. (people. thousands)	Aat	Ea. (Euro. thou- sands)	Et. (Euro. thou- sands)	Eat	Ep. (people. thousands)	Ept
Romania	9824816	19400	0.51	949792.56	990642.61	0.2	222.1	0.01145
Slovakia	4628279	5500	0.84	1243477.62	880083.93	0.73	107.9	0.01962
Slovenia	2923791	2100	1.39	554381.73	361927.1	0.31	40.5	0.01929
Spain	94856412	47100	2.01	11436847.54	11426164.26	0.36	1715.4	0.03642
Sweden	21616763	10300	2.1	9087120.58	14159280.24	1.08	164.8	0.016

\* obtained by the authors according to the data Statista (2020); Eurostat (2022a); Eurostat (2022b); Eurostat (2022c); Eurostat (2022d).

Different countries are characterized by the varied solvency of consumers. The results of the calculations show that Greece and Bulgaria receive the least solvent tourists who arrive at the destination countries and spend at least one night in a hotel or a similar establishment, while Denmark and Luxembourg receive the most solvent tourists (values of the Eat coefficient in Table 2).

The tourism and hospitality industry has a positive impact on economic and social development by creating jobs. Malta, Spain, and Ireland are the leaders in Europe with the number of employees in accommodation and food services. Poland, Romania, and Lithuania have the smallest number of employees in these areas (values of the Ept coefficient in Table 2).

The results are shown in Table 3. It indicates the rating of the social and economic potential of the tourism and hospitality industry in the EU countries, based on which countries with the highest and lowest potential are determined.

**Table 3.** Results of the rating assessment pertaining to the social and economic potential of the tourism and hospitality industry in the EU countries

The EU countries	$x_1$	$x_2$	$x_3$	$(y_1-x_1)^2$	$(y_2-x_2)^2$	$(y_3-x_3)^2$	$\Sigma$	$R_j$	Rating
Austria	0.922	0.182	0.774	0.006084	0.669124	0.051076	0.726284	0.85	2
Belgium	0.247	0.378	0.409	0.567009	0.386884	0.349281	1.303174	1.14	13
Bulgaria	0.271	0.033	0.669	0.531441	0.935089	0.109561	1.576091	1.26	18
Croatia	0.413	0.075	0.672	0.344569	0.855625	0.107584	1.307778	1.14	13
The Republic of Cyprus	0.623	0.168	0.747	0.142129	0.692224	0.064009	0.898362	0.95	6
The Czech Republic	0.385	0.093	0.467	0.378225	0.822649	0.284089	1.484963	1.22	17
Denmark	0.238	0.972	0.497	0.580644	0.000784	0.253009	0.834437	0.91	3
Estonia	0.623	0.182	0.586	0.142129	0.669124	0.171396	0.982649	0.99	8
Finland	0.493	0.43	0.454	0.257049	0.3249	0.298116	0.880065	0.94	5

**Table 3.** Results of the rating assessment... (cont.)

The EU countries	$x_1$	$x_2$	$x_3$	$(y_1-x_1)^2$	$(y_2-x_2)^2$	$(y_3-x_3)^2$	$\Sigma$	$R_j$	Rating
France	0.476	0.14	0.404	0.274576	0.7396	0.355216	1.369392	1.17	15
Germany	0.468	0.364	0.489	0.283024	0.404496	0.261121	0.948641	0.97	7
Greece	0.596	0.028	0.915	0.163216	0.944784	0.007225	1.115225	1.06	10
Hungary	0.271	0.079	0.499	0.531441	0.848241	0.251001	1.630683	1.28	19
Ireland	0.582	0.262	0.932	0.174724	0.544644	0.004624	0.723992	0.85	2
Italy	0.371	0.103	0.655	0.395641	0.804609	0.119025	1.319275	1.15	14
Latvia	0.327	0.117	0.432	0.452929	0.779689	0.322624	1.555242	1.25	18
Lithuania	0.249	0.159	0.358	0.564001	0.707281	0.412164	1.683446	1.3	20
Luxembourg	0.366	1	0.474	0.401956	0	0.276676	0.678632	0.82	1
Malta	1	0.084	1	0	0.839056	0	0.839056	0.92	4
The Netherlands	0.424	0.285	0.574	0.331776	0.511225	0.181476	1.024477	1.01	9
Poland	0.188	0.154	0.269	0.659344	0.715716	0.534361	1.909421	1.38	21
Portugal	0.476	0.061	0.799	0.274576	0.881721	0.040401	1.196698	1.09	11
Romania	0.141	0.093	0.294	0.737881	0.822649	0.498436	2.058966	1.43	22
Slovakia	0.233	0.341	0.503	0.588289	0.434281	0.247009	1.269579	1.13	12
Slovenia	0.385	0.145	0.495	0.378225	0.731025	0.255025	1.364275	1.17	15
Spain	0.557	0.168	0.934	0.196249	0.692224	0.004356	0.892829	0.94	5
Sweden	0.582	0.037	0.41	0.174724	0.927369	0.3481	1.450193	1.2	16

Luxembourg, Austria, Ireland, Denmark, Malta, Spain, Finland, Republic of Cyprus, Germany, and Estonia (III group) have the highest social and economic potential of the tourism and hospitality industry, while Sweden, Czech Republic, Bulgaria, Latvia, Hungary, Lithuania, Poland, Romania (I group) have the lowest (Table 4).

**Table 4.** Grouping of the EU countries according to the rating of the social and economic potential of the tourism and hospitality industry

Group	EU countries	Group interval relative to $R_j$	Number of countries in the group
I	Sweden, the Czech Republic, Bulgaria, Latvia, Hungary, Lithuania, Poland, Romania	$\geq 1.2$	8
II	The Netherlands, Greece, Portugal, Slovakia, Belgium, Croatia, Italy, France, Slovenia	1.19-1.01	9
III	Luxembourg, Austria, Ireland, Denmark, Malta, Spain, Finland, the Republic of Cyprus, Germany, Estonia	$\leq 1$	10

The segmentation of the EU member states by the social and economic potential of the region made it possible to see that almost all EU countries located in Eastern Europe fell into Group 1 (I.E segment). This characterizes it as the region with the worst prospects for the development of tourism and hospitality (Table 5). In general, 83.3% of Eastern European countries with the lowest potential for the social and economic development of the tourism and hospitality industry fell into this region. In contrast, 57.1% of Northern European countries fell into Group III (III.N segment), indicating the highest potential for the social and economic development of the tourism and hospitality industry for all countries in this region (except for Sweden, Latvia, Lithuania, which occupied I.N segment).

**Table 5.** Segmentation of the EU countries according to the ratings of the socio-economic potential of the tourism and hospitality industry depending on regions (UN M49 classification)\*

Groups of countries/ Regions	E	%	W	%	N	%	S	%
	Eastern Europe		Western Europe		Northern Europe		Southern Europe	
I	The Czech Republic Bulgaria Hungary Poland Romania	83.3	—	0	Sweden Latvia Lithuania	42.9	—	0
II	Slovakia	16.7	The Netherlands Belgium France	50	—	0	Greece Portugal Croatia Italy Slovenia	71.4
III	-	0	Luxembourg Austria Germany	50	Ireland Denmark Finland Estonia	57.1	Malta Spain	28.6
Σ. %	x	100	x	100	x	100	x	100

\* the Republic of Cyprus is not included as according to the UN M49 standard it belongs to the region of Western Asia.

The EU countries situated in Western and Southern Europe fell into segments II.W, III.W and II.S, III.S, and none of these countries are in I.W or I.S segments. This means that the countries of Western and Southern Europe have high potential and are very similar in terms of its level (Table 5).

## **Discussion**

The tourism potential analysis is carried out using various scientific approaches and methods, some of them based on tourist questionnaires [6], a survey of management personnel [27], the use of SWOT analysis [38], expert assessments [46], the study of resources [20]. There is no single research design, and each method has its advantages and disadvantages.

The proposed method of assessing tourist potential is based on quantitative assessments with the use of statistical data and the calculation of an integral indicator for assessing the social and economic potential of the tourism and hospitality industry in the EU countries. A similar approach to studying the potential of the tourism industry based on the calculation of an integral indicator is used by Shpak et al. [30]. In this research, they determine how tourism potential is influenced by a group of direct external factors: labour resources, marketing policy, tourist activity management system, external infrastructure, environmental quality, general image of the region. Moreover, the results of their research prove that the integral indicator of the tourism industry potential can be used to characterize regional features of tourist attractiveness. In contrast to our understanding of tourism activity ratios, which form an integral indicator for assessing the socio-economic potential of the tourism and hospitality industry, Yıldız and Gurhan [47] argue that it is alternative tourism activities that have a significant impact on tourism potential and employment in tourism.

Stec and Grzebyk's [33] approach to social and economic development and the tourism industry as a multidimensional, complex social and economic phenomenon influenced by many different factors is justified. The rankings of the EU countries and defined typological groups of countries reveal the variables that have the greatest influence on the classification of the EU countries by the level of social and economic development and the level of development of the tourism industry. As scientists note, the quality of research of the generalizing indicator as an integral indicator for assessing the social and economic potential can be increased by using various statistical and econometric methods or methods of comparative analysis. This gives the opportunity not only to deepen the assessment of the studied phenomena but also to obtain more objective results [33].

The countries segmentation by regional characteristics enabled us to identify which of the EU regions have a higher or lower potential for the tourism and hospitality industry development. The Western and Southern Europe countries have similarly high potential and prospects for tourism and hospitality development, but most Eastern Europe countries have the lowest potential. Such results correlate with the methodology and conclusions made by Alimov et al. [1], which justifies the cluster approach for a better understanding of the conditions, problems, competitive opportunities, and advantages of the tourism industry.

Our results support the authors' opinion that clustering is reasonable as an organizational tool for developing a strategy and future tourism development projects in the European Union. A similar approach to the use of cluster analysis for the study of tourism in the EU is applied in the research results of Bulin [3], Roman et al. [28]. The scientists prove that the results of cluster analysis can be used in effective planning and decision-making to support sustainable tourism development in a specific EU country or a group of countries.

## Conclusions

The tourism and hospitality industry in the EU countries has a different level of development. The comparison of the tourist activity coefficients proposed by the authors showed the differences between the countries in terms of tourist intensity, tourist solvency, and relative employment in the field of accommodation and food.

An assessment of the socio-economic potential of the tourism and hospitality industry has produced a ranking that places each EU country on a scale. The assessment highlighted groups of countries with different socio-economic potential in the tourism and hospitality industry. The study showed that Luxembourg, Austria, Ireland, Denmark, Malta, Spain, Finland, the Republic of Cyprus, Germany, and Estonia have the highest potential, while Sweden, Czech Republic, Bulgaria, Latvia, Hungary, Lithuania, Poland, and Romania have the lowest.

Regional features of the social and economic potential of the tourism and hospitality industry of the EU countries were identified, which showed that the countries of Eastern Europe lag behind other regions in terms of the potential for the development of the tourism and hospitality industry.

The obtained results can be useful for the European Economic and Social Committee in the packages of social and economic proposals for the Council of Europe preparation. Such approaches would draw attention to the need to support the tourism and hospitality sector in Eastern European countries and adjust the mechanism for the distribution of EU financial aid funds. This will make it possible to influence the improvement of social and economic indicators of the tourism and hospitality industry in countries with low potential and solve the issue of uneven development of the EU countries in general.

From the perspective of further research, it would be useful to study the social and economic potential of the tourism and hospitality industry in other countries of the world and compare them with the countries of the European Union.

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