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Article Island Development Model Specialisation: A Panel Data Analysis Comparing Evolutionary Tourism Model, Industrial to Community-Based (2010–2019)

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Abstract: Islands are frequently characterised by an economic structure centred on tourism and the service sector. This specialisation has taken different forms and characterisations concerning the chosen or spontaneously developed model. To understand the development choices and patterns, this article analyses sixteen islands and archipelagos in the European Union over ten years from 2010 to 2019. A panel data analysis was based on critical variables identifying the tourism industry model from those that could represent a proxy of the community-based tourism model. The principal component analysis was adopted to compare the evolutionary trends of these two different ways of choosing the island's tourism model. Findings identified before the COVID-19 pandemic crisis include two island clusters. One group of islands followed a spontaneous tourism model based on the local community and small or micro hospitality systems, with auto-entrepreneurship in tourism. The second group of islands followed a planning and industry-based tourist model with an employment system and a relevant hospitality industry. Both paradigms have limitations and identify two different tourism evolutionary scenarios useful for the EU's future island tourism policies.

Keywords: community-based tourism; industrial tourism; islands; economics; panel data; APC model

1. Introduction

The COVID-19 pandemic pushed markets to evaluate different tourism motivations far from the big and crowded destinations, looking more at small places where contact with nature and local communities is possible (Fernández et al. 2022). Therefore, islands are specific geographical places where local people and nature are often predominant and are considered tourist attractions by a more significant number of travellers and tourists (Ruggieri and Calò 2022). In contrast, islands are also regarded as fragile territories due to the limited resources and the negative impacts they can receive from an unplanned process (Briguglio and Kisanga 2004). Consequently, tourism can be considered a central activity because it easily attracts external economies and, at the same time, is also considered a potential risk for locals and the environment.

The attention to sustainability, particularly for islands, is very relevant in tourism development planning. Thus, new tourism supply models are needed to find an acceptable balance between tourism economies and limited resources.

Accordingly, socio-cultural factors are more requested from tourists, such as experiences and seeing unique cultures, histories, nature, and genuine authenticity. These market trends make tourism development plans for destinations which have built the tourism economy on quantitative rather than qualitative dimensions more difficult (Baggio and Sainaghi 2011). A significant problem for under-developed territories, such as low-income



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Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). islands per capita, is that economic benefits dominate social and environmental sustainability issues. Economic added value will not be a primary objective for tourism in the next decade, more so in light of the social and environmental factors that will improve and characterise tourism activity (Sofield 2003). In contemporary research on sustainability issues, it is more accurate to consider social, ecological, and economic components as the combination and interweaving of sustainability elements. Some authors argued the need for a common goal in land planning by finding the proper equilibrium between economic conditions, environmental protection, and the resident's needs (Nugraheni et al. 2020).

Consequently, the environment is often limited, instituting sea and natural reserves, SIC areas, sovra-national initiatives (UNESCO), and national land-use limitations (Zarb 2017). Regarding the social aspect of sustainability in the case of tourism in some places, there is a planned distance between tourist destinations and residents. The human dimension is less considered in sustainable tourism planning. It sometimes becomes relevant in the case of over-tourism or the possibility of adverse effects on the population (Kittinger et al. 2012). The new post-COVID-2019 trend looks at places as islands with a spontaneous and network-organised community based on tourism activities. This trend could be considered a new model for planning and managing different tourism processes by developing a more vital link between the host and visitor and maintaining a sustainability approach (Zarb 2019).

Due to the recent interest in island policies, the EU Commission needs to have some policy indicators for islands and the fragile territory where sustainability represents a pre-condition to keep the value and for new evolution.

This article will focus on islands' development models, addressing some aspects to compare the two different opposite paradigms. Firstly, tourism as an industry based on a quantitative approach has led to the deterioration of many destinations over the past fifty years, bringing about over-tourism, environmental damage, infrastructural over-development, and social challenges, such as increased housing costs and costs of living. Secondly, the sustainable and responsible method for managing tourism is more inclusive and spontaneously indicated as community-based tourism, highlighting the gaps in managing tourism as a socio-cultural activity rather than a spontaneous and ignored local initiative.

The research questions are based on the development path of the tourism model adopted by EU islands and if there are specialisations in community-based or industrial tourism. Starting from those assumptions, the specific research questions are based on the following:

Rq₁: The main dimensions of the industry-based tourism model (IBTM) and communitybased model (CBTM);

Rq₂: Comparing islands in the last ten years which followed IBTM or CBTM;

Rq₃: Tourism policy can favour islands in the adoption of sustainable tourism.

The article first analyses the literature regarding the tourism industry and communitybased tourism. The second step of the article shows data analysis that adopted a mixed methodology in gathering empirical and secondary data to analyse the situation of tourism in the last ten years and several island destinations. The main supply and demand data for EU islands analysed come from Eurostat and the Observatory of Tourism for Islands Economies (OTIE). After the data presentation, the third step of the article shows the selected critical variables, such as population, establishment types, occupation, and tourism demand, comparing island territories. The variables consider the evolutionary trend over ten years from 2010 to 2019. A factor analysis (FA) is applied to analyse the interrelationship within a group of variables and identify some factors believed to contain basic information about the observed structure. Finally, the article needs to demonstrate the existence of two different tourist development models for islands. Both paradigms have limitations and identify two different tourism evolutionary scenarios useful for the EU's future island tourism policies.

2. Literature Review

In recent years, the growth in tourism demand and increased economies opened the literature debate on tourism development models (Ashley et al. 2007). The COVID-19 pandemic, the shock in tourism demand, and the contained and planned tourism increased the discussion among the hosting communities, residents, stakeholders, and shareholders (Dangi and Jamal 2016). According to this new sensitivity from a tourist destination point of view, tourism planning has become more evident and relevant in supporting decision choices from local policymakers (Baggio 2008). Today, a permanent increase in tourist demand and a rapid increase in tourism supply seems to be an unconscious way to take advantage of tourism economies. Analysing some aspects of the literature, we can identify two directions based on two main drivers: the tourism industry-based model (IBTM) and the community-based model (CBTM). The following scientific literature review supports the two tourism development models.

2.1. The Industry-Based Model

The growing volume and complexity of tourism services have generated the development of a whole tourist industry that justifies treating the phenomenon of tourism as a distinct branch of the growing economy (Sofronov 2018). The tourism industry should also contain delivery systems, which are often not located in a tourism destination. The tourism industry (Leiper 1997) is a group of services and products found in a tourist destination. Manente et al. (1996) defined travel and tourism as a mix of heterogeneous industries interrelated with each other with different participation related to the tourist consumption levels. Therefore, tourism involves several products and services at the tourist destination level. Baggio (2008) provides some evidence to the idea that tourism and its primary representative, a tourism destination, is a complex adaptive system. Therefore, the tourist expenditure and production are different (Jakulin 2017), and local productions can also participate in the production process if they are not directly related to tourism consumption. McKercher et al. (2021) demonstrate the complex nature of tourism systems and related industries in the production process.

In this way, at the destination level, travel and tourism need a reticulum of productions and activities useful for a complete tourist experience at a destination level (Baggio and Sainaghi 2011). Therefore, the tourism development model based its concept on the need to have a well-structured tourist company network, centrally coordinated or managed. According to the cluster theory (Marshall 1994), this model proposes an industrial organisation that is place-based and able to generate specialisation and agglomeration economies. This evidence in some places was theorised with the tourist destination paradigm. Destinations (Cooper 2002) are often based on the following bullet points.

- i. Big hotel establishments;
- ii. External investors, such as international hotel chains;
- iii. High level of employment in the tourism and travel industry;
- iv. High level of the local population;
- v. Durable participation of the public sector in providing public services to tourists;
- vi. A management destination system—DMO;
- vii. Level of product imports to satisfy the international tourist consumption;
- viii. Non-direct tourist sectors related to tourism expenditure that receive tourism economies;
- ix. An articulated network of tourist services, such as food services, travel agencies, tour operator reservation services, cultural, sports, recreation, agriculture, fashion, manufacturing industries, etc.;
- x. Public policies for management, planning, and promoting the destination.

In this way, tourism contributes to a country's economy from different angles. Government and industries realise tourism's contribution to the economy regarding employment, profits, income generation, the balance of payment, and investment (Holloway and Humphreys 2016). Therefore, from an economic perspective, tourism is also vital for the economy because it generates employment for locals and increases profit margins.

The tourism and travel industrialisation process in EU tourism island destinations has been followed by large and medium EU island destinations, such as Mallorca, Ibiza, Malta, Crete, Cyprus, Tenerife, Elba, Capri, Sardinia, Sicily, etc. The destination-building process followed a cluster model according to a demand driver approach, external investments, international hotel chains, a consistent number of accommodation services, related services, flight connections, and public services. As shown in Table 1, some authors specified the tourism industry concept at the destination level while considering some thematics.

Table 1. Industry-based tourism model literature thematic.

Tourism Industry Supply	Authors
Relations	Ashley et al. (2007); Leiper (2008).
Competitiveness	Navickas and Malakauskaite (2009); Bazargani and Kiliç (2021).
Clusters	Malakauskaite and Navickas (2010).
Organization	Sofronov (2018).
Services	Fernández et al. (2022)
Organization	De Falco (2018)
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Source: elaboration on literature analysis.

2.2. The Community-Based Destination Model

In recent years, sustainability aspects, over-tourism evidence, crowding effects on tourism destinations, and uncontrolled demand have increased the need for relational and experience tourism (Ruggieri 2008). Therefore, the need for a new paradigm for the tourist destination was developed spontaneously in rural and isolated areas, and there is a need to support and project this model (Wearing and McDonald 2002). Relevant scientific literature is now more concentrated on the social aspect of tourism, moving the attention from the concept of territory to the concept of locals or residents, defining a community-based tourism paradigm. This model is based on "community development, community survival, community involvement, and local benefits are among the foci here" (Dangi and Jamal 2016). It is considered in the literature as an integrated supply-driven approach based on the local people and companies. This tourism planning and policy model is based on trust, commitment, and synergy among the three key stakeholders. Bramwell and Lane (1993) highlighted two key stakeholders: the tourism industry and host communities.

Therefore, the impacts and responsibilities of the sustainable tourism industry will affect communities rather than sectors of society. Dangi and Jamal (2016) argue that there are apparent differences between sustainable and community-based tourism in planning and implementation. Sustainable tourism planning is a macro-level strategy involving "quasi-governmental, global institutions," whereas community-based tourism involves the "grassroots". Sofield described how community and stakeholder participation may have failed in terms of tourism: "such growing endorsement notwithstanding, participatory development is far from being adopted in practice anywhere in a way that leads to major structural reforms and political structures towards underprivileged people" (1995:26). Indeed, Murphy (1985), Krippendorf (1987), and Britton (1984) tended to be sceptical about the implementation of "community-driven tourism planning." (Murphy 1985).

The experience has shown how the initial thrust towards developing a broader understanding of tourism from a socio-economic industry to a more inclusive socio-cultural activity was positive in terms of the host toward the phenomenon of hospitality and service. However, as it progressed into a more significant commitment, it also changed the traditional tourism concept to one where more stakeholders could participate. Murphy (1985) describes three reasons for developing the basic theory behind community-based tourism. The first reason addresses the "feeling that the growing tourism literature needed some form of synthesis to make it intelligible to the student of tourism and managers of the industry". The second reason was "to offer an approach that would correct the inadequacies of previous survey texts". The third reason refers to the sustainability and responsibility of tourism since it recognised "that tourism in industrial nations was now reaching a crucial stage in its development, to suggest a planning method that would meet the needs of tourism and integrate them into the general planning process" (Murphy 1985). Beeton (2006) provided some seminal literature that bolstered the research and study to develop an alternative and effective form of tourism activity. Beeton states, "many of those searching for that difference are looking to the people at the places they visit ... ". Dangi and Jamal (2016) state, "There is a paucity of good research on inequalities in goods, services, and income and related distribution and procedural justice issues". Moscardo (2008) has been an inspiration to the research and study that was carried out for these projects when she speaks about the growth of the socio-economic industry, which contrasts with the slow pace at which sustainable and community-based tourism is growing; perhaps the best explanation for this phenomenon is stated by Moscardo (2008) when she explains, "The challenge for this model is that there exist critical gaps in our knowledge of how to achieve the goals embedded in the community capacity-building approach to tourism development". Indeed, Macbeth (2005) added two other settings that gave this industry a more socio-cultural sense of sustainability and ethics.

In recent years, some critique has been made about the effectiveness and feasibility of community-based tourism (CBT) as an alternative to the mainstream markets (Goodwin and Santilli 2009). Still, the aspect of three key factors can be seen as the driving force in making CBT a primary objective of any local tourism planning strategy and policy. The three factors are commitment, trust, and synergy. It is only by ensuring participation throughout the process by all stakeholders, avoiding "stakeholder fatigue", and consistent consultation with the stakeholders that such an inclusive process of local tourism planning will succeed. Ruggieri and Iannolino (2022) demonstrate the existence of a company network in some island destinations. The relatives and commercial links are managed with trust and by sharing information to create a common vision and high cooperation levels. Following those principles of the community-based model, it is possible to identify some bullet points.

- i. Self-employment of local people;
- ii. Diffuse entrepreneurship among communities;
- iii. Accommodation based on the non-establishment models."
- iv. Small dimension on local businesses;
- v. Local services are usually offered to the local population;
- vi. Maintaining a local supply;
- vii. Self-managed destination;
- viii. Community company network based on trust;
- ix. The public sector supports the local community and stakeholders;
- x. Common vision and policies are shared and decided with all the networks.

This model is more challenging to study due to the lack of information and statistics and several micro hospitality sectors managed by people not involved in the tourism sector. In Table 2, the main theories are recalled for the analysis.

Table 2. Community-based tourism model thematic.

Community-Based Tourism	Authors
Network	Ruggieri and Iannolino (2022)
Activities	Beeton (2006)
Social aspects	Moscardo (2008)
Planning	Murphy (1985); Krippendorf (1987); and Britton (1984)
Model and implementation	Wearing and McDonald (2002)
Community benefits	Dangi and Jamal (2016)

Source: elaboration on literature analysis.

3. Islands Tourism and Planning

The European Union (EU) tourist islands in south Europe are more than 100 and belong to six EU state members. However, despite the diversity and uniqueness of each island, these territories share the same permanent handicaps because of their insularity (Briguglio and Kisanga 2004). The EU has recognised this condition as both a geo-cultural factor and a permanent handicap because of additional constraints on competitiveness in the areas concerned and is seen as the main reason for the formulation of specific policies addressed to these territories. It has led to the insular areas being identified as regions that suffer from severe or permanent natural or demographic handicaps. It is necessary to adopt specific measures to reduce disparities between the levels of development of the various regions and the backwardness of the least favoured regions.

In contrast to these difficulties, EU tourist islands experience strong demand for high levels of tourism consumption with positive effects on local employment and production. Tourism in islands tends to be central to the local economy. However, the islands cannot all be placed at the same stage of tourism development (Butler 1980) because destinations coexist at various stages of development. This makes it impossible to formulate strategic guidelines for sustainable development that are valid and generally applicable on all islands (Baldacchino 2006; Fairbairn 2007). It is, therefore, necessary to start with a comparative analysis of tourism in the islands to develop the most appropriate tourism policies for the territory concerned. Table 3 shows the statistical indicators for the islands.

Table 3. The islands' panel dimensions.

	Population		Hotel Establishments		No-Hotel Establishments		International Arrivals		Employment	
	2010	2019	2010	2019	2010	2019	2010	2019	2010	2019
Malta	414,027	493,559	153	224	7	20	1,118,596	1,821,836	17,196	22,796
La Réunion	821,136	856,547	51	109	6	0	N.A.	63,419	8289	10,314
Corse	309,693	342,256	370	438	251	451	631,599	866,213	3954	9259
Illes Balears	1,083,679	1,188,220	1399	1410	1171	1362	7,302,495	10,703,104	69,861	104,440
Canarias	2,045,163	2,206,901	602	578	2109	1734	7,464,321	10,484,447	101,581	149,063
Região Autónoma dos Açores (PT)	246,900	242,846	82	100	10	283	126,714	361,913	6048	10,107
Cyprus	819,140	875,899	690	814	149	2	1,814,328	2,689,344	42,438	54,478
Voreio Aigaio (Nord Egeo)	200,179	221,098	N.A.	389	N.A.	962	N.A.	369,551	7691	12,893
Notio Aigaio (Sud Egeo = Cicladi + Dodekaneso)	332,652	344,027	N.A.	2113	N.A.	7282	N.A.	6,534,569	27,888	88,065
Kriti	623,113	634,930	N.A.	1611	N.A.	3405	N.A.	5,600,054	29,447	72,469
Sardegna	1,641,347	1,622,257	916	925	2998	4792	840,212	1,738,868	40,015	/
Região Autónoma da Madeira (PT)	266,715	253,945	188	168	9	224	588,019	983,678	13,631	18,222
Ionia Nisia	208,675	203,869	N.A.	956	N.A.	4270	N.A.	2,642,305	15,185	42,573
Sicilia	4,997,429	4,908,548	1306	1328	3462	6145	1,544,488	2,396,508	70 <i>,</i> 596	/
Guadeloupe	N.A.	417,161	N.A.	45	N.A.	0	N.A.	39,613	/	4343
Martinique	394,173	364,413	73	46	11	0	N.A.	44,858	5520	4976

Source: data analysis on OTIE islands database.

4. Methodology

To describe the trend behaviour of these islands, we have considered some statistical indicators taken from the literature that refers to some macroeconomic dimensions (Table 4). The main supply and demand data for EU islands analysed come from Eurostat and the Observatory of Tourism for Islands Economies (OTIE). The variables consider the evolutionary trend over ten years from 2010 to 2019. The first two variables (variation of the number of hotel accommodations and variation of the number of non-hotel accommodations) measure the increase in the number of hotels and non-hotels during the observation period (Ruggieri and Calò 2022). According to Eurostat, we consider holiday and other short-stay accommodations, camping grounds, recreational vehicle parks, and trailer parks

in the non-hotels categories. These variables are relevant to describe the tourism sector evolution because the accommodation establishments, according to the United Nations World Tourism Organization (UNWTO) statistical convention, are the essential elements of the existence of tourism products.

1.	Development dimension	2.	Variables	3.	Coding
4.	Industrial tourism	5.	Variation of number of hotel accommodation	6.	ZAveragevarhotel
7.	Community-based tourism	8.	Variation of number of non-hotel accommodation	9.	ZAveragevarnohotel
10.	Demography	11.	Variation of population	12.	ZAveragevarpop
13.	Economy	14.	Employers' variation	15.	ZAveragevaremploy
16.	Tourism model	17.	Variation of international arrivals	18.	ZAveragevarinternat

Table 4. List of variables used.

Source: data analysis on OTIE Islands database.

The development of new hotel structures demonstrates the existence of a growing tourism supply and the possibility of containing the increasing tourist demand. Hotel facilities represent essential investments in the territory and have a multiplier effect on economic development and island sustainability. In contrast, non-hotel facilities, on the other hand, are a quick way to meet demand needs. Significant investments are unnecessary in some cases (use of second homes), and the impact on the island's sustainability could be contained or limited. The third and the fourth variables (variation of the population and employer variation) measure the attractiveness of the islands from a social and economic point of view, and it will be used as an attractiveness proxy. When an island has development growth, we expect an increase in employment followed by population growth. The decline of the population and islands is a much-discussed topic in the literature and has been addressed by local governments for several years. Population decline involves reducing community services (think of the closure of hospitals or parts of them) and less social capital (the ageing population).

Finally, the last variable is related to the characteristics of the tourism sector. The dimension associated with international arrivals highlights the interests of the global tourism market for the island. As already stated, all these variables are considered in their evolution in the same observation period. To avoid the danger of overestimation, the starting value of each variable corresponds to the average of the values for the years 2010 and 2011. Similarly, the end-of-period values correspond to the average values for 2018 and 2019. Therefore, their value is a trend linked to territorial transformation paths.

Factor analysis was carried out to analyse the relationships between the five variables. Factor analysis (FA) is a method to analyse the interrelationship within a group of variables and identify some factors believed to contain basic information about the observed structure. This methodology explains the correlation between the observed variables due to fewer non-observed factors. These factors are also known as "components", "dimensions", or "latent factors". Furthermore, the agglomeration of observations is transformed into a simple structure that can "inform" as much as the initial setup (Mignami and Montanari 1994). Of all the techniques of multivariate analysis, FA is of the most significant interest because of its possible application in the business sphere, particularly regarding market research (Iacobucci 1996; Cool and Henderson 1997). Finally, the applied methodology finds the main factors that can identify the two island groups based on chosen variables from the two theoretical models.

Applying the methodology to such a small sample requires caution in interpreting the results. Several contributions in the literature discourage researchers from using FA when

their sample size (N) is too small. Some authors, such as Guilford (1954) and Cattell (1978), recommend a minimum sample size of 200. Other researchers have focused on the number of cases per variable (N/p) (Hair et al. 1979). However, as de Winter et al. (2009) recalled, the absolute N and N/p ratio recommendations were gradually abandoned as erroneous.

Recently, studies have shown that the minimum sample size is a function of several parameters (Gagné and Hancock 2006; MacCallum et al. 2001; MacCallum et al. 1999; Velicer and Fava 1998).

On the other hand, some studies have shown the application of factor analysis to very small samples (Velicer and Fava 1998; Geweke and Singleton 1980; Bearden et al. 1982; Preacher and MacCallum 2002), considering them to be adequate. Aware of these limitations, we used factorial analysis for our study.

5. Data Analysis

The variables used have different units of measurement. Thus, a normalisation process was needed. The eigenvalues of the variance and covariance matrix of the transformed variables are shown in Table 5. The first principal component alone summarises more than 40% of the total variability, namely the information contained in the five variables used in the analysis, while the second is more than 33%. The data analysis has some limitations due to the secondary data delivered from the Observatory of Tourism for Islands Economy and compared with Eurostat ones. The variable considered to better describe the two EU island's tourist models is the only one available for all the EU islands. Sometimes the statistical indicators are different for each country at a sub-regional level; thus, the number of variables considered in this article is comparable but limited.

Table 5. Principal Component Analysis, Extracted Components.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.302	46.040	46.040	2.302	46.040	46.040	2.027	40.535	40.535
2	1.377	27.548	73.588	1.377	27.548	73.588	1.653	33.053	73.588
3	0.782	15.636	89.225						
4	0.444	8.882	98.107						
5	0.095	1.893	100.000						

Source: data analysis on OTIE islands database.

The factor analysis summarised the five variables into two components. In the first, the more critical in terms of expressed variability, we find the variables of social development (population variation), and economic development (interpretation of employers), together with the variable of the development of industrial tourism (variation of hotels). We can define the first component as relating to the product in various forms (social, economic, and tourist).

Thus, we move to a more in-depth analysis of the results by calculating the factor scores (FAC) resulting from the FA calculation and expressing the link between the cases and the extracted components. By placing the ingredients in hierarchical order concerning FAC1 (from the strongest to the weakest link), it is possible to understand the island's "behaviour" (Table 6) and make some reflections on the characteristics of the tourist models on these islands.

		Variables								
Islands	FAC_1	Population Trend	Hotel Establishments Trend	No-Hotel Establishments Trend	International Arrivals Trend	Employment Trend				
Malta	2.475	16.9	38.4	146.7	56.2	48.9				
La Réunion	1.190	3.8	116.7	-60.0	54.7	6.9				
Corse	1.171	9.1	18.9	67.7	42.9	30.8				
Illes Balears	0.556	8.3	0.2	13.1	36.5	19.2				
Canarias	0.352	6.7	-3.7	-17.3	32.8	17.8				
Região Autónoma dos Açores (PT)	0.239	-1.4	22.8	2520.0	168.1	3.9				
Cyprus	0.045	4.9	17.6	-98.6	42.4	3.2				
Voreio Aigaio (Nord Egeo)	-0.034	7.8	-8.5	103.4	41.7	2.7				
Notio Aigaio (Sud Egeo = Cicladi + Dodekaneso)	-0.232	2.7	-1.2	119.3	110.3	0.5				
Kriti	-0.405	1.5	-1.5	13.6	85.0	-0.4				
Sardegna	-0.527	-0.4	0.1	49.4	96.4	-1.7				
Região Autónoma da Madeira (PT)	-0.707	-4.9	-11.2	2233.3	59.9	0.6				
Ionia Nisia	-0.778	-2.3	-0.8	49.5	108.8	-6.4				
Sicilia	-0.780	-0.7	0.5	71.5	46.0	-6.6				
Guadeloupe	-1.065	-4.2	4.4	-100.0	34.8	-8.3				
Martinique	-1.501	-6.8	-32.6	-100.0	42.6	-3.9				

Table 6. Rank islands order and variables value considering FAC_1 (value 2010–2011 vs. 2018–2019).

Source: data analysis on OTIE islands database.

First, it is evident that, compared to the other islands, Malta has a different tourism development model, strongly influenced by economic and social factors. The other islands in Table 6 have a less intense but evident development trend. In some cases, this economic development is measured only on the basis of the number of hotels. (La Réunion, Corse, Illes Balears, Região Autónoma dos Açores).

On the contrary, on the last five islands (the "marginal" islands), it is noted that despite a population loss and a decrease in hotel and non-hotel facilities, the trend of international arrivals is consistent. It, therefore, seems that the economic conditions towards which this group of islands is moving do not affect the international tourist attraction. The marginality is also evident from the non-growth of hotel structures, contrary to non-hotel systems (which grow in almost all the "marginal" islands).

6. Discussion

Starting from a literature analysis, this article offers the principal dimensions and variables that can separately identify the two tourism models: IBTM and CBTM. Consequently, to understand the development of choices and patterns, this article analysed sixteen islands and archipelagos for the south European Union countries in ten years from 2010 to 2019. A panel data analysis was based on critical proxy variables for IBTM and CBTM. The principal component analysis was adopted to compare the evolutionary trends of these two different ways in the EU islands' tourism model adopted and followed.

According to the research question (Rq₂), the data analysis identified two groups of islands: the first in the past ten years before COVID-19, following a planned and industrybased tourist model with an employment system and a relevant hospitality industry. Malta, La Réunion, Corse, Iles Baleares, Canarias, Azores, and Cyprus developed a reticulum of well-structured tourist industries centrally coordinated or managed (Baggio and Sainaghi 2011). This model proposes an industrial organisation that is place-based and able to generate at different levels the specialisation and agglomeration economies (Marshall 1994). The island's destination followed from 2010 until 2019, a demand driver approach based on external investments, international hotel chains, a consistent number of accommodation services, related services, flight connections, public services, and central policy coordination as a single tourism industry with some exceptions.

Tourism based on industry economies follows economic aspects and works for local economic increase, added value, and employment. Industrial tourism has its fair share of defects, such as unsustainability, over-tourism, and the lack of correct carrying-capacity

studies that have led, in some places, to force fields between construction and infrastructural developments for tourism.

In contrast, the second group of selected islands, such as Voreio Aigaio, Notio Aigaio, Kriti, Sardegna, Região Autónoma da Madeira, Ionia Nisia, Sicilia, Guadeloupe, and Martinique, adopted and followed in ten years a spontaneous tourism model which is supply-driven and based on the local community and small or micro hospitality systems and with auto-entrepreneurship in tourism. For this group, the community-based approach to tourism is based on host–visitor activity in respect of the life quality of the host community, maintaining and guaranteeing economic support to self-managed activities. The community-based approach created an awareness of what sustainable and responsible tourism can offer all stakeholders regarding those economic and social aspects.

7. Conclusions

The concept of the integrated approach to tourism planning needs to be implemented through continuous and consistent dialogue and discussion more focused on the economic, social, and environmental aspects. The analysed theoretical paradigms offer two different and opposite approaches to the EU island tourist destinations. The islands' fragile territories with limitations and evident economic disparities compared with the mainland tourism economies are considered a great opportunity for economic development using local natural resources (Mazzola et al. 2019). The tourism economy specialisation for islands needs to investigate the tourism model adopted or chosen. As explained above, the literature analysis shows two paradigms: the IBTM and CBTM.

Both paradigms have limitations and identify two different tourism evolutionary scenarios useful for the EU's future island tourism policies. The integrated approach (Zarb 2017) could be followed, considering the two presented tourism paradigms. In this way, an integrated approach could ensure commitment, trust, and synergy between all three stakeholders—the local authorities, businesses, and the local community (Murphy 1985; Britton 1984; Krippendorf 1987; Zarb 2017, 2019).

The CBTM limitation in the planning process is related to the difficulty of establishing a fragmented society where the key stakeholders and shareholders work within their dedicated and isolated cells. Therefore, the host community must learn to adapt to the changing situations and cultures affected by the tourism demand. This means looking at the broader socio-cultural activity rather than the sectoral socio-economic area.

Despite working under the sectoral socio-economic area, as in the tourism industry model, the stakeholder often works isolated and based on a single specialisation.

In an integrated approach, stakeholders work consistently and continuously, not simply as observers but as active participants, which will mean that there can no longer be two traditional blocs in the stakeholder structure, that is, those who work directly for the industry and the rest, but the host community has a role to play in enriching the visitor experience. The community must possess a powerful element of commitment, trust, and synergy for all the stakeholders. This synergy must be demonstrated by consistently evaluating the activity and reviewing any timely processes, policies, and strategies. Building such an interpretation of the tourism activity will allow the stakeholders to provide a basis for sustainably and responsibly managing tourism with their involvement.

This article highlighted for EU island destinations the effect of rethinking, redeveloping, and restoring tourism as a socio-cultural activity. Consequently, a sustainable and responsible approach is where the host community, the business community, and the authorities will benefit both in terms of the social and economic factors. The need to reopen the tourism activities now indicates a stubbornness that will surely lead to the decline of tourism as an activity where hospitality and service are vital components but where the emphasis is on making a quick return, irrespective of the long-term damage to the environment and the local communities. Therefore, sustainable tourism in islands could follow a more integrated approach with local communities following relational hospitality based on people. The limitation of this article relates to the small number of variables considered as a proxy of the two adopted island tourism models. The limited data available for sub-regional territories at the EU level reduces the possibility of deep analysis. Further study must also compare the economic performance and the economic, social, and environmental positive and negative impacts.

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