Segmentación y caracterización regional de destinos turísticos en España: enfoque del turismo local y extranjero

Regional segmentation and characterisation of tourist destinations in Spain: focus on local and foreign tourism

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Resumen

El turismo es uno de los sectores de mayor expansión debido al crecimiento de la economía global. Este trabajo plantea como objetivo caracterizar los destinos turísticos españoles como opción económica de desarrollo desde una perspectiva regional. Para ello, se aplican técnicas de Análisis Multivariante, identificándose cuatro factores que determinan al turismo. Estos factores recogen y diferencian los principales aspectos del impacto económico y la eficacia turística de la industria hostelera. Se produce un efecto desigual del turismo sobre los destinos turísticos españoles, siendo la localización del destino turístico el principal determinante del desempeño. Se identifican dos segmentos regionales según el mercado turístico de mayor importancia, considerándose decisiva para dicha clasificación la nacionalidad del turista. Por un lado, se distinguen los archipiélagos españoles como destinos turísticos en los que el turista internacional tiene mayor peso, influyendo de forma
importante en el empleo y en el volumen de gasto. Por otro lado, las regiones de la costa Mediterránea, en las que el turismo nacional adquiere mayor relevancia, contribuyen de forma importante a alcanzar la eficacia del sector. Las regiones de Andalucía y Cataluña son las más competitivas a nivel nacional, consiguiendo atraer tanto al turista local como al internacional.

Palabras clave: impacto turístico; eficacia turística; destinos turísticos; análisis multivariante.

Abstract

Tourism is one of the fastest-growing sectors due to the growth of the global economy. The aim of this paper is to characterise Spanish tourist destinations as an economic development option from a regional perspective. To this end, Multivariate Analysis techniques are applied, through which four factors are identified to determine tourism. These factors capture and differentiate the main aspects of the economic impact and tourism efficiency of the hospitality industry. There is an unequal effect of tourism on Spanish tourist destinations, whereby the location of the tourist destination constitutes the main determinant of performance. Two regional segments are identified in terms of according to the most important tourist markets, market for which, the nationality of the tourist is considered decisive for this classification. On the one hand, the mainland archipelagos are distinguished as tourist destinations where international tourists have the greatest presence, with a significant influence on employment and the volume of expenditure. On the other hand, the regions of the Mediterranean coast, where national tourism is predominant, make a major contribution to the efficiency of the sector. The regions of Andalusia and Catalonia are the most competitive an at national level since they attract both domestic and international tourists.

Key words: tourism impact; tourism efficiency; tourism destination; local tourist; foreign tourist.
1 Introduction

Tourism is one of the world’s fastest-growing economic sectors. The demand for leisure has greatly increased in recent years due to the growth of the global economy. The importance of the tourism industry in the economy has been widely studied in the literature (see, for example, Cárdenas-Garcia et al., 2015; Dogru and Sirakaya-Turk, 2017; Dogru and Bulut, 2018; Liu and Wu, 2019; SantaMaría and Filis, 2019). The relationship between tourism and the economy generates direct and indirect effects, since the sector contributes toward wealth creation, increased business activity, improved income levels of the population, and infrastructure development (Egbali et al., 2011; Shariff and Abidin, 2013) and benefits the labour market (Andereck and Nyaupane, 2011; Long, 2011; Sánchez and Sánchez, 2018). It also enhances the public image of the tourism destination (Huang et al., 2010; Prayaq and Ryan, 2011; Matos et al., 2012). This relationship is particularly important in Europe, several of whose countries feature among the world’s top tourist destinations (UNWTO, 2019).

The contribution of tourism to economic growth in countries such as Spain, France, the United Kingdom, and the United States remains uneven (Brida et al., 2008). In Spain, holiday tourism is a key activity; both domestic and international tourism demand is essential for the growth of the country’s tourism sector. Tourism accounts for more than 52% of service exports and 11.8% of GDP (OECD, 2020). The demand regarding international tourism to Spain has sustained a strong long-term trend, as shown by its behaviour during the economic crisis of 2008. Most economic sectors were severely affected, yet international tourist arrivals to Spain increased by 7.6% in 2011, while in 2016, the increase was 10.3%, and in 2017 the increase was 8.6% (FRONTUR, 2020). This trend makes it possible to establish an association between international tourism and the socio-economic development of the territory (Carrillo and Pulido, 2012; Pablo-Romero and Molina, 2013; Brida et al., 2016; Cherkasov et al., 2017), which in the case of Spain, links economic growth with tourism (Perles-Ribes et al., 2017). Domestic tourism, it is characterised by being more sensitive to alterations, whereby a causal relationship (bidirectional) is determined between domestic tourism and economic growth (Flores et al., 2018). However, the recent COVID-19 health crisis has favoured the development of more local forms of travel, forcing a closer type of tourism, focusing on national and regional markets, with domestic tourism being a key
pillar for tourism and economic recovery (Bieger and Laesser, 2020; Dupeyras et al., 2020; Gössling et al., 2020; Rogerson and Baum, 2020). Most research has considered the international tourism market and its relationship with the country’s economy (Perles-Ribes, et al., 2017), and hence the main contribution of this study is that it also considers the domestic tourist, which enables a comparison of the two tourism markets. This comparison will identify the tourism impact according to nationality, which can provide a good indicator of the tourism potential in terms of market segments, thereby helping the development of the sector and boosting the country’s economic growth.

Given the enormous competitiveness of Spanish destinations and the rise of new international destinations, there is a clear need to identify and characterise the determinants that define the various tourist destinations in this country. This task requires consideration of the geographical diversity of Spain, which is manifested in the different regions (also called Autonomous Communities) into which the country is divided both politically and administratively. The regions in Spain play a fundamental role, and enjoy a high level of autonomy and independence from the central government in relation to many issues, including tourism planning (Ivars-Baidal, 2004). Therefore, the identification of the determinants of these regional differences is of great importance, since knowledge thereof can help in the planning of territorial tourism policies and strategies. The objective of this study is, therefore, to characterise Spanish tourist destinations from a regional perspective, identifying the factors which determine the tourism sector and grouping tourist destinations according to the factors which define them, all of which will be carried out while taking the nationality of the tourist into consideration, which will allow segmentation in terms of the tourist market.

2 Theoretical Framework and Working Hypotheses

Spain was a late entrant into the global tourism industry but the country has nevertheless, been able to adapt and satisfy the strong tourism demand it receives (San Román, 2017; Vallejo-Pousada, 2013). Spain’s importance as a global tourist destination has sparked the interest of numerous research studies (see, for example, Cánoves et al., 2016; Flores et al., 2018; Gil-Alana et al., 2019). In Spain, international tourism is a fundamental market that shows a growing temporal evolution whose trend is not easy to deviate (Bote, 1994).
However, the country’s tourism is not exclusively international; domestic tourism also makes an important contribution to the economy (Gálvez et al., 2014). The tourism sector plays a strategic role in the country’s territorial economic growth and development (Bote, 1994; Pulido et al., 2008; Larrinaga and Vallejos, 2013; Ruiz, 2012; Vizcaíno, 2016; Sánchez-Sánchez and Sánchez-Sánchez, 2021), even in periods of economic and financial crisis (Perles-Ribes et al., 2017). Thus, it can be established that tourism has an economic, environmental, and socio-cultural impact (Fennell, 2007). This effect can be positive, given that it benefits employment (Andereck and Nyaupane, 2011; Long, 2011; Sánchez and Sánchez, 2018), helps the conversion of the local economy, the maintenance of local services (Roberts and Hall, 2001; Paniagua, 2002; Cánoves et al., 2004), contributes towards improving the image and quality of life of the population, helps in the conservation of cultural heritage and favours the business network associated with the sector (Andereck et al., 2005).

Tourism reinforces wealth, intensifies the economy, and contributes towards income growth and infrastructure development (Egbali et al., 2011; Shariff and Abidin, 2013). However, tourism can also have negative effects on the tourist destination, leading to overcrowding, security problems, and an overintensive use of resources (Huybers and Bennett, 2003; Ramseok-Munhurrun and Naidoo, 2011; Almeida et al., 2016). The study of the impact of tourism in Spain has mainly focused on the analysis in terms of tourist areas, for example, Aguiló et al. (2004) studied this impact in the Balearic Islands, Marrero (2006) in the Canary Islands, Oviedo et al. (2008) in Seville, Vargas et al. (2009, 2011) in Huelva, Bujosa and Rosselló (2007), Royo and Ruiz (2009), Gutiérrez (2010) in Catalonia, and Huete (2010) in Valencia. Sánchez and Sánchez (2018) perform an analysis of the total Spanish territory, while disaggregating and grouping the units of analysis at the provincial level. When the analysis is carried out from a regional perspective, the relationship between tourism and economic impact differs depending on the area, as a result of the various degrees of tourism specialisation in each area (Brida et. al., 2013). Each tourism destination is characterised by offering different products and services usually aimed at a multi-segmented market, with a high number of clusters of potential customers, with different tastes, concerns, and needs (Vanhoeve, 2005; Wall and Mathieson, 2006; Romão et al., 2015). Tourism has a high potential as a destination-oriented activity (Williams and Shaw, 2011; Brouder and Eriksson, 2013); the combination and integration of specialised products and services can help to
increase the attractiveness of the tourist destination (Hall and Williams, 2008; Malakauskaite and Navickas, 2010), thereby providing added value (Martin, 2014; Boes et al., 2016).

Ritchie and Crouch (2003) consider the following definition of competitiveness "what makes a tourism destination truly competitive is its ability to increase tourism expenditure, to increasingly attract visitors, while providing them with satisfying, memorable experiences, and to do so in a profitable way, while enhancing the well-being of destination residents and preserving the natural capital of the destination for future generations". This idea of competitiveness reflects the link between economic impact, growth, profits, resource conservation and consumer satisfaction. In short, this definition refers both to the idea of efficiency in the tourist exploitation of tourist destinations and to the sustainability of such exploitation. Tourism competitiveness has been widely analysed in the literature (Enright and Newton, 2004; Navickas and Malakauskaite, 2009; Tsai et al., 2009). However, there are few studies that carry out territorial comparisons from this perspective. Several examples can be observed in the study of regions in Italy (Cracolici and Nijkamp, 2008), of regions in Spain (Camisón and Forés, 2015; Sánchez and Sánchez, 2018), and territorial analysis in Japan (Romão and Saito, 2017). Therefore, the identification of territorial tourism determinants is fundamental in achieving a competitive advantage, since these determinants explain and measure the impact on the sector. As a consequence, the analysis of tourism destination determinants has gained major interest in the literature (Tsai et al., 2009; Crouch, 2011; Assaf and Josiassen, 2012; Benito-López et al., 2014; Marco-Lajara et al., 2014). Several of these determinants are related to the tourist destination (Sellers-Rubio and Casado-Díaz, 2018; Yang and Cai, 2016), to infrastructures, to services, to the interest and image projected by the destination (Assaf and Josiassen, 2012), and to environmental factors (Chen et al., 2018; Sellers-Rubio and Casado-Díaz, 2018; Solana-Ibáñez et al., 2016). In Spain, some of this research analyses determinants of destination (Sánchez and Sánchez, 2018), international tourism (González and Moral, 1995; Garín and Pérez, 2000; Garín, 2007), and domestic tourism (Flores et al., 2018). Therefore, this research focuses on the identification of the factors that enable the economic impact and regional benefits of Spanish tourist destinations to be characterised.
These approaches allow the following research hypotheses to be established:

Hypothesis 1: The impact of tourism on the Spanish economy is uneven, the main determinant of this impact being the location of the region: In general, coastal regions bordering the Mediterranean Sea are the most favoured.

Hypothesis 2: The balance between the national and international tourism market determines the efficiency and competitiveness of the tourist destination.

3 Contextualisation of The Spanish Tourism Sector

The Spanish tourism industry began to expand in the 1950s. Since the early 1960s, the share of tourism in GDP has been increasing. In 1950, Spain’s share of world tourism revenues was 0.8%, while in 2001 the share had risen to 7% (Banco de España, 2004). In Spain, both foreign and domestic tourism play a major role in the country’s economy (Gálvez et al., 2014), however, Spain presents the singularity that non-residents have contributed significantly to total tourism revenues, while domestic tourism was developed at a later stage. In the 21st century, Spain has become a world tourism power, wherein the sector is fully consolidated. Proof of this is shown in the statistics regarding 2019, when Spain ranked second in the world in terms of the number of tourist arrivals, surpassed only by France.

In 2019 in Spain, 83,509,153 tourists came from the foreign market (60.8%) and 53,722,188 from the domestic market (39.2%) (Figure 1). Regarding international tourists, in 2019, 70,766,425 million were European (84.7%), of which 18 million were British (25.45%), 11.15 million German (15.77%), and 11.14 million French (15.75%) (see Table 1).

**Table 1. Evolution of tourists in terms of country of origin for the period 2016-2019 (total volume and distribution of tourists as a % of all Europeans by country of origin)**

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<tr>
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<tbody>
<tr>
<td>Germany</td>
<td>15.77%</td>
<td>16.13%</td>
<td>16.81%</td>
<td>15.84%</td>
</tr>
<tr>
<td>France</td>
<td>15.75%</td>
<td>15.96%</td>
<td>15.92%</td>
<td>15.91%</td>
</tr>
<tr>
<td>Italy</td>
<td>6.41%</td>
<td>6.20%</td>
<td>5.97%</td>
<td>5.61%</td>
</tr>
<tr>
<td>Nordic Countries</td>
<td>7.81%</td>
<td>8.20%</td>
<td>8.23%</td>
<td>7.25%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>25.45%</td>
<td>26.18%</td>
<td>26.58%</td>
<td>24.98%</td>
</tr>
<tr>
<td>Total European Tourists</td>
<td>70,766,425</td>
<td>71,297,652</td>
<td>71,136,373</td>
<td>66,437,222</td>
</tr>
<tr>
<td>-------------------------</td>
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</tr>
<tr>
<td>Total International Tourists</td>
<td>83,509,153</td>
<td>82,808,413</td>
<td>81,868,522</td>
<td>75,315,008</td>
</tr>
</tbody>
</table>

Note: Total expressed in number of visitors. Only those countries accounting for at least 5% of tourist volume are presented.

Source: Authors’ own using data from the Spanish National Institute of Statistics (INE, 2019b).

One possible explanation for this large influx of international tourists may involve the economic and political problems of a number of Spain’s direct competitors. Several of these countries are in a stage of tourism stagnation, which they are trying to solve with alternative and complementary proposals to mass tourism, which is usually associated with sun-and-beach holiday tourism (Bonet, 2003; Williams and Buswell, 2003). In the last decade, the trend in Spanish domestic tourism has also registered highly significant growth, and shows the growing dynamism of national tourism, but above all international tourism. (Figure 1).

**Figure 1. Evolution of tourist arrivals in Spain per nationality (year 2019).**

Source: Prepared by the authors using data from the Spanish National Institute of Statistics (INE, 2019b).

With regard to the country’s main tourist destinations, the regions most visited by international tourists in 2019 were located along the Mediterranean coast, with the regions of Catalonia, Andalusia, the Balearic Islands, Madrid and the Canary Islands (located in the Atlantic Ocean) absorbing 60.59% of tourist arrivals (Figure 2). These results confirm the
preference of foreign visitors for sun-and-beach tourism. Destination preferences for domestic tourism are somewhat different, with the regions of Andalusia, Madrid, Catalonia and Valencia as the main destinations for tourist trips that account for 56.87% of domestic travellers.

The preferences for certain tourist destinations are best understood by analysing the main reason for travelling. In 2019, leisure, recreation, and holidays, at 87%, constitute the main purposes of tourism, while business, professional, and other reasons account for only 13% of the total (Figure 3).

The contribution of tourism to the Spanish economy is highly significant since it helps considerably in job creation, whereby the number of people employed in tourism shows a constant and growing evolution (Figure 4). In 2019, there were 2.72 million workers in the tourism sector affiliated to Social Security, which represents 12.9% of the total number of employees in the country (INE, 2019a).

**Figure 2. Tourist arrivals by region and type of tourist market (year 2019).**

Source: Prepared by the authors using data from the Spanish National Institute of Statistics (INE, 2019b).
During the period 2016-2019, the tourism sector’s weight in Spanish GDP continued to increase (Table 2). This increase occurs in all GDP components (tourism expenditure and consumption, tourism direct gross value added, gross value added of tourism industries). Note that, in 2019, tourism contributed a total of 154,487.1 million euros to the Gross
Domestic Product (GDP) of Spain, which constitutes 12.4% of its GDP (Table 2). An example of this importance can be seen in Figure 5, which shows a comparison of the evolution of the year-on-year variation rate of tourism GDP compared to the variation rate of national GDP.

In terms of the income generated by the tourism sector in Spain, in the 4 years from 2016 to 2019 there was an increase in expenditure of more than 21,000 million euros. The year 2019 concluded with the highest volume of Spanish tourism activity in history, with more than 140,000 million euros spent thereon (INE, 2019a).

Table 2. Evolution of the contribution of tourism to the GDP of the Spanish economy for the period 2016-2019 (absolute value)

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</thead>
<tbody>
<tr>
<td>Domestic Tourism Expenditure</td>
<td>140,479.0</td>
<td>133,031.0</td>
<td>127,895.6</td>
<td>115,709.2</td>
</tr>
<tr>
<td>Domestic Tourism Consumption</td>
<td>159,910.0</td>
<td>152,312.3</td>
<td>145,963.0</td>
<td>131,668.9</td>
</tr>
<tr>
<td>Gross Value Added of tourism industries</td>
<td>-</td>
<td>237,063.3</td>
<td>230,996.4</td>
<td>221,584.8</td>
</tr>
<tr>
<td>Tourism direct Gross Value Added</td>
<td>-</td>
<td>72,993.6</td>
<td>71,127.0</td>
<td>64,860.7</td>
</tr>
<tr>
<td>Tourism direct Gross Domestic Product</td>
<td>-</td>
<td>79,193.8</td>
<td>77,015.5</td>
<td>72,806.5</td>
</tr>
<tr>
<td>% of GDP</td>
<td>-</td>
<td>6.6</td>
<td>6.6</td>
<td>6.5</td>
</tr>
<tr>
<td>Tourism Gross Domestic Product</td>
<td>154,487.1</td>
<td>146,313.2</td>
<td>141,053.4</td>
<td>126,304.8</td>
</tr>
<tr>
<td>% of GDP</td>
<td>12.4</td>
<td>12.1</td>
<td>12.1</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Note: Data for 2019 and 2018 is a provisional estimate.

- - Data not available.

Source: Prepared by the authors using data from the Spanish National Institute of Statistics.

Figure 5. Trend in the year-on-year rate of change of tourism GDP and the year-on-year rate of change of the general GDP of the Spanish economy.
4 Methodology and Sources

The data for the study comes from official statistics, and specifically refer to the Tourist Expenditure Survey (EGATUR), Resident Tourism Survey, Tourist Occupancy Survey, Price Index and Profitability Indicators, and the Border Tourism Movement Statistics (FRONTUR), published by the Spanish National Institute of Statistics (INE). The time period considered refers to the year 2019.

Spain has a geographical plurality that is manifested in different administrative divisions, among which are the regions. This segmentation is not only territorial, but also political and administrative, which means that the regions play a crucial role in tourism management (Ivars-Baidal, 2004). For this reason, the study considers 17 Spanish regions as units of analysis, excluding the autonomous cities of Ceuta and Melilla due to their lack of official data.

The selection of the variables used in the study is conditioned by the information available in the databases. The aim of these variables is to capture the reality of the tourism sector in Spanish destinations. It will be taken into account that tourism is fundamentally shown in terms of tourist demand, the necessary infrastructures and resources, and the social and economic effect that tourism generates. Eighteen variables have therefore been selected, which can be grouped into three thematic blocks (the unit of measurement of the variable is
indicated in brackets). In research on the tourism sector, where the objective is the determination of factors, the usefulness of some of the variables that will be used in this study has been demonstrated (Sánchez-Sánchez and Sánchez-Sánchez, 2021; Sánchez and Sánchez 2018).

1. **Economy:** staff employed (number of people), total expenditure on international tourism (€), total expenditure on domestic tourism (€), average expenditure per international tourist (€), average expenditure per domestic tourist (€), hotel price index (annual rate of change, base 2008).

2. **Tourism demand:** international tourists (number of people), domestic tourists (number of people), international overnight stays (number of overnight stays), domestic overnight stays (number of overnight stays), trip stages (number), length of stay of international tourists (number of days), length of stay of domestic tourists (number of days), occupancy rate per bed place (%), occupancy rate per room (%).

3. **Resources:** bed places (number of beds), establishments (number of tourist establishments), rooms (number of rooms).

The heterogeneity of the units of measurement of the variables considered makes it necessary to standardise the data, which enables the results to be presented in relative terms and renders them comparable.

Statistical techniques of Multivariate Analysis (Factor Analysis, Cluster Analysis, and Discriminant Analysis) are applied to carry out the data analysis. This methodology is widely used to describe and represent areas in different contexts. For example, in studies related to Spain, Sánchez-Sánchez and Sánchez-Sánchez (2021) use these techniques to identify and characterise determinants of rural tourism in protected natural areas as an economic option for the development of rural areas. In Sánchez and Sánchez (2018) these techniques are applied in the analysis of the effect of rural tourism on the Spanish labour market. Fernández-Morales and Mayorga-Toledano (2018) use these techniques to determine territorial groupings, by taking into account the seasonal peculiarities of cruise tourists. De Carlos et al. (2016) study the performance of Spanish coastal destinations using tourism demand and accommodation supply. Other studies in which these statistical techniques are applied to determine territorial groups include those of: Serra et al. (2014) who study the
variations arising in urban and rural processes in different municipalities; Sánchez et al. (2018), whereby a grouping of municipalities in the region of Andalusia is carried out according to their social and employment characteristics; Cruces et al. (2009) who explore the economic discrepancies at the municipal level in Andalusia; Pena and Sánchez (2008) who examine the socio-economic reality of the region of Galicia at the municipal level; Herrero et al. (2007) who study territorial divergences in Castilla and León. Other international research that uses multivariate analysis techniques to characterise territorial units are found in Tanzania (Jani, 2018), in Nigeria (Agbabiaka et al., 2017), in Ecuador (SantMaría-Freire et al., 2017); in Romania (Dona and Popa, 2013); in Portugal (Vareiro et al., 2013), in Italy (Brida et al., 2010), in China (Hon et al., 2005), in Australia (Stimson et al., 2001), and in the United States (Hill et al., 1998).

4.1 Factor Analysis

Factor analysis aims to represent a set of variables as a linear combination of underlying factors or dimensions. This technique makes it possible to extract a smaller number of latent variables (factors) that concisely express the behaviour of the individuals for whom a set of original variables is under study. The analysis employed herein uses an exploratory and non-inferential analysis, namely the Principal Components method (Morrison, 1987). As a criterion for the extraction of the factors, those that show an eigenvalue greater than unity are chosen (Kaiser, 1960).

4.2 Cluster Analysis

Once the factors that determine tourist destinations have been identified through Factor Analysis, they are then utilised to establish groups of regions with similar characteristics by using Cluster Analysis. This technique classifies different subjects into groups (clusters) by taking the particularities they present as a reference. The objective of Cluster Analysis is to group subjects in such a way that those in a cluster are as similar as possible to each other and that the differences between clusters are as great as possible (Hair et al., 2000).

For the clusters, the concept of similarity between subjects is used, measured mathematically by means of the "distance" between individuals. The squared Euclidean distance is employed to measure this distance. There are other alternatives to the squared
Euclidean distance; however, Hair et al. (2000) show that the chosen measure bears no significant influence on the result obtained.

There are two types of clustering methods: hierarchical and non-hierarchical. Hierarchical methods consider all possible groups, while non-hierarchical methods need to set an initial number of clusters. Our study starts with the application of the hierarchical method, which will obtain the appropriate number of clusters, k, followed by the non-hierarchical k-means method.

4.3 Discriminate Analysis

Discriminant Analysis will validate the results obtained. This analysis is based on a set of elements belonging to different previously established groups and attempts to analyse the information relating to a series of variables, for both explanatory and predictive purposes. This enables the discriminatory capacity of the factors extracted to be studied.

5 Result

The results are organised in the same order as the objectives of the study: firstly, the factors that characterise the Spanish tourism sector are determined; and secondly, regional groups are identified according to the factors that define them.

5.1 Characterisation of Tourist Destinations

The analysis begins with the identification and characterisation of factors that determine Spanish tourist destinations.

Firstly, the applicability of the factor model is verified. To this end, Bartlett’s test of sphericity is applied, in order to ascertain whether the correlation matrix of the variables is an identity matrix. Bartlett’s statistic takes a high value (482.359) and the significance level is small (0.0000), which means that it is unlikely that the correlation matrix is the identity and, therefore, the application of Factor Analysis is appropriate. This result is reaffirmed by the value obtained by the Kaiser-Meyer-Olkin coefficient, KMO (0.743).

For the eigenvalues, the criterion involves the selection of those that are greater than unity, which leads to the selection of four factors that explain 93.223% of the total variability (Table 3). This percentage of explained variability is very high and is considered a very good model,
given that according to Hair et al. (2000), the lower limit of acceptance in studies related to Social Sciences is 60%.

Table 3. Determining factors of tourist destinations and explained variance

<table>
<thead>
<tr>
<th>Factors</th>
<th>Autovalue</th>
<th>% variance</th>
<th>% cumulative variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1. International market: Economic dynamism and hotel efficiency</td>
<td>10.998</td>
<td>61.099</td>
<td>61.099</td>
</tr>
<tr>
<td>Factor 2. Domestic market: Tourism effectiveness</td>
<td>2.525</td>
<td>14.027</td>
<td>75.125</td>
</tr>
<tr>
<td>Factor 3. Domestic market: Holiday duration and economic impact</td>
<td>2.167</td>
<td>12.037</td>
<td>87.163</td>
</tr>
<tr>
<td>Factor 4. Hotel prices</td>
<td>1.091</td>
<td>6.060</td>
<td>93.223</td>
</tr>
</tbody>
</table>

Source: Authors’ own

Table 4 shows the coefficient scores of the rotated factor matrix of the four factors. These values reflect the weight of each variable in each factor, whereby the higher their factor scores become, the stronger is the relationship between them.

Of the total variability, 61.099% is explained by Factor 1 (Table 3). This factor is strongly associated with nine of the eighteen variables analysed: staff employed, international tourist overnight stays, bed places, rooms, total international tourism expenditure, stages of travel, international tourists, occupancy rate per bedplace, and occupancy rate per room. These relationships are determined by the positive correlation of the variables (Table 4), which shows that high (or low) values of Factor 1 are related to regions with high (or low) values of staff employed, international tourist nights spent, bed places, rooms, total international tourism expenditure, stages of travel, international tourists, occupancy rate per bed place, and occupancy rate per room. According to the variables that represent it, Factor 1 stands out in aspects related to the economy and hotel resources generated by tourists of foreign nationality, which is why this factor is labelled as International market: Economic dynamism and hotel efficiency.

The regions with a higher score in Factor 1, that is, those most relevant in terms of presenting greater economic dynamism and hotel efficiency caused by international tourism, are the
Canary Islands with 2.04 points, the Balearic Islands with 1.82 points, and Catalonia with 1.58 points.

Factor 2 explains 14.027% of the total variance (Table 3). It is strongly and positively related to four variables: domestic tourist overnight stays, total domestic tourist expenditure, domestic tourists, and establishments (Table 4). This indicates that high (or low) values of the factor are related to regions with high (or low) values for domestic tourist overnight stays, total domestic tourist expenditure, domestic tourists, and tourist establishments. These relationships allow the second factor to be labelled as *Domestic Market: Tourism Effectiveness*.

The areas with the highest scores in the second factor include Madrid with 2 points, Andalusia with 1.83 points, and Catalonia with 1.46 points.

Factor 3 explains 12.037% of the total variance (Table 3), labelled as *National market: Holiday duration and economic impact*, given that the areas that comprise said factor present a positive correlation with the variables labelled duration of stay of the national tourist and average expenditure of the national tourist (Table 4). The most prominent region due to its high score in this factor is Madrid with 2.57 points.

Factor 4 explains 6.060% of the total variance (Table 3) and is positively associated only with the hotel price index variable (Table 4). This indicates that high (or low) values of the factor are related to regions with high (or low) hotel price index values. These relationships enable the fourth factor to be labelled as Hotel prices. The most important regions with high scores for this factor are Navarra with 1.40 points and Catalonia with 1.14 points.

**Table 4. Rotated factorial matrix**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
</tr>
<tr>
<td>Duration of stay for international tourists</td>
<td>0.116</td>
</tr>
<tr>
<td>Duration of stay for domestic tourists</td>
<td>0.018</td>
</tr>
<tr>
<td>Establishments</td>
<td>0.470</td>
</tr>
<tr>
<td>Stages of travel</td>
<td>0.885</td>
</tr>
<tr>
<td></td>
<td>Average international tourist expenditure</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>0.515</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ own.

The results obtained enable several of the hypotheses proposed to be contrasted, thereby proving that the tourism market (international/national) is a determining factor in characterising the Spanish tourism sector. The following cases can be distinguished: 1) The economic impact is unequal in the various tourist destinations, in that it is greater in those regions with high levels of international tourism demand; 2) National tourism is associated with tourism efficiency, so the sector’s performance is good.

5.2 Clustering of Tourist Destinations

In order to carry out the territorial grouping of tourist destinations and to analyse the regional impact, regions with similar characteristics with respect to the four factors extracted above are determined. The method selected for the creation of clusters is non-hierarchical, and is applied to the scores obtained in the different regions for the four factors extracted. In order to determine the most appropriate number of clusters, various tests are carried out, and the variations that occur in the residual variance are assessed when assuming a different
number of clusters. Finally, five clusters are selected as the optimal number. Table 5 and Figure 6 show the cluster membership of the different regions and their representation, respectively.

**Table 5. Regional configuration per cluster**

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Tourist areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 regions. Andalusia, Catalonia.</td>
</tr>
<tr>
<td>2</td>
<td>9 regions. Aragón, Cantabria, Castilla and León, Castilla-La Mancha, Extremadura, Galicia, Navarra, Basque country, La Rioja.</td>
</tr>
<tr>
<td>3</td>
<td>3 regions. Asturias, Comunidad Valenciana, Region of Murcia.</td>
</tr>
<tr>
<td>4</td>
<td>2 regions. Balearic Islands, Canary Islands.</td>
</tr>
<tr>
<td>5</td>
<td>1 region. Madrid</td>
</tr>
</tbody>
</table>

Source: Authors’ own

**Figure 6. Regional representation according to cluster of membership**

Source: Authors’ own
Table 6 shows the final mean scores of the clusters for each of the factors.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1. International market: Economic dynamism and hotel efficiency</td>
<td></td>
</tr>
<tr>
<td>1.36257</td>
<td>-0.54353</td>
</tr>
<tr>
<td>Factor 2. Domestic market: Tourism efficiency</td>
<td>1.65012</td>
</tr>
<tr>
<td>Factor 3. Domestic market: Holiday duration and economic impact</td>
<td>-0.71995</td>
</tr>
<tr>
<td>Factor 4. Hotel prices</td>
<td>0.25677</td>
</tr>
</tbody>
</table>

Source: Authors’ own

Cluster 1 comprises the regions of Andalusia and Catalonia. These destinations stand out largely for achieving a significant average score in Factors 1 and 2, which indicates that these regions are important for both national and international tourism. In these areas, tourism causes a major impact on the economy, especially in terms of job creation and the income derived from tourism activity. These destinations also stand out in terms of the efficiency of the hospitality industry sector, given that in these regions the consumption of tourism production factors and the results obtained in the process reach an optimum level. Andalusia and Catalonia are regions that offer a variety of tourism including both inland tourism (cultural, nature, sports, gastronomic, etc.) and sun-and-beach tourism. This complementarity brings added value to these regions, since it increases the competitiveness of these tourist destinations compared to others.

Cluster 2 is the most numerous and heterogeneous, since it comprises 9 regions (Aragon, Cantabria, Castilla and León, Castilla-La Mancha, Extremadura, Galicia, Navarra, Basque country, and La Rioja) which do not stand out in terms of average score in any of the factors, and present below-average scores in three of the four factors; only the Hotel prices factor
has a positive score. It should be noted that the regions that make up this cluster are mostly inland. Although three regions are coastal (Cantabria, Galicia, Basque country), they are all located in the north of Spain on the Cantabrian coast, whereas in Spain the traditional destinations for coastal recreational tourism are located in the much warmer Mediterranean Sea. This result shows the greater weight and importance of holiday tourism in Spain compared to alternative forms of tourism.

Cluster 3 is made up of three regions (Asturias, Comunidad Valenciana, and Region of Murcia) that fail to stand out in any of the factors, with below-average scores in all factors except for the National market: Holiday duration and economic impact, however, the score obtained in this factor is quite low (0.32503), clusters 5 (Madrid) and 4 (Balearic and Canary Islands) are more important in Factor 3. If this result is analysed, we can see that the Comunidad Valenciana and the Region of Murcia are located on the Mediterranean coast and receive mainly national tourists whose stays are of long duration, which increases tourist expenditure, thereby making it an important variable for their characterisation. However, Asturias is a region especially renowned for rural tourism (Sánchez and Sánchez, 2018), and is the only traditional nature tourism area that stands out in the grouping obtained. In fact, it is the only region in the grouping that offers a type of tourism other than traditional sun-and-beach tourism. Asturias is a leading Spanish region in nature tourism, and this type of tourism is almost entirely consumed by the national market, with an almost negligible presence of international tourism.

Cluster 4 is made up of the regions of the Balearic and Canary Islands, and is the most important in terms of the score obtained in Factor 1. These regions are favoured by the impact of international tourism, which has a positive impact on employment, tourism expenditure and income, resources, and the efficiency of the hospitality industry. The Balearic and Canary Islands make up the Spanish archipelagos and are prominent sun-and-beach tourism markets for the country. The location of the archipelagos gives them a competitive advantage over other destinations since it is possible to reach the islands in a few hours from almost any European country.

Cluster 5 is made up of a single region, Madrid, and scores highest in Factors 2 and 3, which measure the efficiency of the domestic tourism market and the length of holiday stay, and
domestic tourist expenditure, respectively. This region is largely important for domestic tourism, and tourism resources are used efficiently in this region. It also reveals that in this tourist destination, domestic tourists stay for long periods of time and spend profusely, which has a positive impact on the economy of the area. However, it has a below-average score in Factor 1, that is, despite the fact that the capital of the country, Madrid, is located in this region, it fails to exert an effect on the international tourist market. Finally, it should be noted that this cluster has the highest score in Factor 4, which measures hotel prices, indicating that the hotel industry in the Madrid region sets prices above the national average.

The territorial grouping obtained shows the diversity and heterogeneity of the tourism impact in the different Spanish regional destinations, whereby there is a clear division of the impact produced into two tourism segments determined by the nationality of the tourist (national/international).

On the other hand, the average scores in the various clusters (Table 6) enable the regional tourist destinations to be classified into three groups, according to the degree of tourist impact they present. Those regions which present a high tourist and economic impact include those areas that obtain the highest average score in terms of Factors 1 and 2, and are mainly composed of regions located on the Mediterranean coast (Andalusia and Catalonia) where the tourist impact is significant for both national and international tourism. The regions experiencing a medium degree of tourism and economic impact can in turn be divided into the type of impact according to whether the tourism market is focused on international tourism (Balearic and Canary Islands) or on national tourism (Madrid). The last group of regions, with low tourism and economic impact, is made up of the remaining Spanish regions.

The territorial groupings obtained show that the tourist destinations located on the Mediterranean coast are the most popular for both national and international tourism, which confirms that sun-and-beach tourism continues to be the type of tourism preferred by tourists who choose Spain as their destination. However, those regions capable of complementing their tourism portfolio by combining sun-and-beach tourism with other alternative forms of tourism (cultural, rural, gastronomic, etc.) are those that benefit the most. This is the case of the regions of Catalonia and Andalusia, which in addition to sun-and-
beach tourism, also offer other types of tourism, as they have some of the most important cities and natural areas in Spain, which allows them to offer a wide variety of historical and natural heritage and a wide gastronomic and cultural offer.

5.3 Validation of Results

In order to contrast the validity of the analysis and the results obtained, discriminant analysis was applied and the validity of the results was verified, given that the four factors that characterise tourism differ across the clusters (see Table 7). This demonstrates the discriminant value of the defined factors. Furthermore, the analysis of the prediction made by the discriminant analysis shows that 100% of the regions are correctly classified.

<table>
<thead>
<tr>
<th>Table 7. Validation of results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Factor 1. International market: Economic dynamism and hotel efficiency.</td>
</tr>
<tr>
<td>Factor 2. Domestic market: Tourist efficiency</td>
</tr>
<tr>
<td>Factor 3. Domestic market: Holiday duration and economic impact</td>
</tr>
<tr>
<td>Factor 4. Hotel prices</td>
</tr>
</tbody>
</table>

*p<0.01

Source: Authors’ own

6 Discussion

Tourist destinations located on the Mediterranean coast are the most relevant in all the factors that characterise Spanish tourism. Spain’s image in the international tourism market is inextricably linked to sun-and-beach tourism, a segment in which coastal tourist destinations play a fundamental role. There is a labour and economic imbalance that favours the destinations located on the islands that make up the Spanish archipelagos (Balearic and Canary Islands). These areas are key sun-and-beach tourism markets for the country, whose location gives them a competitive advantage over other destinations (Martín et al., 2018). Tourism is the main economic activity of the islands, and has significantly influenced the
transformation and wealth of these areas (Garín and Montero, 2007), whereby international tourism plays an essential role (Cordero and Tzeremes, 2017). These results show the importance of the tourism destination and environment as determinants of competitiveness, which contrasts strongly with the conclusions drawn by Camisón and Forés (2015) who indicate that the most important factor lies in the capacity of tourism companies.

The regions of Andalusia and Catalonia are the most competitive and present the best results in terms of tourism impact. These regions attract both national and international tourists and offer a wide range of coastal and inland tourism, thereby showing that the complementarity of both types of tourism is positive and promotes tourist destinations (Vera et al., 2011; Baños and Rico, 2016; Cánoves et al., 2016; Gil, 2019; Sánchez-Sánchez and Sánchez-Sánchez, 2021). This highlights the need to revitalise tourist destinations as alternatives to traditional destinations oriented towards sun and sand. It is necessary to develop initiatives that involve the integration of alternative tourism destinations to the coast, designing appropriate strategies to improve competitiveness (Chen et al. 2011), which will attract more tourists and improve profitability levels. This will benefit the transformation of traditional tourist destinations, by offering products other than the usual sun-and-beach tourism (López and Vera, 2001; Antón, 2004; Vera et al., 2011; Sánchez-Sánchez and Sánchez-Sánchez, 2021), thereby making it possible to respond to the search for new experiences (Kastenholz et al., 2012) and enabling tourism managers to achieve maximum efficiency through the appropriate use of tourism resources.

The analysis reveals the dependence of the Spanish tourism sector on the international tourism market, which shows that an “export” tourism orientation helps towards reducing dependence on local markets. This shift is important since international tourists stay longer and have greater travel budgets than local tourists (Rosenbaum and Spears, 2006). International visitors exert a positive impact on economic aspects and tourism performance, a result that coincides with the findings of other research (Bernard and Jensen, 2004; Rosenbaum and Spears, 2006; Assaf et al., 2017; Sellers-Rubio and Casado-Díaz, 2018).
7 Conclusions

Growing competitiveness and the emergence of new international tourist destinations justify the analysis and characterisation of the determinants that define the various Spanish tourist destinations.

a) With regard to the initial hypotheses, the following conclusions can be drawn from the analysis carried out: Four factors are identified as determining Spanish tourist destinations. The first factor characterises the economic dynamism and hotel efficiency caused by the international tourist market. It is defined by nine variables: staff employed, number of overnight stays by international tourists, number of bed places, number of rooms, total international tourism expenditure, stages of travel, number of international tourists, occupancy rate per bed place, and occupancy rate per room. This factor shows that the impact of international tourism on the economy, the labour market, and the efficiency of the hotel industry differ depending on the region. The areas that stand out for imposing a strong and positive impact on this factor are the Balearic Islands, the Canary Islands, Andalusia, and Catalonia. On the other hand, the regions located in the interior of the peninsula and those on the northern coast of the country exert comparatively little impact on this factor. The second factor characterises the tourist efficiency of the national tourist market, with the number of overnight stays by national tourists, total expenditure by national tourists, number of national tourists, and number of establishments being identified as the prominent aspects. The regions of Madrid, Andalusia, and Catalonia stand out regarding this factor, that is, these regions enjoy the highest yield or performance of domestic tourism with the available resources. The third factor determines the duration of the holiday stay and the economic impact measured in terms of the expenditure of the national tourist, while the fourth factor deals with the hotel price index. Madrid is the region with the highest impact on these latter two factors, which reflects the preference of national tourism for Madrid as an inland destination.

b) With regards to the international tourist market versus the national tourist market, the nationality of the tourist constitutes a determining factor in characterising the Spanish tourism sector according to the tourist destination. The fundamental difference between
tourism from abroad and local tourism lies in the resulting economic impact. International tourism exerts a greater impact on job creation and on the volume of expenditure generated than does domestic tourism. On the other hand, certain correlations can be established between the two tourism markets: 1) Both national and international tourists contribute towards the efficiency of the sector; 2) Both types of tourist possess a preference for coastal destinations. With regard to this last aspect, two regional segments are clearly reflected according to the tourist market that has the greatest weight:

b. 1. The Spanish archipelagos are mainly focused on the international market, while the regions situated along the Mediterranean coast are focused on national tourism.

b. 2. The regions of Andalusia and Catalonia prove to be the most competitive in the country, since they attract both national and international visitors thereby achieving a positive impact not only on economic factors, but also on the performance and efficiency of the tourism sector.

c) There is an unequal impact of tourism on Spanish tourist destinations. Given the heterogeneity caused by the factors which characterise the Spanish regions, the following considerations can be made:

c. 1. Based on the factors and segmentation that determine tourism, regional tourist destinations can be classified into three groups, according to the degree of impact caused by tourism: 1) Regions with a high tourist-economic impact, comprising Andalusia and Catalonia. These regions are located on the Mediterranean coast and are the only areas where both national and international tourism are significant. 2) Regions with a medium level of tourist-economic impact, which should be determined depending on the nationality of the visitor. If the tourist market is focused on international tourism, then the Balearic and Canary Islands are the most important, while for the national tourist market, the Madrid region remains the most relevant. 3) The remaining regions have a low tourist-economic impact and are mainly located in the interior and north of the peninsula.

c. 2. Sun-and-beach holiday tourism remains comparatively more important than alternative forms of tourism. In order to increase the competitiveness of the Spanish tourism sector, it is necessary to broaden the types of tourism available, in order to
promote and integrate destinations that offer alternative tourist packages to sun-and-beach tourism. The complementarity between coastal and inland tourism should be promoted, given that they can be compatible and coexist positively. Coastal destinations, which are often saturated and fundamentally oriented towards the sun-and-beach product, could therefore be strengthened by taking into account the quality, development, competitiveness, and sustainability of these destinations. The reinvention of sun-and-beach tourism, based on alternative forms of tourism, will enhance the value of other destinations and boost the resilience of destinations as tourist areas.

3. Few regions of the country manage to achieve sector efficiency. The main determinant of tourism performance is the location of the region, with coastal regions bordering the Mediterranean Sea being the most favoured in terms of tourism efficiency, with the exception of the Canary Islands located in the Atlantic Ocean, whose good performance is due to the special territorial situation of these islands.

For future research, it is worth considering a more in-depth analysis of the sector, whereby the characteristics of tourism demand and their effect on the local population are studied, with the aim of analysing the sustainability of the sector. To this end, additional variables will have to be considered, especially those that take into account the environmental consequences and the impact on the population, both at a local and global level, in order to achieve the sustainability of the sector. The study can also be extended to include other countries that are in direct competition regarding tourism, thereby making a comparison of each country’s determinants of tourism. This extension of the analysis herein would help tourism managers in their decision-making.

References


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Herrero, L.C., Figueroa, V., & Sanz, J.A. (2007). Las disparidades territoriales en Castilla y León: estudio de la convergencia económica a nivel municipal. Revista de Investigación Económica y Social de Castilla y León, 9, 15-170. Available at:


Available at: [http://www.revistaestudiosregionales.com/documentos/articulos/pdf1029.pdf](http://www.revistaestudiosregionales.com/documentos/articulos/pdf1029.pdf)


