The competitiveness of cruise tourism The case of Greece

Yfantis, Athanasios and Galanos, Georgios

2013

The competitiveness of cruise tourism

The case of Greece

Yfantis Athanasios
Msc Urban/ Regional Planner, Department of Planning and Regional Development
University of Thessaly, Greece

Galanos Georgios
Assistant Professor Department of International & European Studies,
University of Piraeus, Piraeus, Greece

Abstract

Cruise tourism is a dynamic sector of the global tourism industry. The annual growth rates of the cruise industry remain high globally and growth prospects remain significantly high, giving opportunities for economic growth in parts of the region. The study examines the current situation of the cruise activity in Greece and the competitiveness of Greek ports in relation to the sector in the rest of the Mediterranean. An analysis of the existing traffic of Greek ports is carried out and the institutional framework is examined through the perspective of spatial planning and how it provides the appropriate tools for the development of cruise tourism in Greece. In conclusion, it is noted that there is no need to adopt a new framework especially for Cruise Tourism, but the spatial impacts from the activity should be highlighted and taken into account significantly in spatial and urban planning at sub-regional level, through the GPS or SCHOAP, as well as the connection of planning levels.

Key words: *cruise, competitiveness, spatial planning, local development*

Introduction

The study looks into the current situation of the cruise activity in Greece and the competitiveness of Greek ports in relation to the sector in the rest of the Mediterranean. More specifically: the categorization with specific factors of areas with the potential of added value in relation to the development of cruise tourism activity and the analysis of the existing traffic and approaches per port and per type – ship size, passengers – nationalities, and the recording and evaluation of the existing institutional - legal framework, resulting in the proposed proposition of the necessary changes to further promote cruise tourism. An overview of the existing Spatial Planning and Sustainable Development Frameworks is made and how these spatial planning tools contribute or not to the development of cruise tourism.

For the development of the paper, the following were carried out:

Search for data through secondary and primary sources, the previous studies, as well as the most recent statistics and indicators that compose the current situation, as well as the prospects, of the cruise industry were searched.

Analysis of the existing traffic and approaches per port and per type – ship size, passengers – nationalities and in particular in the analysis of the elements and factors that compose the current situation regarding passenger traffic and the approaches of Greek ports.

Recording, codification and evaluation of the existing institutional – legal framework governing the development of cruise tourism activity.

Finally, having codified and analyzed the existing Spatial Framework and having identified its existing shortcomings and weaknesses, the working group's assessments on the feasibility of a Special Spatial Framework for cruise tourism are presented..

Chapter 1. Analysis of the International and European Cruise Environment

Cruise tourism is a dynamic sector of the global tourism industry. The annual growth rates of the cruise industry remain high globally. Indicative of the dynamics of the sector is the fact that the demand for cruise tourism remained almost unaffected by the international economic crisis of 2008 (Cruise Market Watch, 2013). The growth prospects of cruise tourism remain significantly large and therefore the economic results of the sector can be further improved. The provision of the final product makes it necessary to interact with dynamic sectors of the global economy, the main ones being shipbuilding, shipping, tourism and port. Therefore, cruise tourism is of great importance for the development and stimulation of the competitiveness of the countries. The internationalization of the sector and the claim of market shares by more and more cruise companies and tourist destinations make the competitive environment of cruise tourism extremely complex (ECC, 2011). Therefore, in order to analyze the growth prospects of this type of tourism in Greece, it is necessary to fully clarify the international dynamics of the sector and the competitive forces that determine the framework for the development of Greek cruise.

1.1 International Cruise Demand

Cruising as a tourism industry began to develop gradually from the 1960s. In the following two decades, the sector was characterized by a slow and steady growth through the continuous construction of new ships that entered the scheduled routes of the companies. The great growth of the sector began to emerge from the 1990s, as the sector began to grow at an annual rate twice that of global tourism. The cruise market, which until 1990 was controlled by North American companies, gradually expanded to other continents, presenting excellent prospects for further development. The main causes for the development of cruise tourism were the technological progress of ships, the reduction of time-distances, the increase in global GDP and the opening of markets (Klein, 2005; Brida and Zapata, 2010). More specifically, Figure 1 shows the total number of cruise passengers per year for the period 1990-2011. From the data of the chart it is clear that in 20 years the global passenger traffic through cruise almost fivefold, reaching in 2011 the 20 million. Passengers. Annual growth rates remain positive throughout the period, with the exception of 1995, at an average of more than 7%. Tourism traffic does not seem to be affected by the international economic crisis, as with the exception of 2008, when growth rates fell below 3%, the sector showed resilience and its annual growth rates returned to the mid-20-year levels. The largest source of users of cruise services is the Market of Northern America. Cruise tourism is a widespread type of tourism among the inhabitants of this region and for this reason throughout the development of the sector, North America holds consistently the largest market share. Nevertheless, gradually cruising as an alternative form of tourism begins to gain significant market shares, both in Europe, as well as in Asia and South America.

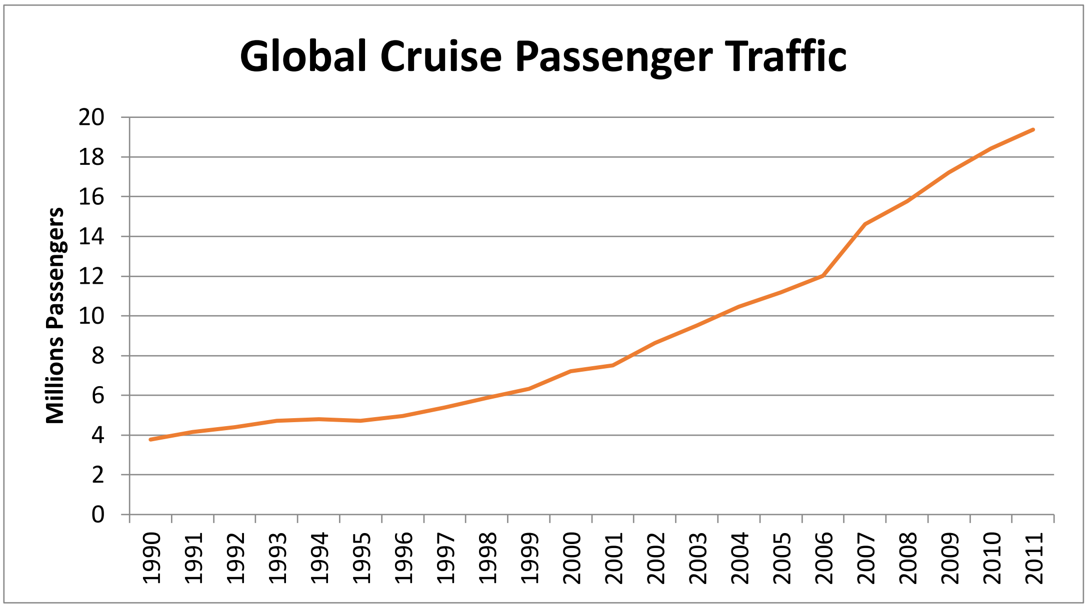
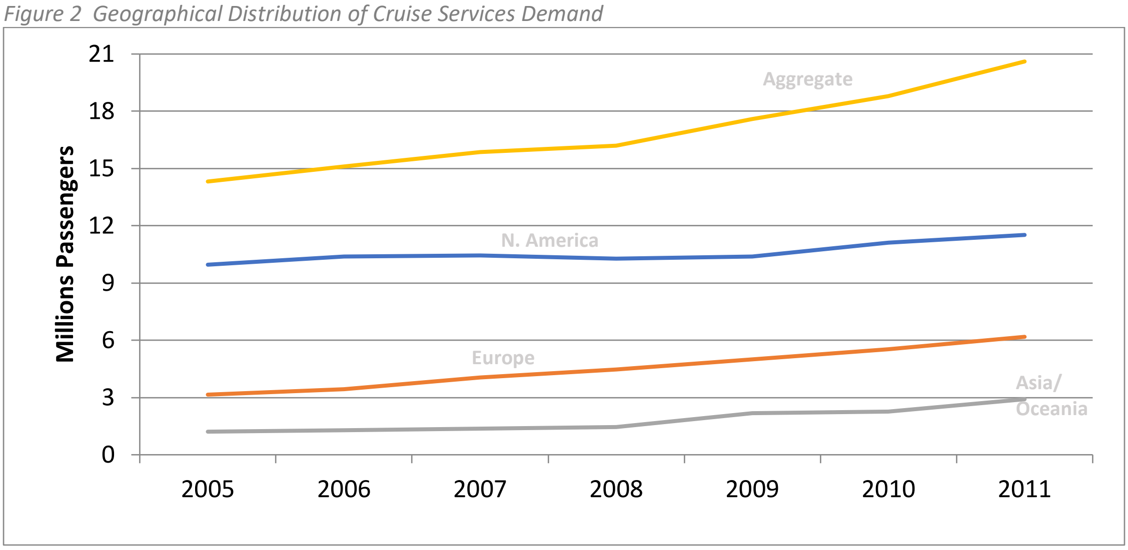


Chart 1 Global Cruise Passenger Traffic (Source: Cruise Market Watch,2013; Own Processing)

Chart 2 shows the evolution over time of market shares by geographical area for the period 2005-2011. Figure 1-2 data show the superiority of North America in the penetration of this type of tourism. North America's performance is followed by Europe where the demand for cruise tourism is constantly increasing. Finally, the demand for cruise travel in the other three geographical units remains significantly lower than the above mentioned, however, showing significant growth trends.

Considering the growth rates of the different geographical units, it is visible that the differentiation in the heights of passenger traffic between North America and the rest of the geographical units is gradually decreasing. More specifically, while in 2005 the percentage of cruise users coming from North America reached 70% of all users, the corresponding percentage in 2011 did not exceed 56%. Competition therefore gradually seems to favour the rest of the continents, especially Europe, which over seven years has increased its market share from 21 % to 30%. The claim of ever greater market shares from regions outside North America shows that it will continue taking into account the fact that the penetration of cruise tourism in North America as a percentage of prospective users per year reaches 3%, while in Europe and Asia the corresponding percentages are 1.5% and 0.05%. Consequently, the cruise product in these two markets can be characterized as relatively new and with greater margins of market penetration than North America (ECC, 2011a).

Figure 2 Geographical Distribution of Cruise Services Demand

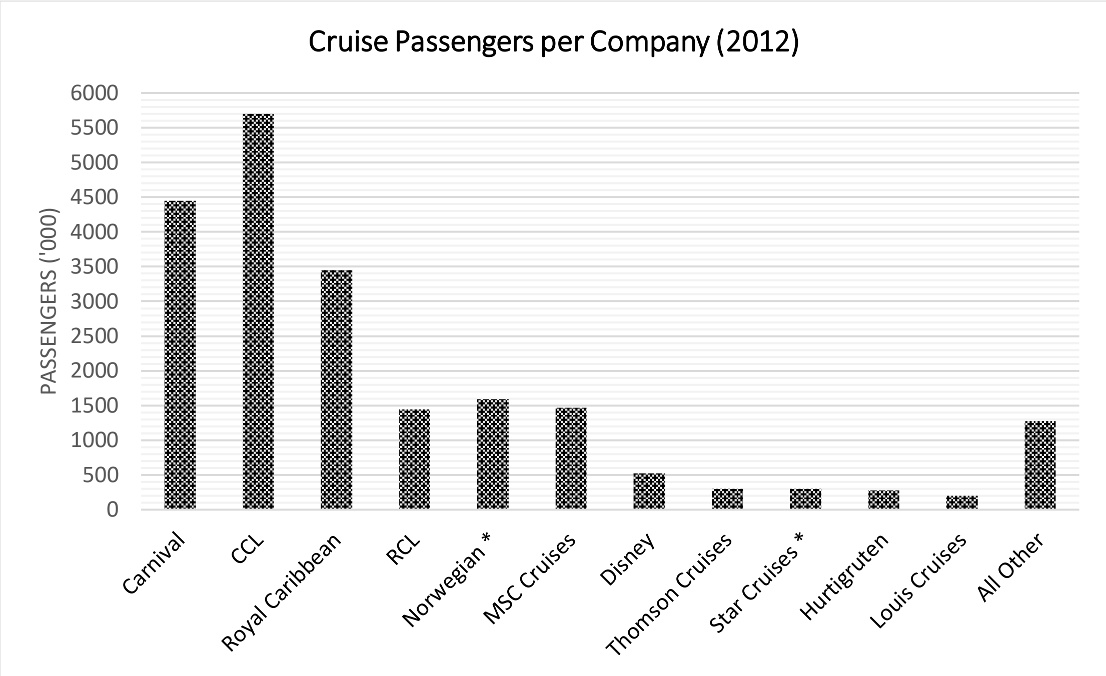


Source: ECC, 2012; 2013; Self-Processing

1.2 The International Cruise Offer

The huge growth prospects of the cruise industry have led to the gradual entry of new cruise travel companies into global competition. However, the market continues to be dominated by a small number of companies which ensure their presence in all regional markets, either autonomously or through their subsidiaries. Characteristic regarding the structure of the cruise travel supply market is Chart 3 which presents the transport work of the cruise companies for the year 2012. The dominant cruise company is Carnival Cruises, which in 2012 presented a transport project of approximately 4.5 million passengers. Considering the transport work of its subsidiaries, which are included in the Carnival Cruise Lines (CCL)group of companies and operate in various markets under a different name, the total number of passengers handled by the group in 2012 exceeded 10 million. Carnival is followed by Royal Caribbean, which handled approximately 3.5 million passengers. In addition, the group's subsidiaries under the name Royal Caribbean Lines (CCL) handled approximately 1.5 million passengers in various markets worldwide (CMW,2013).

Chart 3 Cruise Companies Transport Work



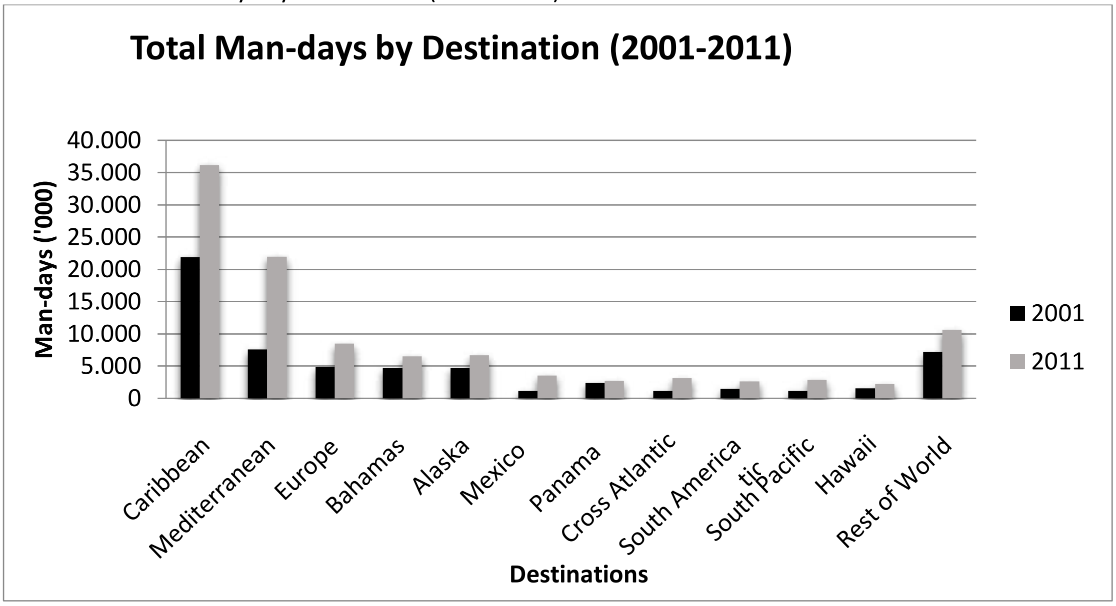
Source: Source: Cruise Market Watch, 2013; Self-Processing

A characteristic of the concentration of market power in the sector is the fact that RCL maintains approximately 50% of the global cruise passenger traffic, while taking into account RCL's market share, the two largest groups retain about 72% of global traffic. The main competitive pressures in the two groups come from Norwegian and MSC Cruises. which in 2012 handled 1.59 and 1.47 million. passengers, respectively. The performance of these companies is followed by those of companies such as Disney, Thomson Cruises, Star Cruises and Hurtigruten which have a passenger traffic ranging from 100 to 500 thousand passengers. A notable element of Chart 3 is the fact that the Cypriot cruise company Louis Cruises is among the world's leading companies. This company is very active in Greece while in the past it also operated under the name Louis Hellenic Cruise Line. Finally, the rest of the companies in the sector in 2012 showed a performance that reached 1.25 million. passengers overall. (CMW, 2013; ECC, 2013).

1.2.1 Analysis of the Dynamics of International Cruise Destinations

The longitudinal examination of tourists' preferences regarding the regions they choose to visit ranks the Caribbean islands as the most popular destination for cruising. However, the internationalization and opening up of the cruise industry to other regions are gradually beginning to highlight new tourist destinations. This is understood by looking at the growth rates of the second most popular cruise destination, the Mediterranean, where they are clearly larger than those of the Caribbean. A characteristic of the developmental dynamics of the most popular cruise destinations is Figure 4, which illustrates the different levels of destinations' traffic for the years 2000 and 2011. As a measure of the visitation of the destinations, the man-days were chosen, as this measure takes into account both the total number of visitors and the total duration of their visit.
The data in Chart 4 clearly show that the Caribbean remains the most visited destination, showing an increase of 15 million. man-days in the decade 2001-2011. On the other hand, the Mediterranean also has a strong dynamic, which has shown a similar increase in the number of man-days. However, the dominance of the Caribbean is attested by the fact that it took 10 years of continuous increase in the number of visitors to Mediterranean ports, in order to surpass the performance of Caribbean ports decade ago in 2011. The performance of the two territorial units mentioned above is followed by destinations located in the rest of Europe, the Bahamas island complex and Alaska. These destinations show a significant increase in the number of cruise tourists who have been welcoming throughout the decade, while in 2011 they recorded a performance ranging between 6.5 million. and 8.5 cm. man-days. The rest of the destinations generally present a remarkable growth potential, but without showing similar performance to those of the aforementioned territorial units.

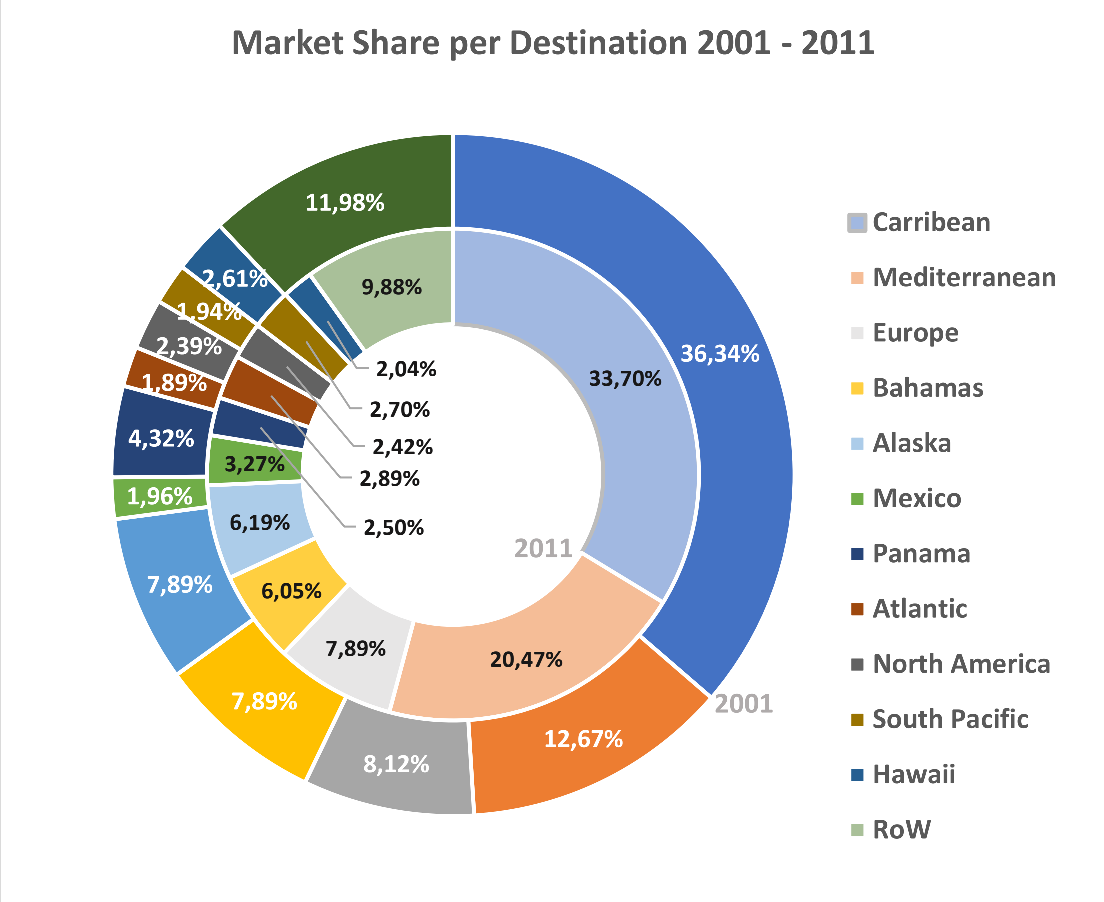
Chart 4 Total Man-Days by Destination (2001-2011)



Source: Clia, 2011;2012; Self-edited

Chart 5 shows the percentages over time of the various spatial units in total international passenger traffic. Figure 2-5 data clearly show the gradual decline in the Caribbean's percentages of total passenger traffic in the decade 2001-2011. However, the main element of the scheme is the impressive dynamics of the Mediterranean market which is clearly reflected when the percentages of destinations are taken into account. More specifically, Mediterranean destinations managed to increase their percentage by about 8 percentage points, constituting as a destination the choice of 1/5 of the total cruise tourists worldwide. The rest of the destinations show small fluctuations that do not change much their relative market power.

Chart 5 Market Shares of Cruise Destinations (2011-2011)



Source: CLIA, 2011;2012; Self-processing

The increase in the total number of cruise passengers carried has given the opportunity to many emerging destinations entering the market and many others to claim ever larger market shares. However, despite the significant mobility of cruise tourists, the market continues to display a relatively centralized form over time. Chart 6 shows the evolution of Gini rates, which is a measure of the[1] concentration of the distribution of tourists among the various destinations. From the figures in Chart

[1] The coefficient Gini is used to reflect the percentage diversion of a distribution relative to the pattern of an even distribution. It is the mathematical expression of the curve Lorenz. The calculation of the indicator Gini results from the following equation:

$$G_j = 0,5 \sum_{i=1}^{N} \left| X_i - Y_i \right| \quad (1)$$

Where

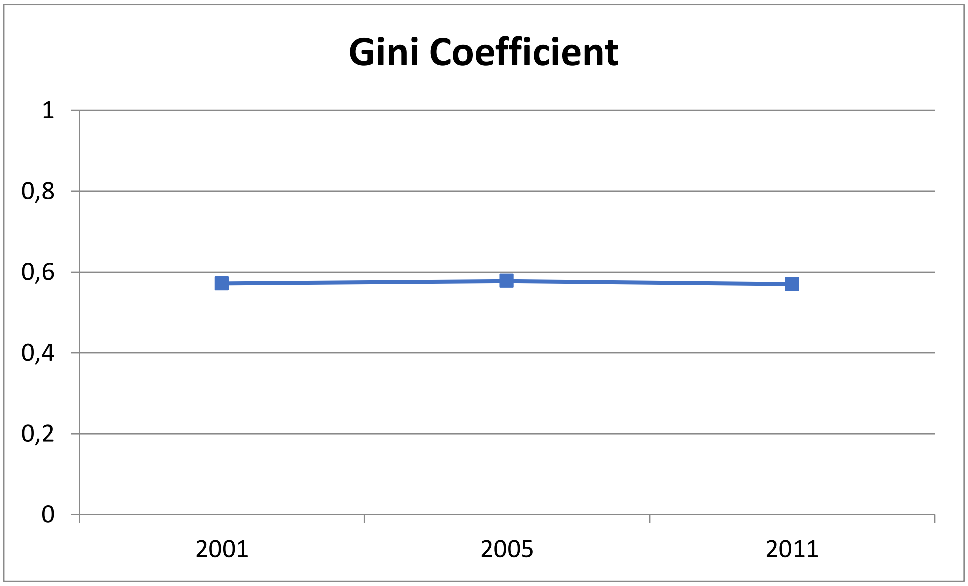
G_j	=	*the coefficient Gini on the port system j*
X	=	*the cumulative percentage of the number of ports to the port i*
Y	=	*the cumulative share of the market share of all ports up to the port i*
N	=	*is the total number of ports in the system.*

The index Gini gets prices in interval 0< G_j *<1. Prices of the index close to 1 indicate a centralized structure of the market while on the contrary prices close to 0 indicate an equal distribution of the movement. In this thesis the index will be used Gini for the construction of a concentration index normalised in terms of number of observations. This indicator is expressed by the formula (Niabis, 2012):*

$$CG = \frac{N}{N-1} G_j \quad (2)$$

6 it is clear that the value of the index essentially remains unchanged, approaching the value of 0.6. This result indicates that the increase in international passenger transport continues to benefit primarily the two most popular destinations, the Caribbean and the Mediterranean, which manage to maintain a leading position in the cruise market.

Chart 6 Time Values of the Gini Coefficient of Cruise Destinations



Source: Clia, 2011;2012; Self-edited

The analysis that preceded it showed the modern international developments in the cruise tourism market. The industry is experiencing continuous growth, which is gradually spreading across all continents, establishing cruise tourism as one of the pillars of global tourism. New companies are entering the competition offering cruise travel, while at the same time the product is differentiated through the construction of luxury ships, the provision of high-quality services and the execution of alternative routes. In the next sections, the study will focus spatially on the European and especially on the Mediterranean area in order to record the current developments and the development prospects presented by the sector, focusing both on the demand side and the supply of cruise services.

1.3 The Cruise Industry in Europe

This section will record and analyze all the current developments of the cruise industry in Europe. The research will move in different directions in order to comprehensively analyze the current situation. Initially, the structure of the demand for cruise services for European destinations will be analyzed. The research will then focus on the supply factors of these tourism services by analyzing the market of cruise travel companies in Europe, as well as the performance in terms of passenger traffic in the host areas of tourists. Finally, the impact of cruise tourism on the economies of European countries will be examined.

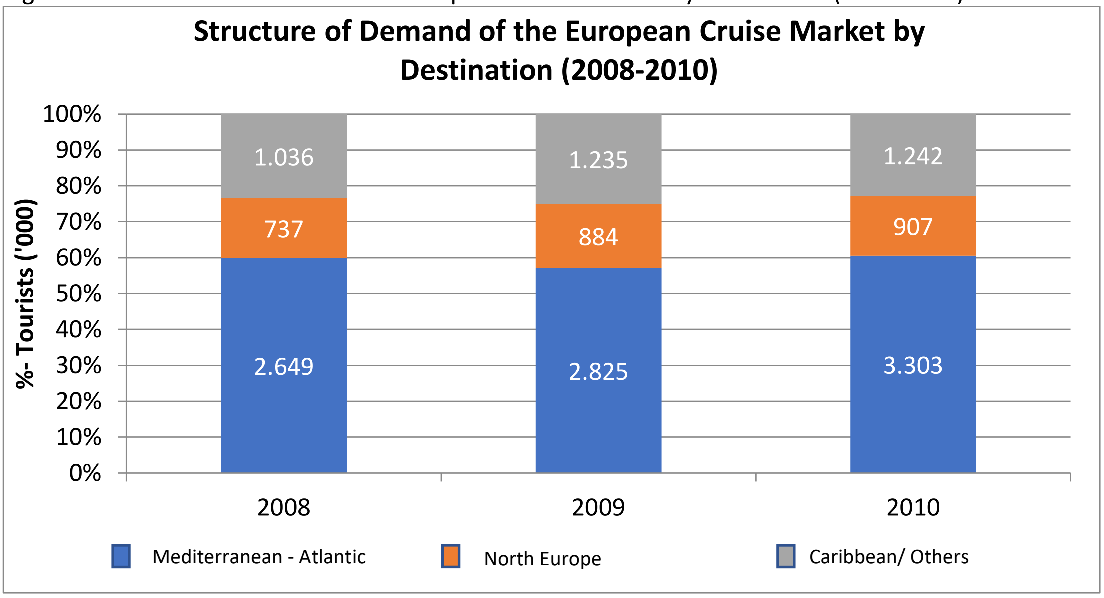
1.3.1 The Structure of Cruise Services Demand in Europe

1.3.1.1 The Developmental Characteristics and The Degree of Penetration of Cruise Tourism in the Markets of Europe

As mentioned above in the previous year, the demand for cruise tourism in Europe over the last decade has been characterized by a continuous increase. The demand for cruises from European citizens is clearly affected by the pressures of the prolonged economic recession in Europe. However, as mentioned above, the penetration of this type of holiday into the preferences of the citizens of Europe is still low, which ensures high growth margins for cruise tourism. Therefore, with the appropriate promotional activities and the provision of competitive cruise holiday packages, the industry is gradually attracting more and more new consumers, thus resisting recessionary pressures and showing positive annual growth rates that were reflected in Figure 1-2(EEC,2012; 2013).

The majority of European tourists prefer cruise packages with destinations in Europe. As can be seen from the data of Chart 7, the largest part of tourists is attracted by the Mediterranean, which has always been the most popular tourist cruise destination, as six out of ten Europeans who decide to participate in a cruise choose the Mediterranean. It is characteristically mentioned that in 2010 more than 3 million. European tourists chose a cruise in the Mediterranean. If European tourists who prefer the Mediterranean are joined by those heading to destinations such as Northern Europe and the Atlantic regions of Europe, then the percentage held by European destinations in general in the preferences of Europeans exceeds 70% throughout the three-year period 2008-2010. This figure even exceeded 77% in 2010. On the other hand, it should be noted that the percentages of Europeans who do not choose Europe for a cruise are also significant, as in the period 2008-2010 it ranged around 25%. From the data of Chart 7 it is clear that annually more than 1 million. Europeans are chosen to take part in cruises outside of Europe. Finally, the relative stability of destinations' preference rates over the three-year period suggests that the growth of European cruise tourists is distributed almost proportionally to destinations in Europe and abroad.

Figure 7 Structure of Demand of the European Cruise Market by Destination (2008-2010)



Source: ECC, 2012a; Self-processing

Table 1 shows the annual demand for cruise travel in the main markets of Europe for the period 2003-2011. The dominant market for cruise travel has always been the UK market. In 2011, 1.7 million residents of the United Kingdom participated in cruise trips, when in 2003 the residents who chose this type of trip did not exceed 1 million. The German market also showed a significant performance as from 2009 onwards cruise travel has consistently attracted more than 1 million Germans. The performance of the two aforementioned markets is followed by Italy as in 2011 the residents who participated in cruises approached 1 million. The fourth largest market is Spain which in 2011 exceeded 700 thousand. cruise tourists. The lowest demand from the countries with the largest activity in the cruise industry is presented by Austria and Switzerland, which managed to overcome the 100 km barrier. bookings in 2011. The rest of Europe in 2011 presented a total demand that exceeded 220 thousand. reservations, while it should be mentioned that Russia also records significant performances, which in 2011 exceeded 120 km. cruise reservations.

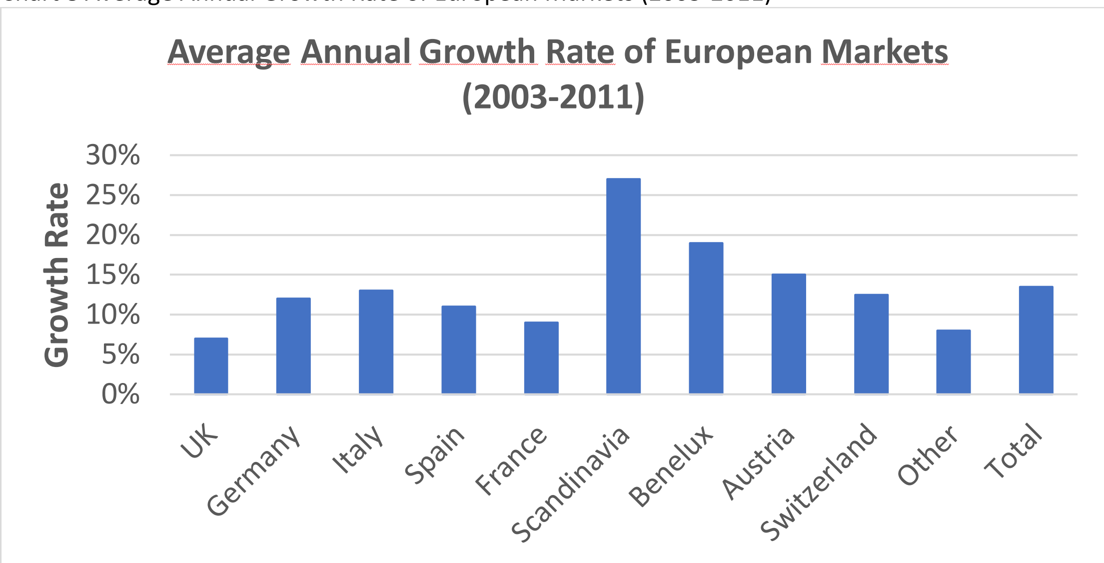
Table 1 The Demand for Cruise in European Countries (2003-2011) (thousand passengers)

	2003	2004	2005	2006	2007	2008	2009	2010	2011
UK.	964	1.029	1.071	1.204	1.335	1.477	1.533	1.622	1.700
Germany	537	583	639	705	763	907	1.027	1.219	1.388
Italy	346	400	514	517	640	682	799	889	923
Spain	307	300	379	391	518	497	587	645	703
France	212	222	233	242	280	310	347	387	441
Scandinavia	54	56	42	62	94	123	173	168	306
Netherlands	42	41	42	64	82	92	110	126	159
Austria	35	38	39	44	52	59	80	93	104
Switzerland	47	50	51	56	64	65	76	91	121
Other	127	115	117	123	175	211	213	212	224
Total	**2.671**	**2.835**	**3.126**	**3.409**	**4.004**	**4.422**	**4.944**	**5.452**	**6.069**

Source: ECC, 2011b; 2013

The data in Table 1 show that the evolution of the annual demand for cruise tourism in the different countries shows significant variations, with the result that the different countries show different dynamics in terms of the development of the domestic market. Characteristically, the figures in Chart 8 are characteristic, showing the average annual growth rates of the different Markets of Europe for the period 2003-2011. Undoubtedly, the dominant European cruise markets do not show the same momentum. In particular, the growth rates of the smaller markets show significantly higher annual growth rates of demand than the already developed markets. The exception is Switzerland, which is below Italy's growth rates. The biggest performance was recorded by the Scandinavian market, which shows an annual growth of cruise tourists of more than 25% on average. Also, the Benelux countries and Austria have significant growth rates, with an average of more than 15%. The UK has the lowest annual growth rate in the period 2003-2011, with this at around 7%. The above findings make it clear that the cruise market in Europe is in full swing. On the one hand there are the countries with large market shares and relatively low growth rates and on the other the countries with smaller market shares and high growth rates. Undoubtedly, the key to the development of the market in each country is whether this particular mode of holiday will be incorporated into the habits of more and more residents.

Chart 8 Average Annual Growth Rate of European Markets (2003-2011)

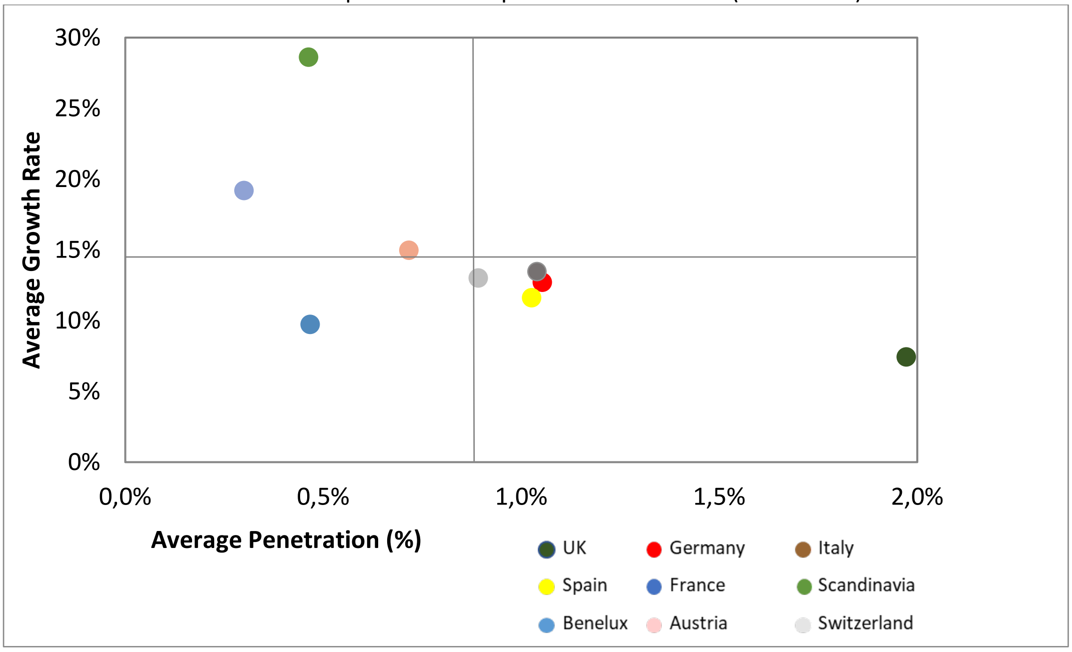


Source: ECC, 2011b; 2013; Own Calculations

Taking into account the above, we are able to understand the real dynamics of the largest European countries-markets with the help of Chart 9.This figure graphically depicts the relative position of each country in terms of its performance in the cruise industry based on the growth rates it demonstrates as well as on the percentage of residents selected in this particular mode of holiday in terms of its entire population. More specifically, Chart 9 presents a system of axes in which the horizontal axis shows the average penetration of the cruise market in terms of the population of each country and the vertical the average growth rate of cruise demand for the period 2003-2011.

The data on the chart show that cruise markets have two main forms of growth. The first category includes markets whose projection in the chart is located in the lower right-hand field of the imaginary axis formed by the lines of the average performance of the two indicators under assessment. This category includes the markets of the United Kingdom, Germany, Italy, Spain and marginally Switzerland. These markets are more than the European average (0.9%) and relatively low growth rates of less than 14% (average growth rate of European cruise markets). However, it should be noted that in this category, too, there are differences in terms of market dynamics, as it is visible that the penetration observed in the United Kingdom is clearly higher than that of the other markets in the category, while at the same time the average annual growth rates of the UK market are clearly lower than those of the other countries in the category.

Chart 9 Penetration and Development of European Cruise Markets (2003-2011)



Source: ECC, 2011b; 2013; Own Calculations

The second category includes markets whose projection is in the upper left field formed by the straights of the media. The category includes the Scandinavian market, the Benelux markets and Austria. Cruise tourism in these markets is low in consumer preferences, but the fact that annual growth rates are constantly increasing throughout the reference period foreshadows the greatest penetration of cruise tourism in these markets. Finally, it should be noted that the market with the worst prospects is France as its visibility is in the midst of in the lower left field of the axle system. The promotion of France leads to the conclusion that the cruise market is growing at a relatively low rate, while cruise travel as a way of vacation is preferred by few French citizens.

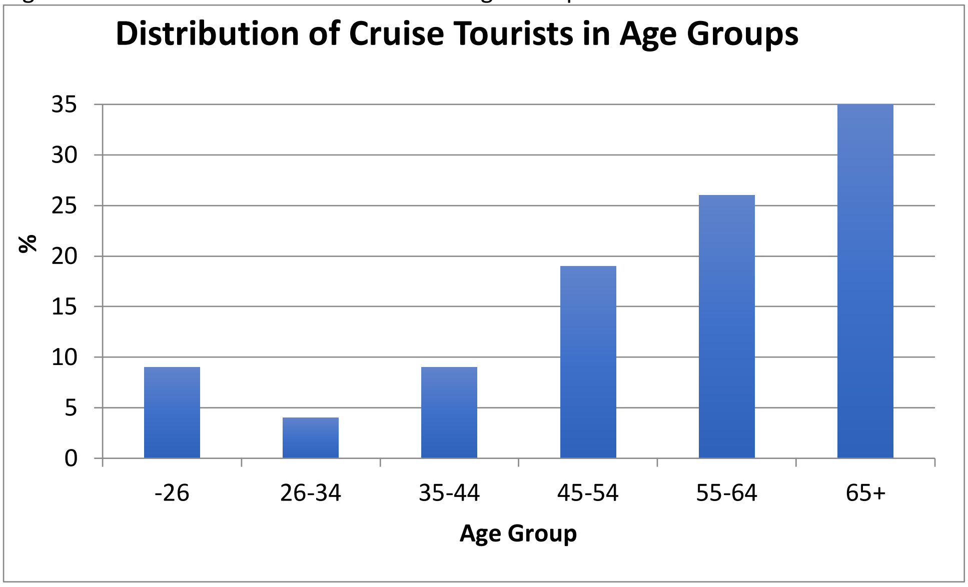
In conclusion, the cruise market in Europe presents significant prospects. Most countries, even those whose inhabitants have a relatively high preference for this type of holiday, provide significant scope for further penetration of the cruise. A characteristic of this fact is the simple calculation of the potential total tourists of the most developed markets in a hypothetical scenario of a cruise penetration rate equal to that of the UK in all developed markets (2%). The total annual number of cruise tourists of the nine most developed markets in this case would reach 7.8 million. This scenario attests to the huge growth potential of the industry. However, the growth of the sector depends on the wider socio-economic conditions in Europe which clearly do not help the growth of the sector due in particular to the prolonged recession suffered by even the most developed markets, such as Italy and Spain. In addition, the development of cruise is directly influenced by the effectiveness of the approach to purchases by cruise package offerors.

1.3.2 The Profile of Cruise Tourists

One of the most important parameters of the cruise market is the profile of tourists who choose this particular tourist product. The demographic characteristics and preferences of cruise service users are critical elements that cruise companies take seriously in order to differentiate their services. Important data on the profile of cruise tourists in Europe is provided by the annual barometer of the Passenger Shipping Association on the habits and preferences of UK cruise users, which is the largest market in Europe. The following analysis will present the highlights of this survey for the year 2011 which due to the size of the UK market are considered to be that they competently represent the profile of the average European cruise tourist.

In more detail, important information on the profile of cruise users can be extracted from the figures in Figure 10 which shows the distribution of passengers by age group for 2011. The majority of cruise passengers are people over the age of 55. The average age of a cruise tourist is estimated at 55.6 years. More specifically, 35% of passengers exceed 65 years of age while 26% are between 55-64 years old. A strong preference for cruises is also evident among tourists of the 45-54 age group, as they make up about 20% of cruise tourists in 2011. This way of vacation seems to have significantly lower penetration in younger ages, as tourists under 44 years of age do not exceed 22% of the total. Finally, the cruise has the least penetration in the 26-34 group as only 4% of tourists belong to this age group.

Figure 10 Distribution of Cruise Tourists in Age Groups



Source: Passenger Shipping Association, 2012; Own processing

Apart from the age characteristics of users, their preferences regarding travel and destinations are also of particular interest in understanding the profile of tourists. More specifically, Table 2 shows the strongest influencers of tourists when choosing cruise packages. More specifically, the two columns of Table 2 show in the form of percentages the responses of users to the determining the three main factors to consider when choosing the cruise package. The two questions concerned the definition of the factors considered when choosing both the route and the cruise ship. The strongest factor of choosing a ship is the value for money ratio, as 67% of tourists choose the ship based on this indicator. Additionally, the quality of services and the adequacy of activities on board are important factors, as more than 20% of passengers pay attention to these factors. Less, but significant importance seems to be given by users to the offers of companies, both to those concerning the price of the trip, and to those concerning the all-inclusive packages.

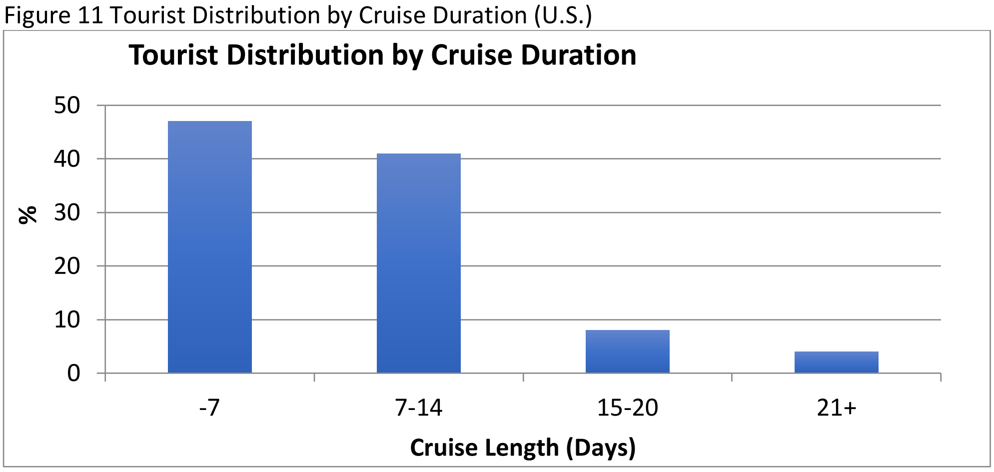
Table 2 Ship Selection and Passenger Travel (UK) Factors

Reasons for Choosing a Ship	%	Reasons for Choosing a Route	%
Price Utility	67	Destinations	69
Onboard Services	29	Pleasant Previous Experience	64
Atmosphere En Plo	26	Departure Day	31
Quality of Meals	26	Duration	22
Activities on Board	25	Flight Availability	22
Special Conjuncture	20	Participation Without Flight	21
All-inclusive	19	Other Company Test	9
Special Offer	17	Personal Recommendation	9

Source: Passenger Shipping Association, 2012; Own processing

On the other hand, the strongest influencer when choosing the routes seems to be the destinations that are included in each package offered. 69% of tourists choose the cruise package based on the intermediate stops it includes. On the other hand, an equally important factor of choice is the previous experience of a company that organizes the cruise. About 65% of tourists pay significant attention to the credibility of the companies they choose. In addition, the dates of the offered packages are considered important factors, as 31% of passengers choose the cruise based on the day of departure and 22% based on its duration. Many of the passengers choose the cruise based on its starting point. About one in five tourists takes into account the way of access to the port of departure and termination, focusing on whether it has easy air access. In addition, the same percentage chooses cruises whose base can be accessed without the use of an airplane. Finally, less weight is given by tourists to factors such as the possibility of testing a new cruise company and personal recommendations from acquaintances.
The majority of users seem to prefer shorter cruises. This can be seen from the data in Chart 11, which shows the percentage distribution of passengers based on the length of the cruise they choose. More specifically, 47% of tourists choose cruises with a duration of less than seven days. In addition, a significant part of passenger traffic, which slightly exceeds 40%, is channeled to cruises of average duration ranging between seven and fourteen days. Finally, 8% choose cruises between 15 and 20 days, while only 4% of tourists make cruise trips lasting more than 21 days. These findings are also confirmed by the study by Rodriguez and Notteboom (2012) who calculated that the average duration of cruise travel is seven days.

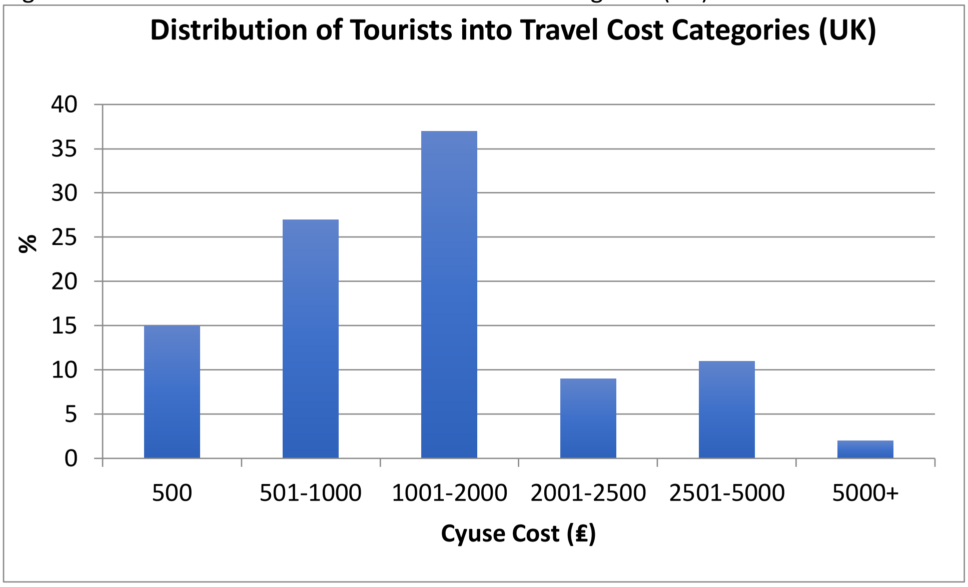
Figure 11 Tourist Distribution by Cruise Duration (U.S.)



Source: Passenger Shipping Association, 2012; Own processing

In closing, the analysis of the user profile should also refer to the costs of users for participating in cruise travel. Figure 12 shows the percentage distribution of passengers by cruise price categories. The majority of passengers prefer cruises at a cost ranging between 1,000£ and 2,000£, as 37% of total passengers chose a cruise that is classified in this price category. Significant percentages of tourists attract and the cheapest cruises as 27% of passengers chose a cruise at a cost between 501£ and 1,000£ while 15% chose cruises whose participation price did not exceed 500£. Cruises with a cost of participation between 2001£ and 5000£have lower rates of passenger attraction, as they attract 20% of passenger traffic. The least preference is given to luxury cruises, as the percentage of passengers who book cruise packages at a cost of more than 5000£ does not exceed 2%. In closing, it should be mentioned that the average cost of passengers for participation in a cruise in 2011 reached 1. 434£.

Figure 12 Distribution of Tourists into Travel Cost Categories (UK)



Source: Passenger Shipping Association, 2012; Own processing

1.4 The Structure of cruise services in Europe

1.4.1 The Europe Cruise Travel Offer

The development of the European cruise market and the increased interest of tourists in European destinations and especially in those of the Mediterranean have brought about a sharp increase in the activity of shipping companies in the region. Both European companies and companies based outside Europe are now active in Europe and, either directly or through subsidiaries, claim market shares in the region. Table 3 shows in detail the number of companies operating in Europe, their headquarters and the size of the fleet available for cruise travel in Europe.

In 2011, a total of 66 companies were active in the European cruise market, providing a fleet of 196 cruise ships, with a total capacity of 240.2 km. Beds. Of all the companies, about 62% of them operate in Europe, while European companies had 61% of the fleet and 60% of the total bed capacity in the European cruise market in 2011. The above data show the great competition that European companies receive from companies outside Europe and especially from those based in North America, as non-European companies now control about 40% of the European market. The increased competition comes mainly from the strong trend towards internationalization of the industry, which is expected to be further strengthened with the operation of the newly established global cruise company operator(CLIA)which is expected to integrate all local cruise company associations.

Table 3 Cruise Companies in Europe (2011)

	Companies	Fleet	Beds
European	41	120	143.200
Non-European	25	76	97.000
Total	66	196	240.200

Source: ECC, 2012; Self-processing

The spatial distribution of companies' activity in Europe is shown in Table 4. The Mediterranean has the highest concentration of activities. In 2011, 114 ships of European companies and 57 ships of non-European companies with an average capacity of 1295 beds were used for cruises in the Mediterranean and the Atlantic islands. On the other hand, 59 ships of European and 29 non-European cruise companies with an average capacity of 1090 beds were used in Northern Europe. Although the direct comparison of the different spatial units in terms of the activity of the concentrate becomes impossible mainly due to the transport of ships on different routes, the data in the table are an indication of the greater attractiveness of the Mediterranean.

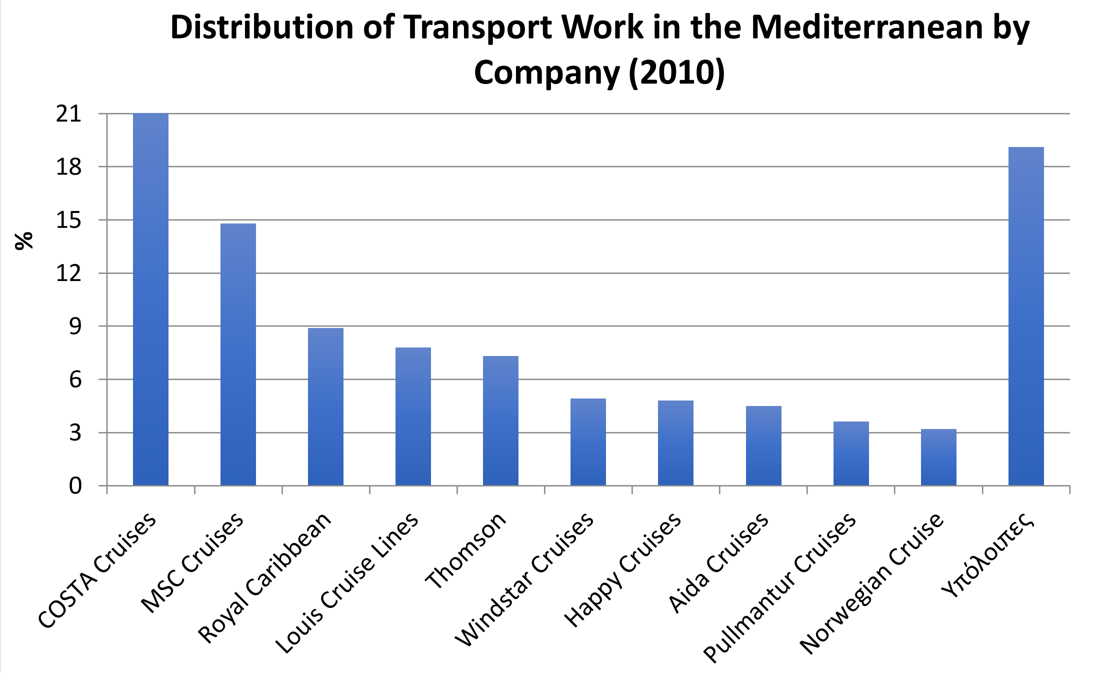
Table 4 The Spatial Dispersion of Cruise in Europe (2011)

	Fleet		AVG.. Beds/Ship
	European	Non-European	
Mediterranean*	114	57	1295
B. Europe	59	29	1090
***Including The Atlantic Islands**			

Source: ECC, 2012; Self-processing

More detailed conclusions on the activity of cruise companies in the Mediterranean can be drawn by analyzing the data in Chart 13. Chart 13 presents in the form of a diagram the cruises that each company made in the Mediterranean in 2010 expressed as a percentage of the total cruises that took place in the region in the same year. The dominant company is Costa Cruises , as 21% of the total cruises that took place in the Mediterranean in 2010 were performed by this company. The performance of Costa Cruises is followed by MSC Cruises with a participation rate in the total transport work that reaches 15%.

Chart 13 Distribution of Transport Work in the Mediterranean by Company (2010)



Source: Marušić et Al, 2012; Self-Edited

The two leading companies operate in Italy. The former is a subsidiary of the US interests Carnival Cruise Lines while the second is an independent company. The third performing company is the Us-owned Royal Caribbean as it organized about 9% of the cruises in the Mediterranean. They are followed in performance by the Cypriot interests Louis Cruise Lines and the British interests Thomson Cruises. with a market share of 7.8% and 7.3% respectively. The chart also shows other companies such as Windstar Cruises, Happy Cruises, Aida Cruises, Pullmantur Cruises and Norwegian Cruise with a smaller transport work that does not exceed 5% of the total for any company. Finally, the total transport work of the smaller companies is around 19% of the total transport work in the Mediterranean.

1.4.2 The Cruise Destinations Offer

The destinations and ports included in each cruise trip are a key part of the structure of the supply of the cruise tourism product. Essentially, despite the influence of the available activities and amenities of a ship on the final decisions of tourists to choose a cruise package, the ports and areas included in the planned routes are an equally important choice of the consumer holiday package and a necessary condition for the optimization of the services provided and the full exploitation of the capabilities of the companies' fleet (Rodrigue and Notteboom, 2013). In an effort to maximize the benefit of tourists, cruise shipping companies promote the concept of the route and less of that of the destination. Therefore, the stations that make up each route should maintain the degree of attractiveness at high levels depending on the target group of tourists. On the other hand, the choice of ports should serve the operational objectives of the company with the main ones being the containment of costs (fuel, port charges, etc.), the excellent service (port services, excellent port-hinterland transport, etc.), as well as the full observance of timetables (avoidance of delays, coordination with air flights before and after the scheduled cruise, etc.) (Lekakou et al. 2009; Rodrigue and Notteboom, 2013).

Considering the above, the highly competitive context in which cruise ports operate is understood. The competitiveness of each region lies in the ability of its port of entry to be of the greatest efficiency in the provision of services and on the other hand in the exploitation of the advantages that the region has in areas such as cultural heritage, natural attractions, recreation areas, adequate connections, etc. Shipping companies, emphasizing on the route and not on the destinations, may skip stops at ports, either due to poor service of the ships, or due to the reduced attractiveness of their hinterland. Therefore, the excellent combination of the two aforementioned factors improves the competitive position of the potential reception areas of cruise tourists and increases the bargaining capacity of the players of the local markets – port and tourist – vis-à-vis the cruise shipping companies.

Cruise tourist reception ports can be divided into two main categories in terms of how they are integrated into the planned routes of shipping companies. On the one hand, we distinguish the ports which are the starting and ending points of cruises and which are called by the international term ***Homeports (base ports).*** The operation of ports according to the standards of the base has huge advantages for the areas where they are located due to the economies of scale achieved by the concentration of activities and the corresponding generation of income from the economic activity of tourists, shipping companies and workers in the cruise industry. A necessary condition for the operation of the base ports is the existence of adequate port facilities and the existence of sufficient tourist facilities. accommodation and transport infrastructure in their hinterland (Lekakou et al.2009; Rodrigue and Notteboom, 2013).

The second category of ports includes ports which are **the points of route of cruise ships**. These types of ports are simple intermediate cruise travel stations whose starting and ending take place in other ports. The operation of a port as a stopover requires significantly lower standards than *homeport-type* ports. . The existence of a hinterland of tourist interest is probably the main factor of competitiveness of these ports which can be included in the planning of companies even if they have rudimentary infrastructure. Finally, it should be mentioned that many ports can operate according to the standards of both categories of ports mentioned above (Lekakou et al.2009; Rodrigue and Notteboom, 2013).

An alternative classification of ports according to the way they are integrated into cruise networks emerges from the recent article by Rodrigue and Notteboom (2013). The authors propose to classify ports into three categories taking into account the purposes served by each port and the port-hinterland relationship in the context of the provision of cruise services. The first category includes *limony destinations* . The immediate inlands of these ports include a sufficient number of cultural and historical attractions. As a consequence of this, the interest of the tourists' visit is focused on the port and the neighboring areas. The second category includes *ports of entry-exit*. These ports do not include direct inland ports of tourist interest. The advantage of these ports lies in their relative proximity to areas of high tourist attraction, constituting the maritime hubs of passenger entry-exit to these areas. Finally, the third category includes balanced cruise ports. which operate on standards that combine the characteristics of the two categories of ports mentioned above.

The analysis that preceded it is considered necessary for a full understanding of the dynamics of European cruise destinations. The different profile of destinations and the capabilities of the host ports are important factors that should be taken into account when analyzing cruise traffic in Europe. Taking into account the above, the following analysis aims at the full recording of the performance of European cruise ports and the assessment of the competitive forces that act and influence their activities.

1.4.3 The Performance of European Countries in Cruise Tourism

The great attractiveness of Mediterranean destinations keeps Mediterranean countries in high positions in the ranking of countries based on the cruise tourists who visit them annually. Characteristically on this are the data in Table 5 showing the total visits of cruise tourists to European countries for the year 2011. The countries with the greatest performance in the reception of tourists are the Mediterranean countries of Italy, Spain, Greece and France, while the first non-Mediterranean country to follow the performance of the above is Norway. The top four countries account for more than 66% of total visits to European countries, and if France's performance is subtracting, it becomes clear that the top three countries attract about 58% of total cruise tourists to Europe. The countries that hold more than 1% in addition to the aforementioned are mainly Baltic and Scandinavian countries.

The dominance of Mediterranean countries in attracting cruise tourists is also evident from Chart 14, which shows the evolution of the total number of annual visits to the top European destinations for the years 2006, 2009, 2011. Figures in Figure 14 show that annual visits between 2006 and 2011 show an increasing trend. However, it should be noted that the destinations of Greece, Gibraltar, Germany and

Denmark show a relatively small decrease between the years 2009-2011. However, the performance of these destinations in 2011 is clearly better than in 2006. Therefore, the reduction may be temporary.

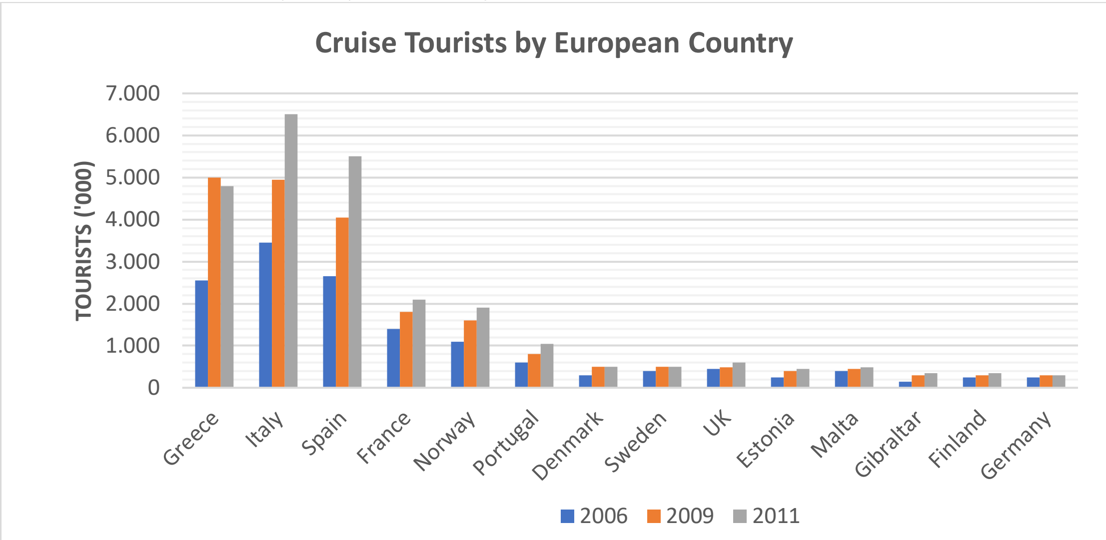
Table 5Tourist Visits to European Countries (2011)

Country	**Tourists (mm)**	**Percentage**
Italy	6.471	23,02%
Spain	5.255	18,69%
Greece	4.780	17,00%
France	2.167	7,71%
Norway	1.947	6,93%
Portugal	1.069	3,80%
UK.	648	2,31%
Sweden	517	1,84%
Denmark	483	1,72%
Malta	445	1,58%
Estonia	443	1,58%
Finland	356	1,27%
Gibraltar	329	1,17%
Germany	315	1,12%
Benelux	311	1,11%
Rest of Europe	2.575	9,16%
Total	28.111	100,00%

Source: ECC, 2012b; Self-processing

Regarding the countries that make up the group of destinations with the most visited, Italy seems to be the most profitable as it managed in three years (2009-2011) to increase the annual visits by 1.5 million. Tourists. On the contrary, Greece seems to have lost significant ground, as while in 2009 it was the country with the highest number of visits, in 2011 it fell to the third place of the relative ranking to the benefit of Spain. Finally, France, Norway, Portugal and the UK managed to achieve a significant improvement in their traffic, as visits to these countries in the five-year period 2006-2011 show a percentage increase ranging from 55% (France) to 74% (Portugal).

Chart 14 Cruise Tourists by European Country (2006-2009-2011)



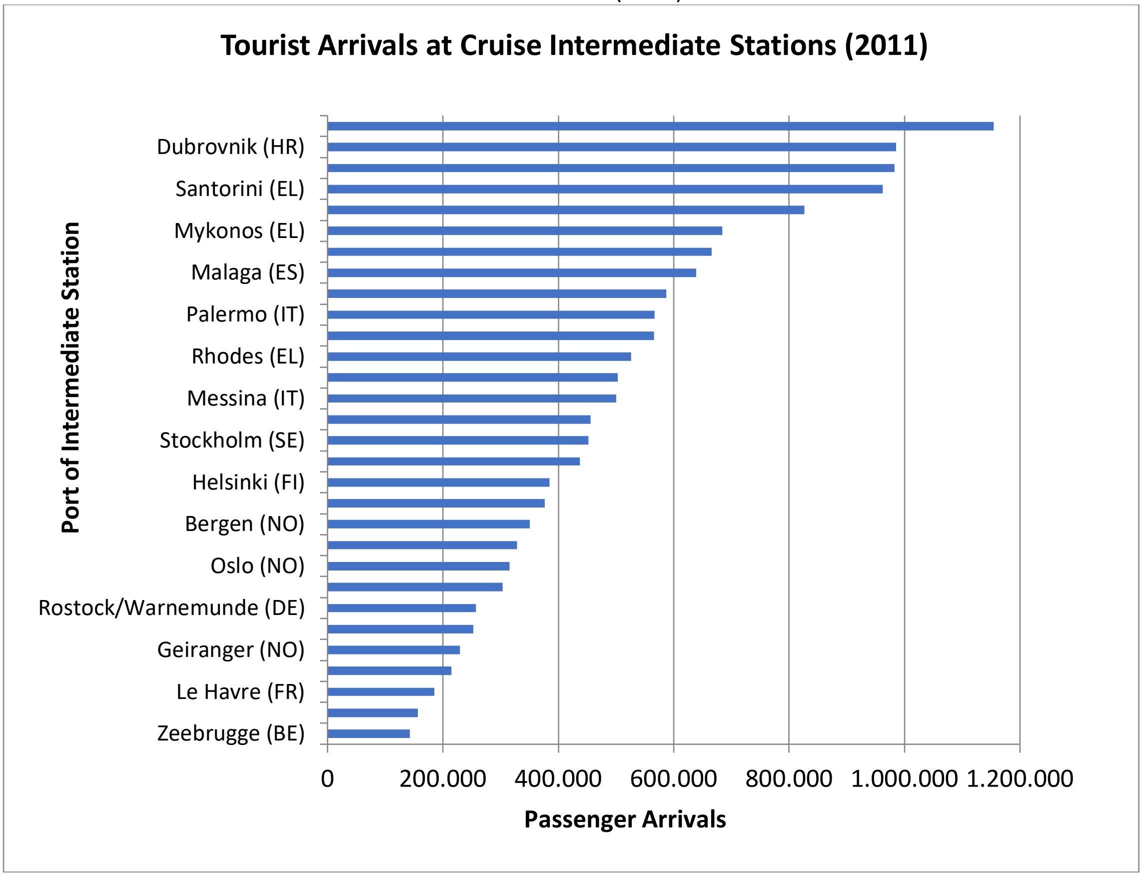
Source: ECC, 2008; 2010; 2012b; Self-processing

1.4.4 The Performance of European Ports in Cruise Tourism

The high performance of the Mediterranean countries as mentioned above is mainly due to the high tourist value of their ports – destinations. The fact that countries such as Italy, Spain and Greece have numbers of arrivals that exceed 5 million. annually shows that the average cruise tourist makes multiple stops at the ports of these countries on a cruise trip. Indicative of the activity of European ports in the cruise sector is Chart 15 which shows the total number of cruise passenger arrivals at the main European intermediate stations for the year 2011. From the data in Chart 15 it becomes clear that the ports which are the main intermediaries Cruise stations are the Mediterranean ports whose inlands are known tourist resorts. The top port in terms of annual visits is the port of Naples, which was visited by more than 1.15 million tourists in 2011.

The Italian port's performance is followed by ports that offer access to internationally-class destinations such as Dubrovnik in Croatia, Livorno in Italy, Santorini and Myconos in Greece, Marseille port and Côte d'Azur ports in France, and Mallorca port in Spain. The first non-Mediterranean port in the relative ranking is the Portuguese port of Lisbon, which attracts about 500 thousand tourists per year occupies the 13th place among the cruise terminals in Europe. At the lowest positions of the relative ranking are the ports of Northern Europe and the Baltic as a result of the less attractiveness of the cruise packages of these regions. Indicative of the low performance of the ports of Northern Europe. is the fact that the port of Stocholm being the top port of Northern Europe in terms of traffic is ranked 16th in the relative ranking, as it welcomed 452 thousand tourists in 2011.

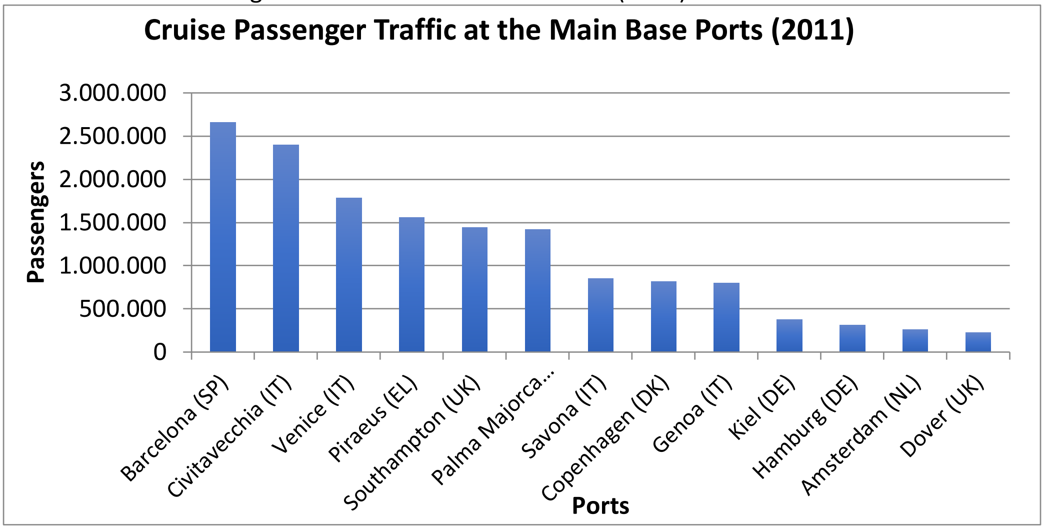
Chart 15 Tourist Arrivals at Cruise Intermediate Stations (2011)



Source: ECC, 2012b; Self-processing

The internationally renowned tourist destinations of the Mediterranean are a guide for the preparation of itineraries by the cruise travel companies. Therefore, for a package holiday to be attractive it should include some of the top tourist destinations. As a consequence, the main ports located in the vicinity of these destinations are systematically benefited. Figure 16 shows the performance of Europe's main base ports for 2011. The most active ports are those from which they are the starting point and end for Mediterranean cruises. . At the top is the Spanish port of Barcelona, followed by the Italian ports of Civitavecchia and Venice and the Greek port of Piraeus. From the ports of Northern Europe the top performers in 2011 were presented by the port of Southampton and the port of Copenhagen . The base ports manage to take advantage of their infrastructure adequacy and excellent connections by acting as central hubs in cruise travel. However, many of them are also of great tourist interest while acting as intermediate cruise stations. These ports show mixed trends regarding the type of traffic they attract and essentially manage to take full advantage of the growth opportunities offered by the cruise industry.

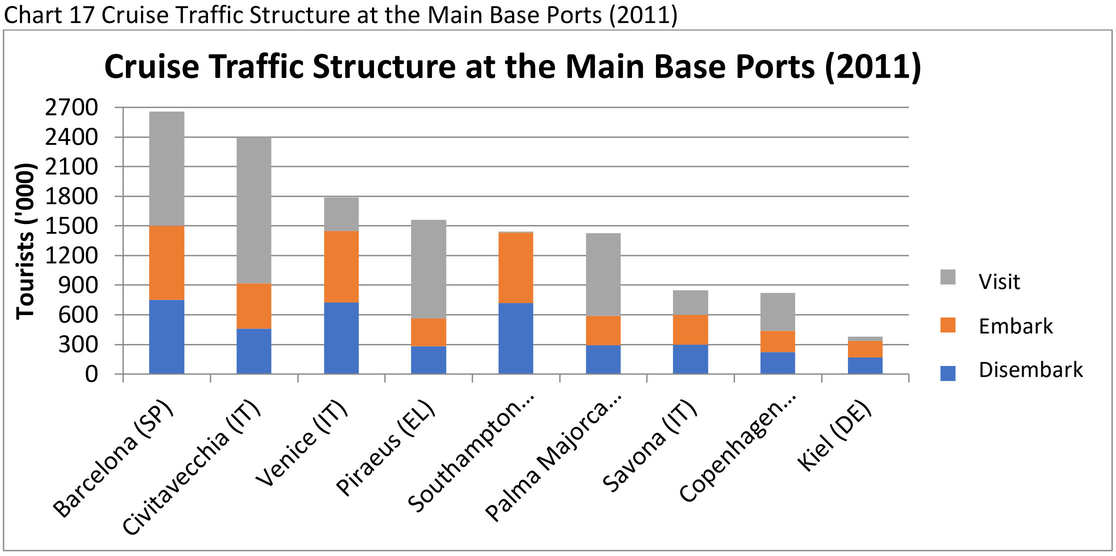
Chart 16 Cruise Passenger Traffic at the Main Base Ports (2011)



Source: ECC, 2012b; Self-Processing

Indicative of the type of passenger traffic faced by the top base ports is Chart 17. The data in Chart 17 clearly show that the Mediterranean base ports manage to function as intermediate cruise stations. The port of Barcelona manages to maintain a balance between embarkation - disembarkation traffic and intermediate visits, reaching 2.7 million tourists per year. In addition, there are destinations such as Piraeus, Civitavecchia and Mallorca which rely mainly on intermediate visits, but also present significant activity as base ports. On the contrary, the ports of Venice and Savona show a greater performance in disembarkation-embarkation traffic. Finally, the ports of Northern Europe operate mainly as base ports (Hamburg, Kiel)with the exception of the port of Copenhagen which manages to maintain a balance between intermediate visits and embarkation - disembarkation.

Chart 17 Cruise Traffic Structure at the Main Base Ports (2011)



Source: ECC, 2012b; Self-processing

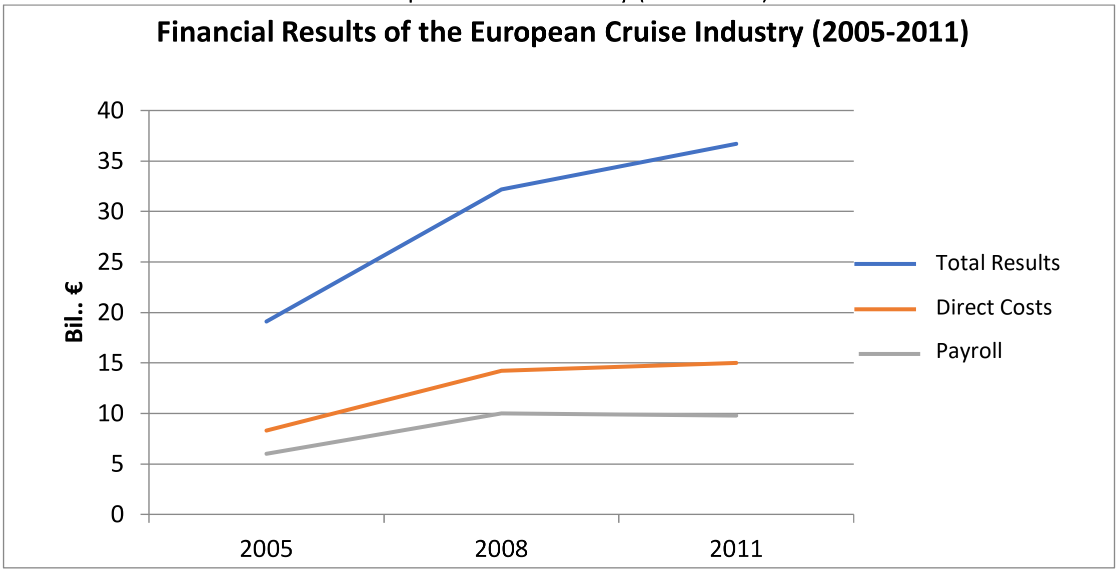
The analysis that preceded it highlighted the dynamics of European cruise destinations. Attracting and maintaining a high number of tourists is influenced by different factors that make up the internal and external environment of cruise ports. Therefore, the purpose of the port authorities and the tourist agents of each region is to highlight and exploit the comparative advantages of their region both in terms of its infrastructure and its attractions. Maintaining high levels of traffic is a key condition for taking advantage of the local development opportunities offered by cruise tourism. These prospects are best understood by the following analysis describing the economic results and the labor supply of the cruise industry in Europe.

1.5 The Contribution of the Cruise Industry to the European Economy

1.5.1 Financial Results and Jobs of the European Cruise Industry

As mentioned above in the introduction to this chapter, the provision of cruise services requires the interaction of different sectors of the economy. The cruise industry is therefore of great importance for the national as well as the local economies which carry out relevant activities, as the economic results of the sector affect in various ways the economic activity developed in these regions. For Europe in particular, and in particular the Mediterranean, the development of cruise activities is accompanied by an obvious impact on the economies of the states, the majority of which are measurable figures. A characteristic feature of this is Chart 18, which presents the annual economic results generated by the activity of the cruise industry in Europe for the period 2005-2011. as well as the main categories thereof.

Chart 18 Financial Results of the European Cruise Industry (2005-2011)



Source: ECC, 2012a; Self-processing

From the data in Chart 18, the increase in the economic impact of the cruise industry in the period 2005-2011 is visible. More specifically, the total results of the sector in 2011 reached EUR 36.7 billion. when in 2005 this barely exceeded € 19 billion. € . The greatest economic benefits are generated by the direct costs generated by the cruise activity, the main ones being the construction and maintenance costs of ships, the costs of shipping companies and the costs of visitors and crews when boarding ships. The total direct costs of the sector in 2011 reached € 15 billion, an increase of 81% compared to the corresponding costs in 2005. On the other hand, the sector's payroll costs for its direct and indirect employees are significant, which increased by 63% in the period 2005-2011, reaching €9.8 billion in 2011. €.

More specifically, with regard to the direct costs of the cruise industry, these are mainly based on the costs of construction and maintenance of ships and the direct costs arising from the operation of shipping companies operating in Europe. Table 6 shows in detail the breakdown of the total direct costs in their main categories. The costs of building and maintaining ships in European shipyards reached EUR 3.84 billion. €, showing an annual decrease of 8.6%. The decline in the activity of European shipyards is mainly due to the competition they receive from shipyards in eastern countries. However, according to ecc estimates (2012a)the trend in the coming years is expected to be reversed mainly due to the growth of the cruise ship fleet that is estimated to take place in the coming years.

Table 6 The Main Categories of Direct Expenditure of the Cruise Industry

Direct Expenditure Categories (2011)	Billion. €	Annual Change
Construction-Maintenance	**3,84**	**-8,6%**
Consumption and Services Costs	**6,4**	**6,7%**
Advertising, Insurance, Engineering Services	1,45	11,5%
Brokering Commissions	0,9	4,7%
Beverages and Food	0,55	11,1%
Other Expenditure	3,5	4,60%
Passenger and Crew Costs at ports	**3,4**	**9,7%**
Passenger Costs	3,28	8,9%
Crew costs	0,12	37,9%

Source: ECC, 2012a; Self-Processing

In addition, consumption and service expenditure reached EUR 6.4 billion in 2011. € recording an increase of 6.4% compared to the corresponding expenses of 2010. The main categories of expenditure concern the purchase of services such as advertising, insurance coverage and engineering maintenance and study services. This expenditure amounted to EUR 1.45 billion. €, showing an increase of 11.5% compared to 2010. Also significant are the expenses related to the procurement of travel agents which increased in the period 2010-2011 by 4.7%, reaching in 2011 900 million. €. In addition, significant expenses are incurred by shipping companies for the supply of cruise ships with the necessary quantities of food and drinks. This expenditure exceeded 550 million. €. Finally, as far as other expenditure is concerned, the main part of this concerns the supply of fuel.

Apart from the expenses of the companies for their operation, a significant income for the European economies is also created by the expenses of passengers and crews in the ports they visit. This expenditure reached EUR 3.4 billion in 2011. €, showing an increase of 9.7% compared to the corresponding expenses of 2010. Passenger spending at Europe's ports in 2010 on cruise travel reached €3.28 billion. €. It is estimated that the average passenger spends about 74 €at the port of boarding. If the air transport cost to the port of departure of the cruise is added to this amount, then the average costs per passenger reach 290 €. Accordingly, it is estimated that the average cost per passenger at the intermediate stations of cruise travel is 62 €. Clearly smaller but important are also the costs of crews in ports which in 2010 exceeded 120 million. €, showing an increase of slightly less than 38% compared to 2010. It is estimated that the average cost per crew member in each port he visits reaches 21 €.

The cruise industry also made an important contribution to job creation in Europe. Table 7 shows the estimated direct and indirect jobs as well as the total payroll costs to cover them in the European area in 2011. The total number of direct jobs fueled by the sector's activity in Europe exceeded 153,000, while the costs of covering them ranged to €4.6 billion. More specifically, around 52,000 workers from Europe worked as a crew of cruise ships in 2011, while 5,000 were employed as employees and representatives of the offices of cruise companies operating in Europe. In addition, the cruise activity has a significant impact on the businesses of sectors that offer products and services to the cruise industry. This impact is particularly significant in areas where cruise ships dock or have a sufficient number of cruise tourists. According to the ECC (2012a),jobs created in other sectors through demand in the cruise industry exceeded 95,000 while payroll costs exceeded €3.3 billion.

Table 7 The Impact of the European Cruise Industry on Employment

Jobs	Number of Jobs	Payroll expenses
Total Direct Jobs	**153.011**	**4.643**
Shipping Company Office Employees	56.959	1.317
Cruise Ship Crew		
Jobs in Other Sectors	95.052	3.326
Total Indirect Jobs	**162.489**	**5.159**
Total Jobs	**315.500**	**9.802**

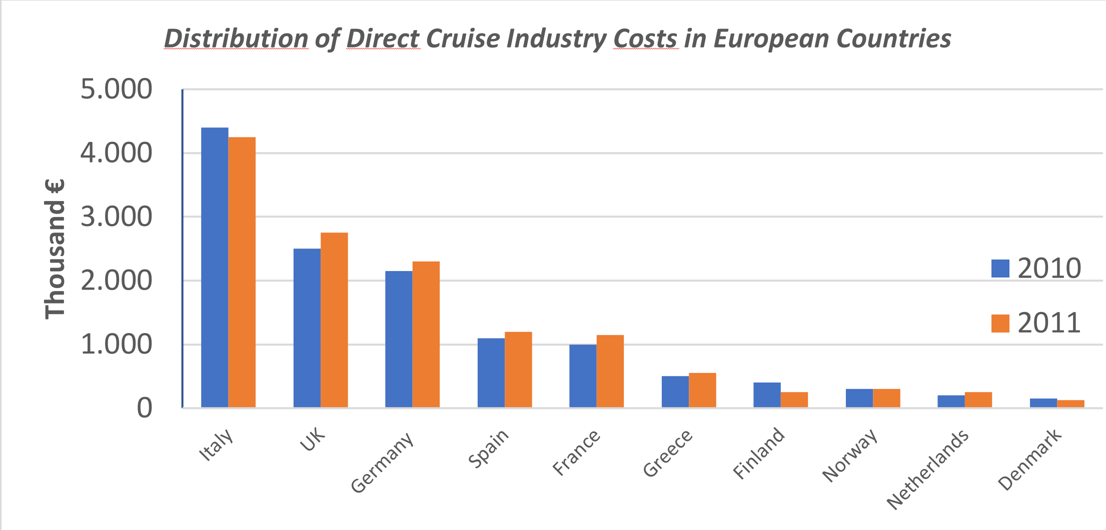
Source: ECC, 2012a; 2012b;Self-processing

The main effects of the cruise operation in terms of job creation are found in the manufacturing sector where it absorbs 46% of the direct costs of the cruise, mainly through ship repair activity and the transport sector which absorbs 23% of the direct costs of the sector, mainly through the services of agency and the distribution of cruise packages. It is estimated that the direct jobs created in these sectors absorb about 50% of the total payroll costs created by the cruise industry. Finally, it should be mentioned that the cruise industry through its related activities creates a significant number of indirect jobs in sectors with which it interacts, which in Europe for 2011 exceeded 160,000. Overall, in 2011, indirect jobs created in Europe reached 315,500, showing an increase of around 68% over the period 2005-2011. The multiplier benefits are perceived by the fact that for every 1 cm. € of direct expenditure of the sector generates an income of 2.45 million. € in the European economy and 21 jobs with an average annual compensation of 30,000 €.

1.5.2 Financial Results and Jobs of the Cruise Industry in the Main European Countries

Undoubtedly, the economic impact of the cruise industry is not the same for all countries in Europe. The countries that benefit most are those that have cruise ports, are a strong cruise tourist market and are very active in the shipbuilding industry. The economic impact of cruise-related activities in terms of the industry's direct costs is shown in Chart 19. In addition, the jobs and the total costs of covering them in the countries of Europe with the largest activity in the sector are presented in Table 8. The biggest economic benefits from the cruise industry are to be found in Italy as direct spending is reaching €4.5 billion. €. In addition, in 2011 cruise-related jobs exceeded 100,000 and payroll costs exceeded €3 billion. €. This result is mainly due to the fact that the country is highly active in the reception of tourists, in the sale of cruise packages, as well as in the shipbuilding industry. A characteristic of the high activity in the shipbuilding industry is that the direct costs of shipping companies for the construction of ships in Italy in 2011 exceeded 1 billion euros. € and maintenance costs of 190 mil. €.

Chart 19 Distribution of Direct Cruise Industry Costs in European Countries



Source: ECC, 2012a; 2012b;Self-processing

Italy's performance is followed by the UK as direct cruise spending in the country in 2011 exceeded €2.8 billion. € and jobs approached 64,000. The bulk of the costs are generated by the intense activity in the sale of cruise packages as it has been pointed out that the UK is the largest cruise market in Europe. It is followed by Germany with direct expenditure in the sector amounting to EUR 2.5 billion. €. These expenses are mainly due to the activity of the country's shipbuilding sector. Germany in 2011 surpassed Italy in terms of direct costs for ship repairs, as the level of expenditure on the construction of new cruise ships and the maintenance of the existing fleet reached EUR 1.33 billion. €. It is estimated that in Germany in 2011, 39,238 people were employed in cruise-related professions and payroll costs reached €1.43 billion. €.

Table 8 The Impact of the Cruise Industry on Employment in European Countries

	Jobs	Payroll expenses (€ million)
Italy	100.089	3.043
UK.	63.834	2.332
Germany	39.238	1.433
Spain	27.437	834
France	16.009	726
Norway	12.364	388
Greece	12.078	234
Netherlands	5.733	165
Finland	3.408	125
Denmark	2.630	93

Source: ECC, 2012a;2012b; Self-processing

The performance of these countries is followed by Spain, France and Greece. Spain and France benefit equally from the activities of welcoming tourists and selling cruise packages, while on the contrary the main cause of income generation in Greece is the activity of welcoming tourists. Significant impacts are created by the cruise industry in other countries of Northern Europe, the main ones being Finland, the Netherlands, Norway and Denmark. The vast majority of expenditure in these countries, with the exception of Norway, relates to the construction and maintenance of the cruise ships of shipping companies. Finally, it should be mentioned that in 2011 in most countries the expenditure of the cruise industry increased compared to 2010. The exceptions are Italy and Denmark, which experienced a relatively slight decline, as well as Finland, which experienced a fall in expenditure of more than 56%.

The relatively low added value produced by the cruise industry in Greece compared to other European countries is due to various factors related either directly or indirectly to the operation of this sector in our country. First of all, it should be noted the importance of losing potential incoming currency from the inability to attract base movement. The comparatively higher consumption expenditure of tourists in the base ports compared to the corresponding expenditure in the ports of transit for which reference was made above, reflects the losses recorded by the Greek economy in terms of potential profits. If the country manages to become the main starting point of cruises in Eastern Europe, it is certain that the industry's revenues will rise sharply.
On the other hand, significant are the losses of potential benefits from the inability of Greek cruise companies to withstand international competition. Greek shipowners and shipowners, while recording excellent performances in other sectors of global shipping, do not manage to take advantage of advantages provided by the country, such as their geographical position, the exceptional level of employees in the maritime professions, the plethora of destinations, etc., in order to develop equally successful activities in the cruise sector. As a consequence of this, the part of the cruise offer is monopolized by companies in America and Western Europe.
Finally, significant losses are due to the lack of activity of the Greek ship repair industry. The high added value of the construction and maintenance of cruise ships is exploited to the full by countries such as Italy and France, as well as countries with low cruise performance, such as Germany and the Netherlands. The conclusion that emerges is that Greece, despite its significant performance in attracting cruise tourists, does not capitalize to the greatest extent on the potential benefits of the activities of this sector. The undertaking of appropriate policies towards the improvement of the port infrastructure and the strengthening of the shipping and ship repair industry is sure to have a significant positive impact on the way Greece capitalizes on the profits of cruise tourism.

1.6 The Performance and Competition of Cruise Ports in the Mediterranean

1.6.1 The Port Zones and the Characteristics of cruise ports

The Mediterranean has more than 170 ports that can accept cruise traffic. If we add to this the ports of the European Atlantic coasts and the Black Sea which are included in many routes that include Mediterranean ports, then the number of ports that tourists can visit in the Mediterranean exceeds 200. Four main zones are distinguished: the Zone of the Western Mediterranean (from Gibraltar to Sicily), the Zone of the Eastern Mediterranean, the Adriatic Zone and the Black Sea Zone. It should be mentioned that the division of the Mediterranean into port zones mainly serves the easier analysis of cruise traffic presented by this region.
Characteristic for the performance and dynamics demonstrated by each zone are the values of statistical measures and the indicators for the analysis of cruise passenger traffic for the year 2010 listed in Table 1-11. Regarding the total visitors, the Western Zone seems to dominate, attracting almost twice as many visitors from the Eastern Zone to follow in terms of performance. The Adriatic Zone follows in performance by recording annual visitor numbers reaching 50% of the corresponding number of the Eastern Zone. Finally, the lowest performance is recorded by the Black Sea Zone, which has the smallest number of ports. In addition, despite the largest number of ports available in the Western Zone, it has the highest price of average annual passenger traffic per port (461,585). They are followed by the Eastern and Adriatic Zones with an average of 343,655 and 290,744 visits, respectively. Finally, the Black Sea Zone has the lowest passenger traffic per port (22,784).

Table 9 Passenger Traffic in the Mediterranean by Port Area

Zones	Eastern	Western	Adriatic	Black Sea	Mediterranean
Total Visitors	8.247.722	16.155.480	4.070.421	136.701	28.610.324

Visitors' M.O.	343.655	461.585	290.744	22.784	362.156
Standard deviation	418.579	551.416	461.008	22.542	483.708
Variable Factor (S.M.)	121,80%	119,46%	158,56%	98,94%	133,56%
Concentration Index(Gini)	0,60	0,60	0,76	0,53	0,64
Harbors	24	35	14	6	79

Source: Medcruise, 2011; 2012a? 2012b? Port*Authority Websites; Self-Processing*

In addition, it should be stressed that all zones show significant differences between the passenger traffic of ports. This conclusion is drawn from the examination of the Coefficient of Volatility, the values of which are considered to be extremely high. The largest heterogeneity between the amount of passenger traffic of its ports is presented by the Adriatic Zone, as the S.M. reaches 158.56%. The observations of the Eastern and Western zones present approximately the same volatility as the value of the S.M. in these zones fluctuates around 120%. Finally, the black sea zone presents the greatest homogeneity regarding the amount of passenger traffic of its ports, with the price of the S.M. not exceeding 100%.

Important data on the dynamics of competition within the zones are also drawn from the values of the concentration index. The largest concentration of passenger traffic is the Adriatic Zone as the value of the concentration index (0.76) far exceeds the value of the corresponding Mediterranean index (0.64). On the other hand, the Eastern and Western Zone has a relatively high concentration, as the value of the concentration index, although slightly below that of the Mediterranean index, is considered high (0.60). Finally, the Black Sea Zone has the lowest concentration of passenger traffic as the value of the concentration index (0.53) suggests that passenger traffic is close to perfect even distribution between ports more than traffic in any other zone.

1.6.1.1 Ship Arrivals in the Mediterranean Port Zones

The cruise port zones are significantly differentiated, both in terms of the number of ships calling at the ports and their size. Table 12 shows the total ship arrivals, the average number of arrivals, as well as the average number of passengers per ship at the main ports of each Mediterranean zone for the year 2010. In 2010, 15,905 ships docked in the ports under consideration, carrying an average of 1,256 passengers. The Western and Eastern Zone receive the largest number of ships per year, as total arrivals in 2010 reached 7,369 and 5,466, respectively. However, the interesting thing that can be seen from Table 1-12 is that the two zones have exactly the same number of average ship arrivals per port (235). The predominance of the Western Zone in terms of ship arrivals is due to the fact that their ports receive on average a larger number of visitors per arrival. As shown in the 3rd row of the table, the arrivals arrived. ships in the Western Zone carry an average of about 1,569 passengers while in the east about 1,179 passengers.

Table 10 Cruise ship arrivals in the Mediterranean Port Zones

	Eastern	**Western**	**Adriatic**	**Black Sea**	**Mediterranea n**
Total Ship Arrivals	5.466	7.369	2.793	277	15.905
M.O. Arrivals	238	238	215	46	218
M.O. Passengers per Arrival	1.179	1.569	988	511	1.256
Harbors	23	31	13	6	73

Source: Greekcruise,2013; Medcruise, 2011; 2012a? 2012b? Port*Authority Websites; Self-processing*

The performance of the Eastern Zone in the number of ships arriving is followed by the Adriatic Zone. Adriatic ports receive an average of 215 ships per year with an average number of passengers approaching 1,000. Finally, 277 ships arrived in Black Sea ports carrying an average of 511 passengers.

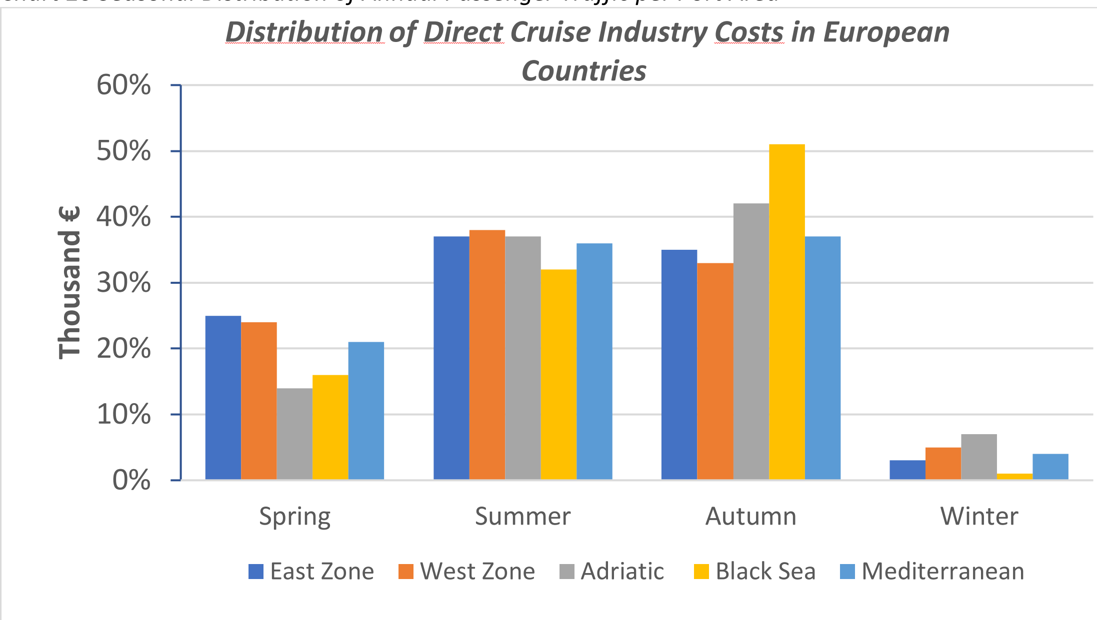
The excellent performance of western zone ports testify to what was reported during the analysis of the data in Table 1-9 that preceded it. and which concerned the highlighting of the critical role of the adequacy of port infrastructure in the effort of each local economy to derive the maximum from the benefits that accompany cruise tourism. The docking of the latest technology ships carrying a large number of passengers entails greater revenues both for the port and for the local economy of the area where it is located.

1.6.1.2 The seasonality of traffic in the Mediterranean Port Zones

A further important dimension of cruise tourism in the Mediterranean is the seasonality of passenger traffic. Important information on this dimension can be drawn from Chart 21, which shows the distribution of annual passenger traffic in the four seasons of the year by geographical area. The data in Chart 21 show the strong seasonality of Mediterranean cruise tourism; as the vast majority of trips (74.27%) take place during the summer and autumn months. The majority of the zones receive more than 37% of its visitors in the summer. An exception is the Black Sea zone, where about 32% of all visitors escape in the summer. In contrast, the Black Sea Zone has a high concentration of visitors in the autumn as more than 50% of the total annual visits to the ports of the zone take place in the autumn months. Significant passenger traffic in the autumn is also observed in the Adriatic zone as it exceeds 40% of the annual traffic. Autumn visitor arrivals in the Eastern and Western Zone show lower percentages of total arrivals as they do not exceed 35%.

The activity of Mediterranean ports in the spring is clearly lower than in the summer and autumn months, as 21.31% of the total visits to the Mediterranean ports take place during this period. The most important activity during the spring is presented by the ports of the Eastern Zone as 25% of the total visitors of the ports of the zone take part in cruises during this period. Significant activity during the spring period, which exceeds the Mediterranean average, is also found in the ports of the Western Mediterranean (23.52%). In contrast, Adriatic and Black Sea ports during the same period show relatively low activity, as visitor arrivals to the ports of the two zones in the spring do not exceed 17% of their total annual arrivals. Finally, the Mediterranean ports are the lowest active during the winter season, as visits do not exceed 5% of annual visits. Characteristic of this is the fact that the ports of the Black Sea show zero activity during all three winter months. The Adriatic Zone is the largest activity in the Mediterranean during the winter months, as 7% of the annual arrivals to the ports of the zone take place during the winter season.

Chart 20 Seasonal Distribution of Annual Passenger Traffic per Port Area



Source: Medcruise,2011; Self-Processing

Chapter 2. Greek Cruise Destinations

2.1 Introduction

As mentioned above, the international character of the cruise intensifies competition between destinations that may be thousands of nautical miles away. For example, it is mentioned that attracting a larger number of visitors from Spain directly affects the performance of the cruise industry in all other countries, including Greece. Therefore, before the analysis is directed at recording the performance and dynamics of the cruise industry in Greece, it was considered appropriate to analyze and clearly demonstrate the international trends of cruise tourism, as well as the current developments regarding the development of the sector in Europe and especially in the Mediterranean.
Having analyzed the international competitive environment of Greek destinations, this chapter will attempt to record in detail the characteristics and performance of Greece's cruise ports. More specifically, the analysis will focus on two directions. On the one hand, the infrastructure of Greek ports will be recorded and evaluated on the basis of the corresponding infrastructure of the ports competing with the Greek ports. On the other hand, the analysis will aim at recording the evolution of the evolution over time and the characteristics of the passenger traffic of Greek ports and at capturing the competition that is developing within the Greek area.

2.2 The Infrastructure of Greek Ports

The analysis of the previous chapter showed the importance of the infrastructure of cruise ports for claiming passenger traffic. Taking into account the importance that the companies give to the smooth execution of their scheduled itineraries, it becomes clear that the adequacy of infrastructure is now a prerequisite for the selection of ports in the planning of the companies. Table 15 presents the infrastructure of the main cruise ports in Greece. The data in Table 15 show the great variations of the infrastructure available to the ports for the service of cruise ships. Greek ports have an average of four piers which they have for the operation of the cruise. The smallest number of piers (1) have the ports of Volos, Igoumenitsa and Patmos, while the largest, the ports of Piraeus and Heraklion that attract significant base traffic, as well as that of Corfu which gradually approaches base traffic. The average pier length exceeds 1000 m. However, the high average is mainly due to the length of the piers of the two major base ports (Piraeus and Heraklion). The ports that also have a pier length above the Greek average are the port of Corfu and the new port of Souda in Chania. The rest of the ports have a total pier length of no more than 1000 m.

Table 11 The Infrastructure of the Main Greek Cruise Ports

Harbors	Piers	Length	Terminals	Maximum Ship Length	Maximum Draught	Distance from airport
Marble	1	460	0	445	11	25
Igoumenitsa	1	341	1	225	12,5	>60
Heraklion	8	3394	1	790	15	1,5
Thessaloniki	3	630	1	370	8	16
Astride	2	380	1	220	10	35
Corfu	5	1250	1	150	11	2,5
Kos	3	340	1	200	10	23
Mykonos	4	750	0	330	10,5	5
Patmos	1	208	0	200	7,5	>60
Patras	3	781	1	370	9	>60
Piraeus	9	2800	2	395	11	45

Santorini Island	4	480	0			7
Souda	2	1370	0	300	10	15
AVG..	**4**	**1014**	**1**	**333**	**10**	**38**
Source: GreekCruise,2013; Medcruise, 2011; 2012a; 2012b; Websites of Port Authorities; Self-Processing						

In addition, Greek ports have on average one passenger cruise terminal (0.70 p.m.). The ports of Volos, Mykonos, Patmos, Santorini and Souda do not have any specialized cruise passenger service station, while the only port that has two cruise stations is Piraeus. On the other hand, most ports do not have infrastructure to serve the latest generation of ships as they either cannot accommodate ships with a length of more than 350 m., or they cannot serve draught ships exceeding 11 m. Piraeus and Volos. Finally, the majority of Greek ports are located at a relatively short distance from airports that can serve international traffic. The only ports which are located at a distance of more than 60 km. are the ports of Igoumenitsa, Patmos and Patras.

The data recorded highlighted the different degree of occupancy of Greek ports in terms of cruise traffic service. Table 16 shows comparatively the total occupancy of the main Greek and Mediterranean ports in the most basic port infrastructure for the service of the cruise. The comparison also focuses on the differences between Greek ports and the ports of the Eastern Mediterranean, which are the most direct competitors of the domestic port industry.

Table 12 Comparative Recording of Infrastructure of Greek and Mediterranean Ports

	Greece	Eastern Zone	Mediterranean
Percentage of ports with >1 cruise piers	76,9%	86,4%	82,9%
Percentage of ports with passenger terminals	61,5%	72,7%	76,3%
Percentage of ports that can accept ships > 350 m in length.	38,5%	40,9%	44,7%
Percentage of ports that can accept ships with a draft >11 m.	38,5%	45,5%	51,3%
Percentage of ports at a distance of < 60 km. from an airport	76,9%	63,6%	65,8%
Source: GreekCruise,2013; Medcruise, 2011; 2012a; 2012b; Websites of Port Authorities; Self-Processing			

From the data in Table 16 it is obvious that the infrastructure of Greek ports can be greatly improved, if we take into account the completeness of the infrastructure of the competing ports of the Mediterranean. More specifically, the percentage of Greek ports with more than one pier is 76.9%. The percentage is slightly below the corresponding percentage. of the Mediterranean which is 82.9%. Moreover, when the analysis focuses only on the comparison between Greece and the Eastern Mediterranean, it seems that Greece is lagging behind the most, as 86.4% of the ports of the Eastern Zone have more than one cruise pier.

In addition, Greek ports lag significantly behind the Mediterranean ports in terms of infrastructure related to the existence of cruise passenger service terminals. More specifically, only 61.5% of Greek ports have passenger terminals, when the corresponding percentage in the Eastern Mediterranean exceeds 72% and in the Mediterranean as a whole 76%. Similar is the picture presented by Greek ports regarding the size of the ships that can be accommodated for docking. More specifically, only 38.5% of Greek ports can accommodate the latest generation cruise ships which exceed a length of 350m. and have a draft that reaches 11m. On the contrary, 41% of the ports of the Eastern Mediterranean and 44.7% of the ports of the entire Mediterranean can accommodate ships over 350 m. In addition, in 45.5% of the ports of the Eastern Mediterranean and in 51.3% of the ports of the entire Mediterranean, ships with a draft of more than 11 m may dock.

Finally, it should be mentioned that Greek ports, despite the lower occupancy in terms of their infrastructure, present a serious advantage that results from their location. More specifically, about 77% of Greek ports are located less than 60 km from an airport when the corresponding number of ports in the Eastern Mediterranean is 63.6% and the Mediterranean as a whole is 65.8%. This fact is a qualifier for Greek ports, especially for attracting cruises that require the air transport of passengers to and from the starting and finishing points, respectively.
The previous analysis showed the differences of the infrastructure of the Greek ports-intermediate stations in relation to the infrastructure of the corresponding Mediterranean ones. Important elements may also arise from the juxtaposition of data concerning the infrastructure of ports in Greece and the Mediterranean area with regard to the ports which operate according to the standards of the base for cruise travel. Table 17 presents the main characteristics of the infrastructure of the two Greek ports. (Piraeus and Heraklion) which are the starting points of a significant number of cruise trips, compared to the corresponding infrastructure of the Mediterranean base ports.

Table 13 Comparative Recording of Infrastructure of Greek and Mediterranean Base Ports

Infrastructure	Mediterranean	Infrastructure	Heraklion	Piraeus
Average number of cruise piers	10,4	Number of cruise piers	8	9
Average cruise pier length	3080,0	Length of cruise piers	3393,6	2800
Average maximum pier ship length	432,6	Maximum pier length	790	395
Average maximum draught of ship to be jacked	12,4	Maximum ship draught to be jacked	15	11
Average number of passenger terminals	3	Number of passenger terminals	1	2
Source: GreekCruise,2013; Medcruise, 2011; 2012a; 2012b; Websites of Port Authorities; Self-Processing				

The data show that both Piraeus and Heraklion have piers whose number is below the average Mediterranean number of piers per port. However, the number of piers of the two ports is considered satisfactory, as it ensures the service of several cruise ships at the same time. On the contrary, the picture of the two ports is different in terms of the total length of the piers available to serve the cruise ships. More specifically, Heraklion has a total length of piers that exceeds the Mediterranean average, while the total length of the piers in Piraeus is below that. In addition, the two Greek ports can serve the latest generation cruise ships, as they have piers over 350 m. with a maximum draught of 11 m. It should be mentioned that in this sector Heraklion is superior to Piraeus, as in this port can be docked ships of longer length and draught than in Piraeus.

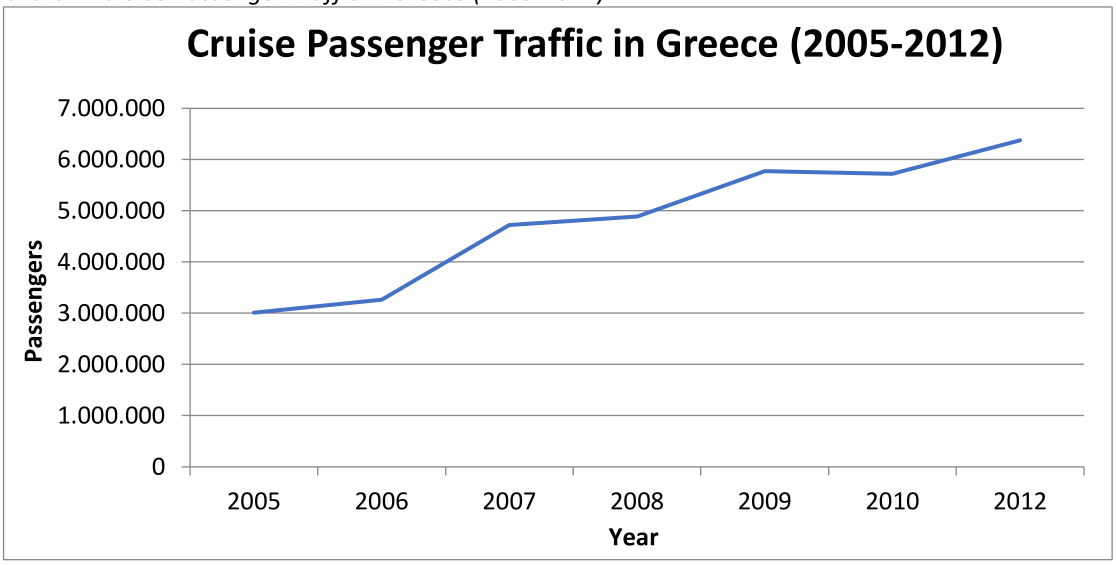
In addition, the two ports seem to be lagging behind the Mediterranean ports in terms of the number of passenger terminals they have. The port of Piraeus has two passenger stations, while Heraklion has one, when the Mediterranean average is 3 stations. Taking into account the above, the base ports of

Greece present prospects of further development, as in general their infrastructure is considered adequate. However, it is necessary to build and operate more passenger stations to serve more smoothly the passengers who use the ports as a starting or finishing point. It is noted that the bureaucratic procedures that must be followed for the embarkation of passengers in the starting points of the cruises require much longer time than those at the intermediate stations. Therefore, their faster processing in ports is a factor that cruise companies take seriously when choosing the base ports.
The analysis demonstrates the necessity of interventions to improve the port infrastructure to serve the cruise in Greece. In many cases, even basic infrastructure, such as passenger terminals, are absent from ports in Greece with far more than the Mediterranean average. Particular attention should be paid to the strengthening of the base ports from which the greatest multiplier benefits for the local communities and \ for the national economy of the country arise. The overall assessment of the infrastructure of the country's ports leads to the conclusion that if Greece claims a leading position in the cruise industry, the development policy should primarily aim at providing ever better services to both cruise companies and passengers.

2.3 The Evolution of Annual Passenger Traffic at Greek Ports

The evolution over time of the annual number of visitors to Greece through cruise tourism demonstrates the great prospects for the further development of this type of tourism in the country. As shown in Figure 2-1, cruise passengers visiting Greece per year doubled during the period 2005-2012. More specifically, visitors in 2005 exceeded at least 3 million, while the corresponding number in 2012 exceeded a 6.3 million. Throughout the period 2005-2012, annual growth rates show a positive sign, with the exception of 2010, where there was a slight decline compared to the previous year. However, growth rates returned to a positive sign, as between 2010 and 2012 visitors increased by 600 thousand. Among the remarkable listed in Chart 17 is the large increase observed in 2007 compared to the previous year, which exceeded 1 million guests.

Chart 21 Cruise Passenger Traffic in Greece (2005-2012)

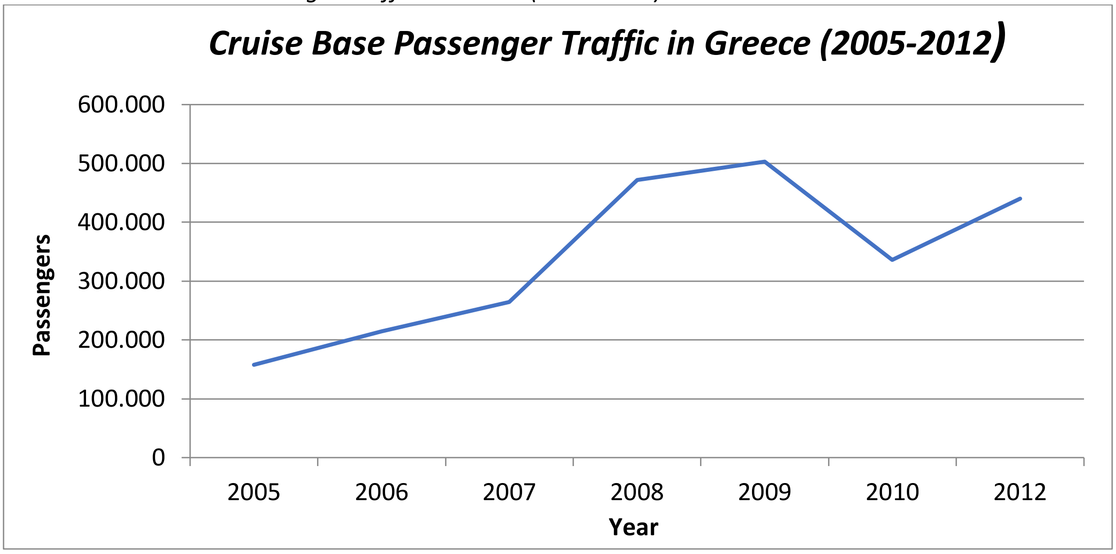


Source: EL.STAT, 2013; ELIME, 2013; Self-Processing

The performance of Greek ports in attracting passenger traffic is mainly due to the globally recognized tourist and cultural reserve of many of the Greek destinations. However, despite the significant increase of cruise tourists in Greek ports, Greece does not show similar growth rates in the start and end of cruises. The inflexible legislative framework, the absence of a coherent policy and the relatively low infrastructure occupancy of Greek ports resulted in the relatively low absorption of base traffic by Greek ports.
As shown by Chart 28, base traffic showed a significant upward trend until 2009 but then the course was not proportional, as in 2010 there was a sharp decline, with base passenger traffic not exceeding 340 km. Passengers. The new legislative framework and policies for the strengthening of the competitiveness of Greek ports in the cruise sector are expected to be the main guarantees for the

development of starting and finishing traffic in Greece at rates similar to the traffic of intermediate stations.

Chart 22 Cruise Base Passenger Traffic in Greece (2005-2012)



Source: EL.STAT, 2013; ELIME, 2013; Self-Processing

The above data demonstrate the general picture of Greek cruise destinations in terms of their long-term performance in attracting visitors.

2.3.1 The evolution of annual cruise ship arrivals at Greek Ports

Important information on the evolution of cruise tourism in Greece can be extracted from the analysis of the evolution of the number of ship arrivals and the transport capacity of cruise ships docked in Greek ports. Table 18 shows the evolution over time of the number of ships docked in Greek ports for the reference years, as well as the average number of passengers carried. From the data it is visible that during the period 2006-2012 the number of ships approaching Greek ports increased by about 1300, reaching 4,818 in 2012. A similar trend can be found in the size of ships calling at Greek ports, as while in 2006 ships carried an average of 806 passengers, in 2012 ships docked in Greece carried an average of 1,136 passengers.

Table 14 ship arrivals in Greece

Year	Number of cruise ships	M.O. Arrivals per Port	M.O. Passengers per Ship
2006	3.524	95	804
2008	4.373	118	968
2010	4.479	121	947
2012	4.818	130	1.136

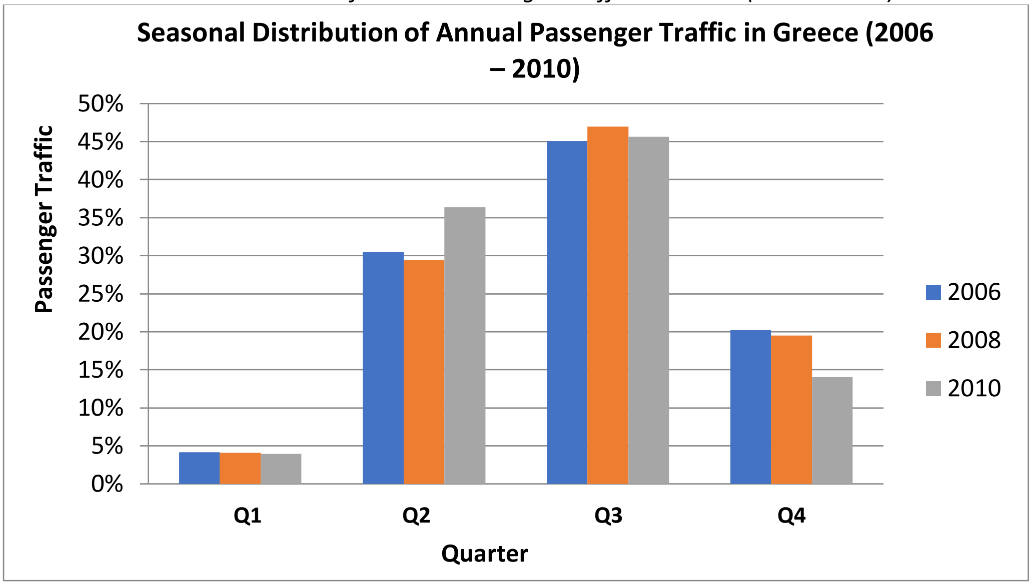
Source: EL.STAT, 2013; ELIME, 2013; Self-Processing

Considering the data in the Table showing the respective performance of all Mediterranean ports for 2010, the conclusion that emerges is that Greek ports are significantly below the Mediterranean average, both in terms of arrivals and in terms of the size of the ships they serve. More specifically, for 2010, Mediterranean ports welcomed an average of 218 cruise ships with average transport occupancy exceeding 1200 passengers. On the contrary, the main Greek ports welcomed an average of 121 ships with passenger occupancy that did not exceed 950 passengers. The 2012 data show an improved performance for Greek ports, but these remain below the performance of Mediterranean ports for the year 2010.

2.3.2 The Seasonality of Cruise Tourism

An important parameter of cruise tourism is the seasonality which is observed in the annual passenger traffic. Chart 32 shows the distribution over time of passenger traffic in the quarters of the year for the years 2006, 2008 and 2010. The majority of visits to Greece take place in the third quarter of the year, as in the three reference years the share of arrivals in the quarter of the total arrivals of the year exceeds 45 %. In addition, significant activity is also shown in the second quarter of the year, i.e. the last two months of spring and the first month of summer. For the years 2006 and 2008 the percentage of arrivals among the total arrivals of the year was 30%, while in 2010 this increased significantly, exceeding 35%.

Chart 23 Seasonal Distribution of Annual Passenger Traffic in Greece (2006 – 2010)



Source: EL.STAT, 2013; Self-Processing

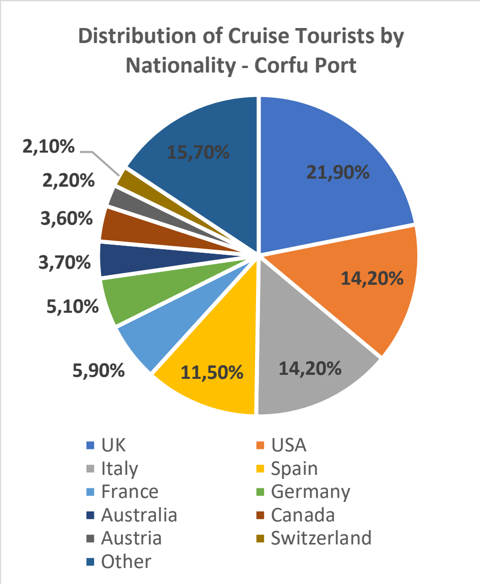
A significantly lower number of arrivals takes place in the fourth quarter of the year, as arrivals do not exceed 20% of annual arrivals. This figure decreased further in 2010, as arrivals in the fourth quarter did not exceed 15% of the total. It seems that in 2010, there was a remarkable change in the scheduling of the companies regarding their routes in Greece, which resulted in a decrease in traffic in the autumn months. Finally, the lowest activity for the cruise is observed in the first quarter of each year, as tourist arrivals in Greece from January to March do not exceed in any reference year 5% of annual arrivals.

The data of Chart 32 suggest that cruising in Greece is characterized by intense seasonality. The majority of tourists visit Greece through the cruise during the period between April and September, as the percentage of arrivals in this period consistently exceeds 75% of the total annual arrivals. In fact, in 2010 this figure exceeded 80%. The distribution of tourist traffic in the quarters of the year is reasonable as Greece as a Mediterranean destination is a pole of attraction for tourists especially during the summer months. It is clear that Greece follows the pattern of seasonal distribution of the annual traffic of the majority of Mediterranean destinations. This is explained by the fact that most of the tourist cruise traffic is diffused to the island tourist resorts of Greece, which anyway are a pole of attraction for millions of tourists during the summer months. The tourist incentive "sun and sea" seems to outweigh the incentives for cultural or other tourism.

2.3.3 The Countries of Origin of Cruise Passengers

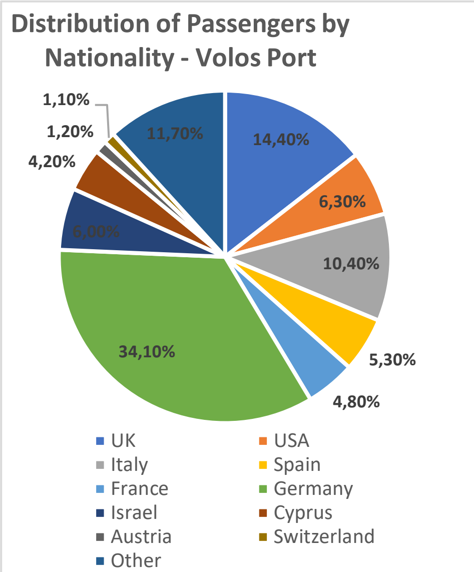
Another important factor affecting the prospects of cruise tourism in the country is the influence of Greek destinations on the international target markets. The analysis of the countries of origin of cruise tourists in Greece is an important parameter that should be taken into account when formulating the development policy of this type of tourism in the country. The knowledge of the preferences of the target tourists and the degree of penetration of Greek destinations in the countries-markets, is a basic prerequisite for the creation of a successful mix of promotion of the Greek tourism package as a whole. This section will present data related to the ethnicity composition of cruise passengers. It should be noted that during the investigation in primary and secondary sources, it was concluded that the port or customs authorities in the local port infrastructure, declare inability to keep such data for passengers and the analysis is covered based on the statements – announcements of the companies operating. The following analysis has selected the ports of Corfu and Volos for which detailed data on the origin of the passengers have been identified.

Charts 33 and 34 show the distribution of tourists who visited the ports of Corfu and Volos based on their nationality. The analysis of the passenger traffic of the two ports selected does not fully reflect the composition of the passengers of cruise ships visiting our country, but it presents a clear picture of the influence of two popular destinations that are located at the western and eastern seapoint of Greece (Ionian and Aegean Seas). The data of Chart 33 show that the dominant country of origin of cruise tourists in Corfu is the United Kingdom, as 22% of the tourists who visited Corfu in 2012 originated in Great Britain.



1Chart 33 Distribution of Cruise Tourists by Nationality at Corfu Port (2012) Source: Corfu Port Authority, 2013; Self-processing

The percentage of Britons is followed by The Americans and the Italians, as they have similar percentages of the total passengers, which reach 14%. There seems to be a significant influence on the Spanish market, as 11.5 of the cruise tourists in Corfu in 2012 were of Spanish nationality. The percentage of passengers of German and French nationality was 5.9 and 5.1, respectively, while smaller but significant percentages seem to be present and the arrivals of Australian and Canadian tourists, as these exceed 3.5% of the total. The influence of corfu destination is clearly less in countries such as Austria and Switzerland, as the percentages of passengers of these countries exceed by a little 2% of the total. Finally, tourists of different nationalities cover a percentage that reaches 15.7%.



2Chart 34 Distribution of Cruise Tourists by Nationality at Volos Port (2000 – 2012) Source: Volos Port Authority, 2013; Self-Processing

In addition, Figure 34 shows the respective percentages of the countries of origin of the passengers at the port of Volos. The percentages refer to the average of the percentages of the countries of origin for the years 2000-2012. The largest source market for the port of Volos is the German one, as 34.1% of tourists visiting the port of Volos by cruise ships are Germans. It is followed by the British market with the percentage of Britons slightly exceeding 14% and the Italian market with 10.4% of the total. In addition, about 6.3% of cruise tourists in Volos come from the USA, while volos destination seems to have a significant penetration in the Israeli market, taking

into account that 6% of passengers come from this market. Among the notables of the chart is the percentage of Cypriots that exceeds 4.2% over time.
Attempting a comparison of the influence of the two ports in the different countries-markets, the conclusion that emerges is that there are differences in the composition of all passengers visiting the two ports. The dominant country of origin for the port of Corfu is the U.B. while in Volos Germany. However, the percentage of Germans in Volos is significantly higher than that of the British in Corfu. On the other hand, ports show significant influence in common countries, but this is reflected in different arrival rates. Finally, the two destinations seem to have an influence in different countries, as Corfu is a pole of attraction for a significant number of Canadians and Australians, who do not seem to visit Volos so massively. On the other hand, Volos is preferred by Israelis and Cypriots who do not hold significant percentages in the composition of passenger traffic of the port of Corfu.

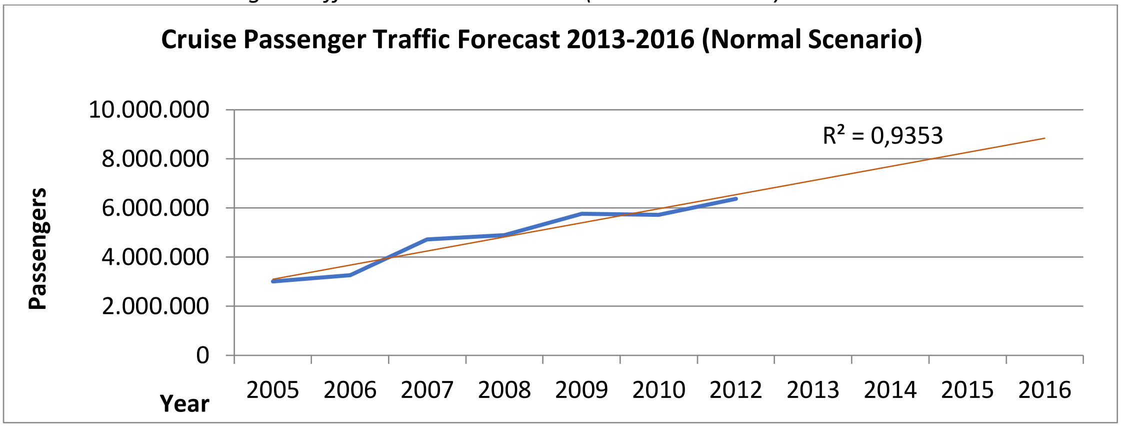
2.4 The Estimates of the Evolution of Cruise Passenger Traffic in Greece

As mentioned above, cruise is an industry whose evolution is influenced by many factors. The previous analysis showed the significant variations in annual traffic, both at country level and at the level of individual ports. Typical examples are the sharp fall in passenger traffic of destinations affected by the events of the "Arab Spring" and the impact on the Italian market of the accident of the vessel «Costa Concordia». Therefore, the provision of forecasts of the fluctuation of passenger traffic in future periods entails considerable uncertainty.

In addition, and regarding the prediction of the future development of the cruise in Greece, it should be mentioned that it becomes even more uncertain due to factors that have to do not with the external and internal environment of the Greek market, but with the statistical significance of the results. More specifically, the relatively limited in terms of reference years official database of passenger traffic of Greek ports makes the results of econometric models of chronological series unstable. Therefore, the use of econometric methods of estimating the future movement of Greek destinations is considered impossible. The assessment of future cruise arrivals in Greece in this study will be based on the construction of three different scenarios. The three scenarios will be structured by adding different trendlines to the existing data.

The first scenario is based on the adoption of the linear trendline and the assumption that annual passenger traffic will increase at a steady pace. According to this scenario, in 2016 cruise guests will approach 9 million. If the international environment of the cruise industry does not change significantly, the realization of this goal is considered feasible. More specifically, considering that a large part of Greece's cruise tourists come from Europe, maintaining stable growth rates depends primarily on the evolution of the recession that is hitting Europe and whether the negative climate begins to reverse in the next few years. On the other hand, growth rates will remain consistently positive if the penetration of Mediterranean destinations in markets outside Europe remains increasing, thus compensating for any losses of tourists from Europe during the crisis.

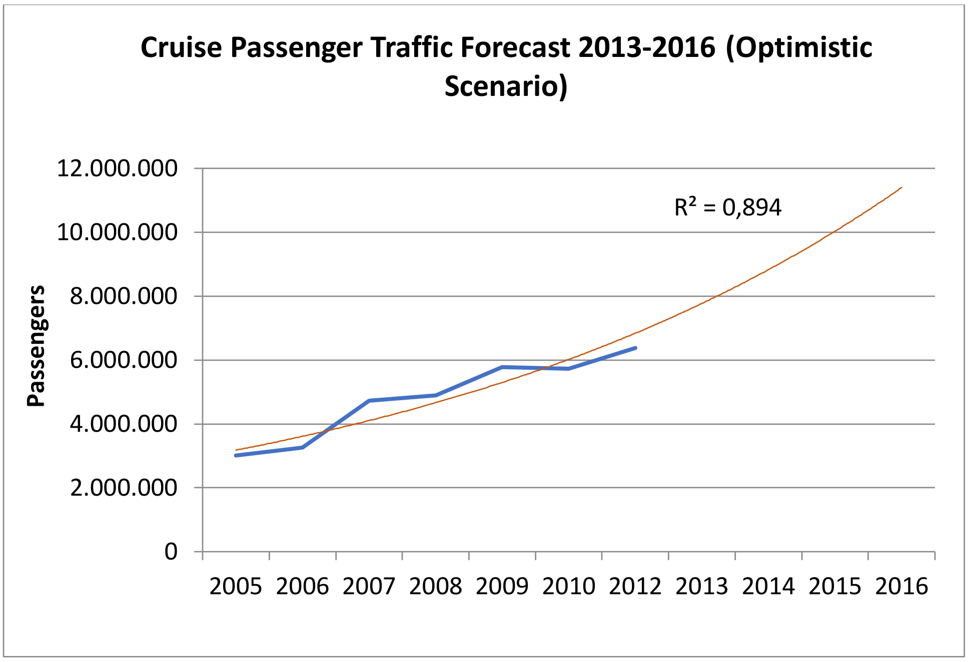
Chart 24 Cruise Passenger Traffic Forecast 2013-2016 (Normal Scenario)



Source: EL.STAT, 2013; ELIME, 2013; Self-Processing

The second scenario is based on the adoption of the exponential trendline. This assumption makes this scenario the most optimistic for the annual growth of cruise tourists in Greece for the coming years. According to the estimates resulting from this trendline, the number of tourists who will visit Greece in the coming years will be constantly increasing, surpassing eleven million in 2017. The realization of this scenario presupposes the immediate exit of Europe from the crisis and the return of European national economies to positive growth rates. In addition, it presupposes the penetration of Mediterranean and Greek destinations rapidly in markets outside Europe.

Chart 25 Cruise Passenger Traffic Forecast 2013-2016 (Optimistic Scenario)

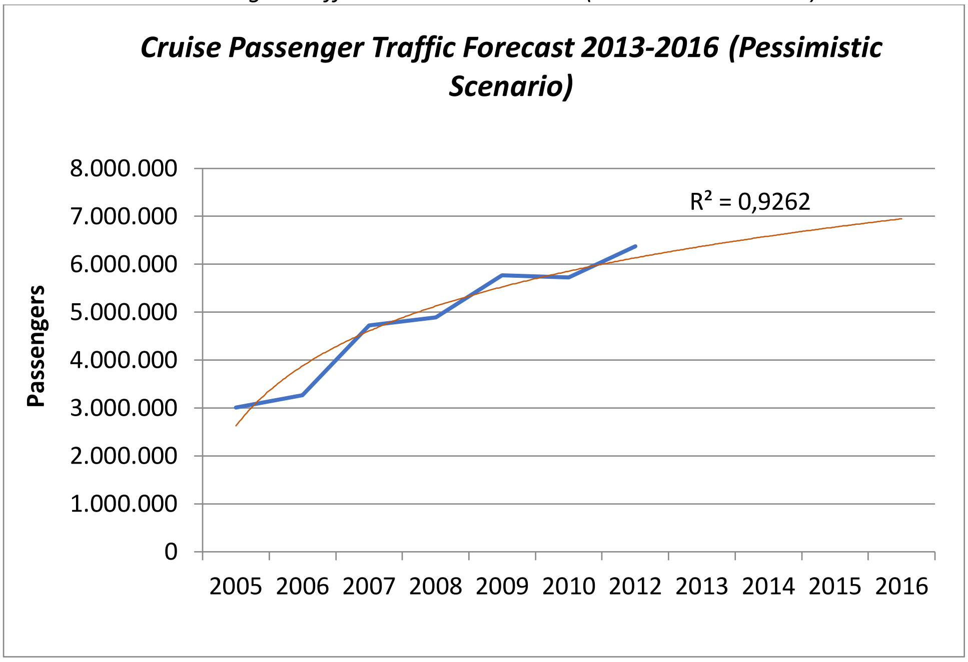


Source: EL.STAT, 2013; ELIME, 2013; Self-Processing

Finally, the latter scenario is described as the most moderate. The predictions of this scenario are based on the adoption of the logarithmic trendline. According to the trend of the scenario, growth rates in the next few years will increase slowly, while from a point in time onwards the annual number of tourists will remain stable. The prevalence of this scenario will take place in case the crisis in the EU deepens over time, negatively affecting the prospects of economies and northern states, which are key feeders of Greek tourism. On the other hand, low growth rates will also prevail if cruise tourism fails to penetrate further into other countries or if destinations such as Asia and Australia become more attractive to some consumers in the global market.

Considering the statistical significance of the three equations of the trend lines, it should be said that the scenario of linear growth of annual passenger traffic in Greece seems to be the most prevalent, as it applies best to the data. More specifically, the R^2 factor of this forecast has the highest value of the three. As mentioned above, the absence of a large number of observations and the non-use of specialized models remove validity points from the forecasts of this study. The use of new data that will emerge from the data for the coming years and will concern all Greek ports will make the use of econometric estimates safer. In each of each econometric estimates. In each of them, the use of econometric estimates is safer. In each case in point, it should be mentioned that the prevalence or not of a scenario depends on a multitude of factors under and outside the control of cruise tourism developers in the country. Therefore, the main concern of the Greek authorities should be to be prepared so that the domestic tourism industry is able to cope successfully with any future developments.

Chart 26 Cruise Passenger Traffic Forecast 2013-2016 (Pessimistic Scenario)



Source: EL.STAT, 2013; ELIME, 2013; Self-Processing

Chapter 3. Recording, codification and evaluation of the existing institutional - legal framework

The most important legislative reform in the cruise sector was made relatively recently, in April 2012, with the aim of helping to improve the business environment. Specifically, Law 4072/2012 implements the complete lifting of restrictions on the provision of cabotage services by ships engaged on touring voyages (cruises) starting from a Greek port. Ships flying the flags of third countries can now engage in voyages without the obligation to conclude a special contract between the ship owning company or the company operating the ship and the state, without any other restrictions, such as the requirement for the flag State to apply the 'principle of reciprocity', or the minimum stay in port.

In the interests of completeness of the mapping and analysis of the current institutional framework, it is appropriate to refer to other relevant legislative initiatives, which, although they do not directly concern the cruise sector, nevertheless have some relevance since they aim at reforming the framework of maritime tourism. These are measures that differentiate the current regime, widen the scope and variety of activities, simplify procedures. More specifically, it provides for:

1. Integration of the Maritime Tourism sector into a common institutional framework (from small boats to yachts and dayboats).
2. Elimination of discrimination on the basis of "arbitrary" criteria (length, duration of chartering and type of charter).
3. Common 'start-up' procedure regardless of the type of vessel.
4. Change of the occupancy criterion (from the counting of days to a calculation system).
5. Reduce bureaucracy (by removing revisions).
6. Expansion of chartering modes (from exclusively total and to partial and packaged with a combination of many ways).
7. Creation of an integrated and single register of recreational craft for the monitoring of the sector and the elaboration of strategic measures or incentives.
8. Provision of recreational fishing by yachts.

3.1 The international and European institutional framework

One of the most important manifestations of the full sovereignty of the coastal state in the movement of ships to and from its ports is the privilege of coastal shipping in favor of ships flying the national flag. In the Greek legal order, the privilege of coastal shipping in favor of Greek ships is regulated by articles 165-166 of the Code of Civil Procedure and series of the Code of Civil Procedure. In particular, the carriage of passengers between Greek ports is the right of Greek ships that have been recognized as passenger ships and have undertaken, in accordance with the provisions in force, the operation of regular services between precisely defined Greek ports (CCT 165 par. 1).

In the context of the European legal order, the preservation of the national prerogative of coastal shipping was considered incompatible with the European Union's policy of free competition, as it constituted an obstacle to the freedom to provide maritime services in the intra-Community area. Thus, a set of Regulations (4055-4058/1986) regulated, at the level of secondary Community law, issues relating to the opening up of the common maritime market, the free movement of workers, the provision of services and establishment in the maritime transport sector, while Regulation 3577/1992 gradually lifted the privilege of coastal shipping in the carriage of goods and passengers between ports of one and the same country (i.e. transport between its mainland ports). between its mainland and island ports and between its island ports). According to the provisions of the Law, the right to tour Greek ports, which applies to passenger ships flying the Community flag, is also granted to ships flying the flag of a third state (Kiantou- Pambouki, 2003).

In this regard, it is noted that, in the exercise of the competences related to the granting of the above right of the administrative bodies, regulations in force under the regulatory competence of the European Union may also be applied in areas where it develops relevant action. This can be seen in particular in the context of the liberalization of maritime cabotage in the Member States of the European Union and the legislation in force on maritime transport safety and environmental protection. Among others, regulation 725/2004 of the European Parliament and of the Council of 31.3.2004 on the improvement of ship and port facility security, Directive 2005/65/EC of the European

Parliament and of the Council of 26.10.2005 on enhancing port security, Regulation 336/2006 of the European Parliament and of the Council of 15.2.2006, on the implementation of the International Safety Management Code within the Community and repealing Council Regulation 3051/95 and Directive 2008/56/EC of the European Parliament and of the Council of 17.6.2008 establishing a framework for Community action in the field of marine environmental policy (Marine Strategy Framework Directive). Besides, from the reservation, in para. 1(a) of Article 1, of the relationship of reciprocity, which the Greek legislator requires to apply between the third states whose flag the ships which will carry the voyages will fly as such and the Member States of the European Union and the EEA, it may be left to be revealed that it intention to comply with any policies of the European Union with regard to the establishment of the single market, in particular vis-à-vis third states claiming a share in the internal market. [2][3][4][5]

In the light of the above, despite the fact that it is not expressly mentioned in the Law, it is understood that the above commitments govern the action of the Administration during the conclusion of the said contracts. Its institutions, therefore, cannot, according to the relevant agreements, deviate from compliance with our country's obligations at Community level or lay down regulations that could disturb the internal market, thereby infringing the freedom to provide services by ships flying the flag of a Member State. It is also self-evident that the relevant commitment also applies to the rules of domestic legislation governing constitutionally protected goods, such as, for example, the protection of the marine environment and cultural goods on the seabed.

3.2 Greek law

3.2.1 Law 3287/2010 "Execution of touring voyages by ships flying the flag of third countries starting from a Greek port"

The law sets the general framework under which ships flying the flag of third countries will be able to operate tours between mainland Greek ports and islands or between island ports. In particular, the ship-owning companies or the companies that operate the ships will conclude a contract with the Greek State, the exact content of which and other terms, which will have a uniform and general character for all ships, will be defined by a C.M.D.

3.2.2 KYA 117/14.12.2010 "Determination of the supporting documents and definition of the content of the Contract for the Execution of Touring Voyages by ships flying the flag of third countries starting from a Greek port, in accordance with the provision of article 1 par. 1 approx. c' of Law 3872/2010 (Government Gazette A' 148/3.9.2010)

It summarizes the supporting documents that the interested ship-owning company must submit to the Greek authorities for its licensing in order to perform circular leisure travel trips with starting and final destination a Greek port.

3.2.3 Law 4072/2012 "Improvement of business environment - New corporate form - Trademarks - Real Estate Brokers - Regulation of shipping, ports and fisheries issues and other provisions"6

It regulates various issues and, among others, issues of competence of the Ministry of Mercantile Marine". An important provision for the cruise sector is Article 222 of the Law, which amends Articles 1-4 of Law 3872/2010. In accordance with the provision of Article 222, the right to execute voyages of Article 165 para. 3 approx. b' of the CSTNN granted to ships flying the Community flag and flying the

[2] *OJ L 129/29.4.2004, p. 129, p. 129/29.4.2004, p. 1. 0006–0091.*

[3] *OJ L 310/25.11.2005, p. 1. 0028–0039.*

[4] *OJ L 064/4.3.2006, p. 1. 0001–0024.*

[5] *OJ L 164/25.6.2008, p. 164/25.6.2008, p. 1. 0019–0040.*

[6] *Government Gazette 86/A/11-4-2012.*

flag of countries of the European Economic Area (EEA) "is henceforth also granted to ships flying the flag of third countries, provided that the ships, which carry out the voyages, have a carrying capacity of more than 49 passengers and are engaged in a touring voyage between the Greek port of call and Greek or foreign ports, for the sole purpose of maritime recreation and touring passengers, against a single ticket (fare) and provided that the port of tourist disembarkation of passengers is the starting port'.
it should be noted that, under the current regime, among the conditions that must be met cumulatively, for the conduct of voyages, is the reciprocity relationship between the third countries, whose flag is flying by the ships that will carry out the voyages, and the Member States of the European Union and the EEA for the conduct of corresponding voyages, a condition which, through the proposed regulation, it is repealed, without any clear justification for the legislative initiative in question.

3.3 Evaluation of the institutional framework and documentation of necessary reforms

The recent reform of the institutional framework with the complete abolition of cabotage is expected to benefit the development of maritime tourism in the country, removing a bureaucratic obstacle and making it much easier for ships flying the flag of a third country to operate in the cruise industry. It is noted that Greece is currently the 2nd most popular cruise destination (19.6% – 4.3 million visits). The most important thing is that it is a dynamic market – in the European area the 2 million. Passengers of 2005 became 6 cm. in 2011 and all forecasts are positive. According to data from the Ministry of Mercantile Marine, in total there are 50 different Greek continental and island destinations that are cruise destinations – they can be used to offer a significant number of cabotage routes by an industry looking for "new destinations" and "new combinations of destinations".

Furthermore, two out of three ships maintained by cruise companies are under non-EU flags. Today these ships can operate in a liberalized market environment for cruise companies as is the case in the main cruise markets worldwide. It should be noted that the competing countries did not place any restrictions on cruise companies, resulting in an increase in their competitiveness vis-à-vis Greek ports. At the same time, the abolition of the contract promotes the possibility of homeporting – that is, the use of a port as a cruise starting point – which brings multiple economic benefits. There are already 2 new destinations for homeporting – Rhodes and Heraklion – and more news is expected when the companies plan their itineraries for the coming years.

3.4 Documentation of other institutional changes and proposals

The existing institutional framework for cruise, as formulated above, creates strong expectations for improvement and further development of the relevant services in our country, but it remains to be tested in practice. Although it would be extremely premature to table proposals to amend or revise this new framework, specific points can be identified which have been pointed out from time to time by stakeholders and could be elaborated and possibly further institutional adjustment. They are not directly related to the provision of cruise services, but are connected and may affect these services. The main points are gleaned below:

- **Operation of customs** in the region and especially in areas approaching cruise ships. Operators in the sector have at times pointed out that there is a need to reorganize customs at the points where cruise ships are approached in order to speed up and effectively control without burdening the traveling process with long delays.
- **Operation and responsibilities of the Tax Office of Ships** in Piraeus for which the absorption by the Piraeus F.C.A. is pregnant.
- **Infrastructure of** the ports, which is still lacking, for the approach and hospitality of cruise ships and the reception of the occupants.
- **Issues of a tourist** nature, including the extension of the tourist season, the opening hours of archaeological sites and museums, as well as direct transatlantic air connections (a matter related to the charges of Athens airport).
- Issues related to the **granting of visas to visitors from third countries** outside the Schengen Agreement who wish to visit Greece on cruise ships. Regulatory changes should be considered in order to facilitate the flow of tourists through procedures known in a timely manner to cruise ship operators.

The elaboration of the above issues could lead to changes in the institutional framework of competence of the Ministry of Tourism with the prospect of Greece becoming a *"homeport"* hub in the Eastern Mediterranean, taking advantage of the trends recorded today in the cruise industry (note: recently, the representatives of the two largest cruise companies in the world, Carnival and Royal Caribbean, visited Greece and stated that Greece is an extremely popular one. a destination for his companies, but further reforms are needed).
It is noted that the new institutional framework covered the relevant requirements of the stakeholders involved, as well as the needs for harmonization with Community law.
From an initial investigation, no new institutional demands of the sector emerged, apart from the above mentioned. In any case, in the context of the consultation with the stakeholders as well as in the context of the survey using a questionnaire, any need for any new institutional changes will be explored and if they are identified they will be incorporated in the relevant subsection of the study.

Chapter 4. Evaluation of the existing Spatial Framework as to its effectiveness for the development of cruise infrastructureς

The object of this chapter is the evaluation of the existing Spatial Framework as to its effectiveness for the development of cruise infrastructure. In the context of this action, therefore, the project team recorded and analyzed the existing Spatial Framework, pointing out identified deficiencies, gaps and ambiguities that do not promote and hinder the development of the necessary infrastructure.

Specifically, a detailed evaluation of the existing Spatial Framework and in particular of the Special Sectoral Frameworks for Spatial Planning - such as that of Tourism - was carried out towards its completeness and effectiveness.

It should be noted that the project team included in its research the study of the Special Framework for Spatial Planning for Tourism. In the subsections of this chapter, the critical points of these plans will be highlighted, while at the same time they will be placed under conditions for the necessary interventions or amendments to the current institutional framework, in order to contribute to the promotion of the necessary port or other investments (related to cruise tourism), if this is highlighted and deemed appropriate.

4.1 Evaluation of the General Framework of Spatial Planning and Sustainable Development for cruise (Government Gazette 128 A/03.07.2008)

Government Gazette 128-A/3-7-2008 ratified the General Framework for Spatial Planning and Sustainable Development, which filled the gap that had been created between the regional spatial planning frameworks established since 2003 and the non-existence of national directions and strategic choices that would arise through this General Framework, just as provided for by 2742/99. The GFSPSD, due to its strategic nature, focuses on the adoption and reference of general principles of organization of activities and spatial specialization of the regions for sectors of the economy or special infrastructure. In this context, the group's analysis focused on the evaluation of the GFSPSD reports on port infrastructure that is specialized or foreshadows potential for the development of cruise tourism.

Through the evaluation of the GFSPSD on maritime passenger transport, the main strategy proposed includes:

- Development of port infrastructure that will safely and quality accommodate modern waterways and their passengers (jetties, piers, boarding rooms with air conditioning, toilets, etc.).
- Adoption in maritime passenger transport of the hub & spoke (mainly) or hub & feeder system, under the conditions of: (a) the electronic interconnection of all passenger transport routes (coastal shipping, aircraft, railway, seaplanes, etc.) in real time, (b) the coordination of the total passenger transport system by a specialized traffic and route management body, (c) the functional connection of the means in each spatial unit (e.g. direct and quality road service between seaports and airports on each island) and (d) strengthening, by any appropriate means, the transport between the islands and limiting dependence, in the case of the Aegean islands, on the port of Piraeus.
- Expansion of the possibility of providing water taxi services by certified pilots and waterborne means.
- Investigation of the possibility of providing sea transport in urban areas with a large coastal front (Attica, Thessaloniki, etc.).

More specifically, in relation to maritime transport and port infrastructure related to the cruise activity and related services, the following directions are given:

Strengthening the international role of the ports of Athens (the system of ports of Attica), Thessaloniki, Patras, Igoumenitsa, Heraklion in conjunction with that of Souda, Alexandroupolis and Volos, with the aim of highlighting and consolidating them as the main sea gates of the country.
Continuous upgrading of all existing ports with significant freight and/or passenger traffic

Immediate implementation of environmental management systems in ports and systems for the prevention and response of marine environmental accidents, as well as the creation of appropriate ports of refuge.

All island ports require constant upgrading (due to the technological development of ships), as they are the main point of connection of the islands, both with each other and with the mainland.

Construction of new or upgrading of existing, specialized and non-specialized, port infrastructure that enhances (in combination with specialized services) the tourist development of the country through the cruise industry (cruise ships, mega yachts, etc.).

Both in the island and on the mainland (complementary and at the same time), it is advisable to develop a national network of exclusive freight transport, independent of the coastal lines and the restrictions imposed by this market. In view of this, the island ports of Chios, Rhodes, Syros, Naxos and Crete (as hubs), as well as the mainland ports of Alexandroupolis, Kavala, Thessaloniki, Volos, Kimi, the port system of Attica, Gythio, Kalamata, Patras, Preveza and Igoumenitsa, Chalkida and Stylida would be appropriate to be equipped with "light" infrastructure to support standardized internal freight transport.

4.2 Evaluation of the established Special Framework for Spatial Planning and Sustainable Development for Tourism (Government Gazette 3155 B/12.12.2013)

During the analysis and evaluation of the current Special Framework for Spatial Planning and Sustainable Development for Tourism, as ratified and in force with the Government Gazette 3155 B/12.12.2013, it emerged that directions are given related both to the development of infrastructure, as well as to broader necessary development interventions for the promotion of this special form of tourism and even in complementarity and correlation (where the local tourism system allows it) with the marine, cultural, etc. tourism. Specifically, article 6 SPECIAL – ALTERNATIVE FORMS OF TOURISM, paragraph C1 provides for the following strategic directions of spatial organization and development for cruise tourism:

a. Improvement and modernization of the existing ones and creation of home ports with modern facilities as a priority in developed, developing and metropolitan areas that have international airports.
b. Creation of cruise passenger service facilities (ports of call) in ports that already have the ability, or can acquire the ability to serve large cruise ships and are located in areas of tourist interest. Priority given to these areas are: Piraeus, Thessaloniki, Rhodes, Volos, Kavala, Kos, Patmos, Pylos, Mykonos, Santorini, Kalamata, Corfu, Crete.
c. Especially in the case of Attica, the possibility of creating cruise passenger service facilities in Piraeus, the wider area of Faliro Bay and Lavrion is investigated.
d. Promotion of cruise stations in multi themed destinations through their interconnection with the thematic networks of the wider regions (cultural, religious, nature-loving, etc.).
e. Ensuring that cruise passengers have access to the tourism resources of the wider areas of the stations (improvement of transport, extension of opening hours of museums, archaeological sites, etc.).
f. Provision for the separation of a port into a cruise service zone and a commercial/passenger zone
g. Development of commercial areas, entertainment, and promotion of local products in the vicinity of cruise stations
h. Management of cruise guests aiming at their optimal service and the protection of the destination from the simultaneous arrivals of cruise ships that exhaust the limits of the available infrastructure (Government Gazette 3155 B/2013).

Chapter 5. Conclusions

Having codified and analyzed the existing Spatial Framework and having identified its existing shortcomings and weaknesses, the working group proceeded to the conclusion that it is not advisable to adopt or develop a new Special Framework for Spatial Plan and Sustainable Development, especially for Cruise Tourism, but to ensure that as a special activity it is reflected in the existing Spatial Planning Frameworks both at national level (instruments of the GFSPSD and the SFSPSD), but also of the Regional Frameworks for Spatial Planning and Sustainable Development (RFSPSD).

Cruise Tourism, as has been highlighted by the analyses that have preceded in previous phases of the present project, is an activity with dynamic development and excellent prospects for the destinations, however its development is inextricably linked to the port infrastructure and their necessary adaptations to accommodate the requirements of siting, safety management, etc. of cruise ships, but also with the interventions to enrich the tourist products in the destinations. The completion of the port infrastructure and the faithful implementation of the Master Plan of the ports, is expected to contribute positively to the upgrading of the services provided, while at the same time the networking and adequate connection of the ports with the nearby areas in which they are located, create conditions for further development.

The adoption of an independent Special Framework exclusively to meet the needs of spatial guidelines for cruise tourism is not expected to contribute decisively, while at the same time the establishment of feasibility based on the provisions of 2742/99 for the elaboration of an SFSPSD presents difficulties and is expected to create more confusion due to the overregulation and fragmentation of the institutional texts of spatial development (strategic provisions in GFSPSD, SFSPSD, RFSPSD, etc.).

However, the study group considers it appropriate to point out that any discussion on the adoption of a national plan for the development of cruise tourism should consider the particularities of the Greek area and the intense insularity and especially the sea environment. Environmental protection issues that may have needed to be regulated (with the logic of preventing and preserving biodiversity) are covered by existing legislation. It is estimated that the institutionalization of the Special Framework for Spatial Planning and Sustainable Development for the Coastal Area, which had been significantly promoted - but was not adopted - would provide the framework or a specification of the directions of environmental protection and a more complete connection of the area and the issues of connection of port and land port zone, while in many cases it would provide solutions regarding the proposals for engravings of the seashore, in order to facilitate the intermediate uses between the port and the land (urban and / or peri-urban area around the ports, creating a functional continuity.

Finally, it should be mentioned that cruise tourism and its spatial impact should be significantly highlighted and taken into account in spatial and urban planning at sub-regional level, through the G.U.P or SCHOAP, as well as the connection of planning levels, in order to prevent and if faced discontinuities of planning and conflicts arising from insufficient cooperation of the planning implementing bodies (OTAs, Port Authorities, Municipal Port Funds, etc.)

References

- Brida, J. G. and Zapata, S. (2010) 'Economic Impacts of Cruise Tourism: The Case of Costa Rica', *Anatolia: An International Journal of Tourism and Hospitality Research*, 21:2, 322-338
- CLIA (2011) '2011 CLIA Cruise Market Overview', http://cruising.org/regulatory/clia-statistical-reports, 15/1/2013
- CLIA (2012) '2012 Cruise Industry Update', http://www.cruising.org/sites/default/files/pressroom/2012CruiseIndustryUpdateFinal.pdf, 2/2/2013
- Ecorys (2011) 'Blue Growth Scenarios and Drivers for Sustainable Growth from the Oceans, Seas and Coasts' https://webgate.ec.europa.eu/maritimeforum/system/files/Subfunction%204.3%20Cruise_Final%20v120813.pdf, 25/1/2013
- European Cruise Council (2008) 'The Cruise Industry: Contribution of Cruise Tourism to the Economies of Europe 2008 Edition', www.europeancruisecouncil.com, 20/1/2013
- European Cruise Council (2010) 'The Cruise Industry: Contribution of Cruise Tourism to the Economies of Europe 2010 Edition', www.europeancruisecouncil.com, 20/1/2013
- European Cruise Council (2011a) '2010/2011 report', www.europeancruisecouncil.com, 20/1/2013
- European Cruise Council (2011b) 'Statistics and source Markets 2010', www.europeancruisecouncil.com, 21/1/2013
- European Cruise Council (2012a) '2011/2012 report', www.europeancruisecouncil.com, 20/1/2013
- European Cruise Council (2012b) 'The Cruise Industry: Contribution of Cruise Tourism to the Economies of Europe 2012 Edition', www.europeancruisecouncil.com, 20/1/2013
- European Cruise Council (2013) '2012/2013 report', www.europeancruisecouncil.com, 20/1/2013
- GreekCruise (2013) 'About Ports', http://www.greekcruise.gr, 1/3/2013
- Griffin Consulting Group (2012) 'Carnival Corporation Strategy Report', http://phx.corporate-ir.net, 22/2/2013

- Klein, R. (2005) *Cruise Ship Squeeze: The New Pirates of the Seven Seas*, Canada: New Society Publisher
- Lekakou, M. B., Pallis, A. A. and Vaggelas, G. K. (2009) 'Which homeport in Europe: The cruise industry's selection criteria' *TOURISMOS: An international multidisciplinary journal of tourism*, 4:4, pp 215 – 240
- Marušić, Z., Sever, I. & Ivandić, N. (2012) 'Mediterranean Cruise Itineraries and the Position of Dubrovnik', in *Cruise Tourism and Society*, eds A. Papathanassis, T. Lukovic & M. Vogel, Springer Berlin: Heidelberg, pp. 3-16.
- MedCruise (2004), *Yearbook 2003/04*, Barcelona: Medcruise
- MedCruise (2010), *Yearbook 2009/10*, Barcelona: Medcruise
- Medcruise (2011) *Medcruise 2011/12 Yearbook*, Colchester: Seatrade Cruise Review
- Medcruise (2012a) *Medcruise 2012/13 Yearbook*, Colchester: Seatrade Cruise Review
- Medcruise (2012b) 'The *new MedCruise Statistic Report*, *2nd edition 2011'*, www.medcruise.com, *10/1/2013*
- Passenger Shipping Association (2012) 'The Cruise Review', www.the-psa.co.uk, 15/1/2013
- Rodrigue, J.-P. and Notteboom, T. (2013) 'The geography of cruises: Itineraries, not destinations', *Applied Geography*, 38, pp. 31-42
- Niavi, S. (2012) Methodological approach to the evaluation of the effectiveness and evaluation of the competitiveness of enterprises: The case of ports of the territorial unit of the Mediterranean, PhD Thesis, Volos: University of Thessaly

Statistical Sources

1. Cruise Market Watch (2013) 'Growth of the Cruise Line Industry', http://www.cruisemarketwatch.com/growth , 19/1/2013
2. ΕΛΙΜΕ (2013) http://www.elime.gr, 20/4/2013
3. ΕΛ. ΣΤΑΤ (2013) http://www.statistics.gr, 25/4/2013